Primaris
Healthcare Business Solutions

2018 External Quality Review

Performance Improvement Projects

missouricare
A WellCare Company

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MoHealthNet

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1.0 Purpose and Overview

The Department of Social Services, MO HealthNet Division (MHD) operates a Health Maintenance Organization (HMO) style Managed Care Program called MO HealthNet Managed Care. The State of Missouri contracts with Managed Care Organizations (MCOs) to provide health care services to Managed Care enrollees.

Effective May 1, 2017, Medicaid Managed Care (hereinafter stated "Managed Care") is operated statewide in Missouri. Previously, Managed Care was only available in certain regions (Central, Eastern, and Western). The State extended the health care delivery program in the Central Region and added the Southwestern Region of the State in order to incorporate the Managed Care statewide extension for all the eligibility groups currently enrolled in MO HealthNet Managed Care. The goal was to improve access to needed services and the quality of health care services in the MO HealthNet Managed Care and state aid eligible populations, while controlling the program's cost.

The Managed Care Program enables Missouri to use the Managed Care System to provide Medicaid services to Section 1931 children and related poverty level populations; Section 1931 adults and related poverty populations, including pregnant women; Children's Health Insurance Program (CHIP) children; and foster care children. As of SFY2018 ending, total number of Managed Care enrollees in MO HealthNet were 712,335 (1915(b) and CHIP combined).

Missouri Care, one of the three MCOs operating in Missouri (MO), shall provide services to individuals determined eligible by the state agency for the MO HealthNet Managed Care Program on a statewide basis in all Missouri counties in the following four (4) designated regions of the State of Missouri: Central, Eastern, Western, and Southwestern.

Missouri Care services are monitored for quality, enrollee satisfaction, and contract compliance. MHD requires participating MCO to be accredited by the National Committee for Quality Assurance (NCQA) at a level of "Accredited" or better. An External Quality Review Organization (EQRO) evaluates MCO annually, as well.

MHD has arranged for annual, external independent reviews of the quality outcomes and timeliness of, and access to, the services covered under each MCO contract. The Federal and

State regulatory requirements and performance standards as they apply to MCOs are evaluated annually for the State in accordance with 42 CFR 438.310 (a) and 42 CFR 438.310 (b).

Quality, (42 CFR 438.320 (2)), as it pertains to external quality review, means the degree to which an MCO increases the likelihood of desired outcomes of its enrollees through:

(1) Its structural and operational characteristics.

(2) The provision of services that are consistent with current professional, evidenced-based-knowledge.

(3) Interventions for performance improvement.

Access, (42 CFR 438.320), as it pertains to external quality review, means the timely use of services to achieve optimal outcomes, as evidenced by managed care organizations successfully demonstrating and reporting on outcome information for the availability and timeliness elements defined under §438.68 (Network adequacy standards) and §438.206 (Availability of services).

Timeliness: Federal Managed Care Regulations at 42 CFR §438.206 require the state to define its standards for timely access to care and services. These standards must take into account the urgency of the need for services.

Primaris Holdings, Inc. (Primaris) is MHD's current EQRO, and started their five-year contract in January 2018. To meet the federal requirement for the validation of PIPs set forth in 42 CFR 438.358 (b) (i), Primaris conducted an annual onsite review on July 16, 2018 for the validation of PIPs which were underway during the review period (CY 2017).

Performance Improvement Projects (PIPs)

MHD requires the contracted MCO to conduct performance improvement projects (PIPs) that are designed to achieve, through ongoing measurements and interventions, a significant improvement, sustained over time, in clinical care and nonclinical care areas. The PIPs are expected to have a favorable effect on health outcomes, member satisfaction, and improve efficiencies related to health care service delivery. (*Ref: MHD-Managed Care Contract 2.18.8 (d)).*

A statewide performance improvement project(s) is defined as a cooperative quality improvement effort by the Health Plan, the State Agency, and the External Quality Review

Organization (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).*

The MCO shall participate in a statewide performance improvement project(s) as specified by the state agency. Completion of the performance improvement project should be in a reasonable time period (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.

The PIPs shall involve the following *(Ref: 42 Code of federal Regulations (CFR) 438.330 (d))*:

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

During calendar year (CY) 2017, MHD required Missouri Care to conduct two (2) PIPs-

- One (1) clinical: Improving Childhood Immunization Rates (Combo 10); and
- One (1) nonclinical: Improving Access to Oral Healthcare.

2.0 Methodology for PIP Validation

To ensure methodological soundness while meeting all State and Federal requirements, Primaris followed guidelines established in the Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS) publication, EQR Protocol 3, Version 2: Validating Performance Improvement Projects.

Primaris gathered information about the PIPs through:

- Documents Submission: Missouri Care submitted the following documents for review:
  - PIP (clinical): Improving Childhood Immunization Rates Combo 10; and
  - PIP (non-clinical): Improving Access to Oral Health.
- Interview: The following Missouri Care officials were interviewed to understand their concept, approach and methodology adopted for the PIPs:

  Erin Dinkel BSN, RN, Manager, Quality Improvement

  Dale Pfaff, QI Specialist, Associate

PIPs: Missouri Care

Vicki Mertz, QI Project Manager

The activities conducted for PIPs Validation were:

1. Assess the study methodology.
2. Verify PIP study findings (Optional) – (***Note****: Not conducted*).
3. Evaluate overall validity and reliability of study results.

Activity 1. Assess the Study Methodology.

1. Review the selected study topic(s): Topic should address the overarching goal of a PIP, which is to improve processes and outcomes of health care provided by the MCO. It should reflect high-volume or high-risk conditions of the population.
2. Review the study question(s): The study question should be clear, simple and answerable. They should be stated in a way that supports ability to determine whether the intervention has a measurable impact for a clearly defined population.
3. Review the identified study population: The MCO will determine whether to study data for the entire population or a sample of that population.
4. Review the selected study indicators: Each PIP should have one or more measured indicator to track performance and improvement over a specific period of time. All measured indicators should be:
    - Objective;
    - Clearly defined;
    - Based on current clinical knowledge or health services research;
    - Enrollee outcomes (e.g., health or functional status, enrollee satisfaction); and
    - A valid indicator of these outcomes
5. Review sampling methods (if sampling used): It should be based on Appendix II of the EQR Protocols for an overview of sampling methodologies applicable to PIPs.
6. Review data collection procedures: Ensure that the data are consistently extracted and recorded by qualified personnel. Inter-Rater Reliability (the degree to which different raters give consistent estimates of the same behavior) should be addressed.

7. Review data analysis/interpretation of study results: Interpretation and analysis of the study data should be based on continuous improvement philosophies and reflect an understanding that most problems result from failures of administrative or delivery system processes.
8. Assess the MCO's Improvement strategies: Interventions should be based on a root cause analysis of the problem. System interventions like changes in policies, targeting of additional resources, or other organization wide initiatives to improve performance can be considered.
9. Assess the likelihood that reported improvement is "real" improvement:

- Benchmarks for quality specified by the State Medicaid agency or found in industry standards.
- Baseline and repeat measures on quality indicators will be used for making this decision.

Note: *tests of statistical significance calculated on baseline and repeat indicator measurements was not done by EQRO.*

10. Assess the sustainability of documented improvement

Real change is the result of changes in the fundamental processes of health care delivery and is most valuable when it offers demonstrable sustained improvements. Spurious is "one- unplanned accidental occurrences or random chance."

Review of the re-measurement documentation will be required to assure the improvement on a project is sustained.

Activity 2: Verify Study Findings (Optional).

MHD may elect to have Primaris conduct on an ad hoc basis when there are special concerns about data integrity. *(**Note:** this activity was not done by EQRO and written as N/A).*

Activity 3: Evaluate and Report Overall Validity and Reliability of PIPs Results.

Determining threats to validity, reliability, and PIP design is sometimes a judgment call, Primaris will report a level of confidence in its findings as follows: The PIPs will be rated as follows:

- High confidence = the PIP was methodologically sound, achieved the SMART (Specific, Measurable, Attainable, Relevant, Time-bound) Aim goal, and the demonstrated improvement was clearly linked to the quality improvement processes implemented.

- Confidence = the PIP was methodologically sound, achieved the SMART Aim goal, 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 goal was not achieved; or (B) the SMART Aim goal was achieved; however, the quality improvement processes and interventions were poorly executed and could not be linked to the improvement.
- Reported PIP results were not credible = The PIP methodology was not executed as approved.

