



home state health.

Measurement Period: Calendar Year 2018

Validation Period: Apr-May 2019

Publish Date: Oct 21, 2019

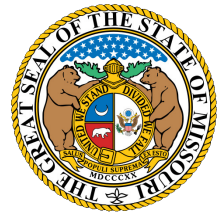


Table of Contents

Topic	Page
1.0 Purpose and Overview.....	3
1.1 Background.....	3
1.2 Description of Performance Improvement Projects (PIPs)	4
2.0 Methodology for PIP Validation	5
3.0 Findings	7
3.1 PIP Clinical: Improving Childhood Immunization Status (CIS Combo 10)	7
3.1.1 Description of Data Obtained.....	8
3.1.2 PIP Results.....	11
3.2 PIP Nonclinical: Improving Access to Oral Healthcare	12
3.2.1 Description of Data Obtained.....	13
3.2.2 PIP Results.....	16
4.0 Overall Conclusions	17
4.1 Strengths and Weaknesses	17
4.3 Improvement by Home State Health.....	20
5.0 Recommendations.....	20
Appendix A: PIP Validation Worksheet-CIS Combo 10	22
Appendix B: PIP Validation Worksheet-Improving Access to Oral Healthcare	30

1.0 Purpose and Overview

1.1 Background

The Department of Social Services, MO HealthNet Division (MHD) operates a Health Maintenance Organization (HMO) style Managed Care Program called MO HealthNet Managed Care (herein after stated “Managed Care”). MHD contracts with MO HealthNet Managed Care Organizations (MCOs), also referred to as “Health Plans,” to provide health care services to Managed Care enrollees.

Managed Care is operated statewide in Missouri in the regions: Central, Eastern, Western, and Southwestern. One of the most important priorities of Managed Care is to provide a quality program that leads the nation and is affordable to members. This program provides 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 May 2019, the total number of Managed Care enrollees in MHD were 605,907 (1915(b) and CHIP combined). This is a decrease by 14.94 % in comparison to the enrollment data available for the end of SFY 2018.

Home State Health is one of the three MCOs operating in Missouri (MO) that provides services to individuals determined eligible by the state agency for the Managed Care Program on a statewide basis. MHD works closely with the MCO to monitor the services being provided to ensure goals to improve access to needed services and the quality of health care services in the Managed Care and state aid eligible populations are met, while controlling the program’s cost.

Home State Health’s services are monitored for quality, enrollee satisfaction, and contract compliance. Quality is monitored through various on-going methods including, but not limited to, MCO’s Healthcare Effectiveness Data and Information Set (HEDIS®) indicator reports, annual reviews, enrollee grievances and appeals, targeted record reviews, and an annual external quality review. An External Quality Review Organization (EQRO) evaluates MCOs annually, as well. MHD has arranged for an annual, external independent review 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).

Primaris Holdings, Inc. (Primaris) is MHD’s current EQRO, and started their five-year contract in January 2018. The External Quality Review (EQR) 2019 covers the period of Calendar Year (CY) 2018.

Home State Health: PIPs

An EQR means the analysis and evaluation by an EQRO, of aggregated information on quality, timeliness, and access to the health care services that an MCO or their contractors furnish to Medicaid beneficiaries.

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:

- Its structural and operational characteristics.
- The provision of services that are consistent with current professional, evidenced-based-knowledge.
- 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 consider the urgency of the need for services.

1.2 Description of Performance Improvement Projects (PIPs)

A statewide performance improvement project (PIP) is defined as a cooperative quality improvement effort by the MCO, MHD, and the EQRO to address clinical or non-clinical topic areas relevant to the Managed Care Program. (*Ref: MHD-Managed Care Contract 2.18.8 (d) 2*). MHD requires the contracted MCO to conduct 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 improved efficiencies related to health care service delivery. (*Ref: MHD Managed Care Contract 2.18.8 (d)*). Completion of PIPs should be in a reasonable period (a CY), to generally allow information on the success of PIPs 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.
- Planning and initiation of activities for increasing or sustaining improvement.

During CY 2018, MHD required Home State Health to conduct two (2) PIPs:

Home State Health: PIPs

- Clinical: Improving Childhood Immunization Rates (Combo 10).
- Nonclinical: Improving Access to Oral Healthcare.

2.0 Methodology for PIP Validation

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. The review period was from April 25-Jun 5, 2019. However, the final HEDIS® rates were submitted in June 2019:

- PIP (clinical): Improving Childhood Immunization Rates Combo 10.
- PIP (non-clinical): Improving Access to Oral Healthcare.

Interview: The following Home State Health officials were interviewed on May 30, 2019 to understand their concept, approach and methodology adopted for the PIPs. Technical Assistance was provided for improvement, correction, and additional information:

- Dr. Sharon Deans, MD, Medical Director
- Megan Barton, BSN, MSHA, VP Medical Management
- Stefanie Throm, Project Manager
- Sara Katz, Data Analyst
- Lupe Ponce, Accreditation Specialist

PIPs validation process includes the following activities:

1. Assess the study methodology.
2. Verify PIP study findings (Note: Not conducted, optional as per EQRO protocol 3)
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 the 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.

Home State Health: PIPs

4. Review the selected study indicators: Each PIP should have one or more measured indicators 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 is 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. These results are provided by the MCO.

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).

Home State Health: PIPs

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

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

Primaris will report a level of confidence in its findings 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, or for reasons beyond control of MCO.

3.0 Findings

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

The evaluation of Childhood Immunizations Rates (Table 1) is a MHD requirement, a Home State Health Quality Strategic Initiative, as well as a nationally recognized study through NCQA/HEDIS® reporting. Childhood vaccines protect children from a number of serious and potentially life-threatening diseases such as diphtheria, measles, meningitis, polio, tetanus and whooping cough at a time in their lives when they are most vulnerable to disease.

