Health Plan Performance Improvement Project (PIP)

Health Plan: Louisiana Healthcare Connections

PIP Title: Ensuring access to the COVID-19 vaccine among Healthy Louisiana vaccine-eligible enrollees

PIP Implementation Period: April 2021 - ongoing

Project Phase: Interim

Submission Dates:

	Baseline	Interim	Final
Version 1	5/7/2021	12/31/2021	
Version 2	06/23/21		

MCO Contact Information

1. Principal MCO Contact Person

[PERSON RESPONSIBLE FOR COMPLETING THIS REPORT AND WHO CAN BE CONTACTED FOR QUESTIONS]

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2. Additional Contact(s)

[PERSON(S) RESPONSIBLE IN THE EVENT THAT THE PRINCIPAL CONTACT PERSON IS UNAVAILABLE]

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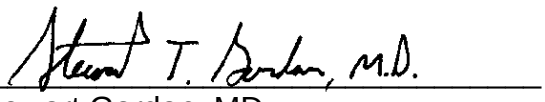
3. External Collaborators (if applicable):

Louisiana Department of Health Vaccination Strike Teams
Vaccine Providers
Office of Public Health

Attestation

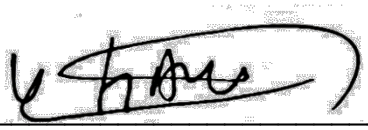
Plan Name: Louisiana Healthcare Connections
Title of Project: Ensuring access to the COVID-19 vaccine among Healthy Louisiana vaccine-eligible enrollees: Persons 18 years of age or older (or 16 years and up for Pfizer vaccine only)

The undersigned approve this PIP and assure involvement in the PIP throughout the course of the project.

Medical Director signature: 
First and last name: Stewart Gordon, MD
Date: 12/31/2021 Chief Medical Officer

CEO signature: 
First and last name: Jamie Schlottman
Date: 12/31/2021 Chief Executive Officer

Quality Director signature: 
First and last name: Yolanda Wilson
Date: 12/31/2021 Vice President, Quality Improvement

IS Director signature: 
First and last name: Michel Hanet
Date: 12/31/2021 Director, Reporting & Business Analytics

Updates to the PIP

For Interim and Final Reports Only: Report all changes in methodology and/or data collection from initial proposal submission in the table below.
[EXAMPLES INCLUDE: ADDED NEW INTERVENTIONS, ADDED A NEW SURVEY, CHANGE IN INDICATOR DEFINITION OR DATA COLLECTION, DEVIATED FROM HEDIS® SPECIFICATIONS, REDUCED SAMPLE SIZE(S)]

Table 1: Updates to PIP

Change	Date of change	Area of change	Brief Description of change
Change 1	06/07/21	☒ Project Topic ☐ Methodology ☒ Barrier Analysis / Intervention ☒ Other	Baseline measure rates adjusted to reflect LDH/ULM report data as of 4/1/2021; Target rates adjusted based on report proposal feedback; additional to 5B to monitor transportation utilization.
Change 2	07/02/21	☐ Project Topic ☒ Methodology ☒ Barrier Analysis / Intervention ☐ Other	Addition of ITM 1c to monitor pediatric population vaccination interventions; addition of ITM 6 to monitor collaborative provider partnership vaccine outcomes.
Change 3	10/1/2021	☐ Project Topic ☒ Methodology ☒ Barrier Analysis / Intervention ☒ Other	ITM 1a/1b/1c updated to reflect new appointment scheduling data guidance from LDH in comparison to eligible enrollees in each subgroup; calculated retro-actively and updated from July forward
Change 4		☐ Project Topic ☐ Methodology ☐ Barrier Analysis / Intervention ☐ Other	
Change 5		☐ Project Topic ☐ Methodology ☐ Barrier Analysis / Intervention ☐ Other	

Abstract

For Final Report submission only. Do not exceed 1 page.

Provide a high-level summary of the PIP, including the project topic and rationale (include baseline and benchmark data), objectives, description of the methodology and interventions, results and major conclusions of the project, and next steps.

Topic: Ensuring access to the COVID-19 vaccine among Healthy Louisiana vaccine-eligible enrollees

Rationale: The COVID-19 pandemic has brought significant health and economic impacts to the state and nation. Increasing access to COVID-19 vaccines is critical in our efforts to reduce and eliminate the presence of the coronavirus in our community. Recommendations from leading healthcare advisory groups highlight the importance of COVID-19 vaccinations to safely establish herd immunity to protect the population at large from the virus. This is especially important for vulnerable, high-risk groups, like the elderly and immunocompromised, with many of these groups being highly representative of the LHCC population. It is estimated that roughly 70 percent of people in the U.S. need to be fully vaccinated in order to reach this level of protection for COVID-19. Louisiana's COVID vaccination strategy relies on making the vaccine accessible across the state. Equitable access to the vaccine ensures that all residents of Louisiana have the opportunity to protect themselves, their families, and their community.

Objectives: The key objective of this PIP is to facilitate COVID-19 vaccination of all eligible enrollees.

Methodology

Eligible population: Louisiana residents who are enrolled in the Louisiana Medicaid program and eligible for COVID vaccination based on the FDA authorization.

Description of Annual Performance Indicators: Annual Performance Indicators collected through State immunization registry (LINKS) data measured the percentage of members receiving COVID vaccination, first dose and second dose, when indicated, in adult and pediatric members. Additionally, disparity in vaccination rates between subgroups (Black, Hispanic/Latino, and Other/Unknown/Missing) was compared versus the White subgroup to identify health inequities.

Sampling Method: No sampling is being used; the entire eligible population is being targeted by PIP interventions.

Baseline and Re-measurement Periods: Baseline period: As of 4/1/2021; Interim measurement period: 4/9/2021 to 12/10/2020.

Data Collection Procedures: Data was collected through State immunization registry (LINKS) data, administrative claims data utilized from Centene's Enterprise Data Warehouse, and additional programs such as Microstrategy, TruCare, and Sharepoint. Additional data for ITMs was collected through our internal Data Analytics team, Case Management, Quality, Operations, and Pharmacy reporting. Data elements were collected monthly, aggregated, analyzed, and reported on a monthly basis. Staff involved in data collection include Data Analysts, Quality Improvement team members, Operations, Case Management, and/or Pharmacy staff who tracked and trended their department's data.

Interventions

Member interventions:

- Refer and facilitate appointment scheduling for eligible enrollees engaged in case management to COVID-19 vaccination sites.
- Refer and facilitate appointment scheduling for eligible enrollees NOT engaged in case management to COVID-19 vaccination sites.

- Educate and inform enrollees on vaccine merits, safety and accessibility with comprehensive and clear communication in accordance with the State of Louisiana communication plan for the COVID-19 vaccine [e.g., LDH COVID-19 website: Louisiana Coronavirus COVID-19 | Department of Health | State of Louisiana (la.gov)].
- Provide enrollees with second dose reminders for those overdue.

Provider Interventions

- Distribute resources to PCP's including listings of COVID-19 vaccine-eligible enrollees, local vaccination sites and events, and other LINK-enrolled providers.
- Conduct training and education for providers using LINKS training videos and CDC/ACIP evidence-based guidance in collaboration with the Tri-Regional LINKS Outreach Coordinators.

Collaboration with state and local partners

- Outreach to racial/ethnic minority enrollees: Utilize COVID-19 vaccination coverage reports generated in LINKS to track and monitor COVID-19 vaccination rates and to determine pockets of need (e.g., zip code and region level). Collaborate and coordinate with the Louisiana Department of Health Vaccination Strike Teams to vaccinate hard-to-reach target populations in Louisiana.
- Collaborate with the Office of Public Health on vaccine education materials.

Results

Although annual rates are pending year-end aggregation and review; all available performance indicator data through 12/10/2021 may be found beginning on page 20. Adult members (16 years and older) receiving the first dose of any approved COVID vaccination YTD rate is 37.27, a 26.10 percentage point increase from baseline, while adult members receiving a completed 2-dose vaccines series YTD rate is 31.66, a 26.07 percentage point increase from baseline. Beginning in July, pediatric members (age 12 to 15 years) were approved to receive vaccination. Members receiving the first dose of any approved COVID vaccination YTD rate is 25.50, 19.88 percentage points higher than baseline and completed vaccine series YTD rate is 20.20, a 17.27 percentage point increase from baseline. The younger group of members age 5 to 11 years old were approved for vaccination in late October and our efforts were expanded to include these members, however data is limited and not included within the scope of this initial phase of the vaccination project.

Conclusions and Next Steps

Ongoing analysis of COVID vaccine interventions and outcomes has provided valuable insight into member and provider centric challenges and opportunities for continued improvement. Continued impacts from the ongoing COVID-19 pandemic, as well as multiple hurricane events in Louisiana, were disruptive to both member and provider facing initiatives and adversely impacted provider operations and member access patterns. LHCC's COVID-19 vaccination efforts continue and rates through 12/10/2021 indicate positive trending in each performance indicator; while steady improvement is noted over the baseline and interim rates, continued commitment to vaccination outreach and community education is needed to reach the target set by President Biden earlier this year.

Provider education and member outreach initiatives remain a continued focus as we move into 2022. Continued member outreach is focused on facilitating education about vaccine efficacy, dispelling vaccine myths, and providing linkage to vaccine administration and transportation when needed. Increasing vaccination accessibility and focus on trusted messengers is an ongoing effort with promotion through direct communications, online media platforms, existing provider relationships, and community partners and events. Emphasis on innovation will also be carried into 2022 to increase member engagement with care management services to provide support and access to vaccination resources. Opportunities include employing new outreach methods to better impact the population and continued exploration and utilization of member communication preferences. Collaboration across MCO's and LDH to streamline member and provider communications and linkage to vaccine delivery will continue into the coming year.

Project Topic

To be completed upon Proposal submission. Do not exceed 2 pages.

