Colorado Children's Health Insurance Program

Fiscal Year 2019–2020 PIP Validation Report

for

Kaiser Permanente Colorado

April 2020

Table of Contents

The Code of Federal Regulations at 42 CFR Parts 438 and 457—managed care regulations for Medicaid and the Children's Health Insurance Program (CHIP), with revisions released May 6, 2016, and effective July 1, 2017, for Medicaid managed care and July 1, 2018, for CHIP managed care require states that contract with managed care health plans (health plans) to conduct an external quality review (EQR) of each contracting health plan. Health plans include managed care organizations (MCOs), prepaid inpatient health plans (PIHPs), primary care case management entities (PCCM entities), and prepaid ambulatory health plans (PAHPs). The regulations at 42 CFR §438.350 require that the EQR include, conducted by an external quality review organization (EQRO), analysis and evaluation of aggregated information on healthcare quality, timeliness, and access. Health Services Advisory Group, Inc. (HSAG) serves as the EQRO for the State of Colorado, Department of Health Care Policy and Financing (the Department)—the agency responsible for the overall administration and monitoring of Colorado's Medicaid managed care program and Child Health Plan *Plus* (CHP+), Colorado's program to implement CHIP managed care.

Pursuant to 42 CFR §457.1250, which requires states' CHIP managed care programs to participate in EQR, the Department required its CHP+ health plans to conduct and submit performance improvement projects (PIPs) annually for validation by the state's EQRO. **Kaiser Permanente Colorado** (**Kaiser**), an MCO, holds the contract with the State of Colorado for provision of medical and behavioral health services for the Department's CHP+ managed care program.

For fiscal year (FY) 2019–2020, the Department required health plans to conduct PIPs in accordance with 42 CFR §438.330(b)(1) and §438.330(d)(2)(i-iv), and each PIP must include:

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

As one of the mandatory EQR activities required by 42 CFR §438.358(b)(1)(i), HSAG, as the State's EQRO, validated the PIPs through an independent review process. In its PIP evaluation and validation, HSAG used the Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS) publication, *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012.[1-1]

[1-1] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012. Available at: https://www.medicaid.gov/medicaid/quality-of-care/medicaid-managed-care/external-quality-review/index.html. Accessed on: January 27, 2020.

Over time, HSAG and some of its contracted states identified that while the MCOs had designed methodologically valid projects and received *Met* validation scores by complying with documentation requirements, few MCOs had achieved real and sustained improvement. In July 2014, HSAG developed a new PIP framework based on a modified version of the Model for Improvement developed by Associates in Process Improvement and modified by the Institute for Healthcare Improvement.[1-2] The redesigned PIP methodology is intended to improve processes and outcomes of healthcare by way of continuous quality improvement. The redesigned framework redirects MCOs to focus on small tests of change to determine which interventions have the greatest impact and can bring about real improvement. PIPs must meet CMS requirements; therefore, HSAG completed a crosswalk of this new framework against the Department of Health and Human Services CMS publication, *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012.

HSAG presented the crosswalk and new PIP framework components to CMS to demonstrate how the new PIP framework aligned with the CMS validation protocols. CMS agreed that given the pace of quality improvement science development and the prolific use of Plan-Do-Study-Act (PDSA) cycles in modern improvement projects within healthcare settings, a new approach was needed.

PIP Components and Process

The key concepts of the new PIP framework include forming a PIP team, setting aims, establishing a measure, determining interventions, testing interventions, and spreading successful changes. The core component of the new approach involves testing changes on a small scale—using a series of PDSA cycles and applying rapid-cycle learning principles over the course of the improvement project to adjust intervention strategies—so that improvement can occur more efficiently and lead to long-term sustainability. The duration of rapid-cycle PIPs is 18 months.

PIP Terms

SMART (Specific, Measurable, Attainable, Relevant, Time-bound) Aim directly measures the PIP's outcome by answering the following: *How much improvement, to what, for whom, and by when?*

Key Driver Diagram is a tool used to conceptualize a shared vision of the theory of change in the system. It enables the MCO's team to focus on the influences in cause-and-effect relationships in complex systems.