Table 1: CIS Combo 10

CIS Combo 10	DTaP	IPV	MMR	HiB	HepB	VZV	PCV	HepA	RV	Influenza
No. of Doses	4	3	1	3	3	1	4	1	2	2

Approximately 300 children in the United States die each year from vaccine-preventable diseases.¹ Missouri is reported in the US Department of Health and Human Services

¹ <http://www.mayoclinic.com/health/vaccines/CC00014>. February 29, 2016.

Home State Health: PIPs

(DHHS) Region VII along with Iowa, Kansas and Nebraska. Despite vaccines' benefits, Missouri's immunization rates for children between 19 and 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 VII (Missouri, Iowa, Kansas and Nebraska)²(Table 2).

Table 2: Estimated vaccination coverage among children aged 19-35 months

HHS region	MMR (≥ 1 dose)%	DTaP (≥ 4 doses)%	Hep B (birth)%	HepA (≥ 2 doses)%	Rotavirus%	Combined vaccine series%
HHS Region VII	92.0	83.5	77.5	52.9	74.4	73.2
Iowa	91.1	87.4	68.2	58.3	67.5	71.3
Kansas	93.4	85.3	78.9	63.0	77.5	76.5
Missouri	90.3	79.2	80.9	39.5	74.4	70.0
Nebraska	96.0	87.3	79.2	67.9	79.6	80.2

Source: National Immunization Survey, United States 2010-2014

3.1.1 Description of Data Obtained

Aim: The statewide CIS rate in H2019/CY2017 was 21.65%, the goal for Home State Health is to increase the CIS rate in H2019/CY2018 by 3 percentage points to 24.65%.

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® 2018 (H2018), HEDIS® 2019))?"

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

Study Population: The study population for this project includes Home State Health members under 2 years of age. The enrollment "allowable gap" criteria will not be used for the intervention population. Interventions will be applied to all eligible members under two years of age at the time of each intervention.

Sampling: The HEDIS® Technical Specifications dictate a systematic sampling scheme for

² National Immunization Survey.

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

Home State Health: PIPs

hybrid measures such as CIS rate. For H2019/CY2018, this was a random sample of 411 members. However, the interventions were applied statewide.

Baseline Data: H2018 (CY 2017) was the baseline year and CIS Combo 10 rate was 27.01% (NCQA 50th percentile: 25.46% and NCQA 95th percentile: 51.82%).

Methodology: CIS measure compliance is determined using administrative claims and non-claims clinical data. Additionally, Home State Health retrieves 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 through the HEDIS® Hybrid Technical Specifications and are entered as non-standard administrative data in HEDIS® rates. Home State Health currently uses an NCQA certified Medical Record Retrieval (MRR) and Abstraction vendor to complete the Hybrid process. This vendor's work is transmitted electronically to Centene for inclusion in the HEDIS® rates using Quality Spectrum Insight (QSI), a nationally recognized HEDIS® software vendor. 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 who turned two years of age during the measurement year, who were continuously enrolled for the 12 months prior to their second birthday.

Numerator: Home State Health members in the denominator who met the measure specification requirements for CIS Combo 10 as defined by the H2019 Technical Specifications

Home State Health monitors this study indicator throughout the year (quarterly at a minimum) to monitor the effectiveness of the interventions and to determine if additional interventions are needed. The final, audited HEDIS® rate are reported annually on June 15 per HEDIS® timelines and contractual requirements.

Interventions and Improvement Strategies: The barrier analysis in Table 3 lists interventions implemented in CY2018 and CY2019 to address specific barriers to reaching CIS rate goals.

Table 3. Interventions and Improvement Strategies

Date	Ongoing Interventions	Root Cause Addressed	Potential Impact	Outcome
Q1 2018 and ongoing	Allow the inclusion of corrective data submitted through the Supplemental Data System (SuDS) by Missouri Health Plus: https://www.missourihealthplus.com/ a group of Federally Qualified Health Centers (FQHCs).	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 data for compliant visits/immunizations	See Table 5 for outcome data
Q2 2018 and ongoing	<p>Implementation of multi-departmental outreach/claims review initiative to address non-compliant EPSDT population. Both member and provider facing outreach was completed. Claims data was reviewed to determine if an EPSDT visit had in fact occurred, however, was coded erroneously per provider.</p> <p>Pay for Performance for Combo 10 implemented. This program pays providers for completing set percentages of Combo 10 for their assigned membership</p>	<p>Lack of parental awareness of the benefits of and access to immunizations for their children under 2 years of age.</p> <p>Coding errors resulting in compliant EPSDT visits not being accurately accounted for.</p> <p>Increasing provider engagement with Home State membership</p>	<p>Increasing the number of children who received vaccinations by their 2nd birthday.</p> <p>Ensuring services are coded appropriately to ensure those members who received their vaccinations by their 2nd birthday is identified as compliant.</p> <p>Increase PCP utilization, well-visits and immunization rates</p>	<p>The MCO must meet the 65% participation ratio in each region to receive the EPSDT withhold. As of 12/31/19, Home State Health achieved a participation ratio of 70% or higher in each region. Outcomes are measured by HEDIS® percentages as listed in Table 5</p>

Home State Health: PIPs

The intervention-“Allow the inclusion of corrective data submitted through the Supplemental Data System (SuDS) by Missouri Health Plus (MH+)”-has shown a positive impact on the member compliance for CIS immunization rates in H 2019/CY 2018 (Table 4).