3.0 Findings: Missouri Care

3.1 PIP Clinical: Improving Childhood Immunization Status (CIS Combo 10)

The evaluation of Childhood Immunizations Status (CIS Combo 10) is a MHD requirement, as well as a nationally recognized study through NCQA/HEDIS reporting. As required by MHD contract Section 2.18.8 (d) 2, the MCO should attain a target rate of ninety percent (90%) for the number of two (2) year olds immunized.

Reducing and eliminating vaccine preventable diseases is one of the top achievements in the history of public health. Because these diseases have been mostly eradicated in the United States, the young parents have never seen the devastating effects of diseases like polio, measles, or whooping cough (pertussis) on a family or community. While it is easy to think these diseases only existed in the past, if vaccination rates drop in a community, it is not uncommon to have an outbreak.

The State of Missouri's goal is to have 90% of children appropriately immunized by 24 months of age. As noted in the Table 1 below, Missouri Care's Aggregate CIS Combo 10 rates have been well below NCQA's 50th Percentile benchmarks.

Table 1: Missouri Care Combo 10 Rates

HEDIS Year	NCQA 50th percentile	Missouri Care Combo 10 Rates
HEDIS 2015	35.88%	29.68%
HEDIS 2016	32.64%	30.15%
HEDIS 2017	33.09%	26.39%

For the purpose of this PIP, Missouri Care monitored immunization rates as defined by the NCQA HEDIS 2018 (H2018) Technical Specifications for Childhood Immunization Status (CIS), for the following vaccinations by their second birthday (NCQA CIS Combo 10):
NCQA Combo 10 includes:

- Four Diphtheria, Tetanus, and Acellular pertussis (DTaP);
- Three Polio (IPV);
- One Measles, Mumps, And Rubella (MMR);
- Three Haemophilus Influenza Type B (HiB);
- Three Hepatitis B (HepB);
- One Chicken Pox (VZV);
- Four Pneumococcal Conjugate (PCV) vaccinations;
- One Hepatitis A (HepA);
- Two Or Three Rotavirus (RV) vaccinations; and
- Two Influenza.

3.1.1 Description of Data obtained

For Attention of MHD and Missouri Care: During onsite visit, Primaris discussed the issues with the approach of PIP based on their submission. Missouri Care was given a chance to resubmit their PIP with the required corrections. The resubmission was a different PIP with a mismatch in the aim statement, the study population, numerator, and denominator. For this reason the second submission was disregarded and the validation was done based on the first submission of PIP.

Aim: To increase the CIS Combo 10 rate by 3% for the measurement year (CY 2017).

Study Question: "Will providing the proposed list of interventions to eligible members increase the number of children receiving Combo-10 by 3% for the measurement year by their 2nd birthday?"

Study Indicator: HEDIS Childhood Immunization Status (CIS) – Combo 10 Rate

Study Population: All Missouri Care members 2 years of age in the measurement year who had no more than one gap in enrollment of up to 45 days during the 12 months prior to the child's second birthday.

Sampling: Sampling was not done**.** The entire population was measured from an administrative standpoint and Hybrid rates were calculated using HEDIS Technical Specifications and NCQA-certified software.

Baseline Data: The HEDIS 2015 (CY 2014) rate is reported to be the baseline rate for Statewide CIS combo 10 rate. However for the purpose of evaluation of this PIP, Primaris would accept HEDIS 2017 (CY 2016) CIS Combo 10 rate as a baseline to measure the improvement from the previous year.

Table 2: Missouri Care CIS Combo 10 Baseline Rate (CY 2016)

HEDIS Year	Missouri Care Combo 10 Rates	NCQA 50th percentile
HEDIS 2017	26.39%	33.09%

Methodology

The data collected includes the entire eligible population of CIS claims/encounter data according to HEDIS Technical Specifications by the members' second birthday. Sources of data used in this study included claims-based software and NCQA Certified Measures Software (Inovalon, Missouri Care's vendor). Claims data for the study were queried from the claims-based software and put into NCQA-certified measures software by Inovalon. Inovalon follows HEDIS Technical Specifications to calculate the CIS rate.

Annually, Missouri Care collects medical records to supplement the administrative claims data. This is known as a Hybrid Review or Medical Record Review (MRR), which uses a systematic sample of eligible members for the denominator. Missouri Care followed NCQA

requirements for this hybrid measure, which includes a systematic sample of members (411) plus a 5% oversample (432 members) for each region, if available. Missouri Care used Inovalon and CHANGE Health vendor for MRR. Numerator hits were abstracted and tracked by CHANGE Health using Inovalon's Quality Spectrum Hybrid Reporter (QSHR) software. Missouri Care staff, along with contracted trained clinical staff, oversaw CHANGE Health's abstractors by over reading medical records to ensure quality review. Abstracted medical records were exported to a secure file transfer portal where WellCare's (Missouri Care's parent company) Med Informatics team confirmed receipt of files, and then the data was downloaded to QSHR.

QSHR measure flowcharts included algorithmic assessments about numerators, denominators, contraindications and exclusions. During the annual HEDIS MRR, the Plan uploaded the administrative claims data on a monthly basis to further supplement the medical record data. At the end of the project, the Plan combined the administrative claims data and the medical record data to create the final HEDIS rate. Data was reviewed and validated by a HEDIS auditor.

The quality measurement for this study includes:

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

Numerator (Must include): Combo 10

- At least 4 DTaP, 3 IPV, 3 HiB, and 4 PCV vaccinations with different dates of service on or before the child's second birthday. Do not count a vaccination administered prior to 42 days after birth.
- At least 3 Hep B vaccinations with different dates of service, 1 Hep A, 1 VZV, and 1 MMR on or before the child's second birthday.
- At least 2 doses of the two-dose Rotavirus vaccine or 3 doses of the three-dose Rotavirus vaccine or 1 dose of the two-dose rotavirus vaccine and 2 doses of the three-dose rotavirus vaccine all on different dates of service on or before the child's second birthday.
- At least 2 Influenza vaccinations with different dates of service on or before the child's second birthday. Do not count a vaccination administered prior to six months (180 days) after birth.

Intervention and Improvement Strategies (Table 3)

Table 3: Missouri Care Interventions to Improve CIS Rates		
Interventions	**Status**	**Initiated**
Care Management: Provide additional training for Care Managers to actively engage members on their immunization status and prevention visits to help educate members on the importance of childhood immunizations.	Ongoing	2017
CIS Provider Incentive: - Missouri Care's provider incentive program, Partnership for Quality, rewards providers with bonus dollars for increasing immunization for members. Providers who achieve certain threshold targets are eligible to receive additional bonus dollars. This Provider incentive increases members' vaccinations by taking every opportunity to educate members on the importance of immunizing members.	Ongoing	Revised 2017
Member Incentive: Missouri Care's Healthy Rewards member incentive program includes rewards for members who complete their recommended well-child visits.	Ongoing	Revised 2017
Flat-file Transfer - Scrapes immunization data directly from providers' EMR system into WellCare's database. In 2017, Missouri Care established Flat-file Transfer with 5 new provider groups.	Ongoing	Revised 2017
QPA Program: Using our Quality Practice Advisors (QPA) and available tools like our HEDIS Toolkit, we educate providers about the CIS measure, how to use our care gap reports to outreach to members, and how to address barriers such as lack of transportation. Providers can use these tools to reduce missed opportunities vaccinating members.	Ongoing	2014

Care Gap/EPSDT Reports: Missouri Care delivers PCP-specific utilization reports that include information about performance relative to peers and member-level information related to care gaps associated with CIS-measure. These reports include HEDIS care gap reports and EPSDT rosters. Combination of these interventions will have a greater impact outreaching members due for vaccinations.	Ongoing	2014
Centralized Telephonic Outreach - Performs outbound calls to members in need of wellness visits to help educate members on the importance of wellness visits and assist them in scheduling a visit	Ongoing	2014
MOHSAIC - Immunization registry data received quarterly. This provides adequate information on member's vaccinations which may be missed in claims or medical records.	Ongoing	2014
Transportation - Ensuring that non-emergency medical transportation adequately supports members' transportation needs.	Ongoing	2013
Audit and Feedback- Conduct annual medical record reviews on a sample of providers. As we identify opportunities to improve provider performance – documentation, capitalizing on missed opportunities– we note this in the audit findings and provide feedback and coaching to the provider. This offers providers education on the process of quality improvement and effectiveness in increasing members' vaccinations.	Ongoing	Active