FMEA (Failure Modes and Effects Analysis) is a systematic, proactive method for evaluating processes that helps to identify where and how a process is failing or might fail in the future. FMEA is useful to pinpoint specific steps most likely to affect the overall process, so that interventions may have the desired impact on PIP outcomes.

PDSA (Plan-Do-Study-Act) cycle follows a systematic series of steps for gaining knowledge about how to improve a process or an outcome.

[1-2] Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009. Available at: http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx. Accessed on: February 6, 2020.

For this PIP framework, HSAG developed five modules with an accompanying reference guide. Prior to issuing each module, HSAG held technical assistance sessions with the MCOs to educate about application of the modules. The five modules are defined as:

- **Module 1—PIP Initiation:** Module 1 outlines the framework for the project. The framework includes the topic rationale and supporting data, building a PIP team, setting aims (Global and SMART), and completing a key driver diagram.
- **Module 2—SMART Aim Data Collection:** In Module 2, the SMART Aim measure is operationalized and the data collection methodology is described. SMART Aim data are displayed using a run chart.
- **Module 3—Intervention Determination:** In Module 3, there is increased focus into the quality improvement activities reasonably thought to impact the SMART Aim. Interventions in addition to those in the original key driver diagram are identified using tools such as process mapping, failure modes and effects analysis (FMEA), and failure mode priority ranking, for testing via PDSA cycles in Module 4.
- **Module 4—Plan-Do-Study-Act:** The interventions selected in Module 3 are tested and evaluated through a thoughtful and incremental series of PDSA cycles.
- **Module 5—PIP Conclusions:** In Module 5, the MCO summarizes key findings and outcomes, presents comparisons of successful and unsuccessful interventions, lessons learned, and the plan to spread and sustain successful changes for improvement achieved.

Approach to Validation

HSAG obtained the data needed to conduct the PIP validation from **Kaiser**'s module submission forms. In FY 2019–2020, these forms provided detailed information about **Kaiser**'s PIP and the activities completed in Module 3. (See Appendix A. Module Submission Form.)

Following HSAG's rapid-cycle PIP process, the health plan submits each module according to the approved timeline. Following the initial validation of each module, HSAG provides feedback in the validation tools. If validation criteria are not achieved, the health plan has the opportunity to seek technical assistance from HSAG. The health plan resubmits the modules until all validation criteria are met. This process ensures that the PIP methodology is sound prior to the health plan progressing to intervention testing.

The goal of HSAG's PIP validation is to ensure that the Department and key stakeholders can have confidence that any reported improvement is related to and can be directly linked to the quality improvement strategies and activities conducted by the health plan during the PIP. HSAG's scoring methodology evaluates whether the health plan executed a methodologically sound improvement project and confirms that any improvement achieved could be clearly linked to the quality improvement strategies implemented by the health plan.

Validation Scoring

During validation, HSAG determines if criteria for each module are *Achieved.* Any validation criteria not applicable (*N/A*) were not scored. As the PIP progresses, and at the completion of Module 5, HSAG will use the validation findings from modules 1 through 5 for each PIP to determine a level of confidence representing the validity and reliability of the PIP. Using a standardized scoring methodology, HSAG will assign a level of confidence and report the overall validity and reliability of the findings as one of the following:

- *High confidence* = The PIP was methodologically sound, the SMART Aim was achieved, the demonstrated improvement was clearly linked to the quality improvement processes conducted and intervention(s) tested, and the MCO accurately summarized the key findings.
- *Confidence* = The PIP was methodologically sound, the SMART Aim was achieved, and the MCO accurately summarized the key findings. However, some, but not all, quality improvement processes conducted and/or intervention(s) tested were clearly linked to the demonstrated improvement.
- *Low confidence* = (A) the PIP was methodologically sound; however, the SMART Aim goal was not achieved; <u>or</u> (B) the SMART Aim goal was achieved; however, the quality improvement processes conducted and/or intervention(s) tested 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.