Describe Project Topic and Rationale for Topic Selection

- **Describe how PIP Topic addresses your enrollee needs and why it is important to your enrollees:**

  The COVID-19 pandemic has brought significant health and economic impacts to the state and nation. Increasing access to COVID-19 vaccines is critical in our efforts to reduce and eliminate the presence of the coronavirus in our community. With an enrollment of over 500,000 members, with many who may be impacted by COVID-19, Louisiana Healthcare Connections (LHCC) is pleased to partner with LDH in this performance improvement project to facilitate COVID-19 vaccinations throughout the state. The project supports LHCC's mission of improving the health of our community one member at a time.

  Currently, approximately 24 percent of Louisiana's population has been fully vaccinated. Recommendations from leading healthcare advisory groups highlight the importance of COVID-19 vaccinations to safely establish herd immunity to protect the population at large from the virus. This is especially important for vulnerable, high-risk groups, like the elderly and immunocompromised, with many of these groups being highly representative of the LHCC population. It is estimated that roughly 70 percent of people in the U.S. need to be fully vaccinated in order to reach this level of protection for COVID-19.

  Louisiana's COVID vaccination strategy relies on making the vaccine accessible across the state. Equitable access to the vaccine ensures that all residents of Louisiana have the opportunity to protect themselves, their families, and their community. However, without focused attention, many vulnerable populations who are disproportionately impacted due to health disparities are at risk of being left out of the vaccine rollout. These populations may be presented with general barriers such as transportation and/or technology challenges related to online vaccine registration. These realities support the need for a focused effort by LHCC to address these challenges and disparities to facilitate COVID-19 vaccinations in accordance with evidence-based recommendations for eligible enrollees.

  Immediate efforts towards initiating this PIP include data aggregation and analysis to determine the scope of LHCC's current membership who are eligible, but who have not received the vaccine or who are not fully vaccinated. A review of the current membership was conducted and preliminary analysis, along with data supplied by LDH, was initiated to determine current risk stratification volumes within the Plan membership. Preliminary review indicates significant opportunity is evident to increase vaccination rates among the eligible enrollees.

- **Describe vaccine eligibility:**

  The Louisiana Department of Health website (https://ldh.la.gov/index.cfm/page/4137, 2021) lists vaccine eligibility. Currently, all individuals ages 5 or greater are eligible for COVID-19 vaccination although only members 12 and over are currently included in the scope of this project and included in this reporting. It is anticipated that the project scope will expand to younger members in the future.

- **Describe current research support for topic (e.g., clinical guidelines/standards):**

  The Advisory Committee on Immunization Practices (ACIP) issued interim recommendations on the use of available COVID-19 vaccines to prevent COVID-19 (Oliver et al., 2020b). The State of Louisiana COVID-19 Vaccination Playbook's rationale for prioritizing persons with these conditions is to protect the most vulnerable, and cites the current CDC guidelines (CDC, 2020). Effective Tuesday, March 9, 2021, the State of Louisiana expanded eligibility for COVID-19 vaccines to include people who have health conditions that may result in a higher risk of disease (https://ldh.la.gov/index.cfm/page/4137, 2021).

Aims, Objectives and Goals

Aim: Ensure access to COVID-19 vaccination for Healthy Louisiana enrollees.

Objective: The key objective of this PIP is to facilitate COVID-19 vaccination of all eligible enrollees.

Interventions:

A. Enrollee Interventions will be the focus of this PIP, as follows:

1. Refer and facilitate making appointments for eligible enrollees engaged in case management to COVID-19 vaccination sites.
2. Refer and facilitate making appointments for eligible enrollees NOT engaged in case management to COVID-19 vaccination sites.
3. Educate and inform enrollees on vaccine merits, safety and accessibility with comprehensive and clear communication in accordance with the State of Louisiana communication plan for the COVID-19 vaccine [e.g., LDH COVID-19 website: Louisiana Coronavirus COVID-19 | Department of Health | State of Louisiana (la.gov)].
4. Provide enrollees with second dose reminders for those overdue.

B. Provider Interventions

5. Distribute listings of COVID-19 vaccine-eligible enrollees, as well as listings of pharmacy vaccination sites and other LINK-enrolled providers, to PCPs.
6. Conduct training and education of providers, when necessary, using LINKS training videos and CDC/ACIP evidence-based guidance in collaboration with the Tri-Regional LINKS Outreach Coordinators.

C. Collaborate with state and local partners

7. Outreach to racial/ethnic minority enrollees. Utilize COVID-19 vaccination coverage reports generated in LINKS to track and monitor COVID-19 vaccination rates and to determine pockets of need (e.g., zip code and region level). Collaborate and coordinate with the Louisiana Department of Health Vaccination Strike Teams to vaccinate hard-to-reach target populations in Louisiana.
8. Collaborate with the Office of Public Health on vaccine education materials.

Table 2: Goals

Indicators	Baseline Rate[1] Measurement Period:	Target Rate[2]	Rationale for Target Rate[3]
Indicator 1: Receipt of COVID-19 vaccine			
Measure A: Receipt of at least one dose of COVID-19 vaccine	N: 32,955[4] D: 295,002 R: 11.17%	R: 70%	National Goal by 7/4/2021 (IPRO guidance 5/10/2021)
Measure B: Receipt of a complete vaccine series[5]	N: 16,497[4] D: 295,002 R: 5.59%	R: 50%	

[1] LDH/ULM Report as of 4/1/21.
[2] Upon evaluation of progress, consideration should be given to improving the target rate, if it has been met or exceeded at that time.
[3] Indicate the rationale, e.g., percentage point improvement based upon the strength of interventions.
[4] Baseline Rate Measurement data submitted in initial proposal included supplemental membership and claims data. These measures have been updated to reflect the LDH/ULM Report data as of 4/1/2021 for consistency in analysis and discussion.
[5] This refers to completion of a 2-dose series for 2-dose vaccines (e.g., Pfizer and Moderna) and receipt of one dose for vaccines only requiring one dose (e.g., Johnson and Johnson).

Indicators	Baseline Rate[1] Measurement Period:	Target Rate[2]	Rationale for Target Rate[3]
Indicator 2: Racial/ethnic disparity in receipt of at least one dose of COVID-19 vaccine:			
Measure A: White enrollees receiving at least one dose	N: 5,656[4] D: 70,056 R: 8.07%		
Measure B: Black enrollees receiving at least one dose	N: 11,425[4] D: 100,780 R: 11.34%	R: 70%	National Goal by 7/4/2021 (IPRO guidance 5/10/2021)
Measure C: Hispanic/Latino enrollees receiving at least one dose	N: 1,401[4] D: 17,574 R: 7.97%		
Measure D: Enrollees of other, missing, or unknown race/ ethnicity receiving at least one dose	N: 14,473[4] D: 106,592 R: 13.58%		
Indicator 3: Racial/ethnic disparity in receipt of a complete COVID-19 vaccine course:			
Measure A: White enrollees receiving a complete COVID-19 vaccine course[4]	N: 2,800[4] D: 70,056 R: 4.00%		
Measure B: Black enrollees receiving a complete COVID-19 vaccine course[4]	N: 5,700[4] D: 100,780 R: 5.66%	R: 50%	National Goal by 7/4/2021 (IPRO guidance 5/10/2021)
Measure C: Hispanic/Latino enrollees receiving a complete COVID-19 vaccine course[4]	N: 600[4] D: 17,574 R: 3.41%		
Measure D: Enrollees of other, missing, or unknown race/ ethnicity receiving a complete COVID-19 vaccine course[4]	N: 7,397[4] D: 106,592 R: 6.94%		
Indicator 4: Receipt of COVID-19 vaccine by the pediatric population[6]			
Measure A: Receipt of at least one dose of COVID-19 vaccine	N: 3,282 D: 58,440 R: 5.62%	R: 70%	National Goal by 7/4/2021 (IPRO guidance 5/10/2021)
Measure B: Receipt of a complete vaccine series[4]	N: 2,061 D: 58,440 R: 3.53%	R: 50%	

[6] For the pediatric population, the denominator equals the number of eligible members based on the FDA authorization and as directed by LDH for inclusion within the scope of the project. The denominator will change significantly as the age range of pediatric authorization changes. The baseline period will start with the 7/2/2021 COVID-19 Vaccine Summary Report.

Methodology

To be completed upon Proposal submission.

Table 3: Performance Indicators

Indicator	Description	Data Source	Eligible Population	Exclusion Criteria	Numerator	Denominator
Indicator 1	Receipt of COVID-19 vaccine	Numerator: State immunization registry (LINKS) Denominator: Medicaid enrollment data	All Medicaid enrollees, age 16+	---	Measure A: Persons who received at least one vaccine dose Measure B: Persons who received a complete vaccine course[1]	All Medicaid enrollees, age 16+
Indicator 2	Indicator 2: Racial/ethnic disparity in receipt of at least one dose of COVID-19 vaccine: Measure A: White enrollees receiving at least one dose Measure B: Black enrollees receiving at least one dose Measure C: Hispanic/Latino enrollees receiving at least one dose Measure D: Enrollees of other, missing, or unknown race/ethnicity receiving at least one dose	Numerator: State immunization registry (LINKS) Denominator: Medicaid enrollment data	All Medicaid enrollees, stratified by race/ethnicity, age 16+	--	Persons who received at least one vaccine dose	Eligible individuals as listed in LDH Report
Indicator 3	Indicator 3: Racial/ethnic disparity in receipt of a complete COVID-19 vaccine course[7]: Measure A: White enrollees receiving a	Numerator: State immunization registry (LINKS) Denominator: Medicaid enrollment data	All Medicaid enrollees, stratified by race/ethnicity, age 16+	--	Persons who received a complete COVID-19 vaccine course[1]	All Medicaid enrollees

[7] This refers to completion of a 2-dose series for 2-dose vaccines (e.g., Pfizer and Moderna) and receipt of one dose for vaccines only requiring one dose (e.g., Johnson and Johnson).

