State of Georgia
Department of Community Health
Georgia Families Program

CY 2016 Performance Improvement Projects Report

for

Peach State Health Plan

Reported June 2017

HSAG HEALTH SERVICES ADVISORY GROUP

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1. Background

The Georgia Department of Community Health (DCH) is responsible for administering the Medicaid program and the Children's Health Insurance Program (CHIP) in the State of Georgia. The State refers to its CHIP program as PeachCare for Kids®. Both programs include fee-for-service and managed care components and deliver services through a statewide provider network. The FFS program has been in place since the inception of Medicaid in Georgia. The DCH contracts with three privately owned managed care organizations, referred to by the State as care management organizations (CMOs), to deliver services to certain categories of members enrolled in the State's Medicaid and PeachCare for Kids® programs. Children in state custody, children receiving adoption assistance, and certain children in the juvenile justice system are enrolled in the Georgia Families 360° (GF 360°) managed care program. The Georgia Families (GF) program, implemented in 2006, serves all other Medicaid and PeachCare for Kids® managed care members not enrolled in the GF 360° program.

The DCH requires its contracted CMOs to conduct performance improvement projects (PIPs). As set forth in 42 CFR §438.240, the PIPs must be designed to achieve, through ongoing measurements and interventions, significant improvement, sustained over time, in clinical and nonclinical care areas. The PIPs are expected to have a favorable effect on health outcomes and member satisfaction. The DCH requires the CMOs to report the status and results of each PIP annually. Peach State Health Plan (Peach State) is one of the Georgia Families CMOs.

The validation of PIPs is one of three federally mandated activities for state Medicaid managed care programs. The evaluation of a CMO's compliance with State and federal regulations and the validation of a CMO's performance measure rates are the other two mandated activities.

These three mandatory activities work together to assess a CMO's performance with providing appropriate access to high-quality care for their members. While a CMO's compliance with managed care regulations provides the organizational foundation for the delivery of quality healthcare, the calculation and reporting of performance measure rates provide a barometer of the quality and effectiveness of the care. The DCH requires each CMO to initiate PIPs to improve the quality of healthcare in targeted areas of low performance, or in areas identified as State priorities or healthcare issues of greatest concern. During calendar year (CY) 2016, DCH required its CMOs to conduct two clinical and two nonclinical PIPs and submit the final PIP modules for annual validation in 2017. PIPs are key tools in helping DCH achieve goals and objectives outlined in its quality strategy; they provide the framework for monitoring, measuring, and improving the delivery of healthcare.

The purpose of a PIP is to assess and improve processes, and thereby outcomes of care. For such projects to achieve real and meaningful improvements in care, and for interested parties to have confidence in the reported improvements, PIPs must be designed, conducted, and reported in a methodologically sound manner. The primary objective of PIP validation is to determine each CMO's compliance with requirements set forth in 42 CFR §438.240(b)(1), including:

- Measurement of performance using objective quality indicators.

- Implementation of system interventions to achieve improvement in quality.
- Evaluation of the effectiveness of the interventions.
- Planning and initiation of activities to increase or sustain improvement.

To meet the federal requirement for the validation of PIPs, DCH contracted with Health Services Advisory Group, Inc. (HSAG), the State's external quality review organization (EQRO), to conduct the validation of Peach State's PIPs.

In response to feedback and input from DCH, HSAG developed the rapid-cycle PIP framework in 2014 based on a modified version of the Model for Improvement developed by Associates in Process Improvement [1-1] and applied to healthcare quality activities by the Institute for Healthcare Improvement.[1-2] The rapid-cycle PIP methodology is intended to improve processes and outcomes of healthcare by way of continuous improvement focused on small tests of change. The methodology focuses on evaluating and refining small process changes to determine the most effective strategies for achieving real improvement. For CY 2016, the CMOs in Georgia continued to use HSAG's rapid-cycle PIP process. The DCH instructed the CMOs to conduct their rapid-cycle improvement projects over a 12-month period.

To support the efforts of DCH and the CMOs, HSAG provided various forms of guidance for the rapid-cycle improvement projects including:

- A detailed Companion Guide describing the rapid-cycle PIP framework and the requirements for each module submission.
- Forms for the CMOs to document their progress through the different stages of the new PIP process for each of the five modules.
- Corresponding validation feedback forms for communicating validation findings on each module back to the CMOs and DCH.
- A presentation and interactive critical-thinking activity related to developing innovative and fundamental changes for performance improvement during the Georgia Families 2016 CMO Conference.
- Extensive technical assistance via conference calls with the CMOs and DCH throughout the 12-month project period.

[1-1] Associates in Process Improvement. Model for Improvement. Available at: http://www.apiweb.org/ Accessed on: May 10, 2017.
[1-2] Institute for Healthcare Improvement. How to Improve. Available at: http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx. Accessed on: Sept 24, 2015.

To ensure methodological soundness while meeting all state and federal requirements, HSAG follows guidelines established in 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.[1-3] In 2014, HSAG provided CMS with a crosswalk of the rapid-cycle PIP framework to the CMS PIP protocols in order to illustrate how the rapid-cycle PIP framework met the CMS requirements.[1-4] Following HSAG's presentation of the crosswalk and new PIP framework components to CMS, CMS agreed that with the pace of quality improvement science development and the prolific use of Plan-Do-Study-Act (PDSA) cycles in modern PIPs within healthcare settings, a new approach was reasonable. CMS approved HSAG's rapid-cycle PIP framework for validation of the Georgia Families and Georgia Families 360º CMOs' PIPs.

HSAG's validation of rapid-cycle PIPs includes the following key components of the quality improvement process:

1. Evaluation of the technical structure to determine whether a PIP's initiation (e.g., topic rationale, PIP team, aim, key driver diagram, and SMART Aim data collection methodology) was based on sound methods and could demonstrate reliably positive outcomes. Successful execution of this component ensures accurately reported PIP results that are capable of measuring sustained improvement.
2. Evaluation of the quality improvement activities conducted. Once designed, a PIP's effectiveness in improving outcomes depends on thoughtful and relevant intervention determination, intervention testing and evaluation using iterative PDSA cycles, and sustainability and spreading of successful change. This component evaluates how well the CMO executed its quality improvement activities and whether the desired aim was achieved.

The goal of HSAG's PIP validation is to ensure that DCH and key stakeholders can have confidence that any reported improvement in outcomes is related and can be directly linked to the quality improvement strategies and activities conducted by the CMO during the life of the PIP.

PIP Components and Process

The key concepts of the rapid-cycle PIP framework include forming a PIP team, setting aims, establishing measures, determining interventions, testing interventions, and spreading successful changes. The core component of the rapid-cycle 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 following outlines the rapid-cycle PIP framework.

[1-3] 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: http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html. Accessed on: Feb 19, 2013.
[1-4] Ibid.

- Module 1—PIP Initiation: Module 1 outlines the framework for the project. The framework follows the Associates in Process Improvement's (API's) Model, which was popularized by the Institute for Healthcare Improvement, by:
  - Precisely stating a project-specific SMART Aim (specific, measureable, attainable, relevant and time-bound) including the topic rationale and supporting data so that alignment with larger initiatives and feasibility are clear.
  - Building a PIP team consisting of internal and external stakeholders.
  - Completing a key driver diagram which summarizes the changes that are agreed upon by the team as having sufficient evidence to lead to improvement.
- 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 in run charts.
- Module 3—Intervention Determination: In Module 3, there is a deeper dive 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 for PDSA cycles (Module 4) using tools such as process mapping, failure modes and effects analysis (FMEA), Pareto charts, and failure mode priority ranking.
- 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: Module 5 summarizes key findings and presents comparisons of successful and unsuccessful interventions, outcomes achieved, plans for evaluating sustained improvement and expansion of successful interventions, and lessons learned.