Table 4. Trends in MH+ Compliant CIS Immunization Rates H2019/CY2018

CIS Immunization	MH+ Compliant Hits	Total Medicaid Compliant Hits	Percentage of MH+ Compliant Hits
DTaP	266	3886	7%
Influenza	213	2763	8%
Hepatitis B	251	3711	7%
Hepatitis A	462	5928	8%
H Influenza Type B	416	5252	8%
MMR	494	6492	8%
Pneumococcal Conjugate	129	3660	4%
OPV/IPV	245	4811	5%
Rotavirus	301	3956	8%
Chicken Pox	437	6417	7%

3.1.2 PIP Results

The statewide CIS Combo 10 rate has decreased from 27.01% (in CY 2017) to 21.65% (in CY 2018). This is a drop of 5.36 percentage points with a statistical significance (p value=0.0001). The other three regions (eastern, central, and western) noticed a drop in CIS Combo rates too. The southwestern region does not have a data for CY 2017 for comparison purpose (new region formed in May 2017) (Table 5, Figure 1). Thus, the impact of the above stated intervention on the overall CIS Combo 10 rate in not noticed.

Table 5. Trends in Home State Health HEDIS® CIS Combo 10 Rates H2016-H2019

HEDIS® Year	Statewide	Eastern Region	Central Region	Western Region	Southwest Region	NCQA Quality Compass 25 th Percentile
H2016/ CY2015	26.44%	28.61%	19.95%	19.95%	N/A	28.70%
H2017/ CY2016	24.04%	25.00%	18.51%	19.23%	N/A	25.99%
H2018/ CY2017	27.01%	25.55%	21.90%	27.49%	N/A	25.46%
H2019/ CY2018 YTD Hybrid	21.65% (89/411)	22.38% (92/411)	21.65% (89/411)	20.68% (85/411)	21.17% (87/411)	27.74%

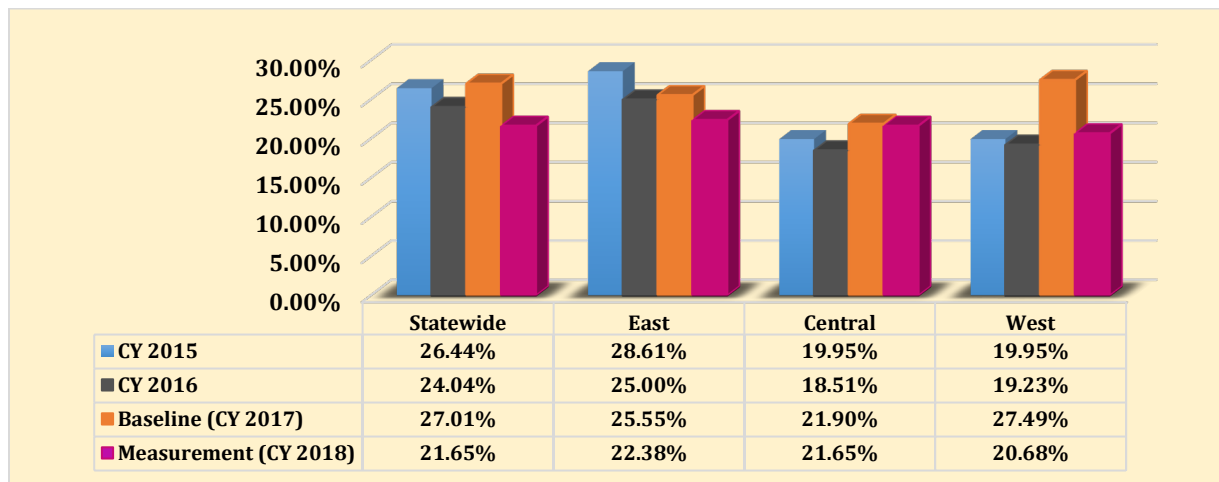


Figure 1. HEDIS® CIS Combo 10 rates (CY 2016/H2017-CY 2018/H2019)

3.2 PIP Nonclinical: 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.³ Statistics from the Centers for Disease Control and Prevention (CDC) reveal that over two-thirds of children have decay in their permanent teeth.⁴ The Kaiser Commission suggests, "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."³

The connection between oral health and general health is not often made by Medicaid recipients who frequently encounter other socioeconomic challenges. Many Medicaid participants have traditionally approached dental care in an episodic, rather than preventive, manner. Access to dental services is an ongoing nationwide challenge for many health plans serving the Medicaid population. Underutilization of dental services is not a problem specific to the Medicaid population. Nationwide only 58% of children with private insurance receive dental care. In the year 2014, the American Dental Association reported that while the Affordable Care Act will expand dental coverage for children in both the public and private sectors; this will not address access to care issues.⁵ Due to the continued disparity in access to dental care in mind, Home State Health has revised this PIP on Improving Oral Health.

³ The Kaiser Commission on Medicaid and the Uninsured: Dental Coverage and Care for Low-Income Children: The Role of Medicaid and SCHIP. August 2007. The Henry J. Kaiser Family Foundation

⁴ Children's Oral Health. 2007. CDC Oral Health Resources

⁵ Wall, Thomas, M.B.A., Nasseh, K., PhD. and Vujcic, M. PhD. US Dental Spending Remains Flat through 2012. January 2014. Healthy Policy Institute: American Dental Association Research Brief.

3.2.1 Description of Data Obtained

Aim: The Statewide ADV rate in H2018/CY2017 was 41.65% and the goal for Home State Health is to increase the ADV rate in H2019/CY2018 by 3 percentage points, to 44.65%.

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 HEDIS® 2018 and HEDIS® 2019 results?”

Study Indicator: Rate of Home State Health members ages 2 through 20 years old who had at least one dental visit during the measurement year as measured by the HEDIS® ADV total rate through the administrative method of measurement.

Study population: The study population for this project includes all Home State Health members ages 2 through 20 years. The enrollment “allowable gap” criteria is not used for the intervention population.

Sampling: No sampling will occur. All members from age 2 through 20 are included in the project.

Baseline Data: Home State Health’s HEDIS® ADV rate for CY 2017 is 41.65%. (NCQA 25th percentile: 46.27% and NCQA 50th percentile: 54.93%).