PIP Topic Selection

In FY 2019–2020, **Kaiser** submitted the following PIP topic for validation: *Improving CHP+ Adolescent Well-Visit Adherence for Members 15–18 Years of Age.*

Kaiser defined a Global Aim and SMART Aim for the PIP. The SMART Aim statement includes the narrowed population, the baseline rate, a set goal for the project, and the end date. HSAG provided the following parameters to the health plan for establishing the SMART Aim for the PIP:

- **S**pecific: The goal of the project: What is to be accomplished? Who will be involved or affected? Where will it take place?
- **M**easurable: The indicator to measure the goal: What is the measure that will be used? What is the current data figure (i.e., count, percent, or rate) for that measure? What do you want to increase/decrease that number to?
- **A**ttainable: Rationale for setting the goal: Is the achievement you want to attain based on a particular best practice/average score/benchmark? Is the goal attainable (not too low or too high)?
- **R**elevant: The goal addresses the problem to be improved.
- **T**ime-bound: The timeline for achieving the goal.

Table 1-1 includes the PIP title and SMART Aim statement selected by **Kaiser**.

Table 1-1—PIP Title and SMART Aim Statement

PIP Title	SMART Aim Statement
Improving CHP+ Adolescent Well-Visit Adherence for Members 15–18 Years of Age	By June 30, 2020, increase the percentage of individuals with a well visit in the previous 12 months among continuously enrolled CHP+ members aged 15–18 years who are linked to the Aurora Centrepoint Medical Office Building from 34.3% to 47.3%.

The focus of the PIP is to increase the rate of members 15 through 18 years of age who receive care from the narrowed focus provider group.

Table 1-2 summarizes the progress **Kaiser** has made in completing the five PIP modules.

Table 1-2—PIP Title and Module Status

PIP Title	Module	Status
Improving CHP+ Adolescent Well-Visit Adherence for Members 15–18 Years of Age	1. PIP Initiation	Completed and achieved all validation criteria.
	2. SMART Aim Data Collection	Completed and achieved all validation criteria.
	3. Intervention Determination	Completed and achieved all validation criteria.
	4. Plan-Do-Study-Act (PDSA)	Initiated in July 2019, with PDSA cycles continuing through SMART Aim end date of June 30, 2020.
	5. PIP Conclusions	Targeted submission for October 2020.

At the time of the FY 2019–2020 PIP validation report, **Kaiser** had passed Module 1, Module 2, and Module 3, achieving all validation criteria for the PIP. **Kaiser** has progressed to intervention testing in Module 4—Plan-Do-Study-Act. The final Module 4 and Module 5 submissions are targeted for October 2020; the Module 4 and Module 5 validation findings and the level of confidence assigned to the PIP will be reported in the FY 2020–2021 PIP validation report.

Validation Findings

In FY 2019–2020, **Kaiser** completed and submitted Module 3 for validation. Detailed module documentation submitted by the health plan is provided in Appendix A. Module Submission Form.

The objective of Module 3 is for the MCO to determine potential interventions for the project. In this module, the MCO asks and answers the question, "What changes can we make that will result in improvement?"

The following section outlines the validation findings for the module. Detailed validation criteria, scores, and feedback from HSAG are provided in Appendix B. Module Validation Tool.

Module 3: Intervention Determination

Kaiser completed a process map and an FMEA to determine the areas within its process that demonstrated the greatest need for improvement, have the most impact on the desired outcomes, and can be addressed by potential interventions. Table 2-1 summarizes the potential interventions **Kaiser** identified to address high-priority subprocesses and failure modes determined in Module 3.