Summary of Peach State's Performance

For CY 2016, Peach State submitted four PIPs for validation. The PIPs were validated using HSAG's rapid-cycle PIP validation process. The PIP topics included:

- *Annual Dental Visits*
- *Avoidable Emergency Room Visits*
- *Member Satisfaction*
- *Provider Satisfaction*

Peach State followed the PIP methodology as identified in the rapid-cycle PIP Companion Guide provided by HSAG. For each PIP conducted in CY 2016, Peach State defined a SMART Aim statement that identified the narrowed population and process to be evaluated, set a goal for improvement, and defined the indicator used to measure progress toward the goal. The SMART Aim statement sets the framework for the PIP and identifies the goal against which the PIP will be evaluated for the annual validation. HSAG provided the following parameters to Peach State for establishing the SMART Aim for each 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 outlines the PIP topics and final CMO-reported SMART Aim statements for the four PIPs. The CMO was to specify the outcome being measured, the baseline value for the outcome measure, a quantifiable goal for the outcome measure, and the target date for attaining the goal. Peach State developed a SMART Aim statement that quantified the improvement sought for each PIP.

Table 1-1—PIP Titles and SMART Aim Statements

PIP Title	SMART Aim Statement
Annual Dental Visits	By December 31, 2016, PSHP aims to increase sealants applied for members ages 6–9 years old residing in Muscogee County with a history of receiving treatment from Candler Dental that have no claims history of a sealant or restorative service on a molar, from 14.9% to 34.9%.
Avoidable Emergency Room Visits	By December 31, 2016, Peach State Health Plan will decrease the rate of utilization of avoidable ED visits to Coffee Regional Medical Center for members > 18 years old from 1,553.9 to 1,522.8 member visits per 1,000 (which represents a 2.0% reduction).
Member Satisfaction	By December 31, 2016, increase the average level of satisfaction from 2.2 to 2.5 for caregivers who were seen at Dr. Charlene Johnson's office in the Atlanta region who answered the question, "When you talked about your child's health, did a doctor or other health provider ask you what you thought was best for your child?"
Provider Satisfaction	By December 31, 2016, decrease the average prior authorization approval turnaround time from 8.4 calendar days to 5.0 calendar days, for Spine and Orthopedic Clinic, in the Atlanta Region.

Validation Overview

HSAG obtained the data needed to conduct the PIP validation from Peach State's module submission forms. These forms provided detailed information about each of Peach State's PIPs and the activities completed in Modules 1 through 5.

Peach State submitted Modules 1 through 3 for each PIP in CY 2016 for validation. The CMO initially submitted Modules 1 and 2, received feedback and technical assistance from HSAG, and resubmitted these modules until all validation criteria were met. Peach State followed the same process for Module 3. Once Module 3 was approved, the CMO initiated intervention testing in Module 4, which continued through the end of 2016.

HSAG offered Peach State the opportunity to submit a Module 4 plan for each PIP for pre-validation review and feedback to ensure a sound testing methodology for the Module 4 PDSA cycles. The Module 4 plan consists of a description of the intervention being tested, a narrative justification describing why the CMO selected the intervention for testing, the CMO's plan for carrying out the intervention, and the intervention evaluation plan, including data collection methodology. The CMO chose to submit Module 4 documentation for pre-validation for all four PIPs. HSAG provided detailed, written feedback on the Module 4 plans for these PIPs and additional technical assistance by teleconference, as needed. Peach State submitted the final Modules 4 and 5 to HSAG on January 31, 2017, for annual validation.

The scoring methodology evaluates whether the CMO executed methodologically sound improvement projects, whether each PIP's SMART Aim goal was achieved, and whether improvement was clearly linked to the quality improvement processes applied in each project. HSAG assigned a score of *Achieved* or *Failed* for each of the criteria in Modules 1 through 5. Any validation criteria that were not applicable were not scored. HSAG used the findings for the Modules 1 through 5 criteria for each PIP to determine a confidence level representing the validity and reliability of the PIP. Using a standardized scoring methodology, HSAG assigned a level of confidence and reported the overall validity and reliability of the findings as one of the following:

- *High confidence* = the PIP was methodologically sound, achieved the SMART Aim goal, and the demonstrated improvement was clearly linked to the quality improvement processes implemented.
- *Confidence* = the PIP was methodologically sound, achieved the SMART Aim goal, and some of the quality improvement processes were clearly linked to the demonstrated improvement; however, there was not a clear link between all quality improvement processes and the demonstrated improvement.
- *Low confidence* = (A) the PIP was methodologically sound; however, the SMART Aim goal was not achieved; or (B) the SMART Aim goal was achieved; however, the quality improvement processes and interventions were poorly executed and could not be linked to the improvement.
- *Reported PIP results were not credible* = The PIP methodology was not executed as approved.

Validation Findings

HSAG organized and analyzed Peach State's PIP data to draw conclusions about the CMO's quality improvement efforts. Based on its review, HSAG determined the overall methodological validity of the PIPs, as well as the overall success in achieving the SMART Aim goals. The validation findings for Peach State's PIPs are presented in Table 2-1 through Table 2-8. The tables display HSAG's key validation findings for each of the PIPs including the interventions tested, the key drivers and failure modes addressed by the interventions, and the impact of the interventions on the desired SMART Aim goals.

For each PIP, HSAG evaluated the appropriateness and validity of the intervention-testing measure(s), SMART Aim measure, and data collection methods, and assessed the reported SMART Aim measurements, in comparison with the reported baseline rate and goal. The data displayed in the SMART Aim run charts were used to determine whether the SMART Aim goal was achieved.

Annual Dental Visits

Peach State's goal for the *Annual Dental Visits* PIP was to identify and test interventions to improve the dental sealant rate among members 6 to 9 years old living in Muscogee County. Because the SMART Aim goal was exceeded and the quality improvement processes were clearly linked to the demonstrated improvement, the PIP was assigned a level of *High Confidence*. The details of the PIP's performance leading to the assigned confidence level are described below.

Table 2-1 provides a summary of the SMART Aim measure results reported by the CMO and the level of confidence HSAG assigned to the PIP. The table presents the baseline rate and goal rate for the SMART Aim measure, as well as the highest rate achieved for the SMART Aim measure.

Table 2-1—SMART Aim Measure Results for *Annual Dental Visits*

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Confidence Level
The percentage of members 6 to 9 years of age in Muscogee County that received a sealant on a molar from Candler Dental	14. 9%	34.9%	53.9%	*High Confidence*

The CMO established a goal of improving the dental sealant rate at Candler Dental for members 6 to 9 years of age living in Muscogee County by 20 percentage points, from 14.9 percent to 34.9 percent. The SMART Aim measure rate exceeded the goal rate of 34.9 percent for six consecutive months. The

details of the improvement processes used and the interventions tested are presented in Table 2-2 and in the narrative description below.

Table 2-2—Intervention Testing for *Annual Dental Visits*

Intervention	Key Driver Addressed	Failure Mode Addressed	Conclusions
Provider incentive for completion of sealant placement during a preventive dental visit	Provider education and addressing missed opportunities	Low prioritization of sealant placements and preventive care	The CMO concluded the intervention was successful and chose to adapt the provider incentive intervention and test the intervention with another provider before spreading the intervention on a larger scale.

Peach State tested one intervention for the PIP: offering the participating provider a financial incentive for each completed sealant placement for members 6 to 9 years of age living in Muscogee County. The CMO initiated the intervention by communicating the incentive program to the participating provider. The participating provider was offered a $25 incentive for each sealant placed for an eligible member. To facilitate scheduling of preventive visits for sealant placement, the CMO's dental vendor generated lists of eligible members 6 to 9 years of age in the targeted county who had no history of receiving a dental sealant and shared the member lists with the participating provider through the dental provider portal and via secure email.

To test the intervention, the CMO tracked a process measure, number of sealants placed on eligible members per month, and compared the number of sealants placed by the participating provider before and after the intervention was initiated. The CMO also tracked the amount of incentive dollars paid to the participating provider through the intervention. In the five months prior to initiation of the intervention, the provider placed sealants on 32 members 6 to 9 years of age. During five months of intervention testing, the provider placed 70 dental sealants on 52 eligible members and received a total of $1,750 in incentive payments. The SMART Aim goal was exceeded for four months during intervention testing and for two additional months following the end of the intervention. Based on the intervention testing results and the SMART Aim measure results, the CMO concluded that the intervention was effective.