Methodology: The administrative method of measurement does not allow information to be gathered using direct chart review, but instead uses claims and enrollment information as data sources. As outlined in the H2018 technical specifications, these calculations will use the procedure codes, age ranges, and enrollment anchor date of December 31 of the reporting year for the HEDIS® ADV measure, but not the continuous enrollment criteria.

Denominator: Home State Health members ages 2 through 20, enrolled on 12/31 of the measurement year (CY 2018), who were continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days.

Numerator: Home State Health members in the denominator who had one or more dental visits with a dental practitioner during the measurement year.

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 Quality Spectrum Insight XL (QSI XL) on a monthly basis. QSI XL is Home State Health’s certified HEDIS® software used to calculate the rates of this study indicator. QSI XL 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

Home State Health: PIPs

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. Analysis of this outreach data suggests that poor demographic information influences the ability to make successful outreach calls. Outreach calls will undergo analysis against actual ADV completed after the contact, to assess the effectiveness of interventions.

Interventions and Improvement Strategies: Home State Health's Early and Periodic Screening, Diagnostic, and Treatment (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 (Table 6):

- Live and automated telephonic outreach.
- Member Services inbound call interactions.
- Care Management interactions and birthday-card reminder mailings.
- Texting program.
- Marketing activities where dental vans will be present.

Table 6: Home State Health Oral Health Barrier Analysis

Date	Ongoing Interventions	Barriers Addressed	Outcomes
Q2 2016 and Ongoing	Members are assigned a Primary Care Dental Provider in attempts to encourage them to go to a dental appointment. Members receive Primary Care Dental (PCD) assignment ID cards	Access to dentists and availability of appointments	Measured by HEDIS® data.
Q1 2018 and Ongoing	Automated text messages sent to all Members identified as not having an annual dental visit in the past 365 days. Message continues to be sent on a monthly basis unless we receive a dental claim. Artificial Intelligence embedded in some of the texts to encourage members to interact with the text	Communicating to members in a method they prefer. Member knowledge of dental benefit and ways to access dental care.	Measured by HEDIS® data. Opt-out methodology approved by the state in May 2019. By Q3 2019, texts will begin to be sent to all members instead of only members who have

Home State Health: PIPs

			opted-in to receive texts.
Q3 2017 to 12/31/2018	Members identified as not receiving their annual dental visit contacted telephonically by AlphaPointe, a contracted vendor, to remind them of their dental benefit, preferred dentist and, if applicable, their benefit to receive transportation to and from their dental visits.	Personalized communication with members. Member knowledge of dental benefit, access to dental care and education on transportation benefit.	Minimal impact. Program ended December 2018.
Q3 2018	Health fair held in Cass/Harrisonville where dental visits were provided	Meeting members where they are.	Minimal impact. Will continue to hold Health Fairs and include dental to encourage members to access their dental benefit.

Home State Health implemented a warm, telephonic outreach campaign with AlphaPointe, a sheltered workshop in Missouri on Aug 18, 2017 and ended on Dec 31, 2018. Data for Jul 2018 to Jan 2019 is outlined below in Figure 2/Table 7.

Home State's eligible population for the Annual Dental Visit Measure was 156,353.

AlphaPointe made a total of 199,381 outreach attempts that equals 1.28 calls per eligible Member (199,381/156,353). These attempts resulted in (Table 7):

- 158 successful warm transfers to dentist offices to schedule an appointment (0.08%).
- 511 (0.26%) members who agreed to contact the dentist themselves.
- 17,028 (8.52%) were left a message.

This is a minimal impact (0.34%) on the ADV rate, and the program ended in Dec 2018.