Table 2-1—Module 3 Intervention Determination Summary for the *Improving CHP+ Adolescent Well-Visit Adherence for Members 15–18 Years of Age* PIP

Failure Modes	Potential Interventions
Kaiser does not send member a "you are due for a well visit" reminder at an appropriate time	Pilot having the local pediatric care team place outreach calls to parents/members who are approaching the due date for their recommended well visit
Member has not signed up to receive reminders of upcoming appointments via kp.org or text message	Pilot having the local pediatric care team, or a community specialist, make reminder calls or send reminder text messages 1–5 days before the scheduled appointment
Parent/member decides not to schedule (cost is too high/benefit is too low)	Pilot outreach calls during which a community specialist attempts to understand the reasons a parent/member decides not to schedule a well-visit and offers education and/or troubleshooting assistance

At the time of this FY 2019–2020 PIP validation report, **Kaiser** had completed its PIP through Module 3 and had initiated the intervention planning phase in Module 4. **Kaiser** submitted one intervention plan (the "Plan" for each PDSA cycle) in July 2019. Table 2-2 summarizes the intervention **Kaiser** selected for testing through PDSA cycles.

Table 2-2—Planned Intervention for the *Improving CHP+ Adolescent Well-Visit Adherence for Members 15–18 Years of Age* PIP

Intervention Description	Key Drivers	Failure Mode
Outreach calls prior to adolescent well care (AWC) visit due	*Not reported in Module 4*	**Kaiser** does not send member a "you are due for a well visit" reminder at an appropriate time

Kaiser selected one intervention to test using PDSA cycles in Module 4. The member-focused intervention included outreach to members with an upcoming well visit due within 30 days to address the failure mode related to members not receiving an appropriately timed reminder. HSAG reviewed the intervention plan and provided written feedback and technical assistance to **Kaiser**. The health plan is currently in the "Do" stage of the PDSA cycles for this intervention, carrying out the tested intervention and evaluating for impact. HSAG will report the intervention testing results and final Module 4 and Module 5 validation outcomes in the next annual PIP validation report.

Conclusions

The validation findings suggest that **Kaiser** successfully completed Module 3 and identified opportunities for improving the process related to adolescent well-visit adherence for members 15 through 18 years of age. **Kaiser** further analyzed opportunities for improvement in Module 3 and considered potential interventions to address the identified process flaws or gaps and increase the percentage of members who receive a well visit. The health plan also successfully initiated Module 4 by selecting an intervention to test and documenting a plan for evaluating the impact of the intervention through PDSA cycles. **Kaiser** will continue testing interventions for the PIP through June 30, 2020. The health plan will submit complete intervention testing results and PIP conclusions for validation in FY 2020–2021. HSAG will report the final validation findings for the PIP in the FY 2020–2021 PIP validation report.

Recommendations

- When planning a test of change, **Kaiser** should clearly identify and communicate the necessary steps that will be taken to carry out an intervention including details that define who, what, where, and how the intervention will be carried out.

- To ensure a methodologically sound intervention testing methodology, **Kaiser** should determine the best method for identifying the intended effect of an intervention prior to testing. Intervention testing measures and data collection methodologies should allow the health plan to rapidly determine the direct impact of the intervention. The testing methodology should allow the health plan to quickly gather data and make data-driven revisions to facilitate achievement of the SMART Aim goal.

- **Kaiser** should consistently use the approved Module 2 SMART Aim measure data collection and calculation methods for the duration of the PIP so that the final SMART Aim measure run chart provides data for a valid comparison of results to the goal.

- The key driver diagram for the PIP should be updated regularly to incorporate knowledge gained and lessons learned as **Kaiser** progresses through determining and testing interventions. Kaiser should also update the key driver diagram to include the key driver(s) addressed by intervention(s) selected for testing in Module 4.

- When reporting the final PIP conclusions, **Kaiser** should accurately and clearly report intervention testing results and SMART Aim measure results, communicating any evidence of improvement and demonstrating the link between intervention testing and demonstrated improvement.

- If improvement is achieved through the PIP, **Kaiser** should develop a plan for continuing and spreading effective interventions and sustaining improvement in the long term.

Appendix A contains the Module Submission Form provided by the health plan.

