Primaris
Healthcare Business Solutions

2018 External Quality Review

Performance Improvement Projects

home state health

Measurement Period: Calendar Year 2017

Validation Period: June-August 2018

Publish Date: Dec 07, 2018

MoHealth Net

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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).

Home State Health, 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.

Home State Health 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 9, 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 Home State Health 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: Home State Health submitted the following documents for review:
  - PIP (clinical): Improving Childhood Immunization Rates Combo 10; and
  - PIP (non-clinical): Improving Access to Oral Healthcare.
- Interview: The following Home State Health officials were interviewed to understand their concept, approach and methodology adopted for the PIPs:

  Megan Barton, Vice President Medical Management

  Dana Houle- Senior Director, Quality Improvement

Douglas H Watts Manger, Quality Improvement

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 and 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: Home State Health

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

The evaluation of Childhood Immunizations Status (CIS Combo 10) is a MHD requirement, a Home State Health Quality Strategic Initiative, as well as a nationally recognized study through NCQA/HEDIS reporting. As required by the 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.

Immunizations are one of the safest and most effective ways to protect children from a variety of potentially serious childhood diseases. Failure to immunize not only exposes children to the dangers of disease, but also significantly impacts the cost of healthcare and lost school and workdays (National Quality Measures Clearinghouse, www.qualitymeasures.ahrq.gov; Feb 2, 2016).

Approximately three-hundred (300) children in the United States die each year from vaccine-preventable diseases (http://www.mayoclinic.com/health/vaccines/CC00014; February 29, 2016). Despite vaccines' benefits, Missouri's immunization rates for children between nineteen (19) and thirty-five (35) months of age are less than the national rates (with the exception of the Hepatitis B vaccine given at birth and Rotavirus) and many times lower than the rates of other states in the region (Iowa, Kansas and Nebraska) (National Immunization Survey.

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6433a1.htm?s_cid=mm6433a1_e#Tab3; February 2016).

Missouri is reported in the US Department of Health and Human Services (DHHS) Region VII along with Iowa, Kansas and Nebraska.

For the purpose of this PIP, Home State Health assessed the 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

Aim: To increase the CIS rate for Combo 10 immunizations for CY 2017 by three (3) percentage points between CY 2016 and CY 2017.

Study Question: "Will directing targeted member and provider health promotion and awareness activities increase the percentage of Home State Health children under age two (2) who are immunized by three (3) percentage points between HEDIS 2017 (H2017) and HEDIS 2018 (H2018)?"

Study Indicator: the CIS rate of members under 2 years of age who meet the compliance requirements set forth in the NCQA HEDIS Childhood Immunizations (CIS) technical specifications applicable for the measurement year (CY 2017).

Study population: Includes all eligible Home State Health members under two (2) years of age.
Sampling: The HEDIS Technical Specifications dictate a systematic sampling scheme for hybrid measures such as CIS rate, for H2018, a random sample of 411 members was taken.
Baseline Data: The baseline for this PIP is Home State Health's Childhood Immunization (CIS) Combo 10 final rates for H2017 (CY 2016) as stated in Table 1.

Table 1: Home State Health CIS Combo 10 Baseline Rate (CY 2016)

HEDIS Year	Home State Health Combo 10 Rate	NCQA 50th percentile	NCQA 95th percentile
2017	24.04%	33.09%	51.82%

Methodology

CIS Combo 10 compliance was determined using administrative claims (using The American Medical Association's (AMA) Current Procedural Terminology (CPT) codes) and non-claims clinical data. Additionally, Home State Health retrieved medical records from a variety of providers in order to capture documentation of immunizations administered which might not have been submitted to the Missouri Department of Health and Senior Services' ShowMeVax immunization registry. These medical records are accounted for the HEDIS Hybrid Technical Specifications and are entered as non-standard administrative data in our HEDIS rates.

Home State Health uses Quality Spectrum Insight (QSI), an NCQA certified measure software, to analyze claims data to determine compliance with this measure. Missouri Health Plus sends non-claims, clinical files to Centene Corporation for Home State Health members on a monthly basis. These supplemental data files are loaded into Centene's Enterprise Data Warehouse (EDW).

HEDIS rates are reviewed each month from QSI flowchart run reports based on claims data, state immunization registry, non-claims-clinical data received electronically via data exchange. QSI generated care gap reports are used each month to assess members meeting the denominator criteria who have not yet met the measure specifications and pursue medical

records from treating providers, clinics and/or health departments to retrieve medical documentation to support immunizations delivered but not captured via electronic means.

Following the current HEDIS Technical Specifications as applicable for the measurement year, the Centene Corporate HEDIS department runs an ETL (extract, transform, and load) process of Home State Health administrative data from the EDW into QSI on a monthly basis. Home State Health's QI staff extract the monthly preliminary HEDIS results to analyze and determine effectiveness of interventions based on changes in the CIS rate. Home State Health HEDIS team analyzes the CIS measure data to identify all members who are non-compliant for the measure for appropriate outreach.

Home State Health performs a HEDIS measurement at the end of each subsequent year using Quality Spectrum Insight (QSI), which includes the HEDIS Technical Specifications enrollment criteria. The quality measurement for this study includes:

- Denominator: Home State Health members under two (2) years of age, enrolled on 12/31 of the measurement year, who were continuously enrolled in the measurement year with no more than one gap in enrollment of up to forty-five (45) days during the measurement year.
- Numerator: Home State Health members in the denominator who met the measure specification requirements for CIS Combo 10 as defined by the H2018 Technical Specifications.

