



State of Georgia
Department of Community Health
Georgia Families Program

**CY 2015 Performance Improvement
Projects Report**

for

**Amerigroup Community Care Georgia
Families 360° Population**

Reported August 2016





Table of Contents

- 1. Background 1-1**
 - PIP Components and Process 1-3
 - Summary 1-4
 - Validation Overview 1-5

- 2. Findings 2-1**
 - Validation Findings 2-1
 - 7-Day Inpatient Discharge Follow-up 2-1
 - Adolescent Well-Child Visits 2-4
 - Appropriate Use of ADHD Medications 2-6

- 3. Conclusions and Recommendations 3-1**
 - Conclusions 3-1
 - Recommendations 3-1

- Appendix A. PIP Performance Summary Table A-1**



Acknowledgements and Copyrights

CAHPS® refers to the Consumer Assessment of Healthcare Providers and Systems and is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

HEDIS® refers to the Healthcare Effectiveness Data and Information Set and is a registered trademark of the National Committee for Quality Assurance (NCQA).

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 (FFS) and managed care components. The DCH contracts with three privately owned managed care organizations, referred to by the State as care management organizations (CMOs), to deliver services to members who are enrolled in the State’s Medicaid and CHIP 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 serves all other Medicaid and CHIP managed care members not enrolled in the GF 360° program. Approximately 1.3 million beneficiaries are enrolled in the GF program.¹⁻¹ In March 2014, DCH transitioned approximately 27,000 foster care, adoption assistance, and juvenile justice children in residential placement from FFS Medicaid to Amerigroup Community Care (Amerigroup GF 360°), the DCH-selected vendor for the GF 360° program. The goals of this program are to improve care coordination, continuity of care, and health outcomes for members.

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.

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

These three mandatory activities work together to assess the CMOs’ 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 the CMOs 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) 2015, DCH required the CMO to conduct three PIPs for the GF 360° population and submit the final PIP modules for annual validation in 2016. 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

¹⁻¹ Georgia Department of Community Health. “Georgia Families Monthly Adjustment Summary Report, Report Period: 8/2015.”

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 Amerigroup GF 360°'s PIPs.

Amerigroup initiated PIPs for the GF 360° population in 2015 using the established rapid-cycle PIP process. HSAG developed the rapid-cycle PIP framework based on a modified version of the Model for Improvement developed by Associates in Process Improvement 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. The DCH instructed the CMOs to conduct their rapid-cycle improvement projects over a 12-month period.

To support DCH and the CMO's efforts, HSAG developed new guidance documents for the rapid-cycle improvement projects including:

- A detailed Companion Guide describing the new 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.

At the start of the new rapid-cycle improvement projects, HSAG conducted introductory webinar training sessions for DCH and the CMOs and, on an ongoing basis, provided extensive technical assistance via conference calls with the CMOs throughout the 12-month project period.

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*

¹⁻² Institute for Healthcare Improvement. How to Improve. Available at:
<http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>. Accessed on: Sept 24, 2015.

(PIPs): *A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012.¹⁻³ 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 CMOs' PIPs for the State of Georgia.

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 Plan-Do-Study-Act (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.

- **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:

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.

- Precisely stating a project-specific SMART Aim (specific, measurable, 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

For CY 2015, Amerigroup submitted for validation three PIPs for the GF 360° population. All of the PIPs were validated using HSAG’s rapid-cycle PIP validation process. The PIP topics included:

- *7-Day Inpatient Discharge Follow-up*
- *Adolescent Well-Child Visits*
- *Appropriate Use of ADHD [Attention Deficit Hyperactivity Disorder] Medications*

For each of the three PIPs conducted in CY 2015 for the GF 360° population, Amerigroup 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 Amerigroup GF 360° for establishing the SMART Aim for each PIP:

- **Specific:** The goal of the project: What is to be accomplished? Who will be involved or affected? Where will it take place?
- **Measurable:** 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 three 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. Amerigroup GF 360° 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
<i>7-Day Inpatient Discharge Follow-up</i>	Increase mental health 7-day follow-up compliance rates, from members aged 6 to 18 years, at Peachford Hospital from 40% to 45% by December 31, 2015
<i>Adolescent Well-Child Visits</i>	Increase adolescent well-child visit rates by 6 percentage points for adolescents 11–21 assigned to Georgia Family Care, LLC, by December 31, 2015
<i>Appropriate Use of ADHD Medications</i>	A 5 percentage point (39.47%–44.47%) increase by December 31, 2015, in the number of members (ages 6–12 years), assigned to Harbin Clinic, who received an initial visit within 30 days after initially being prescribed an ADHD medication

Validation Overview

HSAG obtained the data needed to conduct the PIP validation from Amerigroup GF 360°’s module submission forms. These forms provided detailed information about each of Amerigroup GF 360°’s PIPs and the activities completed in Modules 1 through 5.