In response to the positive PIP results and based on lessons learned, the CMO plans to adapt the intervention and test it with another provider before pursuing expansion on a larger scale. The CMO may incorporate the provider incentive intervention with a pilot dental home program to further improve dental sealant rates in the context of broader, preventive dental services. The CMO documented the following lessons learned from the PIP:

- Providers play a large role in the quality of care provided to members; therefore, provider engagement is necessary to achieve improvement in care.
- Offering a provider incentive was an effective way to ensure provider engagement in improvement efforts.
- Using primary care dentists or dental homes would be most beneficial for enhancing the provider incentive intervention because dental homes may mitigate challenges in obtaining accurate demographic information for members who have not accessed dental services in the past.

Following a comprehensive review and evaluation of Peach State's *Annual Dental Visits* PIP, HSAG determined *High Confidence* in the PIP results. Peach State provided clear evidence that the selected intervention, provider incentive for completion of dental sealant placements, was associated with an increase in the dental sealant rate among eligible members. The CMO provided a sound rationale for adapting and further testing the intervention prior to large-scale dissemination of the improvement strategy.

HSAG recommends that Peach State build on the success of the PIP by refining the intervention strategy using lessons learned and testing the adapted intervention through further PDSA cycles. Each PDSA cycle should be initiated with a methodologically sound evaluation plan using a clearly defined testing measure to ensure meaningful and actionable testing results. Additionally, the CMO should make efforts to gradually expand the intervention to a wider group of providers if future testing results continue to demonstrate the effectiveness of the intervention, with the ultimate goal of spreading effective improvement strategies statewide.

Avoidable Emergency Room Visits

Peach State's goal for the *Avoidable Emergency Room Visits* PIP was to identify and test interventions to reduce the avoidable ER visit rate at Coffee Regional Medical Center. The SMART Aim goal was achieved, and some but not all of the demonstrated improvement could be linked to the quality improvement processes; therefore, the PIP was assigned a level of *Confidence*. The details of the PIP's performance leading to the assigned confidence level are described below.

Table 2-3 below provides a summary of the SMART Aim measure results reported by the CMO and the level of confidence assigned to the PIP by HSAG. The table presents the baseline rate and goal rate for the SMART Aim measure, as well as the lowest rate achieved for the SMART Aim measure and the PIP's confidence level. The rates presented in the table are visits per 1,000 member months.

Table 2-3—SMART Aim Measure Results for *Avoidable Emergency Room Visits*

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Lowest Rate Achieved*	Confidence Level
The avoidable emergency room utilization rate at Coffee Regional Medical Center	1,553.9	1,522.8	1,447.5	*Confidence*

* The Lowest Rate Achieved is reported for the *Avoidable Emergency Room Visits* SMART Aim measure because the measure is an inverse indicator, where a lower rate is better.

The CMO established a goal of reducing the avoidable ER rate for Coffee Regional Medical Center from 1,553.9 visits per 1,000 member months to 1,522.8 visits per 1,000 member months. Two of the PIP's monthly SMART Aim measurements were at or below the goal rate of 1,522.8, with the lowest avoidable ER rate achieved being 1,447.5 visits per 1,000 member months. The details of the improvement processes used and the intervention tested for the *Avoidable Emergency Room Visits* PIP are presented in Table 2-4 and in the narrative description below.

Table 2-4—Intervention Testing for *Avoidable Emergency Room Visits*

Intervention	Key Driver Addressed	Failure Mode Addressed	Conclusions
Partner with Coffee Regional Medical Center (CRMC) emergency department to distribute member educational flyer and provide information on appropriate ED use to members	Member awareness/education on alternative locations for nonurgent care (primary care physician, urgent care centers, physicians with extended hours)	Member's lack of understanding regarding avoidable ED use	The CMO will adapt the intervention by testing it during multiple seasons throughout the year and include member input on the design of the educational flyer.

Peach State tested one intervention for the PIP: partnering with the CRMC emergency department to present and explain educational materials on alternative facilities for seeking nonemergent care to members who were seen for an avoidable ED visit. The CMO originally planned to test the intervention with Phoebe Putney Memorial Hospital (PPMH); however, confounding factors beyond the CMO's control arose shortly after initiating the intervention with PPMH. After consultation with HSAG and DCH, the CMO switched to partnering with CRMC to test the intervention. To carry out the intervention, Peach State provided CRMC with the State approved "Is it an Emergency?" flyer, which included the address of a collaborating urgent care center. CRMC ED staff presented the flyer to members who were seen for an avoidable ED visit and provided a verbal explanation of appropriate ED use and alternative facilities for nonemergent care.

To test the intervention at CRMC, the CMO tracked a process measure (weekly number of members seen at CRMC ED facility for an avoidable diagnosis after receiving the intervention). A total of 38 members received the intervention during an initial ED visit. The CMO followed members for 12 weeks after they received the intervention to determine if a subsequent, avoidable ED visit occurred. The CMO set an intervention-specific goal for a 60.0 percent decrease in avoidable ED visits among members who received the intervention. The intervention-specific goal was above and beyond the SMART Aim goal of reducing the avoidable ED utilization rate at CRMC to 1522.8 visits per 1,000 member months. The intervention testing results were as follows: of the 38 members who received the intervention, 10 members (26.3 percent) returned to the ED a second time for an avoidable diagnosis compared to three members (7.9 percent) who sought care at the urgent care clinic.

While the SMART Aim goal was met for two monthly measurements during intervention testing, the CMO's intervention-specific goal for a 60.0 percent decrease in avoidable ED visits was not met. Additionally, the avoidable ED visit rate increased above the baseline rate for several months after the completion of intervention testing. Based on these results, the CMO concluded that the intervention was not successful. The CMO planned to adapt the intervention, based on lessons learned from the PIP, and conduct further testing. The CMO documented the following lessons learned:

- The importance of involving members in the development of the intervention and in reviewing educational materials.
- The benefit of providing a script to provider partners involved in the delivery of a member education intervention to ensure consistency of content delivery.
- Working with the targeted facility to pursue other methods of member surveys may improve the member survey response rate.
- Surveying members who returned for an avoidable ED visit after receiving the intervention would have provided valuable information on barriers to appropriate ED use.

After an in-depth review and evaluation of Peach State's *Avoidable Emergency Room Visits* PIP, HSAG determined *Confidence* in the PIP results. The SMART Aim goal was met, and the intervention testing results showed that 28 of the 38 members who received the intervention did not return to the ED for nonemergent symptoms during the follow-up period. Because 10 of the 38 members who received the intervention returned to the ED for nonemergent symptoms, and only three of the 38 members sought care at the urgent care clinic, some but not all of the improvement could be logically linked to the intervention.

To build on the PIP results and lessons learned, HSAG recommends that Peach State explore the reasons why 10 members who received the intervention returned to the ED for an avoidable visit. The CMO could survey the members or analyze claims data to examine patterns in the specific medical issues that led to the subsequent avoidable visit. HSAG supports Peach State's plans to incorporate member review and feedback into the adaptations of the intervention. Gathering information directly from members, especially those for whom the original intervention was not successful, will help to better inform future improvement strategies leading to increased intervention effectiveness. Additionally, the CMO should convene key PIP team members and stakeholders to review the final key driver diagram, process map, and FMEA for the PIP. The CMO may need to identify additional barriers or gaps in the process to reducing avoidable ED visits and develop new interventions to test to achieve the desired improvement. HSAG recommends that Peach State use carefully planned PDSA cycles to test the adapted and/or new interventions to further improve the avoidable emergency room visit rate.

Member Satisfaction

Peach State's goal for the *Member Satisfaction* PIP was to identify and test interventions to improve member satisfaction by improving communication between members and providers. Because the SMART Aim goal was exceeded and the quality improvement processes were clearly linked to the demonstrated improvement, the PIP was assigned a level of *High Confidence*. A description of the PIP's performance leading to the assigned confidence level is provided below.

Table 2-5 provides a summary of the SMART Aim measure results reported by the CMO and the level of confidence HSAG assigned to the PIP. The table presents the baseline rate and goal rate for the SMART Aim measure, as well as the highest rate achieved for the SMART Aim measure.