Home State Health monitors this study indicator throughout the year (at minimum quarterly) to monitor the effectiveness of the interventions and to determine if additional interventions are needed. The annual report of this measure is audited by an NCQA certified HEDIS auditor.

Intervention and Improvement Strategies:

Home State Health have ongoing interventions from the past years, not limited to the following listed below:

EPSDT Program includes outreach to members at strategic milestones encouraging their engagement in wellness activities, including childhood immunizations. Through monthly assessment of member engagement, Home State Health outreaches members who have not obtained their immunizations in the following ways:

- Live and automated telephonic outreach;

- Member services inbound call interactions;
- Care management interactions; and
- Birthday card reminder mailings.

Home State Health's pay-for-performance improvement programs that were initiated in 2015 continue to date, and have evolved to increase the number of in-network participating providers.

Table 2: Home State Health Childhood Immunization Interventions based on Barrier Analysis

Date	Ongoing Interventions	Root Cause Addressed	Potential Impact	Outcome
2016 & ongoing	Implemented STL Medical New Mom and Traditional EPSDT tangible incentive and texting programs aimed at educating parents in their preferred mode of communication and incentivizing healthy behaviors, including childhood immunizations.	Lack of parental awareness of the benefits of and access to immunizations for their children under 2 years of age.	Increasing the number of children who need vaccinations by their 2nd birthday.	In 2016, Home State Health distributed 3,751 Childhood Immunization education mailers to families with children eligible for this measure. In 2017, 6,6,81 mailers were sent.
Q2 2017	Implemented quarterly validation of provider database based on claims evidence.	Inconsistency of provider-member relationship attributed to imputed vs. assigned provider	Improving the ability to locate member medical records for compliant visits/immunizations	Home State Health identified that approximately 40% of membership have no discernable PCP relationship.

Q3 2017	Expanded electronic medical record (EMR) access to Home State Health Quality Improvement Department staff Implemented utilization of HEDIS User Interface (HUI). It is an interactive and routinely updated database used for HEDIS reporting and a standardized mechanism to add non-standard supplemental data to demonstrate more accurate childhood immunization rates.	Compliant immunization data unavailable to Home State Health Insufficient processes/systems to support the reporting of immunization supplemental data following NCQA specification and auditor approval to support HEDIS reporting requirements	Improving the ability to locate member medical records for compliant visits/immunizations Providing a more accurate and timely representation of HEDIS rates; supporting collection and oversight process available	In 2017 Home State Health acquired EMR access to 8 providers servicing over 100,000 Home State Health members. For H2018, Home State Health utilized HUI for 3,741 immunization events that were not captured via claims or other supplemental data sources

3.1.2 PIP Results

- The Statewide CIS Combo 10 rate for Home State Health in CY 2017 (H2018) was 27.01% as compared to the rate in CY 2016 (H2017-24.04%), shown in the Figure 1.

Between H2017 and H2018 (CY 2016 and CY 2017), the statewide CIS Combo 10 rate increased by 2.97 percentage points, which is not statistically significant. The aim of the PIP to increase by 3% point could not be achieved. It fell short by 0.03% point. Home State Health is far too behind the contractual requirement to meet the goal of 90% rate.
Between H2016 and H2017 (CY 2015 and CY 2016) the rate decreased 2.40 percentage points.
Between H2015 and H2016 (CY 2014 and CY 2015), the statewide rate of CIS Combo 10 increased 1.54 percentage points.

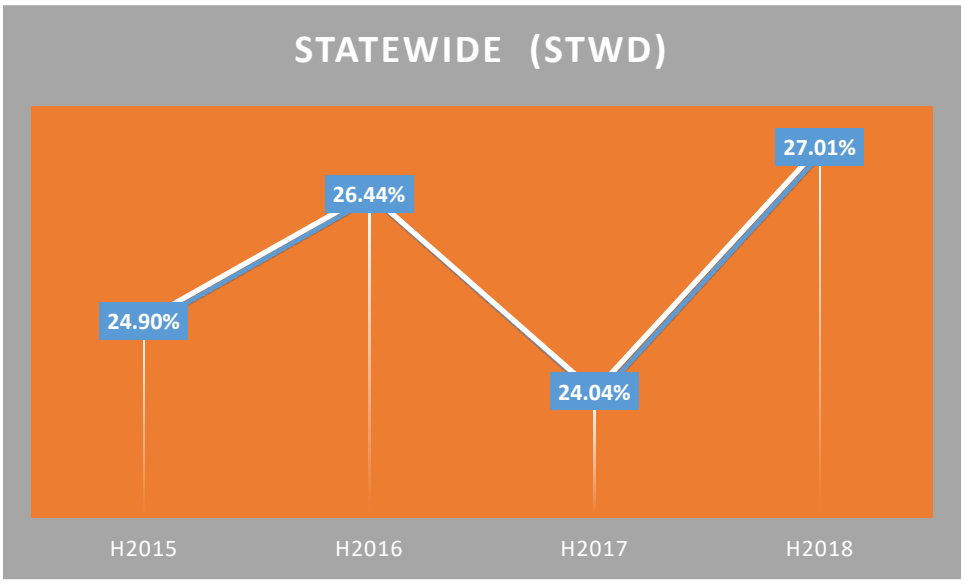

Figure 1: Trend in Home State Health for STWD CIS Combo 10 Rates H2015-H2018

- The rates of CIS Combo 10 increased in each individual region between H2017 and H2018 (CY 2016 and CY 2017) from the 10th to the 25th percentile. Additionally, Home State Health demonstrated statistically significant increases in the rates of Combo 10 in the Western region between H2017 and H2018.