Indicator	Description	Data Source	Eligible Population	Exclusion Criteria	Numerator	Denominator
	complete COVID-19 vaccine course Measure B: Black enrollees receiving of a complete COVID-19 vaccine course Measure C: Hispanic/Latino enrollees receiving a complete COVID-19 vaccine course Measure D: Enrollees of other, missing, or unknown race/ethnicity receiving a complete COVID-19 vaccine course					
Indicator 4	Receipt of COVID-19 vaccine by the pediatric population[8]	Numerator: State immunization registry (LINKS) Denominator: Eligible members based on the FDA authorization	All Medicaid pediatric population enrollees who are eligible based on the FDA authorization	---	Measure A: Persons who received at least one vaccine dose Measure B: Persons who received a complete vaccine series[1]	All Medicaid pediatric population enrollees

[8] For the pediatric population, the denominator equals the number of eligible members based on the FDA authorization and as directed by LDH for inclusion within the scope of the project. The denominator will change significantly as the age range of pediatric authorization changes. The baseline period will start with the 7/2/2021 COVID-19 Vaccine Summary Report.

Data Collection and Analysis Procedures

Is the entire eligible population being targeted by PIP interventions? If not, why?

Sampling Procedures

If sampling was employed (for targeting interventions, medical record review, or survey distribution, for instance), the sampling methodology should consider the required sample size, specify the true (or estimated) frequency of the event, the confidence level to be used, and the margin of error that will be acceptable.

- **Describe sampling methodology:**
  No sampling; the entire eligible population is being targeted by PIP interventions.

Data Collection

Describe who will collect the performance indicator and intervention tracking measure data (using staff titles and qualifications), when they will perform collection, and data collection tools used (abstraction tools, software, surveys, etc.). If a survey is used, indicate survey method (phone, mail, face-to-face), the number of surveys distributed and completed, and the follow-up attempts to increase response rate.

- **Describe data collection:**
  Data will be collected through administrative claims data using Centene's Enterprise Data Warehouse and additional programs such as Microstrategy, TruCare, and Sharepoint. Additional data for ITMs will be collected through our internal Data Analytics team, Quality & Case Management, and Provider Network reporting. Supplemental data from COVID-19 vaccination coverage reports generated in LINKS, provided by LDH, will also be utilized for indicators as instructed. Data elements will be collected, aggregated, and reported monthly. Forms and data storage repositories may be developed to support outreach efforts and archive the data until its end of useful life defined by LDH contract and Centene system policies. Those who collect the data include Data Analysts, Quality Improvement team members, Case Management and/or Provider Network staff who track and trend their department's data.

Validity and Reliability

Describe efforts used to ensure performance indicator and intervention tracking measure data validity and reliability. For medical record abstraction, describe abstractor training, inter-rater reliability (IRR) testing, quality monitoring, and edits in the data entry tool. For surveys, indicate if the survey instrument has been validated. For administrative data, describe validation that has occurred, methods to address missing data and audits that have been conducted.

- **Describe validity and reliability:**
  For data reliability, the vaccination coverage rates (% of enrolled members per month who have received the COVID-19 vaccine) obtained from LDH will be compared to the number of claims and pharmacy data for the same time period, hence a correlation ratio is derived to check data consistency. Data is validated by Data Analytics & Reporting team including Data Analysts and Data Scientists; department level data for ITM's may also be validated by the Quality team including, but not limited to, Quality leadership, QA Abstractors, and PI Specialists in both Quality, Provider Network, and Population Health departments. Data validation processes also include having multiple analysts run the same data for a volume check and analyze further if there is a discrepancy.

Data Analysis

Explain the data analysis procedures and, if statistical testing is conducted, specify the procedures used (note that hypothesis testing should only be used to test significant differences between independent samples; for instance, differences between health outcomes among sub-populations within the baseline period is appropriate).Describe the methods that will be used to analyze data, whether measurements will be compared to prior results or similar studies, and if results will be compared among regions, provider sites, or other subsets or benchmarks. Indicate when data analysis will be performed (monthly, quarterly, etc.). Describe how plan will interpret improvement relative to goal. Describe how the plan will monitor intervention tracking measures (ITMs) for ongoing quality improvement (e.g., stagnating or worsening quarterly ITM trends will trigger barrier/root cause analysis, with findings used to inform modifications to interventions).

- **Describe data analysis procedures:**
  Data is compared to the data received from LDH; denominators and numerators will be checked for inclusion of all eligible populations and any identified discrepancies are investigated. Data is compared to all sources available in an effort to produce the most valid data possible.

LHCC has an analytics department within the Operations group that performs routine and ad hoc analysis of data. The team is skilled in data analysis, data collection and transformation, and statistical modeling.

- **Describe how plan will interpret improvement relative to goal:**

  Improvement will be monitored via internal benchmarking against established baseline thresholds where available. Preliminary analysis of internal claims activity, as well as state data provided, indicate comparable deficits in vaccine rates, providing a baseline upon which ongoing performance may be compared to benchmark progress towards improving vaccine coverage for COVID -19.

- **Describe how plan will monitor ITMs for ongoing QI:**

  ITMs will be monitored at minimum monthly to evaluate positive improvement, plateaus, or identify adverse trends for prompt investigation, analysis and/or action to modify interventions if indicated. Monitoring of enrollees who are eligible for the vaccine will be conducted using data tools for internal reporting and outreach processes supported by efforts to increase vaccine awareness, availability, and completion by the multidisciplinary project team including provider network, case management, quality improvement, and marketing/communications associates. Intervention tracking measure data, including member feedback collected through direct outreach and incoming calls, as well as member advisory committee meetings, will be collected and documented through programs such as Microstrategy, TruCare, Sharepoint, and others to be analyzed monthly in order to guide next steps. Similarly, provider feedback will be collected through direct outreach by provider consultant teams, provider advisory committee meetings, and internal medical director feedback for barrier analysis and informing our efforts moving forward. Relevant feedback and trends positively or negatively impacting these racial/ethnic subgroups, i.e., vaccine hesitancy or other concern specific to a disparity subgroup, will also be analyzed in order to reduce health disparities.

PIP Timeline

Start Date: April 9, 2021

Baseline Measurement Period: COVID-19 Vaccine Report as of 4/1/21, except for the pediatric population, for whom the baseline period starts with the 7/2/2021 COVID-19 Vaccine Summary Report

PIP Interventions (New or Enhanced) Initiated: 4/9/2021

Submission of Baseline Report Due: 5/7/2021

Submission of Final Report Due: 12/31/2021

Barrier Analysis, Interventions, and Monitoring

To be completed upon Proposal submission (to be updated for baseline, interim and final reports).

Table 4: Alignment of Barriers, Interventions and Tracking Measures

Barrier 1: Enrollees need help with accessing COVID-19 vaccine. **MCO-identified Barriers** (October[9])		**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec[10]**
Intervention to address barrier 1: 1a. Develop and implement COVID-19 vaccination outreach to enrollees engaged in case management. Planned Start Date: 4/9/2021 Actual Start Date: 4/1/2021 Revised Intervention to address MCO-identified barrier: See footnote below Revision Date: 10/1/2021; Retro-active to 7/2021	Intervention tracking measure 1a: *Percentage of enrollees age 16+ who are engaged in CM and had an appointment made for COVID-19 vaccination* N: *# enrollees with appointments made at any vaccine provider* D: *# enrollees otherwise engaged in case management*	N: 19 D: 3777 R: 0.50%	N:58 D:2213 R:2.62%	N:41 D:2380 R:1.72%	N:228 D:1350 R:21.33%	N: 276 D: 1248 R: 22.12%	N: 286 D: 1132 R: 25.27%	N: 207 D: 998 R: 20.74%	N: 72 D: 838 R: 8.59%	*Data pending*
Intervention to address barrier 1: 1b. Develop and implement COVID-19 vaccination outreach to enrollees not engaged in case management. Planned Start Date: 4/9/2021 Actual Start Date: 5/1/2021	Intervention tracking measure 1b: *Percentage of enrollees age 16+ who are NOT engaged in CM and had an appointment made for COVID-19 vaccination* N: *# enrollees with appointments made at any vaccine provider*	N/A	N: 22 D: 297520 R: 0.01%	N: 160 D: 283190 R: 0.06%	N: 597 D: 220205 R: 0.27%	N: 542 D: 213237 R: 0.25%	N: 200 D: 198980 R: 0.10%	N: 283 D: 194594 R: 0.15%	N: 71 D: 189735 R: 0.04%	*Data pending*

[9] Member preference to independently schedule vaccination appointments was noted early in the project; LDH guidance in October provided expansion of allowable data which was applied retroactively through July for review and analysis of intervention outcomes. Table 6. Next Steps provides additional insight into intervention additions and adaptations impacting ITM results.

[10] Q4 data represent the results of outcomes collected to date; holiday impacts on access, availability, and data collection taken into consideration.

Revised Intervention to address MCO-identified barrier: See footnote below Revision Date: 10/1/2021; Retro-active to 7/2021	D: *# enrollees NOT engaged in case management*									
Intervention to address barrier 1 for the pediatric population: 1c. Develop and implement COVID-19 vaccination outreach to the pediatric population. Planned Start Date: 07/01/21 Actual Start Date: 07/01/21 Revised Intervention to address MCO-identified barrier: See footnote below Revision Date: 10/1/2021; Retro-active to 7/2021	Intervention tracking measure 1c: *Percentage of the eligible pediatric population based on authorization who had an appointment made for COVID-19 vaccination* *N: # enrollees with appointment made at any vaccine provider* *D: # eligible pediatric population based on authorization*	N/A	N/A	N/A	N: 222 D: 50845 R: 0.44%	N: 265 D: 47252 R: 0.56%	N: 103 D: 44376 R: 0.23%	N: 101 D: 44399 R: 0.23%	N: 16 D: 43144 R: 0.04%	*Data pending*
Barrier 2: The large volume of eligible enrollees poses a challenge to enrollee reach via CM outreach alone. **MCO-identified Barriers** (August[11])		**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec[11]**
Intervention to address barrier 2: 2a. Distribute eligible enrollee lists to PCPs and facilitate referrals as needed. Planned Start Date: 5/1/2021 Actual Start Date:5/1/2021 Revised Intervention to address MCO-identified barrier: Eligible enrollee lists	Intervention tracking measure 2: *Percentage of enrollees where PCPs were provided with their eligible patient list.* N: *# enrollees whose PCP was provided with their list of eligible patients* D: *# eligible individuals*	N/A	N: 45042 D: 299733 R: 15.03%	N: 59772 D: 285570 R: 20.93%	N: 32524 D: 272400[12] R: 11.94%	N: 276706 D: 276706 R: 100.00%	N: 275265 D: 275265 R: 100.00%	N: 261357 D: 261357 R: 100.00%	N: 257209 D: 257209 R:100.00%	N: 252139 D: 252139 R: 100.00%

[11] Eligible enrollee lists initially distributed manually to largest impacted provider groups began distribution through Secure Provider Portal, inclusive of all vaccine eligible members and 2nd dose overdue vaccine status. Provider distribution of vaccine site lists transitioned from electronic distribution to monthly mailing to overcome identified barrier due to limited number of providers opting-in to electronic communication. Table 6. Next Steps provides additional insight into intervention additions and adaptations impacting ITM results.