Table 2-5—SMART Aim Measure Results for *Member Satisfaction*

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Confidence Level
The average rating of satisfaction for caregivers whose child was seen by Dr. Charlene Johnson and who answered the survey question, "When you talked about your child's health, did a doctor or other health provider ask you what you thought was best for your child?"	2.2	2.5	3.0	*High Confidence*

The CMO established a goal of increasing the average rating of satisfaction from 2.2 to 2.5 among caregivers who responded to the survey question, "When you talked about your child's health, did a doctor or other health provider ask you what you thought was best for your child?" where the response choices ranged from 1.0 ("Never") to 3.0 ("Always"). The SMART Aim measure rate exceeded the goal rate of 2.5 for seven consecutive monthly measurements, with the highest monthly average response being 3.0, the most favorable response. The details of the improvement processes used and the intervention tested are presented in Table 2-6 and in the subsequent narrative description.

Table 2-6—Intervention Testing for *Member Satisfaction*

Intervention	Key Driver Addressed	Failure Mode Addressed	Conclusions
Develop and distribute to members a checklist of questions to ask during the doctor visit to help with shared decision making	Member empowerment and engagement	Member unable to comprehend provider's recommendations	The CMO chose to test the intervention at a new primary care practice. The CMO plans to adopt the intervention if successful testing results are observed with the new provider.

Peach State tested one intervention for the PIP: developing a checklist of questions to guide shared decision making during the doctor visit. The CMO provided the checklist to members prior to their appointment at the participating provider's office. Each week, the CMO's Community Relations Representative (CRC) was located on-site at the provider's office. The CRC met with members and caregivers prior to their appointment and educated caregivers on using the checklist. The checklist suggested questions the member could ask during the appointment to promote shared decision making and understanding.

To test the intervention, the CMO collected post-appointment survey data from members who received the checklist, to determine if members and caregivers found the checklist helpful in improving their understanding of the doctor's instructions. Across the seven months of intervention testing, 80.9 percent of respondents provided the most favorable response (i.e., "Always") to the post-visit survey question. Additionally, the SMART Aim goal for an average monthly response of 2.5 to the survey question, "When you talked about your child's health, did a doctor or other health provider ask you what you thought was best for your child?" was exceeded during all seven months during intervention testing. The CMO documented the following lessons learned from the PIP:

- Increased member involvement in the design and development of member materials may improve understanding and increase use.
- Systematic solutions, such as incorporating the checklist intervention into established modes of member communication, are likely to be more sustainable than more resource-intensive, in-person delivery of interventions.

Based on the analysis of findings, the CMO chose to adopt the intervention and planned to test it with another targeted provider to replicate the initial testing results. If intervention testing with a second targeted provider yields similarly successful results, the CMO plans to adopt the intervention and incorporate the checklist into standard processes, distributing the checklist to all members.

As a result of a comprehensive review and evaluation of Peach State's PIP documentation, HSAG determined *High Confidence* in the PIP results. The SMART Aim goal was achieved, and the demonstrated improvement was clearly linked to the quality improvement processes implemented. The PIP results clearly demonstrated that the checklist for shared decision making was associated with increased caregiver satisfaction with the listening and communication skills of the participating provider.

Given the success of the PIP, HSAG supports the CMO's plans to test the intervention in another setting, with the consideration of expanding the shared decision making checklist intervention beyond the initial scope of the PIP. The CMO should view the successful PIP results as a step in the process of improving satisfaction on a larger scale, well beyond the initial, narrowed focus of the PIP. The CMO should use PDSA cycles to gradually ramp up dissemination of the checklist among members and caregivers attending appointments at other provider practices and facilities. With the use of ongoing PDSA cycles, the CMO can continue to refine the intervention and adapt it, as necessary, for other specialties or types of facilities. The gradual expansion and refinement of the intervention will support improved satisfaction with provider communication among members statewide.

Provider Satisfaction

Peach State's goal for the *Provider Satisfaction* PIP was to identify and test interventions to reduce the time required to complete the prior authorization (PA) process for providers at the Spine and Orthopedic Clinic. The SMART Aim goal was achieved; however, the quality improvement processes were not clearly linked to the demonstrated improvement. As a result, HSAG assigned the PIP the level of *Low Confidence*. The details of the PIP's performance leading to the assigned confidence level are described below.

Table 2-7 below provides a summary of the SMART Aim measure results reported by the CMO and the level of confidence HSAG assigned to the PIP. The table presents the baseline rate and goal rate for the SMART Aim measure, as well as the lowest rate achieved (a lower rate is better) for the SMART Aim measure.

Table 2-7—SMART Aim Measure Results for *Provider Satisfaction*

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Lowest Rate Achieved*	Confidence Level
The average number of calendar days to complete a prior authorization requested by Spine and Orthopedic Clinic	8.4 days	5.0 days	4.6 days	*Low Confidence*

* The Lowest Rate Achieved is reported for the *Provider Satisfaction* SMART Aim measure because the measure is an inverse indicator, where a lower rate is better.

The CMO established a goal of reducing the average number of days required to complete a prior authorization request for Spine and Orthopedic Clinic providers from 8.4 days to 5.0 days. The SMART Aim measure rate fell below the goal of 5.0 days for four biweekly measurements following initiation of the intervention, indicating better performance. The details of the improvement processes used and the intervention tested for the *Provider Satisfaction* PIP are presented in Table 2-8 and in the narrative description below.

Table 2-8—Intervention Testing for *Provider Satisfaction*

Intervention	Key Driver Addressed	Failure Mode Addressed	Conclusions
Provider education to Spine and Orthopedic Clinic providers on using InterQual Pain Management Clinical Policy SmartSheets to request prior authorization for pain management services	Provider knowledge	Required documentation to determine medical necessity not received	The CMO deemed the intervention ineffective because the goal of 80 percent complete pain management prior authorization requests was not met. The CMO chose to abandon the intervention because only 56 percent of the pain management prior authorization requests received after the training were complete.

Peach State tested one intervention for the PIP: equipping the participating provider with InterQual SmartSheets, which outline medical necessity requirements for PA requests. The CMO provided training to the participating provider on the use of SmartSheets to ensure submission of complete and accurate documentation for PA requests. During the training, the provider was instructed to use the SmartSheets for all subsequent PA requests related to pain management.

The CMO tested the intervention by evaluating a process measure: the completeness of pain management-related PA requests received from the targeted provider and tracking completeness of those requests. The CMO set an intervention-specific goal of receiving complete PA requests 80.0 percent of the time, following initiation of the intervention. This goal was separate from the SMART Aim goal. The CMO also tracked the SMART Aim measure (average turnaround time in days for all PA requests received from the targeted provider) before and after initiation of the intervention. Although the SMART Aim goal for an average turnaround time of 5.0 days was achieved for four biweekly measurements, the process measure (percentage of PA requests that were complete) fell short of the CMO's intervention-specific goal of 80.0 percent by 35.6 percentage points. The CMO chose to abandon the intervention and pursue other interventions in response to feedback received from the targeted provider.

The CMO documented the following lessons learned:

- Future testing cycles should include at least 20 PA requests per month to provide sufficient data for evaluating intervention effectiveness.
- Successful use of InterQual SmartSheets requires commitment by all office staff, and monthly refresher trainings would be required to sustain successful use of the SmartSheets for improving PA completeness.

- While the targeted provider staff reported being more satisfied with the CMO as a result of the intervention, the provider staff also expressed a preference for direct, one-on-one assistance and support regarding PA requests.
- Working with the targeted provider to discuss and develop a realistic, intervention-specific goal prior to intervention testing may increase provider buy-in and result in a more attainable and relevant goal for evaluating intervention success in the future.

During the five months of intervention testing, Peach State received only nine pain management PA requests from the participating provider. The CMO noted in its lessons learned that at least 20 PA requests were needed to sufficiently evaluate the intervention. A greater number of data points would have yielded more robust PDSA results for determining intervention effectiveness. For future PIPs, HSAG recommends that, as part of the *Plan* step in the PDSA cycle, the CMO conduct up-front analyses into the frequency of data points related to the intervention and outcome being studied. The CMO should gather and analyze data prior to initiating intervention testing to determine a testing cycle length that is likely to yield sufficient data points for determining intervention effectiveness.