Table 3: Trends in Home State Health HEDIS CIS Combo 10 Rates H2015-H2018 (CY 2014-CY 2017)

HEDIS Year	Statewide (STWD)	Eastern Region (EMO)	Central Region (CMO)	Western Region (WMO)	NCQA Quality Compass 50th Percentile
H2015	24.90%	25.72%	28.77%	22.12%	34.18%
H2016	26.44%	28.61%	19.95%	19.95%	32.64%
H2017	24.04%	25.00%	18.51%	19.23%	33.09%
H2018	27.01%	25.55%	21.90%	27.49%	Pending

Figure 2: Trends in Home State Health HEDIS CIS Combo 10 Rates by Region

3.2 PIP Non Clinical: Improving Access to Oral Healthcare

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

Aim: To increase the Annual Dental Visit (ADV) rate by three (3) percentage points between CY 2016 and CY 2017.

Study Question: "will implementing the proposed interventions to Home State Health members between ages 2 through 20 increase the ADV rate per the HEDIS specifications by 3 percentage points between Home State Health's HEDIS 2017 (H2017) and HEDIS 2018 (H2018) results?"

Study Indicator: The rate of Home State Health members age two through twenty years old who had at least one dental visit during the measurement year (CY 2017) as measured by the HEDIS ADV total rate through the administrative method of measurement.

The study population: Includes all eligible Home State Health members ages two through twenty.

Sampling: No sampling was done. All members from age two through twenty were included in the PIP.

Baseline Data: Home State Health baseline for this performance improvement project is the plan's ADV final rates for HEDIS Year 2017. For comparison purposes, the NCQA Quality Compass percentile targets for both the 25th and 50th percentile are referenced.

Table 4: Home State Health ADV Baseline Rate (CY 2016)

HEDIS Year	Home State Health ADV Rate	NCQA Quality Compass 25th percentile	NCQA Quality Compass 50th percentile
H2017	39.91%	46.27%	54.93%

Methodology

Home State Health uses QSI XL, an NCQA-certified HEDIS software, to analyze claims data to determine compliance with this measure. Administrative claims are gathered using the American Dental Association's (ADA) Current Dental Terminology (CDT) and the American Medical Association's (AMA) Current Procedural Terminology (CPT) codes as well as non-claims administrative data. Envolve Dental sends Centene Corporation claims files for Home State Health members on a monthly basis. These supplemental data files are loaded into Centene's Enterprise Data Warehouse (EDW).

The H2018 Technical Specifications eliminated the Dental Visits Value Set, which is "the complete set of codes used to identify a service or condition included in a measure". This change now allows any visit with a dental practitioner during the measurement year to be counted in the ADV rate, rather than only particular types of visits, as before.

Following the current HEDIS Technical Specifications, the Centene Corporate HEDIS department runs an ETL (extract, transform, and load) process of Home State Health's administrative data from the Enterprise Data Warehouse into QSI XL on a monthly basis. Home State Health QI staff then extract the monthly preliminary HEDIS results to analyze and determine the effectiveness of interventions based on changes in ADV rate. The Corporate HEDIS team also runs the ADV measure without the continuous enrollment factor to allow Home State Health to determine all members who are non-compliant for the measure for appropriate outreach. In addition, the vendor contracted to conduct outreach calls to encourage members to utilize their dental benefits periodically provides data on their contact rates.

Home State Health performed a HEDIS measurement at the end of subsequent year using Quality Spectrum Insight XL (QSI XL), which included the HEDIS Technical Specifications enrollment criteria. The quality measurement for this study includes:

- Denominator: Home State Health members ages 2 through 20, enrolled on 12/31 of the measurement year, who were continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days during the measurement year.
- Numerator: Home State Health members in the denominator who had one or more dental visits with a dental practitioner during the measurement year.

Home State Health monitored this study indicator throughout the year - at minimum quarterly - to monitor the effectiveness of the interventions and to determine if additional interventions were needed. The annual report of this measure is audited by an NCQA certified HEDIS auditor.

Intervention and Improvement Strategies

- Home State Health's EPSDT program includes outreach to members at strategic milestones, encouraging their engagement in wellness activities, including oral health. Through monthly assessment of member engagement, Home State Health outreaches members who have not completed their annual dental visits in multiple ways:
    - Live and automated telephonic outreach;
    - Member Services inbound call interactions; and
    - Care Management interactions and birthday card reminder mailings.
- In conjunction with the MO HealthNet contract effective May 1, 2017, Home State Health implemented a warm, telephonic outreach campaign with AlphaPointe, a sheltered workshop in Missouri. Following state approval of the Annual Dental Visits script on August 18, 2017, these calls were initiated in September and ran through the end of December, 2017.
- Table 5 lists interventions implemented in 2016 and 2017 to address specific barriers to reaching ADV rate goals.