Home State Health: PIPs

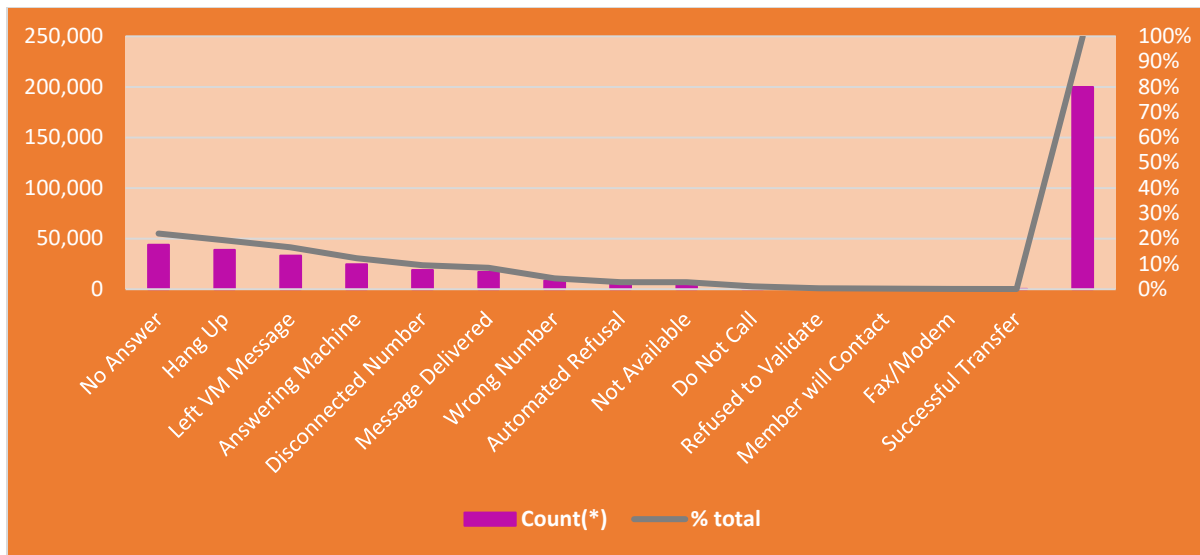


Figure 2: AlphaPointe calls Jul 2018 – Jan 2019 results

Table 7. AlphaPointe Calls Jul 2018 – Jan 2019 Results

Call Result	Count	%Total
No Answer	44,031	22.03%
Hang Up	38,740	19.39%
Left VM Message	33,195	16.61%
Answering Machine	24,608	12.31%
Disconnected Number	18,875	9.45%
Message Delivered	17,028	8.52%
Wrong Number	8,468	4.24%
Automated Refusal	5,682	2.84%
Not Available	5,448	2.73%
Do Not Call (member requests for us not to call)	2,185	1.09%
Refused to Validate (member refuses to confirm HIPAA)	658	0.33%
Member will contact (member states they will schedule an appointment)	511	0.26%
Fax/Modem	244	0.12%
Successful Transfer (Warm transfer to the dental office)	158	0.08%
Total	199,831	100.00%

3.2.2 PIP Results

The statewide HEDIS® ADV rate increased from 41.65% in CY 2017 (H2018) to 47.82% in CY 2018 (H2019) which is an increase by 6.17 percentage points. This increase is not statistically significant (p value=0.94). However, the aim of the PIP is met.

There has been a rise in statewide HEDIS® ADV rate (Figure 3) as well as in central, eastern and western regions over the 2 years (Table 8). However, southwest region which was

Home State Health: PIPs

newly formed in May 2017, shows a decline by 3 percentage points from CY 2017. Home State Health is currently at NCQA 25th percentile (47.48%).

Table 8. Trends in Home State Health HEDIS® ADV Rates H2016-H2019

HEDIS® Year	Statewide	Eastern Region	Central Region	Western Region	Southwestern Region	NCQA Quality Compass 50 th Percentile
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	41.65%	42.85%	40.69%	40.12%	53.40%	54.93%
H2019	47.82%	48.04%	46.49%	46.47%	50.43%	56.60%

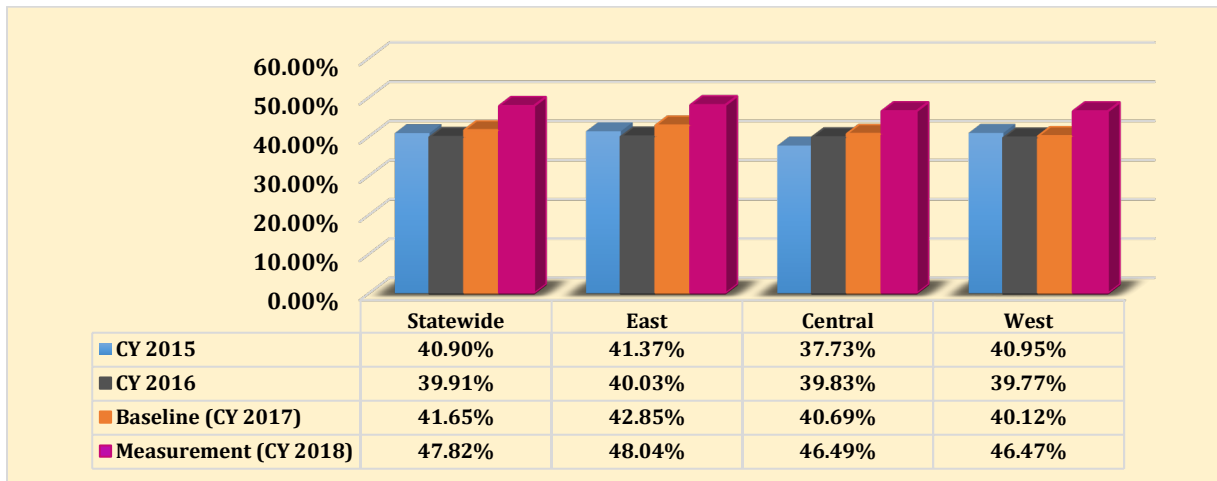


Figure 3. Trends in Home State Health HEDIS® ADV Rates H2016-H2019

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 Strengths and Weaknesses

Strengths

Home State Health: PIPs

- Home State Health expressed their willingness to learn the correct methodology for PIP during a Technical Assistance session. They responded by providing updates/additional information/corrections and tried to align with the expectations of EQRO.
- Home State Health has committed to a number of long-term projects designed to empower providers with the ability to offer immunizations/dental services to their patients as well as to a more robust and efficient method of capturing and analyzing data. The plan for future interventions is created in order to achieve set goals for CY 2019 PIPs.

Weaknesses

- The PIPs did not meet all the required guidelines stated in CFR/MHD contract (Ref: 42 Code of federal Regulations (Table 9-CFR438.330 (d)/MHD contract 2.18.8 d 1).
- Annual evaluation of HEDIS® measures 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.

Table 9. PIPs' Evaluation based on CFR guidelines

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	● Partially Met
Planning and initiation of activities for increasing or sustaining improvement	● Met

- Interventions could not be linked to the measured quality indicators. The Missouri Health plus intervention showed some positive impact on the CIS compliance but the annual HEDIS® CIS Combo 10 rate decreased by 5.36 percentage points. On the other hand, AlphaPointe intervention showed minimal impact (0.34%), but the annual HEDIS® ADV rate increased by 6.17 percentage points.
- Analysis about the impact of each intervention is not done.
- Some interventions are ongoing from previous years, without evaluation of their usefulness/impact on the quality indicators.
- PIPs result: The CIS combo 10 rate has decreased by 5.36 percentage points from the previous year in spite of interventions.

4.2 Quality, Timeliness and Access to Healthcare Services

Home State Health plans to begin working with in-network providers to promote and facilitate their participation in the Vaccines for Children (VFC) program. Supplying providers with in-office immunizations increases members' access to immunizations by eliminating members' need to take a prescription to a third-party pharmacy or clinic. Additionally, providers who are involved in VFC are required to report the immunizations they distribute to the ShowMeVax immunization registry.