Intervention List	Status	Initiated
Multi-touch Point to help educate members on the importance of childhood immunizations: - Missouri Care Member Handbook - New member orientation, My Health Matters to Me - Quarterly member newsletters - Community-based health fairs - Maternity program and the related activities and interventions (i.e. TEXT4BABY, Nurses for Newborns) - Written reminders about importance of/need for well-child visits through periodicity letters - Engaging members who have care gaps	Ongoing	Active

3.1.2 PIP Results

- The Statewide CIS Combo 10 rate for Missouri Care in CY 2017 (H2018) was 26.52% as compared to the rate in CY 2016 (H2017-26.39%), shown in the Figure 1.
  The State aggregate CIS rate increased by 0.13% points or 0.4% from CY 2016. The aim of PIP to get a 3% increase is not met. There is no statistical significance of this increase. Missouri Care is far too behind the contractual requirement to meet the goal of 90% rate. Between H2016 and H2017 (CY 2015 and CY 2016) the CIS Combo 10 decreased by 3.76% point or 12.47%.
- Missouri Care expanded statewide May 1st, 2017, which included the addition of Southwest Region and expanded Central Region. Due to continuous enrollment criteria based on NCQA HEDIS 2018 Tech Specs, the Southwest Region does not have a reportable denominator for HEDIS 2018 (CY 2017).

Childhood Immunization Status – Combo 10

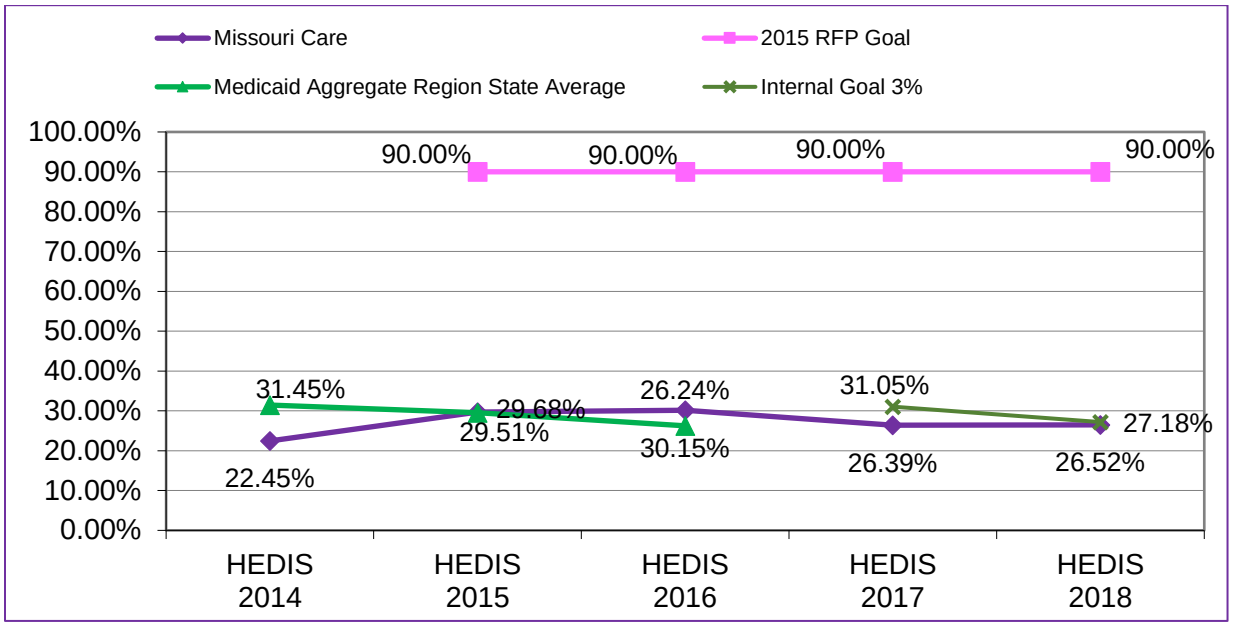

Figure 1: HEDIS Aggregate

- The CIS Combo 10 rates increased in Central (4.14 % points or 15.47%), Western (1.95% points or 7.49%) and Eastern (1.92% points or 8.21%) regions between H2016-H2017 (CY 2016-CY 2017), as shown in the Table 4 and Figure 2 below.

Table 4: HEDIS Rates H2016-H2018 (CY 2015-CY 2017)

Childhood Immunization Status – Combo 10

Regions	HEDIS 2016	HEDIS 2017	HEDIS 2018
Aggregate	30.15%	26.39%	26.52%
Central	26.02%	26.76%	30.90%
Western	21.95%	26.03%	27.98%
Eastern	30.10%	23.38%	25.30%

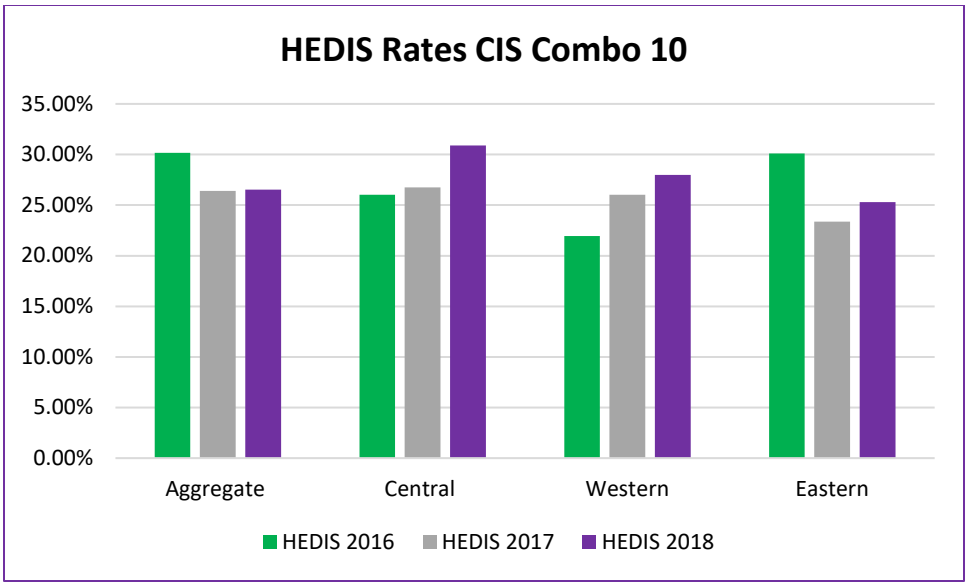

Figure 2: HEDIS Rates for All regions H2016-H2018 (CY 2015-CY 2017)

3.2 PIP Non Clinical: Improving Oral Health

Oral health is an integral component of children's overall health and well-being. Dental care is the most prevalent unmet health need among children. Statistics from the Centers for Disease Control and Prevention (CDC) reveal that over two-thirds of children have decay in their permanent teeth (ref: Children's Oral Health 2007,CDC Oral Health Resources).

The Kaiser Commission suggests that "oral disease has been linked to ear and sinus infection and weakened immune system, as well as diabetes, and heart and lung disease. Studies found that children with oral diseases are restricted in their daily activities and miss over 51 million hours of school each year" (ref: Dental Coverage and Care for Low-Income Children: The Role of Medicaid and SCHIP. August 2007. The Henry J. Kaiser Family Foundation). The connection between oral health and general health is not often made by Medicaid recipients who frequently encounter other socioeconomic challenges Underutilization of dental services is not a problem specific to the Medicaid population.

3.2.1 Description of Data obtained

For Attention of MHD and MO Care: During onsite visit, Primaris discussed the issues with the approach of PIP based on their submission. The MO Care was given a chance to resubmit their PIP with the required corrections. The resubmission was a different PIP with a mismatch in the study population, study indicator and data collection and the reporting of results. For these reasons the second submission was disregarded and the validation was done based on the first submission of PIP.

Aim: To increase the number of children who receive an annual dental visit by 3% for the measurement year.