Table 5: Home State Health Oral Health Interventions based on Barrier Analysis

Date Implemented	Ongoing Interventions	Barriers Addressed	Outcomes
Q2 2016	Existing eligible members received Primary Care Dental (PCD) assignment ID cards in the mail in June 2016. Newly eligible Adult PCD assignment ID cards mailed in July 2016.	Access to dentists and availability of appointments.	Plan to continue in H2018. At time of initial implementation, this was mailed to the entire eligible

			population. Newly enrolled members receive PCD assignment cards upon enrollment.
Q2 2017	Automated Static Telephonic Messaging sent to all Members identified as not having an annual dental visit in the past 365 days was deployed in June 2017.	Member knowledge of dental benefit, access to dentists, and transportation benefit.	Plan to continue in H2019.
Q3 and Q4 2017	Members identified as not having received their annual dental visit were contacted by AlphaPointe, a contracted vendor, to be reminded of their dental benefit, preferred dentist and, if applicable, of their benefit to receive transportation to and from their dental visits.	Member knowledge of dental benefit, access to dentists, and transportation benefit.	Plan to continue in H2019.
Q4 2017	Oral Health Texting Campaign 11/16/17.	Member knowledge of dental benefit and recommended frequency for dental exams.	Plan to continue in H2019.

Q4 2017	Toothbrush Timer Texting and app for cell phones 12/28/17.	Member knowledge of dental benefit	Plan to continue in H2019.

3.2.2 PIP Results

- Outreach campaign with AlphaPointe had the following impact on members:
  - 9% (544/6,374) Members set up and completed their dental required visit after the AlphaPointe call;
  - 85% (5448/6,374) Members did not complete their dental required visit after the AlphaPointe call; and
  - 11% (700/6,374) Members opted into Home State Health's texting program which addresses wellness behaviors in general, including annual dental visits.
- The intervention about sending an automated static telephone message to all households where at least one Member in the eligible population had no evidence of completing an annual dental visit within the past 365 days as well as sending oral health related text messages to all households where texting Opt In has been documented, resulted in 10,700 Members who have opted into receiving text messages related to wellness behaviors.
- The Statewide ADV rate for Home State Health in CY 2017 (H2018) was 41.63% as compared to the rate in CY 2016 (H2017-39.91%), shown in Figure 3.

  Between H2017 and H2018 (CY 2016 and CY 2017), Home State Health's statewide ADV rate increased by 1.72 percentage points which is statistically significant. However, the aim of the PIP to increase by 3% point could not be achieved.

  Between H2016 and H2017 (CY 2015 and CY 2016) the ADV rate decreased by almost a full % point.

  Between H2015 and H2016 (CY 2014 and CY 2015) decreased by 0.87% point.
- There has been an increase in ADV rates in Eastern, Central and Western region of Missouri between H2017 and H2018 (CY 2016 and CY 2017). The largest increase has been in the Eastern region (2.83% point) which is statistically significant, where the plan is headquartered and where the largest concentration of members resides.

The ADV rate in the new, Southwest Region (effective 5/1/17) was 52.82%, or 9.96 percentage points higher than the Eastern Region at 42.86% (Table 5).

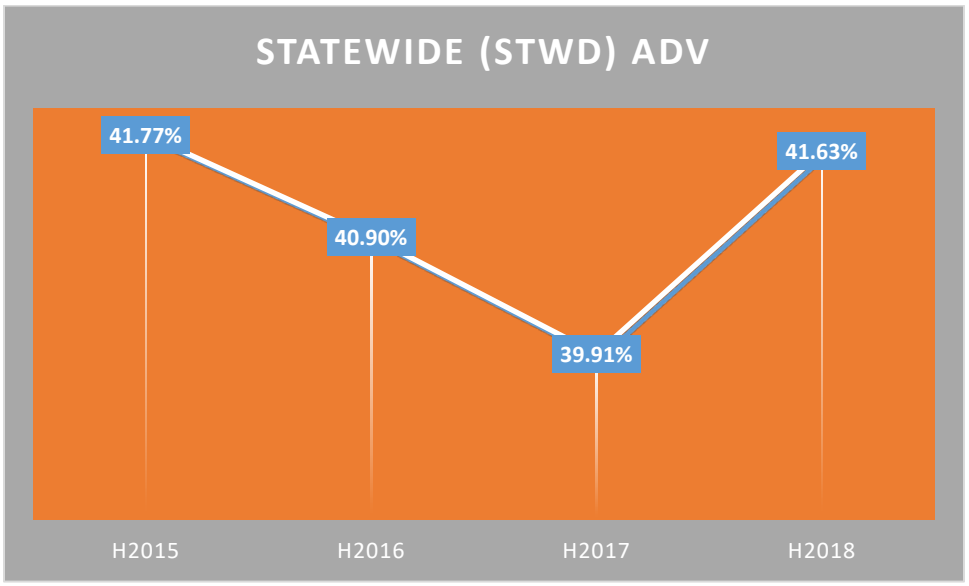

Figure 3: Trend in Home State Health for STWD ADV Rates H2015-H2018

Table 5: Trends in Home State Health HEDIS ADV Rates H2015-H2018

HEDIS Year	Statewide (STWD)	Eastern Region (EMO)	Central Region (CMO)	Western Region (WMO)	Southwestern Region (SWMO)	NCQA Quality Compass 50th Percentile
H2015	41.77%	41.26%	40.31%	43.08%	N/A	52.65%
H2016	40.90%	41.37%	37.73%	40.95%	N/A	51.7%
H2017	39.91%	40.03%	39.83%	39.77%	N/A	54.93%
H2018	41.63%	42.86%	40.62%	40.10%	52.82%	Pending