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members 15–18 Years of Age
for Kaiser Permanente Colorado

Managed Care Organization (MCO) Information	
MCO Name:	Kaiser Foundation Health Plan of Colorado
PIP Title:	Improving CHP+ Adolescent Well–Visit Adherence for Members 15–18 Years of Age
Contact Name:	Carlos Madrid/Cathy Johnson
Contact Title:	Senior Manager, Care Delivery Operations for Medicaid and Charitable Programs
E-mail Address:	carlos.madrid@kp.org/catherine.m.johnson@kp.org
Telephone Number:	303-344-7434/303-344-7911
Submission Date:	April 10, 2019

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for **Kaiser Permanente Colorado**

Process Mapping

Indicate when the process map(s) was completed and list all team members involved. Describe the role and responsibilities for each individual team member. The team should include a data analyst. The analyst can assist with determining data needed for prioritization of subprocesses and failure modes and proposed interventions.

Table 1—Process Mapping Team	
Development Period	
02/20/2019 to 04/05/2019	
Team Members Involved	**Role/Responsibilities**
Christine Jelinek, MD	Strategy, Program Design, Operational Resource
Carlos Madrid	Senior Manager, Care Delivery Operations for Medicaid and Charitable Programs
Nancy Lubuye	Data Analysis and Reporting
Shanee Courtney	Population Health Consultant
Josh Miller	PHIS
Kathy Westcoat	Executive Sponsor
Cathy Johnson	Regulatory Consultant, Process Mapping Creation
Mark Learned, MD	Director of Quality

Module 3—Intervention Determination Submission Form—State of Colorado—Version 4

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for **Kaiser Permanente Colorado**

Failure Modes and Effects Analysis (FMEA)

Indicate when the FMEA was completed and list all team members involved. Describe the role and responsibilities for each individual team member. The team should include a data analyst. The analyst can assist with determining data needed for prioritization of subprocesses and failure modes and proposed interventions.

Table 2—Failure Modes and Effects Analysis Team	
Development Period	
02/20/2019 to 05/13/2019	
Team Members Involved	**Role/Responsibilities**
Christine Jelinek, MD	Strategy, Program Design, Operational Resource
Carlos Madrid	Senior Manager, Care Delivery Operations for Medicaid and Charitable Programs
Nancy Lubuye	Data Analysis and Reporting
Shanee Courtney	Population Health Consultant
Josh Miller	PHIS
Cathy Johnson	Regulatory Consultant, Process Mapping Creation
Mark Learned, MD	Director of Quality

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for Kaiser Permanente Colorado

Process Mapping

Description of process and rationale for selection of subprocesses:

The FMEA analysis team outlined current workflows and systems supporting pediatric well visit outreach, scheduling, appointment reminders and follow-up. Where points of uncertainty or detail questions arose, team members reached out to clinical partners and allied teams to better understand how these processes function and to identify possible gaps.

The FMEA analysis team then drafted several iterations of a high-level end-to-end process flow aimed at highlighting points in the processes that might contribute to less than 100% adherence with annual well-child recommendations in the 15-18-year age range.

While a number of subprocesses had the possibility of functioning with less than 100% consistency, input from our population health and care delivery partners indicated that the most significant subprocesses driving adherence/non-adherence were:

- receipt of a reminder that a visit is due;
- scheduling; and
- receipt of a reminder of an upcoming appointment.

Data and anecdotal experience suggested that all three of these subprocesses are currently operating with significantly less than 100% consistency. In addition, problems with the first two sub-processes can lead to no appointment ever being scheduled while failure of the third can lead to appointments not being completed or not being rescheduled until after the one-year measurement period.

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for **Kaiser Permanente Colorado**

Module 3—Intervention Determination Submission Form—State of Colorado—Version 4   Page | 5

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for **Kaiser Permanente Colorado**

Failure Modes and Effects Analysis

From the completed process map(s), enter up to three subprocesses that have the potential to make the greatest impact on the SMART Aim. The assigned priority number in the process map should align with the subprocess number in the FMEA table. This will help clearly link each opportunity for improvement to an identified subprocess.

Complete the table with the corresponding failure modes, failure causes, and failure effects.
Note: The MCO should ensure that the same language is used consistently to describe the failure modes throughout Modules 3, 4, and 5.