[12] Eligible Pediatric population added in ITM data as age group became eligible for the COVID-19 vaccine. Table 6. Next Steps provides additional insight into intervention additions and adaptations impacting ITM results.

distributed via secure provider portal; see footnote below Revision Date: 8/1/2021										
Intervention to address barrier 2: 2b. Distribute vaccination site lists to PCPs. Planned Start Date: 4/1/2021 Actual Start Date: 4/1/2021 Revised Intervention to address MCO-identified barrier: Vaccine site distribution mailed monthly; see footnote Revision Date: 8/1/2021	Intervention tracking measure 2: *Percentage of PCPs who were provided a list of available vaccine sites* N: *# PCPs provided a list of available vaccine sites* D: *# in network PCPs targeted for outreach/distribution*	N: 298 D: 708 R: 42.09%	N: 304 D: 760 R: 40.00%	N: 324 D: 693 R: 46.75%	N: 313 D: 686 R: 45.63%	N: 690 D: 690 R: 100.00%	N: 685 D: 685 R: 100.00%	N: 701 D: 701 R: 100.00%	N: 696 D: 696 R: 100.00%	N: 702 D: 702 R: 100.00%
Barrier 3: Enrollees may need reminders for the second dose in a 2-dose series **MCO-identified Barriers** (June[13])		**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec[11]**
Intervention to address barrier 3: Eligible enrollees pending the 2nd dose of COVID vaccine will be outreached with reminder communications to facilitate completion of vaccination series. Planned Start Date: 05/01/21 Actual Start Date: *05/01/21* Revised Intervention to address MCO-identified barrier: 2nd dose reminder mailed to member monthly; see footnote Revision Date: 6/1/2021	Intervention tracking measure 3: *MCO to develop* *Percentage of enrollee's who were outreached for 2nd dose reminders for COVID-19 vaccination.* N: *# enrollees outreached for 2nd dose reminders for COVID-19 vaccination* D: *# eligible enrollees targeted for 2nd dose outreach*	N/A	N: 33 D: 43 R: 76.74%	N: 3409 D: 3409 R: 100.00%	N: 4050 D: 4050[14] R: 100.00%	N: 3948 D: 3948 R: 100.00%	N: 13532 D: 13532 R: 100.00%	N: 16873 D: 16873 R: 100.00%	N: 16916 D: 16916 R: 100.00%	N: 18422 D: 18422 R: 100.00%

[13] In order to reach each member requiring a reminder to complete 2nd doses of vaccine series, reminders were transitions to a monthly mailer sent to members each month until completed vaccinate series was recorded in the LINKS system and thus reflected in LDH data.
[14] Eligible Pediatric population added in ITM data in July 2021.

Barrier 4: There may be disparities in receipt of COVID-19 vaccines **MCO-identified Barriers** (July[15])		**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec[11]**
Intervention to address barrier: Eligible enrollees in susceptible subpopulations will receive tailored and targeted interventions to address observed disparities in receiving the COVID-19 vaccine. Planned Start Date: 05/01/21 Actual Start Date: 05/01/21 Revised Intervention to address MCO-identified barrier: Member incentive for vaccination Revision Date: 7/15/2021	Intervention tracking measure 4a: *Percentage of eligible enrollees in identified disparity groups receiving tailored/ targeted outreach in collaboration with local providers to promote trust and engagement.* N: *# members within identified disparity group (Caucasian population) outreached via tailored messaging/ communication in collaboration with local provider to promote trust and engagement* D: *# members within identified disparity group (Caucasian population)*	N/A	N: 2660 D: 56716 R: 3.86%	N: 2247 D: 58230 R: 3.86%	N: 1257 D: 53078 R: 2.37%	N: 2238 D: 48699 R: 4.60%	N: 1221 D: 44379 R: 2.75%	N: 1668 D: 39576 R: 4.21%	N: 3269 D: 38835 R: 8.42%	*Data pending*
Barrier 5: Enrollees may have difficulties with transportation or be homebound **MCO-identified Barriers** (June[16])		**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec[11]**
Intervention to address barrier: 5a. Eligible enrollees with transportation barriers/homebound status will be outreached to assess vaccination status and	Intervention tracking measure 5a: *Percentage of eligible enrollees with identified transportation/homebound barriers who were outreached for vaccination support and*	N/A	N: 310 D: 7697 R: 4.03%	N: 866 D: 7154 R: 12.11%	N: 2608 D: 5135 R: 50.79%	N: 756 D: 5108 R: 14.80%	N: 50 D: 4378 R: 1.14%	N: 1940 D: 4279 R: 45.34%	N: 1542 D: 4555 R: 33.85%	*Data pending*

[15] Member incentive for vaccination began in July, initially intended to drive increased vaccination rates over a 30-day period; extended through August 31, 2021. Table 6. Next Steps provides additional insight into intervention additions and adaptations impacting ITM results.
[16] Transportation outreach was expanded and offered to each member successfully outreached for any initiative and/or incoming call need. Table 6. Next Steps provides additional insight into intervention additions and adaptations impacting ITM results.

connection to plan resources to facilitate vaccination access. Planned Start Date: 05/01/21 Actual Start Date: 05/01/21 Revised Intervention to address MCO-identified barrier: Transportation assistance offered with each member touchpoint Revision Date: 6/1/2021	*transportation coordination to vaccine appointments.* N: *# members with transportation/mobility barriers outreached to offer assistance with vaccine scheduling & transportation coordination.* D: *# eligible members with identified transportation/ mobility barriers*									
Intervention to address barrier: 5b. Provide transportation for members with transportation/ mobility barriers to COVID vaccination sites Planned Start Date: 05/01/21 Actual Start Date: 05/01/21 Revised Intervention to address MCO-identified barrier: Transportation assistance offered with each member touchpoint Revision Date: 6/1/2021	Intervention tracking measure 5b: *Percentage of eligible enrollees with identified transportation/ homebound barriers who were provided transportation to COVID vaccination sites.* *N: # members with transportation/mobility barriers provided transportation to COVID Vaccination sites* *D: # eligible members with identified transportation/ mobility barriers*	N/A	N: 92 D: 7697 R: 1.20%	N: 40 D: 7154 R: 0.56%	N: 90 D: 5135 R: 1.75%	N: 96 D: 5108 R: 1.88%	N: 60 D: 4378 R: 1.27%	N: 67 D: 4768 R: 1.41%	N: 61 D: 4555 R: 1.34%	*Data pending*
Barrier 6: Enrollees may be hesitant to vaccinate **MCO-identified Barriers** (August[17])		**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec[11]**
Intervention tracking measure 6: 6. Leverage the trusted relationship between members/providers to decrease vaccine hesitancy	Intervention tracking measure 6: *Percentage of eligible enrollees who received vaccination following distribution of PCP co-*	N/A	N/A	N: 339 D: 3160 R: 10.73%	N: 1058 D: 3748 R: 28.23%	N: 1930 D: 6133 R: 31.47%	N: 2300 D: 6773 R: 33.96%	N: 2586 D: 9761 R: 26.49%	N: 2751 D: 9761 R: 28.18%	N: 2784 D: 9761 R: 28.52%

[17] Delta variant surge impacted provider practices focus on vaccine administration due to increasing acute care visits and staff impacted by illness. Vaccination efforts resumed as infection rates declined.

and increase vaccine administration Planned Start Date: 06/01/21 Actual Start Date: 06/01/21 Revised Intervention to address MCO-identified barrier: Pediatric population included in July Revision Date: 7/1/2021	*branded collaterals to members* N: # vaccine-eligible members vaccinated following targeted outreach through provider collaboration D: # vaccine-eligible members whose PCPs targeted for outreach with co-branded mailer									

Results

To be completed upon Baseline, Interim and Final Report submissions. The results section should present project findings related to performance indicators. ***Do not*** interpret the results in this section.

Table 5: Results

Indicator	Description	Apr 2021 (Baseline)	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Target
Indicator 1	Measure A: Persons who received at least one vaccine dose	N: 32,955 D: 295,002 R: 11.17%	N: 50,364 D: 295,735 R: 17.03%	N: 58,726 D: 297,389 R: 19.60%	N: 64,961 D: 300,380 R: 21.63%	N: 78,473 D: 301,789 R: 26.00%	N: 98,402 D: 304,368 R: 32.33%	N: 103,250 D: 306,199 R: 33.72%	N: 110,296 D: 307,516 R: 35.87%	N: 115,708 D: 310,421 R: 37.27%	Rate: 70%
	Measure B: Persons who received a complete vaccine course[18]	N: 16,497 D: 295,002 R: 5.59%	N: 39,924 D: 295,735 R: 13.50%	N: 49,051 D: 297,389 R: 16.49%	N: 57,175 D: 300,380 R: 19.03%	N: 63,649 D: 301,789 R: 21.09%	N: 77,850 D: 304,368 R: 25.58%	N: 85,930 D: 306,199 R: 28.06%	N: 93,418 D: 307,516 R: 30.38%	N: 98,294 D: 310,421 R: 31.66%	Rate: 50%
Indicator 2	Racial/ethnic disparity in receipt of at least one dose of COVID-19 vaccine										
	Measure A: Difference between the percentage of eligible White and Black individuals receiving at least one dose	R: 3.27%	R: 5.06%	R: 5.00%	R: 6.88%	R: 8.85%	R: 10.85%	R: 11.32%	R: 12.33%	R: 11.27%	Rate: 0%
	Measure B: Difference between the percentage of eligible White and Hispanic/Latino (H) individuals receiving at least one dose	R: -0.10%	R: 1.28%	R: 1.68%	R: 2.25%	R: 2.96%	R: 4.29%	R: 4.43%	R: 4.85%	R: 2.84%	Rate: 0%

[18] This refers to completion of a 2-dose series for 2-dose vaccines (e.g., Pfizer and Moderna) and receipt of one dose for vaccines only requiring one dose (e.g., Johnson and Johnson).