Study Question: "Will providing the proposed list of interventions to eligible members from the ages of two (2) through twenty (20) years old increase the number of children who receive an annual dental visit by 3% for the measurement year?"

Study Indicator: HEDIS Annual Dental Visit (ADV) Rate as per HEDIS Technical Specifications (eligible members have at least one dental visit during the measurement year For ADV, the period of time measured includes a full calendar year).

The study population: Members 2 through 20 years of age who had at least 1 dental visit during the measurement year and are continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days.

Sampling**:** No sampling technique was used in this study. All members 2 through 20 years of age were included in the study.

Baseline Data: HEDIS 2013 rate is reported to be the baseline for aggregate population all over the State. However for the purpose of evaluation of this PIP, Primaris will accept HEDIS 2017 (CY 2016) to measure the improvement.

Table 5: Missouri Care ADV Baseline Rate (CY 2016)

HEDIS Year	Missouri Care ADV Rate	NCQA 50 percentile
HEDIS 2017	46.97%	54.93%

Methodology

The data collected includes the entire eligible population of ADV claims/encounter data according to HEDIS Technical Specifications within a calendar year period. Sources of data used in this study includes claims-based software and NCQA Certified Measures vendor (Inovalon) to calculate the HEDIS ADV rate.

As part of its systematic method of collecting valid and reliable data, claims data for the study were queried from claims-based software and put into NCQA-certified software by Inovalon (Missouri Care's Vendor). Inovalon follows HEDIS Technical Specifications to calculate the ADV rate.

Missouri Care's Quality and Analytics personnel manage data validation, integrity, quality reporting, and oversee technical analysts. This includes trend reporting, data modeling, coding, report design, statistical analyses and queries, data mining, and program evaluation. As part of the Data Analysis Plan, The Plan evaluates the success of the project by demonstrating an improvement in Missouri Care members' oral health outcomes through education and on-going interventions, as evidenced by at least a 3% increase in the HEDIS ADV rate.

According to HEDIS Tech Specs, the Study Indicator data pulled from the HEDIS ADV rate captures:

- Denominator*:* Members 2 through 20 years of age who are continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days.
- Numerator: Members 2 through 20 years of age identified as having one or more dental visits with a dental practitioner during the measurement year. A member had a dental visit if a submitted claim/encounter contains any relevant code.

This indicator will measure a change in the health status of the member by receiving an annual dental visit.

Intervention and Improvement Strategies

Throughout the course of the PIP, Missouri Care has implemented numerous interventions based on their barrier analysis (Table 6).

Table 6: Missouri Care Oral Health Interventions

Intervention List	Status	Initiated
County Health Departments: Missouri Care provided a Micro Grant of $5,000 to the Missouri Coalition for Oral Health to use as a way to fund oral health supplies to Cape Girardeau, Lincoln County and Vernon County Health Departments, as identified by the Dental Task Force. This will provide a greater opportunity for members to receive dental services. Year 1 2017: Funds identified for the project Two of the 3 counties are within the expansion territory effective 5/1/2017.	Year 1: Complete	2017
ADV Member Incentive: - To help motivate members to complete an annual dental visit they will receive an incentive through our Healthy Rewards program.	Ongoing	2017
Care Management: Provide additional training for Care Managers to actively engage members on their dental care and prevention visits to help educate members on the importance of annual dental visits.	Ongoing	2017
Partnership with Affinia - Community Outreach collaborates with Affinia the East Region to provide dental services.	Ongoing	2016
Housing Authority Partnership - Missouri Care partners with local Housing Authorities to host Back to School and Health Fairs that will focus on providing dental screenings and education for participants.	Ongoing	2016
Dental Day at Local Community Health Center- Missouri Care and several community health centers in Missouri work together to open the clinic to Missouri Care members only for preventive dental services. In 2015, the program expanded.	Ongoing	Revised 2015
Centralized Telephonic Outreach - Performs outbound calls to members in need of dental care to help educate members on the importance of annual dental visits and assist them in scheduling a dental visit	Ongoing	2014
Dental Vans and Dental Providers at Health Fairs - Missouri Care continues to provide on-the-spot dental services to Health Fair participants especially in rural communities. Missouri Care will continue special outreach efforts to new member enrollees to schedule appointments for annual dental visits.	Ongoing	2013

Transportation Ensuring that non-emergency medical transportation adequately supports members' dental-related transportation needs.	Ongoing	2013
Multi-touch Point to help educate members on the importance of annual dental visits: Dental Due/Over-due Mailings Periodicity Reminders Prenatal Graduation Collaboration with Rural Schools ICAN Campaign Boys and Girls Club Partnership Show-Me Smiles Baby Showers Member Newsletter articles Member Handbook	Ongoing	Active

3.2.2 PIP Results

- The HEDIS 2018 ADV results show statistical significant improvements in Central, East, West, and Aggregate population.
- The State aggregate ADV rate for CY 2017 (measurement year) is 48.42%. This is an increase by 1.45% points or 3% from CY 2016 (46.97%). The aim of PIP to get a 3% increase is met.

  Between H2016 and H2017 (CY 2015 and CY 2016) the ADV rate increased by 0.37% point or 7.9%.

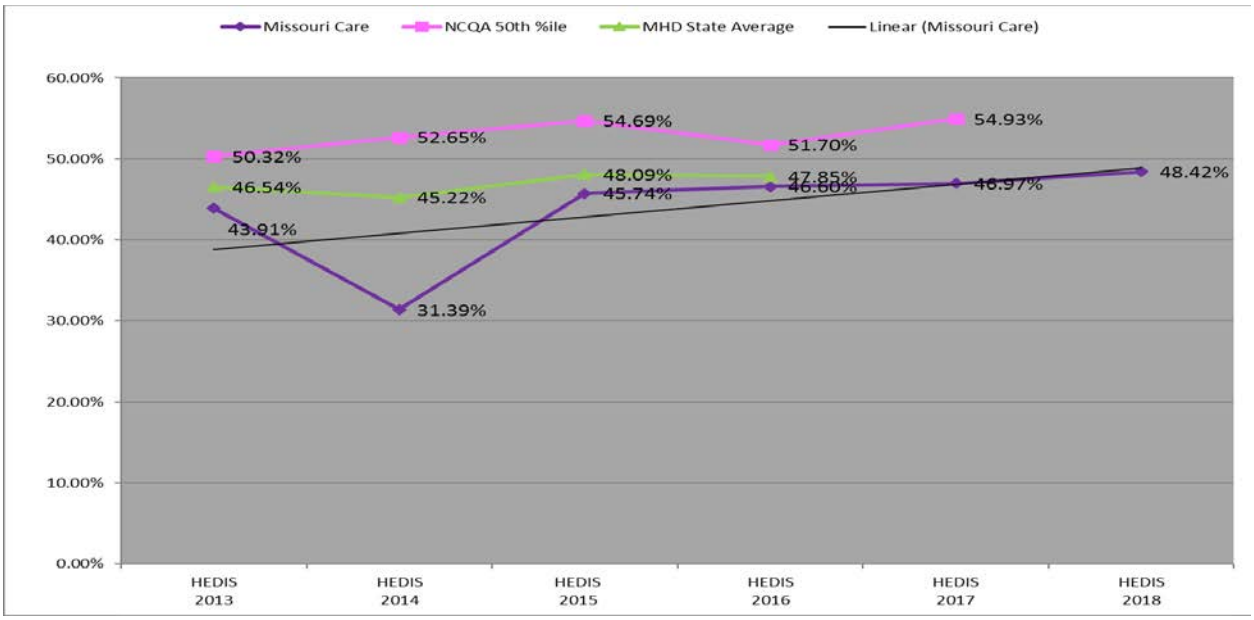

Figure 3: Aggregate (Statewide) Annual Dental Visit

- The HEDIS 2018 (CY 2017) ADV results improved in Central, East, West, and Aggregate population.

  The ADV rates increased in Central (0.84% points or 1.5%), Western (1.61% points or 3.5%) and Eastern (1.9% points or 4.4%) regions between H2016-H2017 (CY 2016-CY 2017), as shown in the Table 7 and Figure 4.