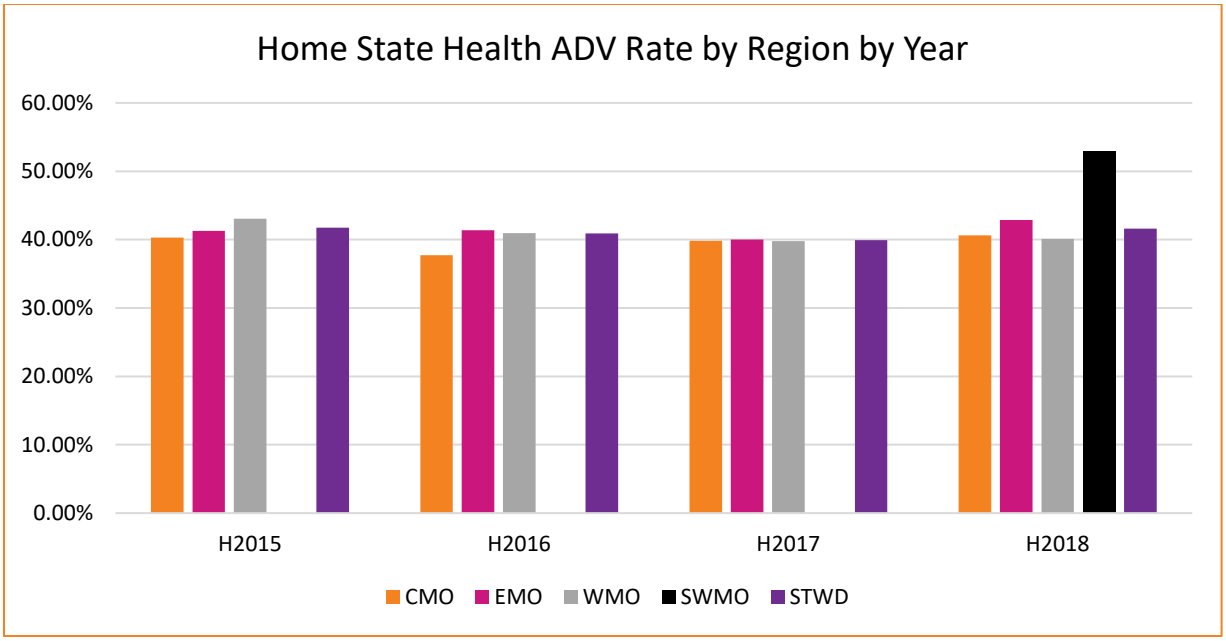

Figure 4: Trends in Home State Health HEDIS ADV Rates by Region

4.0 Overall Conclusions

PIPs Score

The following score was assigned to both the CIS Combo 10 and Oral HealthCare 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 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 6: 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 aim was not clearly written. The baseline rate and rate to be achieved (aim) were not stated.
- 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.
- Monthly measurement of HEDIS rates is mentioned by Home State Health but data/run charts were not submitted.

PIP Results

Home State Health's CIS Combo 10 rates did not increase as expected. Potential reasons submitted by Home State Health were:

- Lack of focus of prior interventions on incentivizing and mobilizing members to seek out their immunizations; and

- Insufficient reporting by providers of immunization administrations, as well as a need for enhanced capturing and validation of those that are reported.

Home State Health's ADV rates did not increase as expected. Potential reasons include the following flaws in the interventions Home State Health has historically implemented:

- Many of the interventions were forward looking and structural in nature.
- The initiative with St. Louis Medical provided the member (parent) with a toothbrush, floss and toothpaste, along with a card informing the parent of how to locate a dental provider. This was informative, but did not actually create a visit to the dentist.
- The utilization of Dental Vans did not yield a substantive increase in the ADV rate; although this intervention was designed to add convenience to an actual visit, the van providers refused to comply with billing standards that would become numerator compliant. Historically, dental vans have not contributed significantly to ADV rates.
- Affinia Healthcare, a large FQHC with over 90 dental chairs, had administrative and provider challenges which restricted forecasted volumes of treatments.

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

- Home State Health will to continue its infrastructure interventions. They will assess its more direct, member-facing interventions for effectiveness, focusing on increasing provider involvement, capturing immunization administrations, and validation of data output analysis.
- During CY 2017, Home State Health continued interventions started in 2016 about EPSDT program which aimed at increasing CIS rates and developed improved data flow with key partners.
- Throughout 2017, Home State Health continued to work toward a project agreement with Missouri Health Connection (MHC), a statewide health information exchange network. Home State Health seeks to collaborate with MHC to develop an agreement and scope of work to include bi-directional information sharing between Home State Health and MHC, including membership and clinical data. This will allow Home State Health to collect additional HEDIS data, including immunizations, and enable reporting through supplemental data. In 2018, Home State Health continues to work with MHC toward this collaborative data exchange.