Indicator	Description	Apr 2021 (Baseline)	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Target
	Measure C: Difference between the percentage of eligible White and those of Other, Unknown, or Missing (O) race/ethnicity receiving at least one dose	R: 5.51%	R: 9.22%	R: 11.92%	R: 13.22%	R: 15.94%	R: 16.46%	R: 16.55%	R: 16.85%	R: 17.08%	Rate: 0%
Indicator 3	Racial/ethnic disparity in receipt of a complete COVID-19 vaccine series										
	Measure A: Difference between the percentage of eligible White and Black individuals receiving a complete vaccine series	R: 1.66%	R: 3.87%	R: 4.83%	R: 5.68%	R: 6.72%	R: 8.56%	R: 9.28%	R: 10.32%	R: 8.98%	Rate: 0%
	Measure B: Difference between the percentage of eligible White and Hispanic/Latino individuals receiving a complete vaccine series	R: -0.59%	R: 0.64%	R: 1.24%	R: 1.69%	R: 2.25%	R: 2.87%	R: 3.31%	R: 3.76%	R: 1.78%	Rate: 0%
	Measure C: Difference between the percentage of eligible White and those of Other, Unknown, or Missing race/ethnicity receiving a complete vaccine series	R: 2.94%	R: 7.64%	R: 10.47%	R: 11.95%	R: 14.49%	R: 15.30%	R: 15.56%	R: 15.98%	R: 16.48%	Rate: 0%

Indicator	Description	Apr 2021 (Baseline)	May 2021	Jun 2021	Jul 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021	Target
	Measure A: Pediatric population who received at least one vaccine dose	N/A	N/A	N/A	N: 3,282 D: 58,440 R: 5.62%	N: 7,434 D: 58,666 R: 12.67%	N: 12,867 D: 58,824 R: 21.87%	N: 13,686 D: 58,950 R: 23.22%	N: 14,545 D: 58,944 R 24.68%	N: 15,064 D: 59,081 R: 25.50%	Rate: 70%
Indicator 4	Measure B: Pediatric population[19] who received a complete vaccine series	N/A	N/A	N/A	N: 2,061 D: 58,440 R: 3.53%	N: 3,826 D: 58,666 R: 6.52%	N: 8,608 D: 58,824 R: 14.63%	N: 10,482 D: 58,950 R: 17.78%	N: 11,817 D: 58,944 R: 20.05%	N: 12,289 D: 59,081 R: 20.80%	Rate: 50%

[19] For the pediatric population, the denominator equals the number of eligible members based on the FDA authorization and as directed by LDH for inclusion within the scope of the project. The denominator will change significantly as the age range of pediatric authorization changes. The baseline period will start with the 7/2/2021 COVID-19 Vaccine Summary Report.

Discussion

To be completed upon Interim and Final Report submissions. The discussion section is for explanation and interpretation of the results. In the Final Report Discussion, revise the Interim Discussion so that the Final Discussion Section represents one comprehensive and integrated interpretation of results, rather than a separate add-on to the Interim discussion.

Discussion of Results

Interpret the performance indicator rates for each measurement period, *i.e., describe whether rates improved or declined between baseline and interim, between interim and final and between baseline and final measurement periods.*

Analysis of COVID-19 vaccination indicator performance demonstrated consistent and significant improvement from the baseline measure in each of the indicated subgroups though not meeting the national goals set forth by President Biden earlier this year.

COVID-19 vaccination indicators for all age-related subgroups (16 years and older, 12-15 years of age) increased from the MY2021 baseline captured in April. Each of the racial/ethnic subgroup performance indicators (White, Black, Hispanic/Latino, and Other/Unknown/Missing) also increased from baseline with the Other/Unknown/Missing and Black racial/ethnic subgroups outperforming White and Hispanic/Latino subgroups. Additional indicator discussion follows:

- **Adult Vaccination**
  Adult members 16 years and older receiving the first dose of any approved COVID vaccination is 37.27 percent representing a 26.10 percentage point increase from the baseline MY2021.

  Adult members 16 years and older receiving either two doses of the multi-dose vaccines (e.g., Pfizer and Moderna) or one dose of the single-dose vaccine (e.g., Johnson and Johnson) is 31.66 percent, representing a 26.07 percentage point increase from the baseline MY2021.

- **Pediatric Vaccination**
  Pediatric members 12 to 15 years of age receiving the first dose of any approved COVID vaccination is 25.50 percent, representing a 19.88 percentage point increase from the baseline MY2021.

  Pediatric members 12 to 15 years of age receiving two doses of the multi-dose vaccines (e.g., Pfizer and Moderna) is 20.80 percent, representing a 17.27 percentage point increase from the baseline MY2021.

- **Vaccination by Race**
  White members receiving the first dose of any approved COVID vaccination is 30.09 percent, a 22.02 percentage point increase from the baseline MY2021 measure; and 25.69 percent received either two doses of the multi-dose vaccines (e.g., Pfizer and Moderna) or one dose of the single-dose vaccine (e.g., Johnson and Johnson), representing a 21.69 percentage point increase from baseline.

  Black members receiving the first dose of any approved COVID vaccination is 41.36 percent, a 30.02 percentage point increase from the baseline MY2021 measure; and 34.67 percent received either two doses of the multi-dose vaccines (e.g., Pfizer and Moderna) or one dose of the single-dose vaccine (e.g., Johnson and Johnson), representing a 29.01 percentage point increase from baseline.

  Hispanic/Latino members receiving the first dose of any approved COVID vaccination is 32.93 percent, representing a 24.96 percentage point increase from the baseline MY2021 measure; and 27.47 percent received either two doses of the multi-dose vaccines (e.g., Pfizer and Moderna) or one

dose of the single-dose vaccine (e.g., Johnson and Johnson), representing a 24.06 percentage point increase from baseline.

Member subgroups with race/ethnicity noted as 'Other/Unknown/Missing' had the highest performance for members receiving the first dose of any approved COVID vaccination at 47.17 percent, a 33.59 percentage point increase from the baseline MY2021 measure; and 42.17 percent received either two doses of the multi-dose vaccines (e.g., Pfizer and Moderna) or one dose of the single-dose vaccine (e.g., Johnson and Johnson), a 35.23 percentage point increase from baseline.

- **Racial/ethnic Disparity**
  In comparison to the White racial/ethnic subgroup, each of the other subgroups (Black, Hispanic/Latino, and Other/Unknown/Missing) performed more favorably throughout the measure year. The Other/Unknown/Missing subgroup performed most favorably when compared to the White subgroup, followed by the Black subgroup, and lastly by the Hispanic/Latino subgroup. Additional observations in racial/ethnic disparities are, as follows:

  - The percentage of members of Other/Unknown/Missing racial/ethnic origins who received the first dose of any approved COVID vaccination showed the largest increase in percentage points from baseline, increasing 33.59 percentage points during 2021. In comparison, Black members who received the first dose of any approved COVID vaccination increased by 30.02 percentage points while Hispanic/Latino members increased by 24.96 percentage point and White members increased by 22.02 percentage points from baseline.
  - The percentage of members of Other/Unknown/Missing racial/ethnic origins who received a single or multi-dose vaccine series of any approved COVID vaccination also showed the largest increase in percentage points from baseline, increasing 35.23 percentage points during 2021. In comparison, Black members who received a single or multi-dose vaccine series of any approved COVID vaccination increased by 29.01 percentage points while Hispanic/Latino members increased by 24.06 percentage point and White members increased by 21.69 percentage points from baseline.
  - The difference between the percentage of eligible White members and the other racial/ethnic members grew consistently during the measurement year. While initial April vaccination rates indicated a slight disparity in the vaccination rates of the Hispanic subgroup, this disparity was no longer evident in May data and Hispanic member vaccination rates, as well as Black and Other/Unknown/Missing member rates, remained higher than White member vaccination rates for the remainder of the 2021 measurement year.
  - Similarly, the difference between the percentage of eligible Other/Unknown/Missing members and the other racial/ethnic members grew consistently during the measurement year and remained higher than White, Black, and Hispanic member vaccination rates for the 2021 measurement year.
  - Notably, when comparing the difference between racial/ethnic subgroups to the Other/ Unknown/Missing subgroup, there is a lower percentage point difference between White and Hispanic member vaccination rates.

- **Explain and interpret the results by reviewing the degree to which objectives and goals were achieved.** *Use your ITM data to support your interpretations.*

The overall size and scope of the target population is substantial, with over 370,000 members eligible for vaccination. This volume presented additional challenges to effective outreach, dissemination of education, and referral/appointment scheduling for vaccinations – all prominent barriers throughout 2021.

ITM data was collected, along with member and provider feedback, for monthly analysis to guide next steps. Monitoring appointment scheduling assistance for adult members enrolled in case management services (ITM 1a) began at 0.50 percent at the onset of the project and averaged between 20-25 percent towards year end. Historically members enrolled in case management have more significant healthcare needs and are therefore more engaged in assistive services for coordination of care, making it difficult to

apply lessons learned to the general population that consider themselves to be healthy and not in need of intervention or assistance.