Table 3—Failure Modes and Effects Analysis Table			
Subprocesses	**Failure Modes (What could go wrong?)**	**Failure Causes (Why would the failure happen?)**	**Failure Effects (What are the consequences?)**
1. Kaiser Permanente Health plan sends member/parent a (seasonal) "You are due for your well visit/sports physical" reminder mailer	KP Health plan doesn't send "You are due for a well visit" reminder mailer (at appropriate time)	Member's well visit appointment becomes due outside of sports physical season	Parent/member takes no action to get a well visit
	Mailer returned as non-deliverable	Bad Address	Parent/member takes no action to get a well visit
	Member not included in "You are due for a well visit/sports physical" list	Breakdown in registry-based processes for creating and distributing lists	Parent/member takes no action to get a well visit

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for **Kaiser Permanente Colorado**

2. Member/parent schedules appointment	Parent/member decides not to schedule	Parent/member thinks the cost is too high and the benefit of the appointment is too low	Parent/member takes no action to get a well visit
	Parent/member tried to schedule and was unsuccessful	Parent/member unable to find appointment number or convenient time slot is unavailable	Parent/member takes no action to get a well visit
3. Kaiser Permanente Health plan reminds Member/parent that appointment is approaching	Parent/member hasn't signed up to receive reminders of upcoming appointments via kp.org or text message	Parent/member hasn't received information about benefits of kp.org enrollment	Member is a no show
	KP Health plan has inaccurate contact information for member	Contact data received from state is out of date	Member is a no show
	Appointment scheduled too close to appointment date to allow for reminder	System processing or delivery times	Member is a no show

Module 3—Intervention Determination Submission Form—State of Colorado—Version 4   Page | 7

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for Kaiser Permanente Colorado

Failure Mode Priority Ranking

Based on the results of the priority ranking process, list the numerically ranked failure modes from highest to lowest priority. In the space below the table, please describe the process used to assign the priority ranking.

Priority Ranking	Failure Modes
	Table 4—Failure Mode Priority Ranking
1	KP Health plan doesn't send "You are due for a well visit" reminder mailer (at appropriate time)
2	Parent/member hasn't signed up to receive reminders of upcoming appointments via kp.org or text message
3	Parent/member decides not to schedule (Cost is too high/Benefit is too low)
4	Member not included in "You are due for a well visit/sports physical" list
5	KP Health plan has inaccurate appointment reminder contact information/preferences for member
6	"You are due for a well visit/sports physical" mailer returned as non-deliverable
7	Parent/member tried to schedule and was unsuccessful (Convenient appointment slot not available or unable to reach appointment line)
8	Appointment scheduled too close to appointment date to allow for reminder

Risk Priority Number (RPN)

We consulted with Clinical Ops and quality leaders regarding the feasibility of resourcing and implementing interventions around these failure modes, here is a copy of our RPN.

Module 3—Intervention Determination Submission Form—State of Colorado—Version 4 Page | 8

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for Kaiser Permanente Colorado

Failure Mode	Likelihood of occurrence	Likelihood of detection	Amt of harm / damage the FM may cause	Totals	Ranking
KP Health plan doesn't send "You are due for a well visit" reminder mailer (at appropriate time)	5	5	4	100	1
Parent/member hasn't signed up to receive reminders of upcoming appointments via kp.org or text message	3	5	3	45	2
Parent/member decides not to schedule (Cost is too high/Benefit is too low)	3	3	5	45	3
Member not included in "You are due for a well visit/sports physical" list	2	4	4	32	4
KP Health plan has inaccurate appointment reminder contact information/preferences for member	2	3	3	18	5
"You are due for a well visit/sports physical" mailer returned as non-deliverable	2	3	3	18	6
Parent/member tried to schedule and was unsuccessful (Convenient appointment slot not available or unable to reach appointment line)	3	1	5	15	7
Appointment scheduled too close to appointment date to allow for reminder	2	5	1	10	8

Module 3—Intervention Determination Submission Form—State of Colorado—Version 4   Page | 9