Table 7: Missouri Care ADV Rates for All Regions

Regions	HEDIS 2016	HEDIS 2017	HEDIS 2018
Aggregate	46.60%	46.97%	48.42%
Central	51.29%	52.86%	53.70%
Western	44.03%	45.91%	47.52%
Eastern	44.84%	43.00%	44.90%
Southwest	N/A	N/A	46.77%

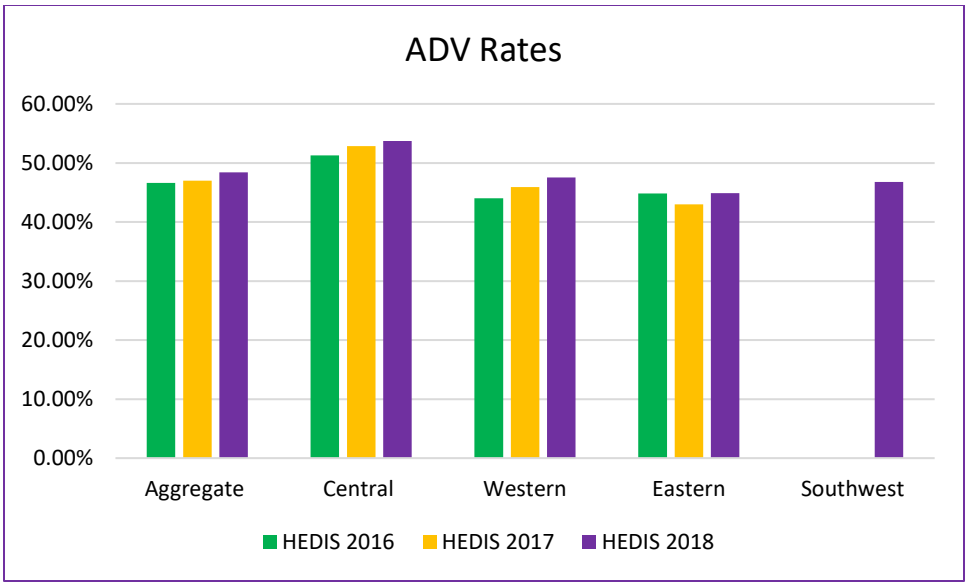

Figure 4: Missouri Care ADV Rates for All regions

4.0 Overall Conclusions

PIPs Score

The following score was assigned to both the CIS Combo 10 and Oral Health PIPs:

Low confidence = (A) the PIP was methodologically sound; however, the SMART Aim goal was not achieved; or (B) the SMART Aim goal was achieved; however, the quality improvement processes and interventions were poorly executed and could not be linked to the improvement.

4.1 Issues and Key Drivers

Issues

PIPs' Approach

- The Aim set by Missouri Care for both the PIPs is too low and will not be helpful in achieving the goals set for improving CIS Combo 10 rate or Improving Oral Health as stated in MHD contract. They target to achieve an increase in CIS Combo 10 and ADV rates by 3% only, instead of 3% point. The aim statement was not clearly written. The baseline rate and rate to be achieved were not stated.

- In section 3.1.2, PIP Results for CIS Combo 10, Fig.1 submitted by Missouri Care shows a decrease in the internal goal between CY 2016 (31.05%) and CY 2017 (27.18%). Setting a lower goal from past year is questionable and does not meet the purpose of a PIP.
- The PIPs did not meet all the required guidelines stated in CFR/MHD contract (Ref: 42 Code of federal Regulations (CFR) 438.330 (d)/MHD contract 2.18.8 d 1):

Table 8: CFR guidelines for PIPs

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

- The PIPs were not conducted over a reasonable time frame (A calendar year). They continued for years from the past and at varying times throughout the year.
- The interventions were not specifically designed for these PIPs. They were on going for years at State or corporate level, overlapped in the measurement year, thus the impact of an intervention could not be measured.
- Annual evaluation of HEDIS CIS/ADV rate was used as quality indicators, which is a requirement for performance measure reporting by MHD/CMS (Centers for Medicare and Medicaid Services)/NCQA (National Committee for Quality Assurance). The indicators were not specifically chosen to measure the impact of interventions.
- The HEDIS CIS/ADV rates could not be tied to any intervention.

PIP Results

- Missouri Care's CIS Combo 10 rates did not increase as expected. Missouri Care did not provide any explanation for not achieving the aim of PIP.
- Missouri Care stated that outreach to members through various means would have had a greater impact on members' health and rate of compliance with an annual dental visit.

Key Drivers

- CDC's Task Force on Community Prevention Services has identified three key drivers around which interventions can help to overcome vaccine noncompliance: (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4927017/#b9-ptj4107426)
  - Increasing community demand for vaccination;
  - Enhancing access to vaccination services; and
  - Provider-based interventions.
- Based on U.S. Department of Health and Human Services Oral Health Strategic Framework, 2014–2017 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4765973/), some of key drivers to improve Oral health are:
  - Integration between medical and dental records;
  - Cost of dental care and lack of dental coverage; and
  - Oral health literacy.

4.2 Quality, Timeliness and Access to HealthCare Services

CIS Combo 10

- Increase from HEDIS 2017 to HEDIS 2018 CIS rates in all regions is attributed to planned quality multi-interventional improvement approach.
- As a part of integrated approach, Missouri Care incentivize members to complete EPSDT/Wellness visits, which includes completing immunizations. From a provider perspective, they not only incentivize providers to complete EPSDT/Wellness visits, but also to close gaps in care relating to needed childhood immunizations.
- Missouri Care have identified opportunities for future:
  - Increase participation in the Healthy Rewards member incentive program.
  - Increase member engagement.
  - Work towards infusing quality metrics, such as CIS and wellness visits, into provider contracts. They anticipate that through this initiative there would be an increase in members utilizing the Healthy Rewards Program and providers closing the gaps in care, resulting in an improved CIS Combo 10 rate.

Access to Oral Health

- There is an upward trend in HEDIS ADV Rates. This is a result of Missouri Care's planned quality multi-interventional improvement approach. Observed performance improvement is true improvement as evidenced by Missouri Care utilizing NCQA statistical testing, including upper and lower confidence intervals, to assess significant improvement.
- In July 2017, the newly revised Healthy Rewards Program was launched, which included a new ADV incentive and a new vendor with additional opportunities at various retail stores. Missouri Care members were notified of the new program through such means as New Member Welcome Packet, mailers, and Care Management Besides a more holistic approach to incentive measures, the new Program allows members to attest completed services through the vendor's website, calling customer service, or by mail. Members then receive a reloadable debit card, which can be redeemed at various retail stores.

4.3 Improvement by Missouri Care

- No improvement in the approach or methodology of PIPs was noticed in CY 2017. The report from the previous year's EQRO stated the same issues that were noticed by Primaris in EQR 2018. Missouri Care continued to use and reuse interventions that have failed to create the anticipated change in these projects.
- The recommendations from previous EQRO were not followed. It was suggested that Innovative approaches to positively impact the problems identified were necessary. As interventions are implemented, a method to measure each interventions' outcome must also be introduced. These elements were missing in the PIP for CY 2017 as well.
- However, the CIS combo 10 rate increased Statewide in CY 2017. Even though the goal/aim for PIP was not achieved, the ongoing interventions and the new ones together increased the rate from previous year by 0.13% points or 0.4%. There was an increase noted in all regions in comparison to CY 2016.

  Similarly, the ADV rate increased by 1.45% points or 3% from CY 2016. There was an increase noted in all the three regions (Eastern, Central, and Western) from the CY 2016.

5.0 Recommendations

PIPs Approach

- Missouri Care must continue to refine their skills in the development and implementation of approaches to effect change in their PIP.
- The aim and study question(s) should be stated clearly in writing (baseline rate, aim to achieve, % increase).
- 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.
- The interventions should be planned specifically for the purpose of PIP required by MHD Contract and results, impact should be measured on a regular basis (minimum of 12 data points on the run chart should be shown).
- The results should be tied to the interventions.
- A request for technical assistance from EQRO would be beneficial. Improved training, assistance and expertise for the design, analysis, and interpretation of PIP findings are available from the EQRO, CMS publications, and research review.
- Instead of repeating interventions that were not effective, evaluate new interventions for their potential to produce desired results, before investing time and money.
- Missouri Care must utilize the PIPs process as part of organizational development to maintain compliance with the State contract and the federal protocol.