Appointment scheduling for the broader group of members not engaged in case management proved more difficult to achieve. Ongoing analysis of member feedback and outreach outcomes revealed a large percentage of members that were unable to be reached by telephone, attributed to local 'robo-call' prevalence as well as likely overlap of outreach efforts for various initiatives across communities. Members who were successfully outreached were provided education on vaccine merits, safety, and accessibility however many declined vaccinations or declined appointment assistance, indicating a preference to self-schedule. The latter became more pronounced as vaccine accessibility improved, with the increasing number of vaccine providers and walk-in access available in communities. This feedback prompted continued discussion and implementation of alternative methods to address this large population, necessitating a multi-focal approach through multiple departments, including case management, health check coordinators, and member services to maximize outreach efforts. An upward trend in member engagement was noted in early summer - at the height of the Delta variant surge - when appointment scheduling peaked at 0.27 percent and 0.56 percent respectively (ITMs 1b and 1c); however, these rates declined with the impact of Hurricane Ida in Southeast Louisiana in late August.

Member engagement to promote initial vaccinations was an early priority, however ensuring member completion of the multi-dose vaccine series was quickly identified as a parallel focus early in this project. A recurring program was developed to distribute second dose reminders to every member identified as past due for the second dose of multi-dose series (e.g., Pfizer or Moderna), based on member information provided by LDH *(reflected in ITM 3a)*. This process was further refined in June, with second dose reminders continuing to 100 percent of members until LDH/LINKS registered completion of the vaccine series. Member feedback specific to this ITM revealed that members continued to receive second dose reminders after the vaccine series is completed. This may be attributed to delays in provider entry of vaccine administration into the LINKS system or potential delays in claims submission. Consideration of member abrasion risks were discussed regularly, in relation to potentially duplicative outreach attempts that may occur due to timing of refreshed data or data inaccuracies, which may impact member engagement and response to outreach efforts for future initiatives. Based on data reviewed, on average members received two reminders before completed vaccine records were recorded, however we are unable to pinpoint record delay versus lack of vaccine administration until the vaccination details are received.

Lists of vaccine-eligible members were distributed to providers to engage them in member outreach for vaccination appointments, focusing on the trusted member/provider relationship to reinforce the importance of vaccination, dispelling misinformation, and providing vaccine administration. Initially care gap reports were developed and distributed manually to provider groups with the largest volume of members. ITM 2a reflects the number of members whose provider received member care gap information, including identification of members with a second dose overdue. As reflected in the ITM, these COVID care gap reports were established in May, with transition to automated distribution through the Secure Provider Portal in August - ensuring 100 percent of all member care gaps were delivered to providers each month. Provider Network teams outreached provider groups throughout 2021 to deliver COVID-19 education and assist providers with accessing vaccine resources and registering within the LINKS system if needed. Monthly distribution of available vaccine sites began electronically through provider email communications, as indicated in ITM 2b, and transitioned to include distribution through direct mail in August to ensure delivery to each provider identified through member care gaps. Using the member/provider relationship to enhance efforts to overcome vaccine hesitancy was also impactful; LHCC has partnered with select participating provider groups to offer co-branded provider/health plan materials to drive appointment scheduling. This initiative included an additional member incentive in order to initiate dialogue with providers. ITM 6 indicates an initial vaccination of rate of 10.73 percent in this group as the initiative launched, maintaining a vaccination rate in these member groups between 26.49 – 33.96 percent each month thereafter.

At the onset of this project, evaluation of racial and ethnic data patterns revealed a small disparity in the Hispanic/Latino population in comparison to the White population; however, this disparity was resolved

in subsequent data analysis in May 2021. Further review indicated a disparity in favor of the Black, Other/Unknown/Missing, and Hispanic/Latino populations when compared to the White population of the LHCC member population. Subsequent outreach was focused on tailoring messaging to this under-performing [White] group to promote the collaboration with trusted providers to increase member engagement. ITM 4 monitored this outreach activity, indicating 2.4 – 8.4 percent of members in this group were outreached monthly in order to address COVID vaccine education and offer assistance with appointment scheduling and transportation when needed.

Members with transportation and/or mobility issues were also a focus early in the project. Analysis and identification of members who had debilitating disease processes impacting mobility and those who required transportation services within the previous six months were a focus for case management outreach to impact members with the highest need. Outreach to this vulnerable population was tracked monthly through ITM 5a and reached its highest point in Q4, with 76% of members outreached to assist with transportation coordination needs. The significant decline in the number of vaccine eligible members in this group, from 7,697 in May to 4,555 in November is noteworthy, reflecting a favorable impact on this group despite the lower utilization rate of transportation services *(as monitored in ITM 5b).* Early in the pandemic, member feedback indicated some members were not comfortable sharing transportation due to concerns with COVID transmission; however, subsequent member feedback indicated that lack of transportation was not a significant barrier to vaccination. Correlations between NEMT utilization and vaccination gap closures were limited, since transportation vendor records capture prominent visit reasons/indications - any trips provided primarily for non-COVID related care that may have included COVID vaccine administration may not be reflected in transportation records.

- **What factors were associated with success or failure?** *For example, in response to stagnating or declining ITM rates, describe any findings from the barrier analysis triggered by lack of intervention progress, and how those findings were used to inform modifications to interventions.*

  Participating providers took part in distribution of co-branded mailers with LHCC to promote the trusted messenger relationship to reduce vaccine hesitancy and increase vaccine administration. This initiative was particularly impactful in vaccine delivery to members in the 12-15 age group, outperforming overall vaccine delivery rates.

  Due to the size of the unvaccinated population, surges in infection rates impacted member access to trusted providers for vaccination, as wellness/preventive care access became secondary to the increasing needs for acute care to sick patients, while providers were also experiencing internal staffing shortages due to COVID illness.

  Development and monthly distribution of vaccine-eligible member lists via the Secure Provider Portal allowed providers access to the most up-to-date member vaccine status available. This information allowed providers to tailor member encounters to meet the needs of each individual member for the most effective outcomes.

  Members previously engaged in case management were more likely to have successful outreach to offer vaccine scheduling assistance. This group is typically a higher utilizer of health care services and/or receives assistance with coordination of care for chronic illness(es) due to higher risk, and therefore more engaged in healthcare opportunities than members without similar illnesses or issues.

  Challenges in contacting members impacted overall outcomes and limited opportunities to communicate vaccine education, dispel vaccine myths, and offer assistance to schedule vaccine appointments as well as limiting opportunities to discuss and collect data on member concerns or barriers including vaccine hesitancy. Member encounters provided staff with useful insights into member preferences for independent self-scheduling of appointments (rather than having a health plan staff member assist) and identification of drivers behind vaccine hesitancy or refusal which informed subsequent efforts towards member education, outreach, and referral to trusted medical providers for further intervention.

Second dose reminders that were intended to support member completion of multi-dose vaccination series also resulted in subsequent calls to member services with concerns about record inaccuracy and reports of member abrasion due to repeated reminders after vaccine series completion. Member-facing staff provided additional information in these instances, explaining vaccine entry into the LINKS system.

Limitations

As in any population health study, there are study design limitations for a PIP. Address the limitations of your project design, i.e., challenges identified when conducting the PIP (e.g., accuracy of administrative measures that are specified using diagnosis or procedure codes are limited to the extent that providers and coders enter the correct codes; accuracy of hybrid measures specified using chart review findings are limited to the extent that documentation addresses all services provided).

- **Were there any factors that may pose a threat to the internal validity the findings?**
  Definition and examples: internal validity means that the data are measuring what they were intended to measure. For instance, if the PIP data source was meant to capture all children 5-11 years of age with an asthma diagnosis, but instead the PIP data source omitted some children due to inaccurate ICD-10 coding, there is an internal validity problem.

  Initial ITM performance data related to appointment scheduling was not reflective of the volume of successful member encounters delivering COVID vaccine education and offering appointment scheduling, primarily because members expressed a preference to schedule appointments independently or avail of walk-in access at many vaccination sites which offer member convenience. LDH guidance was expanded later in the year to include members indicating an intent to vaccinate with a specified provider, and data was re-aggregated through July for more accurate reflection of appointment scheduling outcomes.

  Members with transportation and/or homebound barriers were identified through claims data or previous transportation utilization. Additionally, abstraction of vaccine-related activity through vendor transportation data was limited due to required documentation of primary reasons for visits captured when members request transportation assistance. As a result, the percentage of members provided transportation for COVID vaccination is likely skewed since members receiving vaccinations during other primary visit reasons may not be correlated as a COVID vaccine trip.

  No other issues have been identified.

- **Were there any threats to the external validity the findings?**
  Definition and examples: external validity describes the extent that findings can be applied or generalized to the larger/entire enrollee population, e.g., a sample that was not randomly selected from the eligible population or that includes too many/too few enrollees from a certain subpopulation (e.g., under-representation from a certain region).

  Vaccine administration entries into the LINKS system are dependent on individual provider processes and internal administrative support, potentially impacting performance indicator vaccination rates.

- **Describe any data collection challenges.**
  Definition and examples: data collection challenges include low survey response rates, low medical record retrieval rates, difficulty in retrieving claims data, or difficulty tracking case management interventions.

  The primary challenge to data collection was the ability the successfully outreach members to assess and collect relevant information to guide interventions. Expanding the outreach efforts was a continual process - engaging automated dialing systems and incorporating multiple outreach methods to increase connection to members. Member feedback and scheduling barrier information collected during successful outreach was reviewed and analyzed cumulatively to monitor for any prevalent themes. Members outreached for second dose reminders that reported already completing the vaccine series did not require appointment scheduling assistance. Member encounters indicating vaccine hesitancy or direct refusal limited opportunities for further data collection and/or dialogue through motivational interviewing

techniques that might eventually lead to vaccine acceptance. In these instances, there was not an opportunity to provide data reflective of successful case management intervention.