Amerigroup GF 360° submitted Modules 1 through 3 for each PIP throughout calendar year 2015. 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. Amerigroup GF 360° 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 2015. Amerigroup GF 360° submitted Modules 4 and 5 to HSAG on February 29, 2016, for annual validation.

The scoring methodology evaluates whether the CMO executed a methodologically sound improvement project, whether the PIP’s SMART Aim goal was achieved, and whether improvement was clearly linked to the quality improvement processes applied in the 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 Amerigroup GF 360°'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 goal. The validation findings for Amerigroup GF 360°'s PIPs are presented in Table 2-1 through Table 2-6. 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 goal.

For each PIP, HSAG evaluated the appropriateness and validity of the SMART Aim measure, as well as trends in the 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.

7-Day Inpatient Discharge Follow-up

Amerigroup GF 360°'s goal for the *7-Day Inpatient Discharge Follow-up* PIP was to identify and test interventions to improve the compliance rates for follow-up visits with a mental health practitioner among GF 360° members discharged from Peachford Hospital with a principal diagnosis of mental illness. 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.

The CMO's rationale for selecting Peachford Hospital as the targeted facility for the PIP and the PIP's initial key driver diagram illustrating the content theory behind the PIP were provided in Module 1. The CMO reported the SMART Aim measure definition and data collection methodology in Module 2. Table 2-1 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 highest rate achieved for the SMART Aim measure.

Table 2-1—SMART Aim Measure Results for 7-Day Inpatient Discharge Follow-up

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Confidence Level
The monthly percentage of inpatient discharges from Peachford Hospital for members with a primary diagnosis of mental illness that were followed by a visit with a mental health practitioner within 7 days of discharge.	40.0%	45.0%	52.4%	<i>High Confidence</i>

The CMO established a goal of improving the compliance rate for seven-day follow-up visits at Peachford Hospital by 5 percentage points, from 40.0 percent to 45.0 percent. Three of the PIP’s monthly SMART Aim measurements exceeded the goal of 45.0 percent for the seven-day follow-up visit rate among members discharged from Peachford Hospital. The highest monthly follow-up visit compliance rate of 52.4 percent was an improvement of 12.4 percentage points over the baseline rate and exceeded the goal rate by 7.4 percentage points. The details of the improvement processes used and the intervention tested for the *7-Day Inpatient Discharge Follow-up* PIP are presented in Table 2-2 and in the narrative description below.

Table 2-2—Intervention Testing for 7-Day Inpatient Discharge Follow-up

Intervention	Key Driver Addressed	Failure Modes Addressed	Conclusions
Stabilization team at discharging facility	Guardian’s understanding of and participation in the transition appointment	<ul style="list-style-type: none"> • Appointments are not made • Appointments are not kept 	Based on initial success and lessons learned during the PIP, the intervention will be adapted and testing will continue.

HSAG reviewed the process map and FMEA Amerigroup GF 360° submitted in Module 3 to identify and select interventions to test for the PIP. Based on the process map and FMEA results, the CMO identified one intervention for the PIP: using a stabilization team to educate and coach members and facilitate the scheduling and attendance of the seven-day follow-up visit after discharge from the targeted hospital with a principal diagnosis of mental illness. The purpose of the stabilization team intervention was to assist the member with “transitional care coordination.” The stabilization team member educated and coached the member prior to discharge to stress the importance of the seven-day follow-up visit and to identify and address barriers to scheduling and attending the visit. The stabilization team took these steps to facilitate completion of the seven-day follow-up visit:

- Identified a new provider for the member’s follow-up visit, if needed.
- Scheduled the follow-up visit or ensuring the member schedules the visit.