Access to Oral HealthCare

- Home State Health experienced an increase in ADV between H2017 and H2018. Home State Health has committed to a number of long term projects designed to empower providers with the ability to identify non-compliant members and to conduct assessments, treatments and referral of members with oral health problems.
- Home State Health has also promoted long-term plans for members to develop a dental home, receive electronic communication regarding oral health, receive fluoride varnish, and increase choices for dental access.
- Home State Health will continue to fully participate and collaborate with the Missouri Dental Task Force to develop innovative methods to provide dental services to the eligible population. Home State Health believes that the Quality Improvement Team's

efforts in both HEDIS and EPSDT member outreach as well as the collaboration with the Missouri Coalition for Oral Health (MCOH) and the Missouri Department of Health and Senior Services (DHSS) implementation of Women, Infants and Children (WIC) Program based oral health services will contribute to future ADV rates.

- The most likely reason reported by Home State Health for the lack of improvement in ADV rate, is its precipitous increase in membership, due to both auto enrollment as well as Home State Health's statewide expansion in calendar 2017 when the plan went from 109,000 members to over 270,000 members. Newer members may not be familiar with the managed care processes or have an established relationship with their MCO or their provider(s).

  Based on the graph below, Primaris noted that there is a minimal decrease of 0.15% point in ADV compliancy rate in CY 2017 in comparison to CY 2016. So the explanation provided by Home State Health attributing the increase in members for the cause of low ADV rates, does not appear to be valid. Home State Health was able to maintain the compliancy rate from previous year.

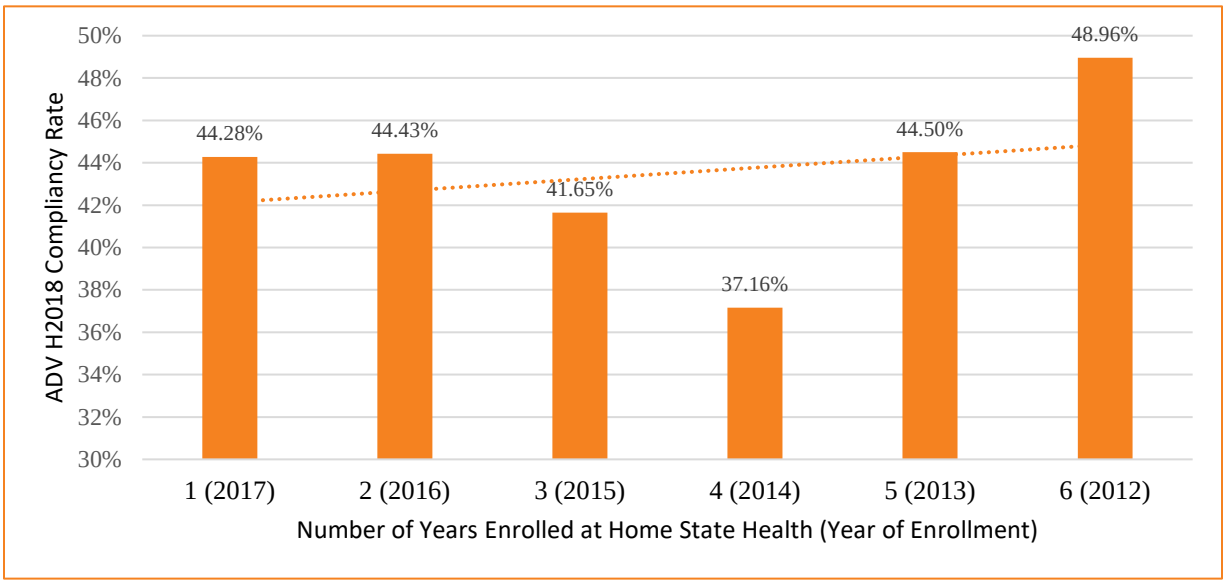

Figure 5: Home State Health HEDIS ADV H2018 Compliancy Rate by Number of Years Enrolled

4.2 Improvement by Home State Health

- 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. Home State Health continued to use ongoing 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 Statewide increased 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 2.97% point.
  Similarly, the ADV rate increased by 1.72% point statewide and in the three regions (Eastern, Central, and Western) from the CY 2016.

5.0 Recommendations

PIPs Approach

- Home State Health 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.
- Home State Health 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 Home State Health 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 9, 2018

MCO Name:	Home State Health
Name of Performance Improvement Project:	Improving Childhood Immunization Status (CIS Combo 10)
Dates in Study Period:	Jan 1, 2017- Dec 31, 2017
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 271,445 Medicaid/CHIP members included in the study: 5608

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 🟢	Home State Health developed the topic for this Childhood Immunization PIP using national, regional, and Home State Health's data. Home State Health 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 🟢	18% of the Home State Health's members were children under the age of two (2). Year-over-year analysis of Home State Health's Combo 10 childhood immunization rates demonstrates that less than 30% of these children have evidence of receiving the required immunizations.

1.3 Did the PIP consider input from enrollees with special health needs, especially those with mental health and substance abuse problems?	M	Home State Health included all members that met the H2018 (CY 2017) HEDIS Technical Specifications for inclusion in the Combo 10 CIS measure. Members with special health needs were not excluded from this PIP.
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	Home State Health's CIS PIP recognizes that immunizations are a fundamental aspect of childhood care and services, and affirms the importance of preventive services.
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 the MHD contract requirement and using the HEDIS Technical Specifications, this PIP was structured to address Home State Health 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 directing targeted member and provider health promotion and awareness activities increase the percentage of Home State Health children under age two (2) who

		are immunized by three (3) percentage points between HEDIS 2017 (CY 2016) and HEDIS 2018 (CY 2017)?'