Home State Health also executed a plan to collaborate with Missouri Health Connection (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.

Home State Health plans to take the following steps in future to improve their member outcomes for immunization:

- Assisting providers in participating with the Show-Me-Vax reporting program.
- Providing providers access to Interpreta and to allow for downloading of clinical documentation of care rendered-this supports the hybrid measures.
- Obtaining additional access to provider EMRs for the purpose of continuous, all-year round data collection, for the purpose of minimizing chart chases.
- Quality improvement support of provider practice management team in focused outreach of high volume providers.
- Emphasis on member outreach of transportation and incentives related to completing immunization care.
- Continued texting program as the state has approved for opt-in texting for well visits.
- Quality improvement and case management outreach and education of mothers during prenatal and postpartum encounters emphasizing the importance of immunizations for newborns.

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.

Home State Health will continue to commit to a number of long-term projects including:

- Continue to work with their dental vendor, Envolve Dental, to inform members of their benefits.
- Family household approach to outreach.
- Emphasis of transportation and incentive benefits

Home State Health: PIPs

- Disseminating information through schools via take-home flyers to children (if allowed by state).
- Exploring opportunities at Head-Start programs-deploying dental vans.

4.3 Improvement by Home State Health

- Some improvement in the documentation/presentation (e.g., aim statement, identifying proper baseline and measurement year, and analysis of interventions) is noted after a Technical Assistance session was conducted by EQRO.
- The statewide HEDIS® ADV rate has increased from 41.65% to 47.82%, which is an increase by 6.17 percentage points from the previous year, though this increase is not statistically significant.

5.0 Recommendations

PIPs Approach

- Primaris recommends Home State Health to follow CMS EQRO protocol 3⁶ and Medicaid Oral Health Performance Improvement Projects: A How-To Manual for Health Plans, July 2015⁷, for guidance on methodology and approach of PIPs to obtain meaningful results.
- Home State Health must continue to refine their skills in the development and implementation of approaches to effect change in their PIP.
- The aim should be stated clearly in writing (it should include baseline rate, % increase to achieve in a defined period). Baseline year, measurement year should be correctly written.
- 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. The results and impact should be measured on a regular basis (monthly/quarterly) and a run chart should be submitted.
- The results should be tied to the interventions.
- Instead of repeating interventions that were not effective, evaluate new interventions for their potential to produce desired results, before investing time and money.

⁶ <https://www.medicaid.gov/medicaid/quality-of-care/downloads/eqr-protocol-3.pdf>

⁷ <https://www.medicaid.gov/medicaid/benefits/downloads/pip-manual-for-health-plans.pdf>

Home State Health: PIPs

- 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.
- Home State Health must utilize the PIP's process as part of organizational development to maintain compliance with the state contract and the federal protocol.

Improvement in CIS rate

- According to the CDC, some children might be unvaccinated because of choices made by parents, whereas for others, lack of access to health care or health insurance might be factors. They may face hurdles such as not having a health care professional nearby, not having time to get their children to a doctor, and/or thinking they cannot afford vaccines. CDC recommends healthcare professionals to make a strong vaccine recommendation to their patients at every visit and make sure parents understand how important it is for their children to get all their recommended vaccinations on time. The Vaccines for Children (VFC) program helps reduce financial hurdles parents face when trying to get their children vaccinated and protected from vaccine-preventable diseases.⁸ Home State Health has plans to utilize this opportunity in future.

Improvement in Oral Healthcare

- Dental caries-risk assessment, based on a child's age, biological factors, protective factors, and clinical findings, should be a routine component of new and periodic examinations by oral health and medical providers (American Academy of Pediatric Dentistry).⁹
- Promote school-based sealant programs aligned with the Centers for Disease Control's expert work group recommendations for school-based sealant programs.¹⁰
- Interprofessional Collaboration: Incorporate oral health improvement strategies across healthcare professions (such as medicine, nursing, social work, and pharmacy) and systems to improve oral health knowledge and patient care.¹⁰
- Work Force: Develop health professional policies and programs which better serve the dental needs of underserved populations.¹⁰

⁸ <https://ivaccinate.org/states-with-the-worst-vaccination-rates/>

⁹ https://www.aapd.org/globalassets/media/policies_guidelines/bp_cariesriskassessment.pdf.



¹⁰ <https://sboh.wa.gov/Portals/7/Doc/OralHealth/WSBOH-OH-Strategies-2013.pdf?ver=2013-11-19-094100-000>

Appendix A: PIP Validation Worksheet-CIS Combo 10




Date of evaluation: May 30, 2019

MCO Name or ID:	Home State Health
Name of Performance Improvement Project:	Childhood Immunization Status- Combo 10 (CIS)
Dates in Study Period:	Jan 1, 2018-Dec 31, 2018
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 235,918 Medicaid/CHIP members included in the study: 8,528


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	In HEDIS® 2018 (CY 2017), Home State Health's Statewide HEDIS® CIS Combo 10 Rate was 27.01%. Noting this is in the 25th NCQA national percentile ranking, Home State Health identified an opportunity to improve the CIS Combo 10 rate in HEDIS® 2019 (CY 2018).
1.2 Is the PIP consistent with the demographics and epidemiology of the enrollees?	 M	From July 2016 through April 2017, the Home State Health statewide EPSDT participation ratio revealed a rate of 94% for children under one (1) year of age. This rate decreased to 70% for those children 1-2 and to 53% for those children 3-5 years of age. These findings support the importance of implementing an effective parental engagement strategy to increase preventive care for young children, especially with regard to immunization for those under two years old.



Home State Health: PIPs

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	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	Same as section 1.3 above.