After a detailed review and evaluation of Peach State's *Provider Satisfaction* PIP documentation, HSAG determined *Low Confidence* in the reported PIP results. HSAG identified several errors in the CMO's summary of intervention testing results and overall key findings. The raw data on intervention testing submitted with Module 4 did not support the CMO's summary of intervention testing results. Also, there were discrepancies between the data presented in the SMART Aim run chart and the narrative summary of SMART Aim measure results. Overall, the CMO did not provide a clear explanation of how the intervention testing results (completeness of PA requests related to pain management) were linked to the improvement in the SMART Aim measure (average turnaround time for all PA requests). There was not a clear link between the InterQual SmartSheets intervention and the improvement demonstrated in PA request turnaround time. Although the SMART Aim goal was achieved, the quality improvement processes were not clearly linked to the demonstrated improvement.

Going forward, HSAG recommends that Peach State ensure adequate analytical staffing on all PIP teams and institute a careful review process of all PIP documentation to improve the clarity and accuracy of data analysis, interpretation, and reporting of intervention testing results and overall key findings. With appropriate staffing and a careful review process, PIP results and lessons learned will be more meaningful and instrumental in achieving desired outcomes.

3. Conclusions and Recommendations

Conclusions

A summary table of Peach State's performance across all four PIPs, including reported SMART Aim measure rates and the level of confidence HSAG assigned for each PIP, is provided in Appendix A. HSAG determined *High Confidence* in the results of two PIPs, *Annual Dental Visits* and *Member Satisfaction.* In each of these PIPs, the design was methodologically sound, the SMART Aim goal was achieved, and the quality improvement processes were clearly linked to the demonstrated improvement. HSAG assigned the level of *Confidence* for the *Avoidable Emergency Room Visits* PIP because the SMART Aim goal was achieved; however, some but not all of the CMO's quality improvement processes could be linked to the demonstrated improvement. Finally, HSAG assigned the level of *Low Confidence* for the *Provider Satisfaction* PIP; the SMART Aim goal was achieved, but the improvement was not clearly linked to the CMO's quality improvement processes.

Peach State's performance across the four PIPs suggests that the CMO has made progress in successfully executing the rapid-cycle PIP process. This progress is demonstrated by HSAG assigning two of the four CY 2016 PIPs the level of *High Confidence* and one other PIP the level of *Confidence*. In each of these three PIPs, the SMART Aim goal was achieved and some or all of the quality improvement activities could be linked to the demonstrated improvement. Only one PIP, *Provider Satisfaction*, was assigned a level of *Low Confidence*. Peach State should review HSAG's feedback in this report and in the module feedback forms, seeking technical assistance as needed, to identify strategies for improving the effectiveness of all of its PIPs going forward. Additionally, the CMO should keep in mind the cyclical nature of effective improvement strategies and take action accordingly in areas identified for improvement. For those PIPs that achieved the level of *High Confidence*, the CMO should continue to monitor interventions and outcomes to facilitate long-term, sustained improvement beyond the life of the PIP. The CMO should also continue to implement PDSA cycles as a method of supporting ongoing improvement. Because the rapid-cycle PIPs are focused on a narrow topic and population, the CMO should look for ways to expand interventions with demonstrated success to other populations or to improve other outcomes. PDSA cycles can be used to gradually ramp up intervention dissemination while assessing level of improvement and refining strategies.

Recommendations

HSAG recommends the following for Peach State:

- Ensure detailed, accurate, and consistent documentation of intervention testing results and SMART Aim measure results across all applicable modules of the PIP.
- Ensure adequate analytical staffing of PIP teams to inform and oversee data analyses and results reporting for all PIPs so that all rates are reported accurately and consistently.

- As Peach State tests new interventions, the CMO should ensure that it is making a prediction in each *Plan* step of the PDSA cycle and discussing the basis for the prediction. This will help keep everyone involved in the project focused on the theory for improvement.
- Determine the best method to identify the intended effect of an intervention prior to testing. The intended effect of the intervention should be known upfront to help determine which data need to be collected.
- Conduct up-front analyses into the frequency of data points related to the intervention and outcome being studied. The CMO should gather and analyze data prior to initiating intervention testing to estimate, and plan for, a testing cycle length that will yield sufficient data points for determining intervention effectiveness.
- Continue to incorporate detailed, process-level data into the intervention evaluation plan to further the CMO's understanding of intervention effects.
- Conduct a series of thoughtful and incremental PDSA cycles to accelerate the rate of improvement. Each PDSA cycle should be initiated with a methodologically sound evaluation plan using a clearly defined testing measure to ensure meaningful and actionable testing results.
- For PIPs that did not demonstrate real improvement, the CMO should convene key PIP team members and stakeholders to review the key driver diagram, process map, and FMEA. In light of the PIP results, the team should explore additional barriers, gaps, or failures to address in future improvement efforts.
- For PIPs that successfully demonstrated real improvement, Peach State should continue to monitor outcomes beyond the life of the PIP. Ongoing monitoring will enable long-term evaluation of sustained improvement and allow the CMO to continually refine interventions to achieve and sustain optimal outcomes.
- For PIPs that identified effective interventions, Peach State should pursue avenues for spreading effective interventions beyond the initial scope of the rapid-cycle PIP. The CMO should identify new populations, facilities, or outcomes that could be positively impacted by the interventions. PDSA cycles should be used to test and gradually ramp up intervention dissemination to broader settings.

Appendix A. PIP Performance Summary Table

Table A-1—CY 2016 PIP Performance Summary

PIP Title	SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Confidence Level
Annual Dental Visits	The percentage of members 6 to 9 years of age in Muscogee County that received a sealant on a molar from Candler Dental	14.9%	34.9%	53.9%	*High Confidence*
Avoidable Emergency Room Visits	The rate of utilization of avoidable emergency room visits at Coffee Regional Medical Center	1,553.9	1,522.8	1,447.5	*Confidence*
Member Satisfaction	The average level of satisfaction for caregivers who were seen at Dr. Charlene Johnson's office who answered the question, "When you talked about your child's health, did a doctor or other health provider ask you what you thought was best for your child"	2.2	2.5	3.0	*High Confidence*
Provider Satisfaction	The average number of calendar days to complete a prior authorization requested by Spine and Orthopedic Clinic	8.4 days	5.0 days	4. 6 days	*Low Confidence*

Appendix B. PIP-Specific Module Feedback Forms

Appendix B contains Peach State's CY 2016 PIP Validation Feedback Forms—Modules 4 and 5.

Module 4—Plan-Do-Study-Act (PDSA) for Each Intervention
Annual Dental Visits PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The team provided details on each intervention tested (who, what, where, when, why, and how).	X		The CMO provided details for testing the following intervention: provider incentive offered to the targeted provider for completion of sealant placement during a preventive dental visit for members 6–9 years old who reside in the targeted county.
2. The interventions that were developed and tested addressed at least one or more of the key drivers, identified failures, or other identified opportunities for improvement.	X		The CMO linked the intervention to the following key driver in the key driver diagram and failure from the failure modes and effects analysis (FMEA). • Key driver: Provider education and addressing missed opportunities for sealant placement • Failure: Low prioritization by providers of sealant placements and preventive care
3. The documentation included the data source(s) for each intervention and detailed the data collection process. (Where are the data being collected, who is collecting the data, how are the data being collected, how are the data being calculated, and what are the predicated results?)	X		The CMO documented an appropriate data collection process and the data sources used for the intervention testing methodology.

Appendix B. State of Georgia
CY 2016 *Annual Dental Visits*—Module 4 Feedback Form
for Peach State Health Plan

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
4. The documentation included the tracking of events/activities and any challenges and/or confounding factors identified.	X		The CMO included the intervention tracking tool and documented intervention-related activities, challenges, and identified solutions.
5. The team provided an accurate summary of findings. (Were the metrics and methods used correctly, was the intervention effective, and did the intervention impact the SMART Aim?)	X		The CMO provided an accurate summary of findings.
6. The key driver diagram, FMEA, and interventions were revised appropriately based on analysis of findings.	X		The CMO included the key driver diagram and FMEA, updated based on the analysis of findings, in the Module 4 submission form.
7. Successful interventions were expanded and supported by rationale. Unsuccessful interventions were adapted or abandoned and decisions made were supported by rationale.	X		The CMO provided a sound rationale for choosing to adapt the intervention and test it with another targeted provider prior to pursuing expansion of the intervention on a larger scale.
8. The team submitted the final PDSA run/control charts illustrating the effect of the intervention(s).	X		The CMO included the process measure and SMART Aim measure run charts illustrating the effect of the intervention.