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	All Home State Health members under two (2) years of age, enrolled on Dec 31 of the measurement year (CY 2017), who were continuously enrolled with no more than one gap in enrollment of up to forty-five (45) days during the measurement year were included as denominator.
3.2 If the entire population was studied, did its data collection approach capture all enrollees to whom the study question applied?	M	The enrollment "allowable gap" criteria was not used for the intervention population. Interventions were applied to all eligible members, under two years of age, at the time of each intervention.

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?	PM	Home State Health stated that the performance for CY 2017 was tracked on a quarterly and annual basis, but not submitted. It should be measured and

		plotted on a run chart to show the impact of interventions.
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?	M	Home State Health utilized a random sample of 411 members for CY 2017, as per 2018 HEDIS Technical Specifications' systematic sampling methodology for the Combo 10 CIS hybrid measure.
5.2 Were valid sampling techniques employed that protected against bias? Specify the type of sampling or census used:	M	Random Sampling as per 2018 HEDIS Technical Specifications was used.
5.4 Did the sample contain a sufficient number of enrollees?	M	411 members

Step 6: Review Data Collection Procedures

Component/Standard	Score	Comments
6.1 Did the study design clearly specify the data to be collected?	M	Home State Health provides a description and explanation of how HEDIS data was obtained and numerators and denominators

		were included as per HEDIS 2018 Technical Specifications.
6.2 Did the study design clearly specify the sources of data?	M	Home State Health defined the sources of data including internally obtained administrative data and year-round medical record retrieval. Home State Health utilizes an independent contractor for hybrid medical record review and evaluation.
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	Home State Health's oversight processes include the utilization of NCQA-certified HEDIS auditors to validate both administrative and hybrid methodology.
6.4 Did the instruments for data collection provide for consistent and accurate data collection over the time periods studied?	M	Home State Health uses QSI XL, an NCQA-certified HEDIS software, to analyze claims data to determine compliance with this measure. Also utilizes an NCQA-certified medical record retrieval abstraction vendor to complete the hybrid data process. The annual report of this measure is also audited by an NCQA-certified HEDIS auditor.
6.5 Did the study design prospectively specify a data analysis plan?	M	Data collected for this measure consisted of administrative claims using American Medical Association's (AMA) Current Procedural Terminology (CPT) codes as well as non-claims administrative data.
6.6 Were qualified staff and personnel used to collect the data?	M	Certified Professionals in HealthCare Quality holding degree in Nursing were involved in the data collection.

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	Home State Health measured success according to the data analysis plan evaluating CY 2016 (baseline) and CY 2017 performance for CIS (combo 10) rates.
7.2 Were numerical PIP results and findings accurately and clearly presented?	M	Home State Health displayed results and findings clearly and accurately through tables and graphs, as well as providing a narrative 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	Home State Health utilized chi square statistical significance testing to evaluate performance. Home State Health demonstrated statistically significant increases in the rates of Combo 10 in the Western region between CY 2016 and CY 2017. No threats to external validity exist. Due to the random sampling methodology, no threats to internal validity existed. Results were measured for CIS (combo 10) HEDIS rate annually and compared from previous years.
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	Home State Health's CIS rates (combo 10) did not increase as expected. The MCO plans to continue the infrastructure interventions, however, Home State Health will assess its more direct, member-facing interventions for effectiveness, and begin focusing on increasing provider involvement, capturing immunization

		administrations, and validation of data output analysis.

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	Home State Health provided a narrative explanation about the interventions undertaken to address barriers. However, some of them were ongoing from previous years and others were implemented in later quarters of CY2017. So 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 Home State Health specifically outlined the root causes/barriers addressed, potential impact, and outcome obtained/anticipated for 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	For EPSDT outreach programs, Home State Health adhere to fourth grade level readability standards on all materials and scripts. The EPSDT postcard utilized in the outreach program in particular contains verbiage that directs members to information in their preferred language. In addition, Home State Health contracts with

		the language interpreter service, Voiance, to provide language translation services to members who call Home State Health.

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	Home State Health utilized the same methodology for member eligibility, data collection, and analysis.
9.2. Was there any documented, quantitative improvement in processes or outcomes of care?	NM	Between H2017 and H2018 (CY 2016 and CY 2017), the statewide CIS Combo 10 rate increased by 2.97 % points which is not statistically significant, and the rates in each individual region increased as well.
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. Home State Health did not meet the established goal for this PIP. However, Home State Health experienced Combo 10 CIS rate increases in all regions that could be attributed to the improved access to, collection of, and reporting of non-standard supplemental data.
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	Home State Health experienced increases in Combo 10 rates statewide and in all regions between CY 2016 and CY 2017. These results could not be attributed to the interventions for CY 2017, specific to this PIP.

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 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 CIS Combo 10 rate increased by 2.97 percentage points which is not statistically significant. The rates in each individual region increased as well. But 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 9, 2018

MCO Name or ID:	Home State Health
Name of Performance Improvement Project:	Improving Access to Oral Healthcare
Dates in Study Period:	Jan 1, 2017- Dec 31, 2017
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 271,445 Number of Medicaid/CHIP enrollees in Study: 62,979

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🟢	Home State Health developed the topic for this Oral Health PIP using the Statewide Improving Oral Health Initiative as the basis, analyzed population data pertinent to their membership to enhance the discussion surrounding the importance of and access to annual dental visits.
1.2 Is the PIP consistent with the demographics and epidemiology of the enrollees?	M🟢	86% of Home State Health's members were children under 20 years of age. Year-over-year analysis of Home State Health's ADV rates demonstrate less than 50% of these children have evidence of having completed an annual dental visit.
1.3 Did the PIP consider input from enrollees with special health needs, especially those with mental health and substance abuse problems?	M🟢	All members between 2 and 20 years of age with no evidence of an annual dental visit are provided education and guidance related to the importance of oral health care and the benefits of completing at least one annual dental visit.