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? It should be stated in a way that supports the ability to determine whether the intervention has a measurable impact for a clearly defined population.	 M	Home State Health's study question was: "Will directing targeted member and provider health promotion and awareness activities increase the percentage of Home State Health children under age 2 who are immunized by 3 percentage points between HEDIS 2018 (CY 2017) and HEDIS 2019 (CY 2019)?"




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 Home State Health members who turned 2 years of age during the measurement year and who were continuously enrolled for the 12 months prior to their 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	For this PIP, the enrollees include all those members who turned 2 years old in CY 2018 and received CIS Combo 10 vaccines.




Home State Health: PIPs

--	--	--

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	The HEDIS® CIS Rate Technical Specifications published by the NCQA was the indicator used to assess the outcome of PIP.
4.2. Did the indicators track performance over a specified period?	 M	The period of time measured includes a full CY 2018. The performance was tracked on a quarterly and annual 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	A primary measure is used as an indicator. Primaris recommends that the MCO should have specific secondary indicators which could measure the impact of each intervention implemented.





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	The HEDIS Technical Specifications dictate a systematic sampling scheme for hybrid measures such as CIS rate. For H2019/CY2018, this was a random sample of 411 members.
5.2. Were valid sampling techniques employed that protected against bias? Specify the type of sampling or census used.	 M	Same as 5.1 above.
5.3. Did the sample contain a sufficient number of enrollees?	 M	411 members as per NCQA guidelines for MRR.



Step 6: Review Data Collection Procedures

Component/Standard	Score	Comments
6.1. Did the study design clearly specify the data to be collected?	● M	<p>According to HEDIS® 2019 (CY 2018) NCQA Tech Specs, the Study Indicator data pulled from the HEDIS® CIS rate captures:</p> <p>Numerator: 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.</p> <ul style="list-style-type: none"> 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. <p>Denominator: All children 2 years of age in the measurement year (CY 2018) 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.</p>
6.2. Did the study design clearly specify the sources of data?	● M	The medical records are accounted for through the HEDIS Hybrid Technical Specifications. Home State Health currently uses an NCQA



Home State Health: PIPs

		certified Medical Record Retrieval (MRR) and Abstraction vendor to complete the Hybrid process.
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 vendors' work is transmitted electronically to Centene (parent company) for inclusion in HEDIS rates using Quality Spectrum Insight (QSI), a nationally recognized HEDIS software vendor. The medical record abstractions completed by the MRR vendor are audited by Centene's NCQA certified HEDIS Audit Firm prior to submission to NCQA each year.
6.4. Did the instruments for data collection provide for consistent and accurate data collection over the time periods studied?	 M	Same as comment above in section 6.3
6.5. Did the study design prospectively specify a data analysis plan?	 M	Home State Health includes annual and quarterly HEDIS® rates to measure improvement over prior year.
6.6. Were qualified staff and personnel used to collect the data?	 M	HealthCare Professional holding degrees 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	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 HEDIS® CIS results were provided region wise and aggregate statewide accurately through tables. The interpretation of results of intervention is provided only for one intervention.



Home State Health: PIPs

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 internal nor external factors that threaten the validity of the findings. The methodology of the source for data analysis, members examined, and tools used have remained the same since baseline year (CY 2017). Statistical significance of the data is reported.
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	<p>Home State Health's CIS rates did not increase as expected. Potential reasons for this include:</p> <ul style="list-style-type: none"> • The focus of prior interventions on incentivizing and mobilizing members to seek out their immunizations. • Insufficient reporting by providers of immunization administrations, as well as a need for enhanced capturing and validation of those that are reported. <p>Home State Health plans to continue the infrastructure interventions as defined in the Data Analysis Plan; however, HSH 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.</p>



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	Home State Health has conducted a barrier analysis listing the interventions implemented in CY2018 which address specific barriers to reaching their CIS rate goals.



Home State Health: PIPs

8.2 Are the interventions sufficient to be expected to improve processes or outcomes?	 M	<p>Barriers addressed by interventions are as below:</p> <ul style="list-style-type: none"> • Lack of parental awareness of the benefits of and access to immunizations for their children under 2 years of age. • Coding errors resulting in compliant EPSDT visits not being accurately accounted for. • Provider engagement with Home State membership. • Insufficient processes/systems to support the reporting of immunization supplemental data following NCQA specification and auditor approval to support HEDIS reporting requirements.
8.3 Are the interventions culturally and linguistically appropriate?	 M	The interventions described in this PIP demonstrate behaviors, attitudes, policies, and structures that enable employees and providers to work effectively across culture. For example, EPSDT outreach programs adhere to fourth grade level readability standards on all materials and scripts.


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, data analysis, members examined, and tools used have remained the same since the baseline measurement.
9.2. Was there any documented, quantitative improvement in processes or outcomes of care?	 NM	The HEDIS® CIS Combo 10 rate shows a decline of 5.36 percentage points from the previous year and this is statistically significant drop.

Home State Health: PIPs

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	Analysis of one intervention showed some improvement but that did not improve the overall CIS Combo 10 rate. The analysis of other interventions was not done.
9.4. Is there any statistical evidence that any observed performance improvement is true improvement?	 NM	The final CIS Combo 10 rate has declined significantly.

Step 10: Assess Sustained Improvement

Component/Standard	Score	Comments
10.1. Was sustained improvement demonstrated through repeated measurements over comparable time periods?	 NM	Although there has been a repeated measurement, sustained improvement has not yet demonstrated.

ACTIVITY 2: VERIFYING STUDY FINDINGS (OPTIONAL)

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

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

Check one: <input type="checkbox"/> High confidence in reported PIP results <input type="checkbox"/> Confidence in reported PIP results <input checked="" type="checkbox"/> Low confidence in reported PIP results <input type="checkbox"/> Reported PIP results not credible

Summary

The aim of the PIP is not met. Only one intervention is tested and analyzed, namely allow the inclusion of corrective data submitted through the Supplemental Data System (SuDS) by Missouri Health Plus (MH+) which did have a positive impact on compliance hits (an increase by 4-8%) but failed to increase the HEDIS® CIS Combo 10. The statewide rate dropped by 5.36 percentage points from the previous year which is a statistically significant drop.