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Submission
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for Kaiser Permanente Colorado
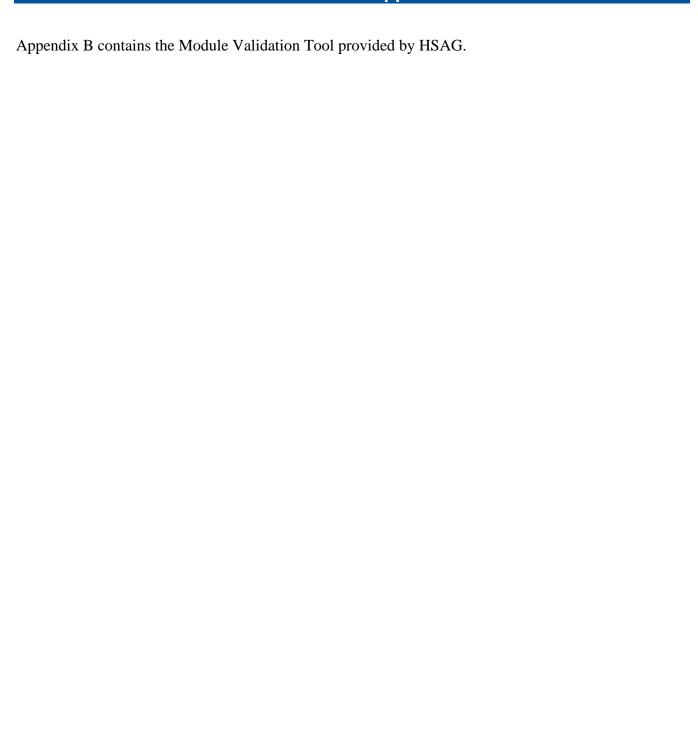
Intervention Determination

In the Intervention Determine table, enter at a minimum, the top three ranked failure modes and the identified intervention to address the failure mode.

Table 5—Intervention Determination Table	
Failure Modes	**Interventions**
KP doesn't send "you are due for a well visit" reminder at appropriate time	Pilot having the local pediatric care team place outreach calls to parents/members who are approaching the due date for their recommended well visit
Member hasn't signed up to receive reminders of upcoming appointments via kp.org or text message	Pilot having the local pediatric care team, or a community specialist make reminder calls or send reminder texts 1-5 days before the scheduled appointment
Parent/member decides not to schedule (Cost is too high /Benefit is too low)	Pilot outreach calls during which Community Specialist attempts to understand reasons Parent/Member decides not to schedule offers education and/or trouble shooting assistance

Appendix B contains the Module Validation Tool provided by HSAG.

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Validation
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for **Kaiser Permanente Colorado**

Criteria	Achieved (Y/N)	HSAG Feedback and Recommendations
1. The documentation included the team members responsible for completing the process map(s) and failure mode and effects analysis (FMEA).	☒ Yes ☐ No	
2. The documentation included a process map(s) illustrating the step-by-step flow of the current process. The subprocesses identified in the process map(s) as opportunities for improvement were prioritized and assigned a numerical ranking.	☒ Yes ☐ No	The subprocesses that were identified as opportunities for improvement were not assigned a priority ranking. Once identified, each subprocess should be assigned a priority ranking based on its potential of impacting the SMART Aim. Additionally, it appears that there may be additional steps within the process map that should be decision points or need additional steps or clarification, for example: "Appointment Scheduled" may need to be a decision point since not all members will have an appointment scheduled. - How does the health plan know that the member received the mailer or if the member understands the costs and benefits of well-visits? Who provides members with a reminder that the appointment is approaching, the health plan or the provider office? - An additional step and yes/no decision point may be needed for members who attend the well-child visits since it is possible for member's to "no-show" for appointments. - An additional step may be needed for any follow-up processes for members who no-show for an appointment.