- Provided appointment reminder calls and emails to the member.
- Contacted the member to confirm that the follow-up visit was completed.
- Repeated the steps to assist the member to schedule and attend a follow-up visit within 30 days of discharge, if the member fails to complete the seven-day follow-up visit.

Amerigroup GF 360° used a methodologically sound process for evaluating the effectiveness of the stabilization team intervention. To test the intervention, the CMO plotted the monthly SMART Aim measure (seven-day follow-up visit rate for members discharged from the targeted hospital with a principle diagnosis of mental illness). Because the intervention was tested at the facility level and the SMART Aim measure included all eligible members discharged from the targeted facility, the SMART Aim measure was appropriate for illustrating the impact of the intervention, and the monthly results provided meaningful data on progress toward achieving the goal.

It should be noted that, while the CMO used a methodologically sound evaluation process to test the series of steps carried out by the stabilization team described above, the evaluation results are only valid for determining the impact of the entire series of steps included in the intervention tested. The evaluation results cannot be extrapolated to any of the individual steps or any other combination of steps. The CMO would need to design a distinct evaluation process specific to each step if the goal was to evaluate each step in the stabilization team process individually.

Based on the analysis of findings, the CMO concluded that the intervention should be adapted and tested further before pursuing expansion. The CMO provided a sound rationale for choosing to adapt the intervention and continue testing it beyond the life of the PIP. The CMO reported three specific adaptations planned for the intervention, based on lessons learned during the PIP:

- Expanding follow-up appointment options to include in-home appointments.
- Modifying the data collection tool to allow for “anecdotal” member-reported reasons (barriers) for not completing the seven-day follow-up visit.
- Conducting a motivational interview about the follow-up visit with the member prior to discharge, rather than providing a simple appointment reminder.

Amerigroup GF 360° used lessons learned during the PIP to inform the planned adaptations of the intervention. The CMO documented a sound decision to continue testing the intervention with the adaptations described above prior to making decisions about expanding the intervention beyond the initial scope of the PIP. The evaluation results of the adapted intervention will be used to guide decisions about expanding the intervention.

When planning future improvement efforts, HSAG recommends that Amerigroup GF 360° refine the intervention evaluation design and data collection process to identify and track measures at the finest level possible. For example, the CMO should track which members participate in a motivational interview prior to discharge and whether those members had a higher seven-day follow-up visit compliance rate. Additionally, the CMO should consider staggering the initiation of the intervention adaptations to help distinguish the impact of individual adaptations and facilitate the development of the

most impactful intervention. For example, the CMO may want to first adapt the intervention to include the motivational interview prior to discharge and then monitor the weekly follow-up visit rate for several weeks. The CMO could then introduce the option of an in-home follow-up visit and plot the weekly follow-up visit rate for several additional weeks. Staggering the introduction of intervention components allows the CMO to more clearly identify the individual impact of each step or component in the process. When staggering intervention components, the CMO should still keep in mind the overall PIP timeline, however, and should consider more frequent data collection intervals, such as weekly measurements, so that results can be calculated more rapidly, allowing time for the step-wise introduction of intervention steps within the overall PIP timeline.

Adolescent Well-Child Visits

Amerigroup GF 360°’s goal for the *Adolescent Well-Child Visits* PIP was to identify and test interventions to improve the rate GF 360° members 11–21 years of age assigned to Georgia Family Care, LLC, who received an annual adolescent well-child visit. Because the PIP’s SMART Aim goal was not achieved, the PIP was assigned a level of *Low Confidence*. The details of the PIP’s performance leading to the assigned confidence level are described below.

The CMO’s rationale for selecting Georgia Family Care, LLC, as the targeted facility and the initial key driver diagram illustrating the content theory behind the PIP were provided in Module 1. The CMO reported the SMART Aim measure definition and data collection methodology in Module 2. Table 2-3 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 for the SMART Aim measure, as well as the highest rate achieved for the SMART Aim measure.

Table 2-3—SMART Aim Measure Results for Adolescent Well-Child Visits

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Confidence Level
The monthly percentage of GF 360° members 11–21 years of age assigned to Georgia Family Care, LLC, who received an annual adolescent well-child visit	42.9%	48.9%	44.9%	<i>Low Confidence</i>

The CMO established a goal of improving the adolescent well-child visit rate at Georgia Family Care, LLC, by 6 percentage points, from 42.9 percent to 48.9 percent. None of the PIP’s monthly SMART Aim measurements met the rate of 48.9 percent. The highest monthly adolescent well-child visit rate achieved during the life of the PIP for eligible GF 360° members was 44.9 percent, which was a 2 percentage point increase over the baseline rate but was 4 percentage points below the goal. The details of the improvement processes used and the intervention tested are presented in Table 2-4 and in the subsequent narrative description.