Module 5—Performance Improvement Project (PIP) Conclusions
Annual Dental Visits PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The narrative summary of overall key findings and interpretation of results was accurate.	X		The CMO provided an accurate summary of key findings.
2. The PIP demonstrated evidence of achieving the SMART Aim goal.	X		The SMART Aim measure (percentage of eligible 6–9-year-old members in Muscogee County who had no history of receiving a dental sealant and who received a dental sealant from the targeted provider) exceeded the goal rate of 34.9 percent for six consecutive monthly measurements.
3. The CMO documented a plan summarizing how it will evaluate sustained improvement beyond the SMART Aim end date.	X		The SMART Aim measure demonstrated sustained improvement for six consecutive months during the life of the PIP. Additionally, the CMO described plans for sustaining improvement in the dental sealant rate by adapting the intervention and continuing to test the intervention beyond the SMART Aim end date.
4. The CMO documented its plan for evaluating the expansion of successful interventions beyond the initial scope of the project.	X		The CMO documented a plan for adapting the intervention and testing it further with another targeted provider prior to evaluating large-scale expansion of the intervention.

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
5. The CMO documented lessons learned.	X		The CMO documented the following lessons learned: • Providers play a large role in the quality of care provided to members; therefore, provider engagement is necessary to achieve improvement in care. • Offering a provider incentive was an effective way to ensure provider engagement in improvement efforts. • Using primary care dentists or dental homes would be most beneficial for enhancing the provider incentive intervention because dental homes may mitigate challenges in obtaining accurate demographic information for members who have not accessed dental services in the past.

HSAG assessed the validity and reliability of the results based on CMS validation protocols and determined whether the State and key stakeholders can have confidence in the reported PIP findings. Based on the validation of this PIP, HSAG's assessment determined the following:

☒ **High confidence**

High confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and the demonstrated improvement was clearly linked to the quality improvement processes implemented.

☐ **Confidence**

Confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and some of the quality improvement processes were clearly linked to the demonstrated improvement; however, there was not a clear link between all quality improvement processes and the demonstrated improvement.

☐ **Low confidence**

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

☐ **Reported PIP results were not credible** = The PIP methodology was not executed as approved.

Summary of Validation Findings:
The CMO tested one intervention for the PIP: offering an incentive to the targeted provider for each sealant placed on a molar for members 6–9 years of age who resided in the targeted county. The CMO tested the intervention by tracking a process measure (monthly number of sealants placed on eligible members) and compared the number of sealants placed before and after the intervention was initiated. The CMO also tracked the amount of incentive dollars provided to the targeted provider during the intervention. The SMART Aim measure (monthly percentage of eligible members in Muscogee County who were seen by the targeted provider and received at least one sealant on a molar) met or exceeded the goal of 34.9 percent for four consecutive months during intervention testing and for two additional months after intervention testing ended, for a total of six consecutive months. While the CMO concluded that the intervention was successful, the CMO provided a sound rationale for adapting the intervention based on lessons learned and testing it further with another targeted provider prior to pursuing further expansion of the intervention. For the next testing cycle, the CMO planned to test the provider incentive intervention with a high-volume, low-performing provider that serves as a dental home for members. Because the SMART Aim goal was achieved and the quality improvement processes were clearly linked to the demonstrated improvement, the PIP was assigned a level of *High Confidence*.

Module 4—Plan-Do-Study-Act (PDSA) for Each Intervention
Avoidable Emergency Room Visits PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The team provided details on the intervention tested (who, what, where, when, why, and how).	X		The CMO provided the details for testing the following intervention: partnering with Coffee Regional Medical Center emergency department (ED) to present and explain educational materials on alternative facilities for seeking non-emergent care to members who were seen for an avoidable ED visit.
2. The intervention that was developed and tested addressed at least one or more of the key drivers, identified failures, or other identified opportunities for improvement.	X		The CMO linked the intervention to the following key driver and identified failure. • Key driver: Member awareness/education on alternative locations for non-urgent care (primary care physician, urgent care centers, physicians with extended hours) • Failure: Member's lack of understanding regarding avoidable ED use
3. The documentation included the data source(s) for the intervention and detailed the data collection process. (Where are the data being collected, who is collecting the data, how are the data being collected, how are the data being calculated, and what are the predicated results?)	X		The CMO documented an appropriate data collection process and the data sources used for the intervention testing methodology.

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
4. The documentation included the tracking of events/activities and any challenges and/or confounding factors identified.	X		The CMO included the intervention tracking tool and documented intervention-related activities, challenges, and identified solutions.
5. The team provided an accurate summary of findings. (Were the metrics and methods used correctly, was the intervention effective, and did the intervention impact the SMART Aim?)	X		The CMO provided an accurate summary of findings.
6. The key driver diagram, FMEA, and interventions were revised appropriately based on analysis of findings.	X		The CMO provided the revised key driver diagram in Module 4, based on the analysis of findings.
7. Successful interventions were expanded and supported by rationale. Unsuccessful interventions were adapted or abandoned and decisions made were supported by rationale.	X		The CMO provided a sound rationale for adapting the intervention, based on the analysis of findings.
8. The team submitted the final PDSA run/control charts illustrating the effect of the intervention.	X		The CMO provided a detailed narrative summary of intervention testing results, a bar chart displaying the intervention evaluation results, and the SMART Aim run chart with the timing of the intervention plotted.

Module 5—Performance Improvement Project (PIP) Conclusions
Avoidable Emergency Room Visits PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The narrative summary of overall key findings and interpretation of results was accurate.	X		The CMO's summary of overall key findings and interpretation of results was accurate.
2. The PIP demonstrated evidence of achieving the SMART Aim goal.	X		The SMART Aim measure rate (number of avoidable emergency department visits at Coffee Regional Medical Center among members over 18 years of age per 1,000 member months) indicated better performance than the goal rate of 1,522.8 for two monthly measurements following initiation of the intervention.
3. The CMO documented a plan summarizing how it will evaluate sustained improvement beyond the SMART Aim end date.	X		The CMO reported plans for continued collaboration with the targeted facility to sustain improvement in avoidable emergency department (ED) visits, with a new team lead who is a licensed and practicing ED physician. Additionally, the CMO is considering several methods for adapting the intervention, based on analysis of findings and member input, and plans to conduct additional Plan-Do-Study-Act (PDSA) cycles to test the adapted intervention beyond the SMART Aim end date.

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
4. The CMO documented its plan for evaluating the expansion of successful interventions beyond the initial scope of the project.	X		The CMO is considering the following potential adaptations that would expand the intervention beyond the initial scope of the project: • Target the intervention to a different age group. • Target the intervention to a specific subset of avoidable ED visits based on presenting symptom (e.g., fever). • Target the intervention to members with multiple avoidable ED visits within a specified time frame. • Test the intervention during multiple seasons to evaluate intervention efficacy in relation to seasonal variation in avoidable ED visits. • Engage primary care providers in educating members on appropriate ED use.
5. The CMO documented lessons learned.	X		The CMO documented the following lessons learned: • The importance of involving members in the development of the intervention and in reviewing educational materials. • The benefit of providing a script to provider partners involved in the delivery of a member education intervention to ensure consistency of content delivery. • Working with the targeted facility to pursue other methods of member surveys may improve the member survey response rate. • Surveying members who returned for an avoidable ED visit after receiving the intervention would have provided valuable information on barriers to appropriate ED use.

HSAG assessed the validity and reliability of the results based on CMS validation protocols and determined whether the State and key stakeholders can have confidence in the reported PIP findings. Based on the validation of this PIP, HSAG's assessment determined the following:

☐ **High confidence**

High confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and the demonstrated improvement was clearly linked to the quality improvement processes implemented.

☒ **Confidence**

Confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and some of the quality improvement processes were clearly linked to the demonstrated improvement; however, there was not a clear link between all quality improvement processes and the demonstrated improvement.

☐ **Low confidence**

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

☐ **Reported PIP results were not credible** = The PIP methodology was not executed as approved.