		Home State Health included all members that met the H2018 HEDIS technical specifications for inclusion in the ADV measure. Members with special health needs were not excluded from this PIP.
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	Home State Health's Oral Health PIP is in coordination with the statewide Improving Oral Health Initiative and is focused on increasing the ADV rates and improving deficiencies in oral health care of our members.
1.5 Did the PIP, over time, include all enrolled populations (i.e., special health care needs)?	M	All members eligible for dental care were addressed in the PIP. Consistent with the Statewide Oral Health Initiative, and using the HEDIS Tech Specifications, this PIP was structured to address members ages 2-20.

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 implementing the proposed interventions to Home State Health members between ages 2 through 20 increase the ADV rate per the HEDIS specifications by 3 percentage points between Home State Health's HEDIS 2017 (H2017) and HEDIS

		2018 (H2018) results?'

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	All Home State Health members ages 2 through 20, enrolled on Dec 31 of the measurement year (CY 2017), who were continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days during the measurement year were included as denominator.
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 an annual basis as stated by Home State Health, but quarterly data was not submitted. It should be measured and plotted on a run chart to show the impact of interventions on a more frequent basis. The analysis of the effectiveness of telephonic outreach completed by AlphaPointe was

		depicted weekly for the duration of the initiative following the implementation on September 19, 2017.
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	The administrative method for collecting HEDIS data from Envolve Dental claims files

		and ingest that data into the Centene Enterprise Data Warehouse and ultimately, QSI XL is stated in the PIP.
6.2 Did the study design clearly specify the sources of data?	M	The sources of data, its collection is explained. Dental claims data are gathered end loaded into the Centene Enterprise Data Warehouse.
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	Home State Health uses QSI XL, an NCQA-certified HEDIS software, to analyze claims data to determine compliance with this measure. The annual report of this measure is also audited by an NCQA-certified HEDIS auditor.
6.5 Did the study design prospectively specify a data analysis plan?	M	Administrative claims were gathered using the American Dental Association's (ADA) Current Dental Terminology (CDT) and the American Medical Association's (AMA) Current Procedural Terminology (CPT) codes as well as non-claims administrative data. Envolve Dental sends Centene Corporation claims files for Home State Health members on a monthly basis. These supplemental data files are loaded into Centene's Enterprise Data Warehouse (EDW).

6.6 Were qualified staff and personnel used to collect the data?	M	Certified Professionals in HealthCare Quality holding degree in Nursing were involved in the data collection.

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	Home State Health completed analysis of the study outcomes as per their submission of data analysis plan.
7.2 Were numerical PIP results and findings accurately and clearly presented?	M	Tables and Figures represent the results of the AlphaPointe outreach as well as year over year HEDIS rates focusing on H2017 compared to H2018.
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	Home State Health utilized chi square statistical significance testing to evaluate performance There were no threats to either internal or external validity. Results were measured for HEDIS ADV rates annually and compared from previous years. Repeat measurements at regular intervals were not submitted.
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	From analysis of the raw HEDIS ADV data, Home State Health's ADV rates did not increase as expected. The potential reasons have been explained in the narrative submitted by Home State Health.

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	Home State Health provided a narrative explanation about the interventions undertaken to address barriers. However, some of them were ongoing from previous years and others were implemented in later quarters of CY2017. 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 Home State Health specifically outlined the root causes/barriers addressed, potential impact, and outcome obtained/anticipated for 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	Home State Health employees are provided training on cultural sensitivity and member experience. The success of Home State Health's mission of "Transforming the health of the community one person at a time" hinges on our being culturally aware in our verbal and written member communications.

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 study used administrative methodology from the HEDIS Technical Specifications for both the baseline and repeat measurements.
9.2 Was there any documented, quantitative improvement in processes or outcomes of care?	M	Between H2017 and H2018, Home State Health's statewide ADV rate increased 1.72 percentage points, and the rate in each individual region increased as well. Chi-square testing revealed that the increases statewide and in the Eastern region between H2017 and H2018 – were both statistically significant.
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	Based on the increase in ADV rates in the statewide as well as 3 regional rates, it appears the increased compliance performance reported is valid. However, It is not clear that the percentage point increases are directly related to the planned quality improvement interventions.
9.4 Is there any statistical evidence that any observed performance improvement is true improvement?	M	Chi-square testing, revealed that the increase in statewide and in the Eastern region between H2017 and H2018 – were both 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	Despite decreases in ADV rates the previous two years, Home State Health experienced an increase in ADV between H2017 and H2018. Home State Health has committed to a number of long term projects designed to empower providers with the ability to identify non-compliant members and to conduct assessments, treatments and referral of members with oral health problems. Home State Health has also promoted long-term plans for members to develop a dental home, receive electronic communication regarding oral health, receive fluoride varnish, and increase choices for dental access.

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 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 1.72 % points which is statistically significant, and the rates in each individual region increased as well. But the aim of the PIP to increase 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.