**Table 2-4—Intervention Testing
for Adolescent Well-Child Visits**

Intervention	Key Driver Addressed	Failure Mode Addressed	Conclusions
Focused member outreach by the targeted provider	Interagency Coordination/Resources	<ul style="list-style-type: none"> Member no-shows for scheduled appointments. Lack of investment in the long-term healthcare needs of members. Member is not aware of the importance or frequency of visits needed for adolescent members. 	Based on the lack of meaningful improvement during the life of the PIP, the CMO chose to abandon the intervention.

Amerigroup GF 360° used a process map and FMEA to identify and select interventions to test. Based on the process map and FMEA results, the CMO identified one intervention for the PIP: focused member outreach conducted by the targeted provider. To facilitate the provider’s outreach efforts, Amerigroup GF 360° generated a monthly roster of members due for an adolescent well-child visit and shared the monthly roster with the targeted provider. The targeted provider reached out to members on the roster and offered to schedule a well-child visit. The provider sent appointment confirmation by phone, email, and written communication. The CMO provided monthly improvement progress updates to the provider regarding the adolescent well-child visit rate.

The CMO used a methodologically sound data collection process and data sources to evaluate intervention effectiveness. The CMO tracked the SMART Aim measure (adolescent well-child visit rate among members assigned to the targeted provider) monthly. Because the intervention was tested at the provider level, the SMART Aim measure could be used to illustrate the effect of the intervention. The SMART Aim measure was tracked collaboratively by the CMO and the targeted provider using a manual tracking tool.

The CMO chose to abandon the intervention based on the analysis of findings. The SMART Aim goal was not achieved during the life of the PIP, and the CMO concluded that the intervention was not effective. Although the intervention was not successful at driving improvement in the adolescent well-child visit rate, the CMO identified lessons learned through the project including:

- The impact of missing and inaccurate member contact information was a greater barrier to improvement than anticipated.
- The CMO generally has better member contact information than the provider’s office.
- The results of testing the intervention with one provider may not translate to other providers; therefore, additional learning may result from testing an intervention with more than one provider.

Based on the validation findings for the *Adolescent Well-Child Visits* PIP, HSAG recommends that the CMO review the final process map and FMEA results for the PIP and identify one or more new interventions to test for improving the adolescent well-child visit rate among GF 360° members. The CMO tested only one intervention during the life of the PIP and abandoned it after determining that it was unsuccessful in driving the desired improvement. The CMO should consider all of the lessons learned during the PIP and determine if any further updates need to be made to the key driver diagram, process map, or FMEA. Once these PIP components have been updated with the lessons learned, interventions addressing high priority failure modes should be identified for testing within the cyclical nature of PDSA cycles.

Appropriate Use of ADHD Medications

Amerigroup GF 360°’s goal for the *Appropriate Use of ADHD Medications* PIP was to identify and test interventions to improve the 30-day follow-up appointment compliance rate among GF 360° members 6–12 years of age who received an initial ADHD medication prescription at Harbin Clinic. Because the PIP’s 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.

The CMO’s rationale for selecting Harbin Clinic as the targeted facility and the initial key driver diagram illustrating the content theory for the PIP were provided in Module 1. The CMO reported the SMART Aim measure definition and data collection methodology in Module 2. 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 and the PIP’s confidence level.

Table 2-5—SMART Aim Measure Results for *Appropriate Use of ADHD Medications*

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Confidence Level
The monthly percentage of members 6–12 years of age who received an initial ADHD medication prescription at Harbin Clinic and returned for a follow-up visit within 30 days of initial prescription fill.	39.5%	44.5%	100%	<i>High Confidence</i>

The CMO established a goal of improving the ADHD medication follow-up visit rate at Harbin Clinic by 5 percentage points, from 39.5 percent to 44.5 percent. Nine of the PIP’s monthly SMART Aim measurements exceeded the goal rate of 44.5 percent, and two of the monthly measurements achieved the maximum possible compliance rate of 100 percent. 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 Appropriate Use of ADHD Medications**

Intervention	Key Drivers Addressed	Failure Modes Addressed	Conclusions
Internal process changes at Harbin Clinic	<ul style="list-style-type: none"> • Provider engagement • Improve provider processes 	<ul style="list-style-type: none"> • Unsuccessful attempts to schedule member’s follow-up visit by telephone • Member is not aware of frequency of visits needed 	Based on the sustained success achieved during the PIP, the intervention will be adopted and the CMO is pursuing expansion of the intervention to additional providers.