Module 3—Intervention Determination Validation Tool—State of Colorado—Version 4   Page | 1

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Validation
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for **Kaiser Permanente Colorado**

Criteria	Achieved (Y/N)	HSAG Feedback and Recommendations
		The health plan must ensure that the documented process map is comprehensive and identifies all the opportunities for improvement. **Re-review May 2019:** The health plan identified and prioritized the subprocesses and clarified the steps within the current process. The validation criterion has been achieved.
3. The health plan included a description of the process and rationale used for the selection of subprocesses in the FMEA table.	☒ Yes ☐ No	**General Comment:** The health plan included the rationale for selecting the subprocesses; however, the health plan did not include the three subprocesses that were selected in the narrative. Additionally, it appears that based on HSAG's feedback in Criterion 2 above, the health plan may need to revisit the subprocesses selection and prioritization process, if additional gap areas are identified. **Re-review May 2019:** The health plan appropriately included within the narrative the three subprocesses that were selected.

Module 3—Intervention Determination Validation Tool—State of Colorado—Version 4   Page | 2

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Validation
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for Kaiser Permanente Colorado

Criteria	Achieved (Y/N)	HSAG Feedback and Recommendations
4. Each subprocess in the FMEA table aligned with a numerically ranked opportunity for improvement in the process map(s), and was logically linked to the documented failure modes, causes, and effects.	☒ Yes ☐ No	**General Comment:** It appears that for the third subprocess, the failure cause of "Member hasn't received information about benefits of kp.org enrollment" may not be the reason for the failure mode "Member hasn't signed up to receive reminders of upcoming appointments via kp.org." The health plan must revisit the failure cause. Based on HSAG's feedback in Criterion 2 above, the health plan may need to revisit the FMEA table, if additional gap areas are identified and are assigned a greater priority that the subprocesses documented currently in the FMEA table.
5. The health plan described the failure mode priority ranking process. If the RPN method was used, the health plan provided the numeric calculations.	☒ Yes ☐ No	The RPN number was not calculated accurately. Instead of addition, the RPN number is calculated by multiplying the numeric values of the likelihood of occurrence, likelihood that failure would not be detected, and severity of impact. For example, if the likelihood of occurrence = 2, the likelihood of detection = 1, and the amount of harm or damage = 3, then the RPN = 6. **Re-review May 2019:** The health plan accurately calculated the RPN number. The validation criterion has been achieved.

Module 3—Intervention Determination Validation Tool—State of Colorado—Version 4   Page | 3

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Validation
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for Kaiser Permanente Colorado

Criteria	Achieved (Y/N)	HSAG Feedback and Recommendations
6. The interventions listed in the Intervention Determination table were appropriate based on the ranked failure modes.	☒ Yes ☐ No	For the third intervention the health plan should not use mailers/robot calls for messaging. All interventions should be innovative actionable improvement strategies that address the failure modes and have the potential to impact the SMART Aim. The health plan must develop a robust tracking mechanism identifying all members who received the additional messaging and develop an effective evaluation method to link the receipt of the information to the members' compliance with a well-care visit. **General Comment**: The health plan must use consistent language when referencing the failure modes and subprocesses throughout the PIP. For example, in the Intervention Determination table, the failure mode "Upcoming appointment reminder process excludes this (type of) appointment" should be worded as in the FMEA table "Automated "Your appointment is approaching" reminder program doesn't include this specific appointment." **Re-review May 2019:** The health plan removed the reference to mailers from the third intervention. The validation criterion has been achieved; however, a general comment has been added.

Module 3—Intervention Determination Validation Tool—State of Colorado—Version 4   Page | 4

State of Colorado
Performance Improvement Project (PIP)
Module 3 — Intervention Determination Validation
Improving CHP+ Adolescent Well–Visit Adherence for Members
15–18 Years of Age
for Kaiser Permanente Colorado

Criteria	Achieved (Y/N)	HSAG Feedback and Recommendations
		General Comment: The health plan must develop a robust tracking mechanism identifying all members who received a reminder text messaging and develop an effective evaluation method to link the receipt of the text to the members' compliance with a well-care visit.

Intervention Determination (Module 3)

☒ Pass

Date: May 23, 2019