Improvement in CIS rate

Below are some of the interventions from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4927017/#b9-ptj4107426 which could be adopted by Missouri Care to improve the CIS rate:

- Health Provider-Based Interventions to Improve Vaccination Compliance

Provide Parent and Patient Counseling
Be informed about vaccinations. Make strong recommendations. Provide patients with educational materials. Use proven communication strategies. Dispel myths about side effects. Inform parents about research. Give parents time to discuss concerns. Describe infections that vaccines prevent. Describe potential health and financial consequences of vaccine noncompliance. Provide a vaccination record with past and future vaccination visits. Provide patient reminders. Ask vaccine-hesitant parents to sign an exemption form. Inform parents that a missed dose will not require vaccine series to be restarted.
Maximize Opportunities for Vaccination
Administer vaccinations during sick or follow-up visits (postsurgical, post hospitalization). Issue a standing order to allow nurses to administer patient vaccinations.
Offer Combination Vaccines
Simplifies vaccination regimen. Minimizes the number of injections. Reduces need for return vaccination visits. Improves patient adherence.
Improve Accessibility to Vaccinations
Allow same-day appointments or walk-in visits. Make sure the office staff is friendly and supportive. Provide convenient office hours. Limit patient wait time.

Use Electronic Medical Records
Utilize consolidated electronic immunization records. Set electronic alerts for needed vaccinations. Follow up on electronic medical record alerts by contacting patient.

- Community- and Government-Based Interventions to Improve Vaccination Compliance

Public Education
Distribute educational materials that incorporate community input. Conduct public messaging campaigns. Use electronic communications to distribute health and safety information.
Public Reminder and Recall Strategies
Conduct centralized reminder and recall strategies through public agencies or payers. Use electronic communications, such as social media and text messaging, for reminder and recall programs.
Free Vaccines and Other Financial Incentives
Provide free vaccines to uninsured patients. Issue financial incentives, such as gift certificates.
Alternative Public and Private Venues for Vaccination
Day care facilities Drop-in service at walk-in clinics Pharmacies Women, Infants, and Children (WIC) program offices Emergency departments Inpatient settings Home visits

Improvement in Oral Health

Source: U.S. Department of Health and Human Services Oral Health Strategic Framework, 2014–2017 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4765973/).

The following are the strategies and actions for each of the 5 goals listed below which would help to achieve improved Oral Health of the members.

1. Integrate Oral health and primary health care.
    - Advance inter professional collaborative practice and bidirectional sharing of clinical information to improve overall health outcomes.
    - Promote education and training to increase knowledge, attitudes, and skills that demonstrate proficiency and competency in oral health among primary care providers.
    - Support the development of policies and practices to reconnect the mouth and the body and inform decision making across all HHS programs and activities.
    - Create programs and support innovation using a systems change approach that facilitates a unified patient-centered health home.
2. Prevent disease and promote oral health.
    - Promote delivery of dental sealants in school-based programs and expand community water fluoridation.
    - Identify reimbursement strategies and funding streams that enhance sustainability of prevention programs.
    - Coordinate federal efforts focused on strengthening the infrastructure and capacity of local, state, and regional oral health programs.
    - Explore new clinical and financial models of care for children at high risk for developing caries, such as risk-based preventive and disease-management interventions.
3. Increase access to oral health care and eliminate disparities.
    - Expand the number of health-care settings that provide oral health care, including diagnostic, preventive, and restorative services in federally qualified health centers, school-based health centers, Ryan White HIV/AIDS-funded programs, and IHS-funded health programs.
    - Strengthen the oral health workforce, expand capabilities of existing providers, and promote models that incorporate other clinicians.

- Improve the knowledge, skills, and abilities of providers to serve diverse patient populations.
- Promote health professionals' training in cultural competency.
- Assist individuals and families in obtaining oral health services and connecting with a dental home.
- Align dental homes and oral health services for children.
- Create local, regional, and statewide partnerships that bridge the aging population and oral health systems.
- Support the collection of sex- and racial/ethnic-stratified data pertaining to oral health.

4. Increase the dissemination of oral health information and improve health literacy.
    - Enhance data value by making data easier to access and use for public health decision making through the development of standardized oral health measures and advancement of surveillance.
    - Improve the oral health literacy of health professionals through the use of evidence-based methods.
    - Improve the oral health literacy of patients and families by developing and promoting clear and consistent oral health messaging to health-care providers and the public.
    - Assess the health literacy environment of patient care settings.
    - Integrate dental, medical, and behavioral health information into electronic health records.
5. Advance oral health in public policy and research.
    - Expand applied research approaches, including behavioral, clinical, and population-based studies; practice-based research; and health services research to improve oral health.
    - Support research and activities that examine the influence of health-care system organization, reimbursement, and policies on the provision of oral health care, including fostering government and private-sector collaboration.
    - Address disparities in oral health through research that fosters engagement of individuals, families, and communities in developing and sharing solutions and behaviors to meet their unique needs.
    - Promote the translation of research findings into practice and use.

- Develop policy approaches that support state Medicaid and CHIP to move from paying for volume to purchasing value, and from treating disease to preventing disease.
- Evaluate the impact of policy on access to care, oral health services, and quality.

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PERFORMANCE IMPROVEMENT PROJECT VALIDATION WORKSHEET (A)

Date of evaluation: July 16, 2018

MCO Name or ID:	Missouri Care
Name of Performance Improvement Project:	Childhood Immunization Status- Combo 10 (CIS)
Dates in Study Period:	Jan 1, 2017-Dec 31, 2017
Demographic Information	Number of Medicaid/CHIP enrollees in MCO: 284,395 Medicaid/CHIP members included in the study: 3645

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

ACTIVITY 1: ASSESS THE STUDY METHODOLOGY

Step 1: Review the Selected Study Topic(s)

Component/Standard	Score	Comments
1.1 Was the topic selected through data collection and analysis of comprehensive aspects of specific MCO enrollee needs, care, and services?	M🟢	Missouri Care developed the topic for this Childhood Immunization PIP using national, regional, and Missouri Care's data. The MCO provided a thorough review of the literature and current MHD contract requirements to further analyze and support the PIP topic.
1.2 Is the PIP consistent with the demographics and epidemiology of the enrollees?	M🟢	Missouri Care has noted that its members have a low compliancy rate for CIS Combo 10, well below NCQA's 50th Percentile benchmarks.
1.3 Did the PIP consider input from enrollees with special health needs, especially those with mental health and substance abuse problems?	M🟢	The PIP considers all enrollees 2 years of age including, but not limited to members with special needs and physical or behavioral health conditions.

1.4 Did the PIP, over time, address a broad spectrum of key aspects of enrollee care and services (e.g., preventive, chronic, acute, coordination of care, inpatient, etc.)?	M	Missouri Care states that by increasing the number of children receiving recommended immunizations, children's overall health should improve by protecting from deadly and debilitating diseases.
1.5 Did the PIP, over time, include all enrolled populations (i.e., special health care needs)?	M	All members who were eligible for immunizations were addressed in this PIP. Consistent with MHD contract requirement and using the HEDIS Technical Specifications, this PIP was structured to address Missouri Care membership under the age of two (2).

Step 2: Review the Study Question(s)

Component/Standard	Score	Comments
2.1 Was/were the study question(s) measurable and stated clearly in writing?	PM	The study question was measurable but not clearly stated. The measurement year, baseline year and the rates for baseline year and goal for measurement year, should be clearly written. The study question was as follows: "Will providing the proposed list of interventions to eligible members increase the number of children receiving Combo-10 (as defined below) by 3% for the measurement year by their 2nd birthday?"

Step 3: Review the Identified Study Populations

Component/Standard	Score	Comments
3.1 Were the enrollees to whom the study question and indicators are relevant clearly defined?	M	The study population includes all Missouri Care members 2 years of age in the measurement year who had no more than one gap in enrollment of up to 45 days during the 12 months prior to the child's second birthday.
3.2 If the entire population was studied, did its data collection approach capture all enrollees to whom the study question applied?	M	Based on the current HEDIS Technical Specification applicable for the measurement year, all enrollees who received the recommended vaccinations on or before their second birthday were included.