Summary of Validation Findings:
The CMO tested one intervention for the PIP: partnering with Coffee Regional Medical Center (CRMC) emergency department (ED) to present and explain educational materials on alternative facilities for seeking non-emergent care to members who were seen for an avoidable ED visit. After initially pursuing Phoebe Putney Memorial Hospital (PPMH) as the targeted facility, the CMO switched to CRMC, in consultation with HSAG and DCH, due to confounding factors beyond the CMO's control that arose shortly after initiating the intervention with the original targeted facility. To test the intervention at CRMC, the CMO tracked a process measure (weekly number of members seen at the targeted ED facility for an avoidable diagnosis after receiving the intervention). The CMO tracked members for 12 weeks after they received the intervention during an initial ED visit and set an intervention-specific goal of having a 60.0 percent decrease in avoidable ED visits among members who received the intervention. Of the 38 members who received the intervention, 10 members (26.3 percent) returned to the ED a second time for an avoidable diagnosis during the 12-week follow-up period compared to three members (7.9 percent) who sought care at the urgent care clinic. The CMO's intervention-specific goal for a 60.0 percent decrease in avoidable ED visits was not met, and the CMO concluded the intervention was not successful because the avoidable ED visit rate increased above the baseline rate for several months after the completion of intervention testing. Based on the analysis of findings and lessons learned, the CMO planned to adapt the intervention and continue testing. The SMART Aim goal was met, and the intervention testing results showed that 28

Summary of Validation Findings:
(73.7 percent) of the 38 members who received the intervention did not return to the ED for non-emergent symptoms during the follow-up period. Because 10 of the 38 members who received the intervention returned to the ED for non-emergent symptoms, and only three of the 38 members sought care at the urgent care clinic, some but not all of the improvement could be logically linked to the intervention. The PIP was assigned a level of *Confidence*.

Module 4—Plan-Do-Study-Act (PDSA) for Each Intervention
Member Satisfaction PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The team provided details on each intervention tested (who, what, where, when, why, and how).	X		The CMO provided details for testing the following intervention: develop a checklist of questions to guide shared decision making during the doctor visit and provide to members prior to their appointment at the targeted provider's office. The checklist suggests questions that the member can ask during the appointment to promote shared decision making and understanding.
2. The interventions that were developed and tested addressed at least one or more of the key drivers, identified failures, or other identified opportunities for improvement.	X		The CMO linked the intervention to the following key driver and identified failure. • Key driver: Member empowerment and engagement. • Failure: The member did not understand the provider's instructions.
3. The documentation included the data source(s) for each intervention and detailed the data collection process. (Where are the data being collected, who is collecting the data, how are the data being collected, how are the data being calculated, and what are the predicated results?)	X		The CMO documented an appropriate data collection process and the data sources used for the intervention testing methodology.

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
4. The documentation included the tracking of events/activities and any challenges and/or confounding factors identified.	X		The CMO included the intervention tracking tool and documented intervention-related activities, challenges, and identified solutions.
5. The team provided an accurate summary of findings. (Were the metrics and methods used correctly, was the intervention effective, and did the intervention impact the SMART Aim?)	X		The CMO provided an accurate summary of findings.
6. The key driver diagram, FMEA, and interventions were revised appropriately based on analysis of findings.	X		The CMO included the key driver diagram and failure modes and effects analysis (FMEA), which was updated based on the analysis of findings, in the Module 4 submission form.
7. Successful interventions were expanded and supported by rationale. Unsuccessful interventions were adapted or abandoned and decisions made were supported by rationale.	X		The CMO provided a sound rationale and plan for adopting the intervention, based on the analysis of findings.
8. The team submitted the final PDSA run/control charts illustrating the effect of the intervention(s).	X		The CMO provided a stacked bar chart summarizing the process measure (post-appointment survey responses) and the SMART Aim measure run chart, with the intervention timing plotted, illustrating the effect of the intervention.

Module 5—Performance Improvement Project (PIP) Conclusions
Member Satisfaction PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The narrative summary of overall key findings and interpretation of results was accurate.	X		The CMO provided an accurate summary of key findings.
2. The PIP demonstrated evidence of achieving the SMART Aim goal.	X		The SMART Aim measure (average response, on a scale of 1.0 to 3.0, to the survey question, "When you talked about your child's health, did the doctor or other health provider ask you what you thought was best for your child?") exceeded the goal of 2.5 for seven consecutive monthly measurements.
3. The CMO documented a plan summarizing how it will evaluate sustained improvement beyond the SMART Aim end date.	X		The CMO documented plans for evaluating sustained improvement beyond the SMART Aim end date. The CMO will track quarterly member satisfaction results after the end of the PIP to monitor and address ongoing performance.
4. The CMO documented its plan for evaluating the expansion of successful interventions beyond the initial scope of the project.	X		The CMO documented plans for evaluating expansion of the intervention beyond the initial scope of the project. The CMO will select additional high-volume providers each quarter to test the intervention and attempt to replicate the PIP results. Upon successful replication, the CMO plans to implement the checklist intervention for all members and is considering the following systematic methods of distributing the checklist: • Incorporating the checklist in the member handbook • Incorporating the checklist in new member packet materials

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
			• Providing the checklist on the CMO's website • Distributing the checklist at in-person new member orientation sessions
5. The CMO documented lessons learned.	X		The CMO documented the following lessons learned: • Increased member involvement in the design and development of member materials may improve understanding and increase use. • Systematic solutions, such as incorporating the checklist intervention into established modes of member communication, are likely to be more sustainable than more resource-intensive, in-person delivery of interventions.

HSAG assessed the validity and reliability of the results based on CMS validation protocols and determined whether the State and key stakeholders can have confidence in the reported PIP findings. Based on the validation of this PIP, HSAG's assessment determined the following:

☒ **High confidence**

High confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and the demonstrated improvement was clearly linked to the quality improvement processes implemented.

☐ **Confidence**

Confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and some of the quality improvement processes were clearly linked to the demonstrated improvement; however, there was not a clear link between all quality improvement processes and the demonstrated improvement.

☐ **Low confidence**

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

☐ **Reported PIP results were not credible** = The PIP methodology was not executed as approved.

Summary of Validation Findings:
The CMO tested one intervention for the PIP: providing members a checklist of questions to guide shared decision making during the doctor visit prior to their appointment at the targeted provider's office. To test the intervention, the CMO collected post-appointment survey data from members who received the checklist, to determine if members found the checklist helpful in improving their understanding of the doctor's instructions. Across the seven months of intervention testing, 80.9 percent of respondents provided the most favorable response (i.e., "Always") to the post-visit survey question. Additionally, the SMART Aim goal for an average monthly response of 2.5 to the survey question "When you talked about your child's health, did a doctor or other health provider ask you what you thought was best for your child?" was exceeded during all seven months during intervention testing. Based on the analysis of findings, the CMO chose to adopt the intervention and planned to test the intervention with another targeted provider to replicate the initial testing results. If intervention testing with a second targeted provider yields similarly successful results, the CMO plans to adopt the intervention and incorporate the checklist into standard processes, distributing the checklist to all members. The SMART Aim goal was achieved, and the demonstrated improvement was clearly linked to the quality improvement processes implemented; therefore, the PIP was assigned a level of *High Confidence*.

Module 4—Plan-Do-Study-Act (PDSA) for Each Intervention
Provider Satisfaction PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The team provided details on each intervention tested (who, what, where, when, why, and how).	X		The CMO provided the details for testing the following intervention: Equip the targeted provider with InterQual SmartSheets, which outline medical necessity requirements for prior authorization (PA) requests, and provide training on the use of the SmartSheets to ensure complete and accurate documentation is included for PA requests.
2. The interventions that were developed and tested addressed at least one or more of the key drivers, identified failures, or other identified opportunities for improvement.	X		The CMO linked the intervention to the following key driver and failure. • Key driver: Provider knowledge. • Failure: Required clinical documentation to determine medical necessity is not received as part of the PA request.
3. The documentation included the data source(s) for each intervention and detailed the data collection process. (Where are the data being collected, who is collecting the data, how are the data being collected, how are the data being calculated, and what are the predicated results?)	X		The CMO documented an appropriate data collection process and the data sources used for the intervention testing methodology.
4. The documentation included the tracking of events/activities and any challenges and/or confounding factors identified.	X		The CMO included the intervention tracking tool and documented intervention-related activities, challenges, and identified solutions.