Appendix B: PIP Validation Worksheet-Improving Access to Oral Healthcare

Date of evaluation: May 30, 2019



MCO Name or ID:	Home State Health
Name of Performance Improvement Project:	Improving Access to Oral Healthcare
Dates in Study Period:	Jan 1, 2018-Dec 31, 2018
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 235,918 Medicaid/CHIP members included in the study: 156,353

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	The continued disparity in access to dental care in mind, Home State Health is conducting this PIP on Improving Oral Health using the Statewide Improving Oral Health Initiative as the basis. Home State Health has 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	The statewide average of all MO HealthNet Managed Care Plans was only 38.6%. Home State Health was at 41.65% (NCQA 25 th percentile 46.27%).
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 HEDIS Technical Specifications for inclusion in the ADV measure. Members with special health needs were not excluded from this PIP.



Home State Health: PIPs

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? It should be stated in a way that supports the ability to determine whether the intervention has a measurable impact for a clearly defined population.	 M	The study question was clearly stated: "Will implementing the proposed interventions to HSH members between ages 2 through 20 increase the ADV rate per the HEDIS specifications by 3 percentage points between Home State Health's HEDIS 2018 and HEDIS 2019 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	The study population for this project includes Home State Health members ages 2 through 20. The enrollment "allowable gap" criteria not used for the intervention population.
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 2019 Technical Specifications.


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?	 M	The performance was tracked on a monthly and annual 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	A primary measure is used as an indicator. Primaris recommends that the MCO should have specific secondary indicators which could measure the impact of each intervention implemented.

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 was done. All members from age 2 through 20 are included in the 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.
5.3. 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	According to HEDIS® 2019 (CY 2018) Technical Specifications, the study

Home State Health: PIPs

		<p>indicator data pulled for the HEDIS ADV rate captures:</p> <ul style="list-style-type: none"> • Numerator: Members 2 through 20 years of age identified as having one or more dental visits with a dental practitioner during the measurement year (CY 2018). • Denominator: Members 2 through 20 years of age who are continuously enrolled during the measurement year (CY 2018) with no more than one gap in enrollment of up to 45 days.
6.2. Did the study design clearly specify the sources of data?	● M	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.
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	HSH QI staff extract the monthly preliminary HEDIS results to analyze and determine the effectiveness of interventions based on changes in ADV rate. (Also ref. to 6.2 above.)

Home State Health: PIPs

6.6. Were qualified staff and personnel used to collect the data?	 M	HealthCare Professional holding degrees 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 H2018 compared to H2019.
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	No threats to external validity exist. As no sampling occurred, no threats to internal validity exist. The monthly HEDIS® ADV rates were measured. The statistical significance was reported for annual HEDIS® ADV rate.
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	<p>There has been an overall increase in ADV rate in three of the four-regions (Eastern, Central, and Western). Even with the decrease in the Southwest Region, the statewide rate increased by six-percentage points. These findings will be reviewed by Home State Health for any practitioner trends or process optimization opportunities that may result in increasing the compliancy in the Southwest Region.</p> <p>Following potential reasons for the increase in rates were attributed:</p> <ul style="list-style-type: none"> • Texting program. • Member Services inbound call interactions. • Marketing activities where dental vans will be present.


Home State Health: PIPs

		<ul style="list-style-type: none"> Care Management interactions and birthday-card reminder mailings <p>Home State Health plans to continue the infrastructure interventions.</p>
--	--	---

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	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 quarter of CY2018.
8.2 Are the interventions sufficient to be expected to improve processes or outcomes?	 M	Home State Health specifically outlined the barriers addressed, potential impact, and outcome obtained/anticipated for ongoing interventions.
8.3 Are the interventions culturally and linguistically appropriate?	 M	The interventions described in the PIP demonstrate behaviors, attitudes, policies, and structures that enable employees and providers to work effectively across cultures. For example, EPSDT outreach programs such as AlphaPointe, solicit information on members' primary language in order to accommodate their needs. In addition, Home State Health contracts with the language interpreter service, Voiance, to provide language translation services to members who call the health plan.

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.

Home State Health: PIPs

9.2. Was there any documented, quantitative improvement in processes or outcomes of care?	● PM	The ADV rate increased by 6.17 percentage points in CY 2018, but this was not of statistical significance.
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 success rate of one intervention tested in the PIP showed an increase of dental visit by 0.34% only. The overall increase in ADV rate does not appear to be the result of this planned intervention.
9.4. Is there any statistical evidence that any observed performance improvement is true improvement?	● NM	The improvement seen is not of statistical significance.

Step 10: Assess Sustained Improvement

Component/Standard	Score	Comments
10.1. Was sustained improvement demonstrated through repeated measurements over comparable time periods?	● M	The annual ADV rates have increased for last two years.

ACTIVITY 2: VERIFYING STUDY FINDINGS (OPTIONAL)

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

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

<p>Check one:</p> <p><input type="checkbox"/> High confidence in reported PIP results</p> <p><input type="checkbox"/> Confidence in reported PIP results</p> <p><input checked="" type="checkbox"/> Low confidence in reported PIP results</p> <p><input type="checkbox"/> Reported PIP results not credible</p>
--

Summary

Even though the aim of the PIP is met and the HEDIS® ADV rate has increased by 6.17 percentage points, the PIP is assigned a score of “Low Confidence.” The intervention namely, telephonic outreach campaign with AlphaPointe has a very insignificant impact on the outcome (0.34%) and cannot be tied to the result. The other interventions are not tested and analyzed.