Step 4: Review Selected Study Indicator(s)

Component/Standard	Score	Comments
4.1 Did the study use objective, clearly defined, measurable indicators (e.g., an event or status that will be measured)?	M	HEDIS CIS (Combo 10) rate was the indicator used to assess the outcome of PIP. Administrative and Hybrid data was used to determine annual CIS (combo 10) rate.
4.2 Did the indicators track performance over a specified period of time?	M	The ADV rates were tracked on a quarterly basis.
4.3 Are the number of indicators adequate to answer the study question; appropriate for the level of complexity of applicable medical practice guidelines; and appropriate to the availability of and resources to collect necessary data?	PM	HEDIS CIS (combo 10) measure was used to provide an answer to the study question. The purpose of PIP is to determine measurable improvement through interventions and see the impact of each of them on the healthcare services and benefits

		to the members, which was not measured in this PIP.

Step 5: Review Sampling Methods

Component/Standard	Score	Comments
5.1 Did the sampling technique consider and specify the true (or estimated) frequency of occurrence of the event, the confidence interval to be used, and the acceptable margin of error?	N/A	The entire population is measured from an administrative standpoint and Hybrid rates are calculated using HEDIS Technical Specifications and NCQA-certified measure software.
5.2 Were valid sampling techniques employed that protected against bias? Specify the type of sampling or census used:	N/A	Same as above
5.4 Did the sample contain a sufficient number of enrollees?	N/A	Same as above

Step 6: Review Data Collection Procedures

Component/Standard	Score	Comments
6.1 Did the study design clearly specify the data to be collected?	M	Missouri Care provided a description and explanation of how HEDIS data was obtained and numerators and denominators were included as per HEDIS Technical Specifications.
6.2 Did the study design clearly specify the sources of data?	M	Sources of data used in this study included claims-based software and NCQA Certified Measures vendor (Inovalon) to calculate HEDIS CIS-Combo 10 rate. CHANGE

		Health vendor was utilized for medical record review.
6.3 Did the study design specify a systematic method of collecting valid and reliable data that represents the entire population to which the study's indicators apply?	M	Claims data for the study were queried from the claims-based software and put into NCQA-certified software. Inovalon uses the HEDIS Technical Specifications to calculate the CIS rate.
6.4 Did the instruments for data collection provide for consistent and accurate data collection over the time periods studied?	M	Missouri Care used NCQA Certified Measures vendor (Inovalon) and CHANGE Health vendor for medical record review. Numerator hits were abstracted and tracked by CHANGE Health using Inovalon's Quality Spectrum Hybrid Reporter (QSHR) software.
6.5 Did the study design prospectively specify a data analysis plan?	M	The information for the data came from claims/encounter data and medical record review, which is where the HEDIS data is obtained. The HEDIS CIS-Combo 10 rate is calculated using NCQA certified measure vendor (Inovalon).
6.6 Were qualified staff and personnel used to collect the data?	M	Quality improvement specialists and Nurses under the direction of Medical Director was involved in this PIP.

Step 7: Review Data Analysis and Interpretation of Study Results

Component/Standard	Score	Comments
7.1 Was an analysis of the findings performed according to the data analysis plan?	M	Information from claims/encounter data and medical record review, was calculated using NCQA Certified Measures Software.

7.2 Were numerical PIP results and findings accurately and clearly presented?	M	The results were provided region wise and aggregate Statewide accurately through tables and graphs, along with a narrative of qualitative analysis.
7.3 Did the analysis identify: initial and repeat measurements, statistical significance, factors that influence comparability of initial and repeat measurements, and factors that threaten internal and external validity?	M	There are no factors that influenced comparability of initial and repeat measurements or threatened internal and external validity of data.
7.4 Did the analysis of study data include an interpretation of the extent to which its PIP was successful and follow-up activities?	M	Though the aim of the PIP was not met, Missouri Care attributed the success to their ongoing interventions started for last several years. They stated the future opportunities for further improvement.

Step 8: Assess Improvement Strategies

Component/Standard	Score	Comments
8.1 Were reasonable interventions undertaken to address causes/barriers identified through data analysis and QI processes undertaken?	M	Missouri Care has a cross-functional HEDIS workgroup with representation from a wide variety of disciplines and service areas. The workgroup brainstorms, analyzes HEDIS data, and works to identify root causes for gaps in care. Through this active workgroup, barriers and interventions are continuously evaluated in an effort to sustain ongoing improvement in HEDIS rates for the members.

8.2 Are the interventions sufficient to be expected to improve processes or outcomes?	PM	Though Missouri Care specifically outlined the barriers and addressed them in their ongoing interventions, the impact of each intervention could not be measured and the interventions started at different times throughout the year at the State level.
8.3 Are the interventions culturally and linguistically appropriate?	Met	To ensure interventions meet and support members cultural and linguistic needs, Missouri Care's offers 6th grade reading level and language translation option available on all member materials/calls.

Step 9: Assess Whether Improvement is "Real" Improvement

Component/Standard	Score	Comments
9.1 Was the same methodology as the baseline measurement used when measurement was repeated?	Met	The methodology of the source for data analysis, members examined and tools used have remained the same since HEDIS 2015 baseline year.
9.2 Was there any documented, quantitative improvement in processes or outcomes of care?	NM	The State aggregate CIS rate increased by 0.13% points or 0.4% from CY 2016. The aim of PIP to get a 3% increase is not met. There is no statistical significance of this increase.
9.3 Does the reported improvement in performance have "face" validity (i.e., does the improvement in performance appear to be the result of the planned quality improvement intervention)?	NM	The interventions could not be tied to the improvement.

9.4 Is there any statistical evidence that any observed performance improvement is true improvement?	NM	The increase in Statewide CIS combo 10 rate is not statistically significant.

Step 10: Assess Sustained Improvement

Component/Standard	Score	Comments
10.1 Was sustained improvement demonstrated through repeated measurements over comparable time periods?	NM	No sustained improvement seen

ACTIVITY 2: VERIFYING STUDY FINDINGS (OPTIONAL)

Component/Standard	Score	Comments
1.1 Were the initial study findings verified upon repeat measurement?	N/A	

ACTIVITY 3: EVALUATE OVERALL VALIDITY AND RELIABILITY OF STUDY RESULTS AND SUMMARY OF AGGREGATE VALIDATION FINDINGS

Result:

- ☐ **High confidence in reported PIP results**
- ☐ **Confidence in reported PIP results**
- ■ **Low confidence in reported PIP results**
- ☐ **Reported PIP results not credible**

Summary

Between H2017 and H2018 (CY 2016 and CY 2017), the statewide CIS Combo 10 rate increased by 0.13 percentage points or 0.4% which is not statistically significant. The aim of the PIP to increase the CIS Combo 10 rate Statewide by 3% point could not be achieved. Multiple interventions were in place from the past years as well as throughout the measurement year. Impact of an intervention could not be evaluated. For these reasons the PIP is assigned a **Low**

confidence= (A) the PIP was methodologically sound; however, the SMART Aim goal was not achieved; or (B) the SMART Aim goal was achieved; however, the quality improvement processes and interventions were poorly executed and could not be linked to the improvement.

PERFORMANCE IMPROVEMENT PROJECT VALIDATION WORKSHEET (B)

Date of evaluation: July 16, 2018

MCO Name or ID:	Missouri Care
Name of Performance Improvement Project:	Improving Oral Health
Dates in Study Period:	Jan 1, 2017-Dec 31, 2017
Demographic Information	Number of Medicaid/CHIP enrollees in MCO: 284,395 Medicaid/CHIP members included in the study: 62,893

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

ACTIVITY 1: ASSESS THE STUDY METHODOLOGY

Step 1: Review the Selected Study Topic(s)

Component/Standard	Score	Comments
1.1 Was the topic selected through data collection and analysis of comprehensive aspects of specific MCO enrollee needs, care, and services?	M 🟢	Evaluation of the most current 2018 HEDIS ADV rate, showed that less than 50% of Missouri Care's eligible members received an annual dental visit. Additionally, the Statewide Improving Oral Health Initiative was taken as basis of this PIP.
1.2 Is the PIP consistent with the demographics and epidemiology of the enrollees?	M 🟢	The HEDIS ADV measure evaluates members 2–20 years of age who had at least one dental visit during the measurement year. This is consistent with the demographics and epidemiological needs of Missouri Care's population, which primarily includes children and pregnant women and is a covered benefit as part of Missouri Care's Medicaid contract.