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
5. The team provided an accurate summary of findings. (Were the metrics and methods used correctly, was the intervention effective, and did the intervention impact the SMART Aim?)		X	HSAG identified the following inaccuracies in the CMO's summary of findings: • On page 13, the CMO reported that four of the nine PA requests received during intervention testing did not have complete documentation; however, the raw data for the nine requests provided in the spreadsheet embedded on page 6 suggested that only two of the nine requests had incomplete documentation (based on the SmartSheet checklists embedded in the Microsoft Excel file for each request). • The intervention results documented in the CMO's intervention progress log did not align with the intervention results documented in the raw data sheet embedded on page 6. For example, for the first two PA requests documented in the progress log, with a decision date of July 8, 2016, the CMO reported, "The TAT [turnaround time] for the intervention was 2 days." For the first two PA requests documented in the raw data sheet (decision dates of July 8, 2016), the average TAT was computed to be 9.2 days. • There was a discrepancy in the last data point for the intervention-specific measure. The graph on page 16 presented the last data point as 5.81 days. In the raw data sheet embedded on page 6, the same data point was reported as 5.87 days. • On page 16, the CMO documented the average TAT for the intervention period as 5.39 days. HSAG was unable to replicate this average using the nine TAT data points provided in the raw data sheet on page 6. Using the nine

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
			raw data points, HSAG calculated an average TAT of 6.34 days. • On page 17, the CMO reported that the lowest SMART Aim measurement was 4.97 days; however, the SMART Aim run chart on page 14 showed a measurement of 4.56 days as the lowest data point on August 29, 2016, which was below 4.97 days. • The CMO reported the following on page 17: "The SMART Aim prior to the intervention averaged 14.48 calendar days" and "The pre-intervention SMART Aim average was 13.29 calendar days." These two sentences appear to report different values for the pre-intervention measurement of average TAT. • Looking at the Intervention Progress Log, HSAG was able to identify nine PA requests. which aligned with the number of PA requests documented in the raw data sheet on page 6. However, the request dates and TAT for individual PA requests did not align for the first two requests. • On page 13, the CMO documented, "Although effective in decreasing the prior-authorization request TAT, the intervention was determined to be unsuccessful as the percent of completed prior-authorization requests received was under the 80 percent completion prediction." On page 17, the CMO documented the following, "The intervention proved to have positively impacted the SMART Aim based on the SMART Aim average pre and post intervention." The CMO did not explain in the summary of findings how the SMART Aim

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
			TAT decreased despite 44.4 percent of the authorizations being incomplete during the testing period. The intervention testing results were not clearly linked to the SMART Aim measure results, and it appeared that the reduction in the SMART Aim TAT was not directly correlated with the InterQual SmartSheet.
6. The key driver diagram, FMEA, and interventions were revised appropriately based on analysis of findings.	X		The CMO provided the updated key driver diagram and FMEA, based on the analysis of findings, as part of the Module 4 submission.
7. Successful interventions were expanded and supported by rationale. Unsuccessful interventions were adapted or abandoned and decisions made were supported by rationale.	X		The CMO provided a sound rationale for abandoning the intervention based on the analysis of findings. The CMO concluded that the intervention was not successful because the intervention-specific goal of 80.0 percent for complete PA requests was not achieved during the life of the PIP. While the CMO did receive reports of improved provider satisfaction from the targeted provider, the provider also expressed a preference for having a designated staff member from the CMO as a liaison for future PA questions. The CMO is pursuing new interventions, such as assigning a medical management liaison to provider offices with a high volume of PA requests, based on feedback from the targeted provider.
8. The team submitted the final PDSA run/control charts illustrating the effect of the intervention(s).	X		The CMO presented the intervention testing results in a pie chart and narrative summary, and provided the SMART Aim measure with the timing of the intervention plotted.

Module 5—Performance Improvement Project (PIP) Conclusions
Provider Satisfaction PIP

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
1. The narrative summary of overall key findings and interpretation of results was accurate.		X	The CMO's documentation of the intervention testing results contained numerous errors (see HSAG's feedback for Criterion 5 in Module 4). Overall, the CMO did not provide a clear explanation of how the intervention testing results (completeness of PA requests related to pain management) were linked to the improvement in the SMART Aim measure (average turnaround time for all PA requests).
2. The PIP demonstrated evidence of achieving the SMART Aim goal.	X		The SMART Aim measure rate (average turnaround time in days for PA requests from the targeted provider) indicated better performance than the goal of 5.0 days for four biweekly measurements following the intervention.
3. The CMO documented a plan summarizing how it will evaluate sustained improvement beyond the SMART Aim end date.	X		The CMO reported plans to continue the partnership with the targeted provider to improve provider satisfaction. In response to feedback from the targeted provider, the CMO is exploring a new intervention, assigning a medical management liaison to provide assistance with PA requests to high-volume provider offices.
4. The CMO documented its plan for evaluating the expansion of successful interventions beyond the initial scope of the project.			Not applicable. The CMO chose to abandon the intervention because the testing results did not meet the intervention-specific goal. Evaluating expansion of the intervention did not apply.

Criteria	Achieved	Failed	HSAG Feedback and Recommendations
5. The CMO documented lessons learned.	X		The CMO documented the following lessons learned: • Future testing cycles should include at least 20 PA requests per month to provide sufficient data for evaluating intervention effectiveness. • Successful use of InterQual SmartSheets requires commitment by all office staff, and monthly refresher trainings would be required to sustain successful use of the SmartSheets for improving PA completeness. • While the targeted provider staff reported being more satisfied with the CMO as a result of the intervention, the provider staff also expressed a preference for direct one-on-one assistance and support regarding PA requests. • Working with the targeted provider to discuss and develop a realistic intervention-specific goal prior to intervention testing may increase provider buy-in and result in a more attainable and relevant goal for evaluating intervention success in the future.

Appendix B. State of Georgia
CY 2016 *Provider Satisfaction*—Module 5 Feedback Form
for Peach State Health Plan

HSAG assessed the validity and reliability of the results based on CMS validation protocols and determined whether the State and key stakeholders can have confidence in the reported PIP findings. Based on the validation of this PIP, HSAG's assessment determined the following:

☐ **High confidence**

High confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and the demonstrated improvement was clearly linked to the quality improvement processes implemented.

☐ **Confidence**

Confidence = the PIP was methodologically sound; achieved the SMART Aim goal; and some of the quality improvement processes were clearly linked to the demonstrated improvement; however, there was not a clear link between all quality improvement processes and the demonstrated improvement.

☒ **Low confidence**

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

☐ **Reported PIP results were not credible** = The PIP methodology was not executed as approved.

Summary of Validation Findings:
The CMO tested one intervention for the PIP: Equipping the targeted provider with InterQual SmartSheets, which outline medical necessity requirements for prior authorization (PA) requests, and providing training on the use of the SmartSheets to ensure complete and accurate PA request documentation. The CMO tested the intervention by evaluating a process measure: the completeness of pain management-related PA requests received from the targeted provider and tracking completeness of those requests. The CMO set an intervention-specific goal of receiving complete PA requests 80.0 percent of the time, following initiation of the intervention. This goal was separate from the SMART Aim goal. The CMO also tracked the SMART Aim measure (average turnaround time in days for all PA requests received from the targeted provider) before and after initiation of the intervention. Although the SMART Aim goal for an average turnaround time of 5.0 days was achieved for four biweekly measurements, the process measure (percentage of PA requests that were complete) fell short of the CMO's intervention-specific goal of 80.0 percent by 35.6 percentage points. The CMO chose to abandon the intervention and pursue other interventions in response to feedback received from the targeted provider. HSAG identified several errors in the CMO's summary of intervention testing results and overall key findings. Based on the documentation received, there was not a clear link between the intervention that was tested and the improvement demonstrated in the SMART Aim measure. Although the SMART Aim goal was achieved, the quality improvement processes were not clearly linked to the demonstrated improvement; therefore, the PIP was assigned a level of *Low Confidence*.