PIP Highlights

Provider-facing interventions that were most effective in supporting the goals and objectives of this project included development and monthly distribution of vaccine-eligible member lists, including second dose overdue status, via the Secure Provider Portal. As indicated in ITM 2a, member care gap lists were initially distributed manually to providers and represented 12-20 percent of vaccine eligible members. With the transition to direct electronic access via the secure provider portal, 100% of vaccine eligible members were identified monthly and allowed providers access to the most up-to-date member vaccine status available. This, in turn, allowed providers to tailor member encounters to meet the needs of each individual member for the most effective outcomes.

Robust efforts to engage providers and establish targeted partnerships were also effective provider interventions that impacted member vaccination rates; enhanced provider supports included practice resources including incentives and distribution of co-branded member mailers with LHCC to promote the trusted relationship with the provider *(ITM 6)* to reduce vaccine hesitancy and increase vaccine administration. The first provider partnerships began in June with 11 percent of members successfully outreached receiving vaccination. An additional ten provider groups joined the initiative throughout 2021 and vaccine rates for members in these provider groups ranged from 26-34 percent.

Effective member interventions supporting vaccination completion included second dose reminder initiatives. Each member flagged as overdue for second vaccine doses received a reminder through direct telephone, digital, automated outreach, or mailers each month until the vaccination was received. Member feedback analysis indicated some members remained on the second dose overdue lists even though the vaccine series was completed, likely due to process delays in vaccine data entry or claims submission.

Member-facing staff collected valuable insights during member encounters, including member preferences surrounding appointment scheduling. Maintaining independence in the appointment scheduling process was a prominent theme in member feedback analysis, especially as vaccine accessibility and walk-in sites became more prevalent throughout the project. These encounters also facilitated identification of members unwilling to vaccinate who may benefit from additional education, outreach and referral to trusted medical providers for further intervention.

In addition to the provider partnerships discussed above that supported the trusted provider relationships, our COVID Vaccine Ambassadors also participated in more than thirty community events across the State - both in partnership with LDH and independently with an Emergency Medical Services provider onsite for vaccine administration to engage members conveniently and in trusted spaces. Though not formalized in an ITM, nearly 1,200 additional vaccinations were administered through these planned events.

Next Steps

This section is completed for the Final Report. For each intervention, summarize lessons learned, system-level changes made and/or planned, and outline next steps for ongoing improvement beyond the PIP timeframe.

Table 6: Next Steps

Description of Intervention	Lessons Learned	System-Level Changes Made and/or Planned	Next Steps
COVID-19 vaccination outreach to enrollees engaged in case management	Competing outreach initiatives limited number of successful outreaches Vaccine hesitancy and refusals/concerns about potential side effects remain prominent	CM direct member outreach to SHCN population engaged in CM leveraged established CM relationship with Members Partnered w/ Walmart for access to scheduling app to support member appts Weekly text/IVR calls/emails provided vaccine education, vaccine education, and appointment scheduling assistance Engaged community partners to enhance appointment assistance Automated Corporate outreach campaign querying vaccination status and share with Providers Promote member incentives for vaccine completion (LHCC incentive as well as LDH campaigns, i.e. Shot for 100) Incorporated COVID vaccine assessment and appointment assistance into each CM outreach Participation in community events to engage members conveniently and/or in trusted spaces	Continue culturally sensitive CM outreach w/ appointment scheduling assistance and promotion of available vaccination sites/events (leveraging language services, recognizing implicit bias, motional interviewing techniques) Continue LHCC member incentives and update communications to align with LDH campaigns as they evolve
The large volume of eligible enrollees poses a challenge to enrollee reach via CM outreach alone	Significant volume of eligible enrollees poses a challenge to enrollee reach via CM outreach alone	Concurrent Corporate outreach supplemented Health Plan efforts (text, email outreach)	Continue direct and automated outreach efforts, including member inbound calls with appointment

	Decreased need to vaccine appointment scheduling due to vaccine accessibility and walk-in options noted	Partnered w/ Walmart for access to scheduling app to support member appts Initial static outreach messaging transitioned to roll back call campaign expanding automated outreach, linking members to representatives for direct message delivery and assistance w/ scheduling; staff were realigned to cover call volumes Updated Member Services scripting and care gap flags to support and promote vaccination with each Member contact. Enhance appointment assistance by engaging community partners and expanding use of available appointment scheduling apps Automated Corporate outreach campaign querying vaccination status and share with Providers (pending LDH approval) Implemented new Member incentive for vaccine completion Incorporated COVID vaccine assessment and appointment assistance into each CM outreach Participation in community events to engage members conveniently and/or in trusted spaces Provider partnership with co-branded mailers emphasized the trusted provider relationship for vaccine completion	scheduling and transportation coordination assistance Continue to develop and participate in community events to engage members conveniently and/or in trusted spaces Supplement ongoing outreach by HCCs to include targeted outreach campaigns for members in proximity to sponsored community vaccination events, including sharing of LHCC planned events with other MCOs for broader community impact. Expand provider partnerships, promoting with co-branded mailers to emphasize the trusted provider relationship for vaccine completion Focus outreach efforts on in-person, member-facing outreach through Community Health Service team
Develop and implement COVID-19 vaccination outreach to the pediatric population.	The large volume of eligible enrollees poses a challenge to enrollee reach via CM outreach alone	Leveraged established CM relationship with Members for initial outreach	Continue to incorporate pediatric populations into direct and automated outreach efforts, including

		Partnered w/ Walmart for access to scheduling app to support member appts Member incentive for vaccine completion initially offered through July; later extended Incorporated COVID vaccine assessment and appointment assistance into each CM outreach Participation in community events to engage members conveniently and/or in trusted spaces Provider partnership with co-branded mailers emphasized the trusted provider relationship for vaccine completion	member inbound calls with appointment scheduling and transportation coordination assistance utilizing culturally sensitive motional interviewing techniques, leveraging language services and recognizing implicit bias Continue to grow LHCC Community Vaccination event opportunities in ongoing partnership with Acadian Ambulance for vaccine delivery/expanded access
Distribute eligible enrollee lists to PCPs and facilitate referrals as needed	Existing processes support regular Provider communication through Provider Network teams and Secure Provider Portal IT support/project build time to incorporate Member care gap reports and establish distribution	Initial care gap reports targeting providers with largest volume of eligible enrollees were distributed manually pending portal revisions; subsequently migrated to automated distribution via secure provider portal Collaboration with Urgent Care Providers for vaccine promotion, mailer distribution to members with prior visits Provider partnerships established using co-branded collaterals leveraging trusted provider relationships Provider incentive for vaccine administration initiated	Continue to update automated care gap reports monthly to support provider vaccination efforts; incorporate additional pediatric age groups as new age guidelines are approved. Include care report access and utilization in provider education initiatives Continue LHCC provider and member incentives to support vaccination promotion
Distribute vaccination site lists to PCPs.	Existing processes support regular Provider communication through Provider Network teams, Secure Provider Portal, and recurrent electronic message distribution.	Provider Services Team delivering vaccination site resources with each Provider contact and addressing any issues and barriers identified Expanded distribution to other Provider emails beyond those enrolled in electronic distributions	Continue to distribute updated vaccination sites/events monthly through mailers, electronic access provided through secure provider portal, and online via LHCC provider resource page

	Limitations in distribution due to provider opt-in for electronic communications	Monthly vaccine site distribution through mailer expanded providers receiving resources	
Eligible enrollees pending the 2nd dose of COVID vaccine will be outreached with reminder communications to facilitate completion of vaccination series.	Existing Care Management and Corporate outreach initiatives included 2nd dose follow up/scheduling assistance for synergy of outreach efforts, although Corporate outreach data did not allow for extraction of 2nd dose reminder data	Member care gap reports distributed to Providers include 2nd dose reminders Automated Corporate member outreach campaigns for 2nd dose reminders enhancing data collection Rollback phone campaign provided opportunity for direct scheduling support Member care gap reports including 2nd dose reminders transitioned to distribution via secure provider portal Established member mailer with 2nd dose reminder for expanded outreach Member incentive for vaccine completion and provider incentive for vaccine administration (including 2nd dose)	Continue member outreach for 2nd dose reminders for expanded outreach. Continue to include 2nd dose overdue vaccine status in member care gap reports updated monthly. Expand member-facing outreach staff to support targeted member outreach needs
Eligible enrollees in susceptible subpopulation (White) will receive tailored and targeted interventions to address observed disparities in receiving the COVID-19 vaccine.	No specific language barrier with identified disparity group Target population significantly represented within each region across the state	Targeted outreach to region with largest density of White enrollees not yet vaccinated, expanded to additional regions as previous regions completed Text/IVR calls/email/mailers providing vaccine education and appointment scheduling assistance Broader concurrent Corporate outreach supplementing Health Plan efforts (text & email outreach) Member incentive for vaccine completion and provider incentive for vaccine administration (including 2nd dose)	Continue direct and automated outreach efforts, including member inbound calls with appointment scheduling and transportation coordination assistance in regions with largest density of White enrollees not yet vaccinated Expand provider partnerships established using co-branded collaterals leveraging trusted provider relationships Continue participation in community events to engage members conveniently and/or in trusted spaces

		Collaboration with Urgent Care Providers for vaccine promotion, mailer distribution to members with prior visits Provider partnerships established using co-branded collaterals leveraging trusted provider relationships Participation in community events to engage members conveniently and/or in trusted spaces	
Eligible enrollees with transportation barriers/homebound status will be outreached to assess vaccination status and connection to plan resources to facilitate vaccination access; Provide transportation for members with transportation/ mobility barriers to COVID vaccination sites	Member feedback indicated transportation barriers/ concerns the lowest rationale given for not getting vaccinated Vaccine hesitancy and refusals and concerns about potential side effects remain prominent in this group as well	Targeted phone outreach to members with previous transportation or homebound status identified Collaboration with local providers for home vaccine delivery; use of NEMT for vaccination trips Promote/offer available vaccine transportation with each member outreach Member and provider incentives for vaccinations	Continued promotion of transportation resources to encourage vaccination with each member outreach

References

Include a list of references for any sources of information used to formulate the project.