1.3 Did the PIP consider input from enrollees with special health needs, especially those with mental health and substance abuse problems?	M	The PIP includes all enrollees from 2-20 years of age including, but not limited to members with special needs and physical or behavioral health conditions.
1.4 Did the PIP, over time, address a broad spectrum of key aspects of enrollee care and services (e.g., preventive, chronic, acute, coordination of care, inpatient, etc.)?	M	Missouri Care states that by members receiving a preventive annual dental visit, it can improve members' overall oral health by reducing chronic or acute oral health conditions.
1.5 Did the PIP, over time, include all enrolled populations (i.e., special health care needs)?	M	Same as 1.3

Step 2: Review the Study Question(s)

Component/Standard	Score	Comments
2.1 Was/were the study question(s) measurable and stated clearly in writing?	PM	The study question was measurable but not clearly stated. The measurement year, baseline year and the rates for baseline year and goal for measurement year, should be clearly written. The study question was as follows: "Will providing the proposed list of interventions to eligible members from the ages of two (2) through twenty (20) years old increase the number of children who receive an annual dental visit by 3% for the measurement year?"

Step 3: Review the Identified Study Populations

Component/Standard	Score	Comments

3.1 Were the enrollees to whom the study question and indicators are relevant clearly defined?	M	The study population included Missouri Care members 2 through 20 years of age who had at least 1 dental visit during the measurement year and are continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days.
3.2 If the entire population was studied, did its data collection approach capture all enrollees to whom the study question applied?	M	The data collection procedures were consistent with the use of HEDIS methodologies.

Step 4: Review Selected Study Indicator(s)

Component/Standard	Score	Comments
4.1 Did the study use objective, clearly defined, measurable indicators (e.g., an event or status that will be measured)?	M	HEDIS ADV rate (Administrative measure) was the indicator used to assess the outcome of PIP.
4.2 Did the indicators track performance over a specified period of time?	PM	The performance for CY 2017 was tracked on a quarterly and annual basis. It should be measured and plotted on a run chart to show the impact of interventions on a more frequent basis.
4.3 Are the number of indicators adequate to answer the study question; appropriate for the level of complexity of applicable medical practice guidelines; and appropriate to the availability of and resources to collect necessary data?	PM	HEDIS ADV rate was the indicator used to answer the study question. No other indicator was used to assess the impact of interventions.

Step 5: Review Sampling Methods

Component/Standard	Score	Comments
5.1 Did the sampling technique consider and specify the true (or estimated) frequency of occurrence of the event, the confidence interval to be used, and the acceptable margin of error?	N/A	No sampling methods were used in this PIP.
5.2 Were valid sampling techniques employed that protected against bias? Specify the type of sampling or census used:	N/A	Same comment as above.
5.4 Did the sample contain a sufficient number of enrollees?	N/A	Same comment as above.

Step 6: Review Data Collection Procedures

Component/Standard	Score	Comments
6.1 Did the study design clearly specify the data to be collected?	M	Study Indicator data pulled from the HEDIS ADV rate captures: *Denominator:* Members 2 through 20 years of age who are continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days. *Numerator:* Members 2 through 20 years of age identified as having one or more dental visits with a dental practitioner during the measurement year. A member had a dental visit if a submitted claim/encounter contains any relevant code as per HEDIS Dental Value set.

6.2 Did the study design clearly specify the sources of data?	M	Sources of data used in this study includes claims-based software and NCQA Certified Software (Inovalon) to calculate the HEDIS ADV rate.
6.3 Did the study design specify a systematic method of collecting valid and reliable data that represents the entire population to which the study's indicators apply?	M	Administrative data is used to produce the HEDIS ADV rates.
6.4 Did the instruments for data collection provide for consistent and accurate data collection over the time periods studied?	M	As part of its systematic method of collecting valid and reliable data, claims data for the study were queried from claims-based software and put into NCQA-certified software (Inovalon). Inovalon follows HEDIS Technical Specifications to calculate the ADV rate.
6.5 Did the study design prospectively specify a data analysis plan?	M	The Plan evaluated the success of the project by demonstrating an improvement in Missouri Care members' oral health outcomes through education and on-going interventions, as evidenced by at least a 3% increase in the HEDIS ADV rate.
6.6 Were qualified staff and personnel used to collect the data?	M	Quality improvement specialists and Nurses under the direction of Medical Director was involved in this PIP.

Step 7: Review Data Analysis and Interpretation of Study Results

Component/Standard	Score	Comments
7.1 Was an analysis of the findings performed according to the data analysis plan?	M	Information from claims/encounter data and was calculated using NCQA Certified Measures Software as per the plan.
7.2 Were numerical PIP results and findings accurately and clearly presented?	M	The results were provided region wise and aggregate Statewide accurately through tables and graphs, along with a narrative of qualitative analysis.
7.3 Did the analysis identify: initial and repeat measurements, statistical significance, factors that influence comparability of initial and repeat measurements, and factors that threaten internal and external validity?	M	There are no factors that influenced comparability of initial and repeat measurements or threatened internal and external validity of data.
7.4 Did the analysis of study data include an interpretation of the extent to which its PIP was successful and follow-up activities?	M	The aim of the PIP was met. Missouri Care attributed the success to their ongoing interventions started for last several years. They stated the future opportunities for further improvement.

Step 8: Assess Improvement Strategies

Component/Standard	Score	Comments
8.1 Were reasonable interventions undertaken to address causes/barriers identified through data analysis and QI processes undertaken?	PM	Missouri Care has a cross-functional HEDIS workgroup with representation from a wide variety of disciplines and service areas. The workgroup brainstorms, analyzes HEDIS data, and works to identify root causes for gaps in care, but specific interventions for CY 2017

		PIP and their impact could not be measured in the given time frame.
8.2 Are the interventions sufficient to be expected to improve processes or outcomes?	PM	Though Missouri Care specifically outlined the barriers and addressed them in their ongoing interventions, the impact of each intervention could not be measured and the interventions started at different times throughout the year at the State level.
8.3 Are the interventions culturally and linguistically appropriate?	M	To ensure interventions meet and support members cultural and linguistic needs, Missouri Care's offers 6th grade reading level and language translation option available on all member materials/calls.

Step 9: Assess Whether Improvement is "Real" Improvement

Component/Standard	Score	Comments
9.1 Was the same methodology as the baseline measurement used when measurement was repeated?	M	The methodology of the source for data analysis, members examined and tools used have remained the same since HEDIS 2015 baseline year.
9.2 Was there any documented, quantitative improvement in processes or outcomes of care?	M	The HEDIS 2018 ADV results show statistical significant improvements in Central, East, West, and Aggregate population.

9.3 Does the reported improvement in performance have "face" validity (i.e., does the improvement in performance appear to be the result of the planned quality improvement intervention)?	NM	The interventions could not be tied to the improvement.
9.4 Is there any statistical evidence that any observed performance improvement is true improvement?	M	Same comment as 9.2

Step 10: Assess Sustained Improvement

Component/Standard	Score	Comments
10.1 Was sustained improvement demonstrated through repeated measurements over comparable time periods?	NM	No statistically significant sustained improvement seen.

ACTIVITY 2: VERIFYING STUDY FINDINGS (OPTIONAL)

Component/Standard	Score	Comments
1.0 Were the initial study findings verified upon repeat measurement?	N/A	

ACTIVITY 3: EVALUATE OVERALL VALIDITY AND RELIABILITY OF STUDY RESULT AND SUMMARY OF AGGREGATE VALIDATION FINDINGS

Result:

- ☐ **High confidence in reported PIP results**
- ☐ **Confidence in reported PIP results**
- ■ **Low confidence in reported PIP results**
- ☐ **Reported PIP results not credible**

Summary

Between H2017 and H2018 (CY 2016 and CY 2017), the statewide ADV rate increased by 1.45% points or 3% which is statistically significant. The aim of the PIP to increase the ADV rate Statewide by 3% could be achieved. Multiple interventions were in place from the past years as well as throughout the measurement year. Impact of an intervention could not be evaluated. The aim set for the PIP is too low and does not meet the CMS goal for Oral Health as listed in MHD contract. For these reasons the PIP is assigned a **Low confidence**= (A) the PIP was methodologically sound; however, the SMART Aim goal was not achieved; or (B) the SMART Aim goal was achieved; however, the quality improvement processes and interventions were poorly executed and could not be linked to the improvement.