Centers for Disease Control and Prevention (CDC). People with Certain Medical Conditions. Updated December1, 2020. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fgroups-at-higher-risk.html [Accessed 18 December 2020]

Immunization Action Coalition. 10 Steps to Implementing Standing Orders for Immunization in Your Practice Setting, 5/20. www.immunize.org. [Accessed 18 December 2020]

Immunization Action Coalition. Using Standing Orders for Administering Vaccines: What You Should Know. www.immunize.org. [Accessed 2 December 2020]

Louisiana Department of Health (LDH) Office of Public Health (OPH). State of Louisiana COVID-19 Vaccination Playbook, Version 01. October 16, 2020.

Oliver SE, Gargano JW, Marin M, Wallace M, Curran KG, Chamberland M, et al. The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Moderna COVID-19 Vaccine---United States, December 2020. Morbidity and Mortality Weekly Report, US Department of Health and Human Services/Centers for Disease Control and Prevention, December 20, 2020a; 69: 1922-1924 [early release].

Oliver SE, Gargano JW, Marin M, Wallace M, Curran KG, Chamberland M, et al. The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine---United States, December 2020. Morbidity and Mortality Weekly Report, US Department of Health and Human Services/Centers for Disease Control and Prevention, December 18, 2020b; 69(50): 1922-1924.

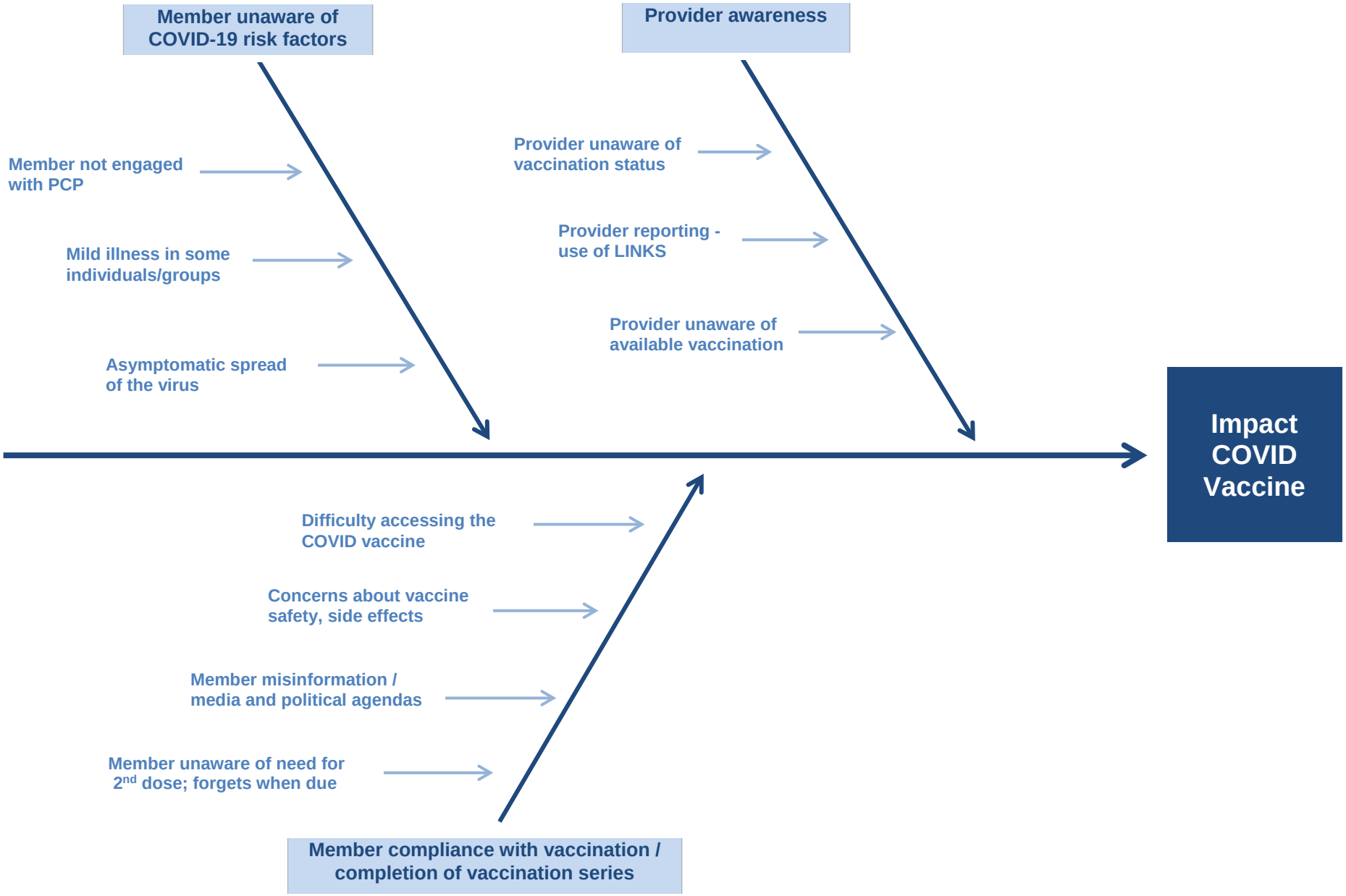
Glossary of PIP Terms

Table 7: PIP Terms

PIP Term	Also Known as…	Purpose	Definition
Aim	• Purpose	To state what the MCO is trying to accomplish by implementing their PIP.	An aim clearly articulates the goal or objective of the work being performed for the PIP. It describes the desired outcome. The Aim answers the questions "How much improvement, to what, for whom, and by when?"
Barrier	• Obstacle • Hurdle • Roadblock	To inform meaningful and specific intervention development addressing enrollees, providers, and MCO staff.	Barriers are obstacles that need to be overcome in order for the MCO to be successful in reaching the PIP Aim or target goals. The root cause (s) of barriers should be identified so that interventions can be developed to overcome these barriers and produce improvement for enrollees/providers/MCOs. A barrier analysis should include analyses of both quantitative (e.g., MCO claims data) and qualitative (such as surveys, access and availability data or focus groups and interviews) data as well as a review of published literature where appropriate to root out the issues preventing implementation of interventions.
Baseline rate	• Starting point	To evaluate the MCO's performance in the year prior to implementation of the PIP.	The baseline rate refers to the rate of performance of a given indicator in the year prior to PIP implementation. The baseline rate must be measured for the period before PIP interventions begin.
Benchmark rate	• Standard • Gauge	To establish a comparison standard against which the MCO can evaluate its own performance.	The benchmark rate refers to a standard that the MCO aims to meet or exceed during the PIP period. For example, this rate can be obtained from the statewide average, or Quality Compass.
Goal	• Target • Aspiration	To establish a desired level of performance.	A goal is a measurable target that is realistic relative to baseline performance, yet ambitious, and that is directly tied to the PIP aim and objectives.
Intervention tracking measure	• Process Measure	To gauge the effectiveness of interventions (on a quarterly or monthly basis).	Intervention tracking measures are monthly or quarterly measures of the success of, or barriers to, each intervention, and are used to show where changes in PIP interventions might be necessary to improve success rates on an ongoing basis.

PIP Term	Also Known as…	Purpose	Definition
Limitation	• Challenges • Constraints • Problems	To reveal challenges faced by the MCO, and the MCO's ability to conduct a valid PIP.	Limitations are challenges encountered by the MCO when conducting the PIP that might impact the validity of results. Examples include difficulty collecting/ analyzing data, or lack of resources / insufficient nurses for chart abstraction.
Performance indicator	• Indicator • Performance Measure (terminology used in HEDIS) • Outcome measure	To measure or gauge health care performance improvement (on a yearly basis).	Performance indicators evaluate the success of a PIP annually. They are a valid and measurable gauge, for example, of improvement in health care status, delivery processes, or access.
Objective	• Intention	To state how the MCO intends to accomplish their aim.	Objectives describe the intervention approaches the MCO plans to implement in order to reach its goal(s).

Appendix A: Fishbone (Cause and Effect) Diagram- OPTIONAL



Appendix B: Priority Matrix- OPTIONAL

Which of the Root Causes Are . . .	Very Important	Less Important
Very Feasible to Address	• Member awareness of vaccine eligibility, availability • Member concerns about vaccine safety, side effects • Prioritization of members for outreach • Transportation barriers including homebound members • Provider access/utilization of LINKS registry for consistent reporting of COVID vaccinations	• Provider awareness of vaccination sites, locations
Less Feasible to Address	• Face to Face engagement of Providers and Members; geographic scope; continued restriction on field visits • Member access to vaccination, i.e. transportation needs, homebound, remote areas • Misinformation being spread in media; conflicting recommendations on vaccine relevance or efficacy	

Appendix C: Strengths, Weaknesses, Opportunities, and Threats (SWOT) Diagram- OPTIONAL

	Positives	**Negatives**
INTERNAL ***under your control***	***build on*** **STRENGTHS** • Leverage LHCC's established marketing/communications programs to disseminate information. • Engage community leaders, advisory council members in vaccination messaging/support.	***minimize*** **WEAKNESSES** • Potential delays / limited ability to customize enterprise platforms timely • Scope of outreach, potential for member abrasion with multiple priority outreach needs.
EXTERNAL ***not under your control, but can impact your work***	***pursue*** **OPPORTUNITIES** • Increase public engagement in community sponsored vaccination events/programs • Vendor capabilities to engage in vaccination outreach, education • Engaging providers in promotion of vaccination benefits, member encouragement (active leadership in efforts)	***protect from*** **THREATS** • Incomplete vaccination information; providers/vaccination sites not providing complete documentation, member identifiers, or limited use of LINKS registry. Lack of claims submissions to aid vaccination tracking, • Political views surrounding COVID-19 leading to vaccine hesitancy; LHCC population skews more towards the west and northern parts of the state where these views are more prevalent. This is also closely aligned with the racial/ethnic disparity trend analysis where Caucasian groups are demonstrating lower vaccination rates.