Amerigroup GF 360° used a process map and FMEA to identify and select interventions to test. Based on the process map and FMEA results, the CMO identified one intervention for the PIP: a series of related internal process changes undertaken at Harbin Clinic. The four primary process changes that comprised the intervention were:

- Reducing the initial ADHD medication prescription from a 60-day supply to a 21-day supply.
- Scheduling the initial follow-up appointment before the member leaves the appointment with an initial ADHD medication prescription.
- Automated reminder calls 48 hours prior to the scheduled follow-up appointment.
- Scheduling the follow-up appointment within three weeks of ADHD medication initiation to allow time for rescheduling within 30 days, if needed.

The CMO used a methodologically sound data collection process and data sources to evaluate effectiveness of the internal process changes. The CMO tracked the SMART Aim measure (30-day follow-up visit completion rate among members who received an initial prescription for ADHD medication from the targeted provider) monthly. Because the intervention was tested at the provider level, the SMART Aim measure could be used to illustrate the effect of the intervention. The CMO used a combination of claims data and manual data collection from the targeted provider’s office for the SMART Aim measure so claims lag did not influence the SMART Aim measure rates.

As a result of the meaningful and sustained improvement demonstrated during the PIP, Amerigroup GF 360° chose to adopt the intervention and is pursuing additional provider partners to participate in the spread of this intervention. The CMO evaluated expansion of the intervention among other high-volume/low-performing provider practices and was pursuing initial meetings about the intervention with two additional practices at the time the PIP was submitted for validation.

3. Conclusions and Recommendations

Conclusions

A summary table of Amerigroup GF 360°'s performance across all three PIPs for the GF 360° population, 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 for two of the three PIPs and *Low Confidence* in the results of one PIP. HSAG did not assign the level of *Confidence* to any of Amerigroup GF 360°'s PIPs.

HSAG assigned the level of *High Confidence* for Amerigroup GF 360°'s *7-Day Inpatient Discharge Follow-up* and *Appropriate Use of ADHD Medications* PIPs. In each of these PIPs, the design was methodologically sound, the SMART Aim goal was achieved, and the quality improvement processes could be clearly linked to the demonstrated improvement. HSAG assigned the level of *Low Confidence* for the *Adolescent Well-Child Visits* PIP because the SMART Aim goal was not achieved.

Amerigroup GF 360°'s performance across the three PIPs suggests that some of Amerigroup GF 360°'s PIP teams have incorporated a high level of understanding of the rapid-cycle PIP process into their projects and have identified promising interventions to pursue for potential spread to their broader member population. All three of Amerigroup GF 360°'s PIPs incorporated sound measurement methodologies for evaluating intervention effectiveness and outcomes.

Recommendations

HSAG recommends the following for Amerigroup GF 360°:

- Revisit and update the key driver diagram and FMEA throughout the improvement process. Each version of the key driver diagram and FMEA should be dated to document when it was last revised.
- As Amerigroup GF 360° moves through the quality improvement process and conducts additional PDSA cycles, the CMO's PIP team should ensure that it is communicating Amerigroup GF 360°'s theory about changes that will lead to improvement. Without a common understanding of the theory, the CMO's PIP team may be working on changes for various perceived reasons.
- As Amerigroup GF 360° 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.
- 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.
- When planning to test an intervention with multiple steps or components, consider staggering the initiation of the individual steps or components so that the impact of each step or component can be

distinguished. A staggered approach to intervention testing may require shorter data collection intervals so that the multiple intervention components can be introduced and tested within the life of the PIP.

- When planning a test of change, Amerigroup GF 360° should think proactively (future tests and implementation).
- 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.

Appendix A. PIP Performance Summary Table

Table A-1—CY 2015 PIP Performance Summary

PIP Title	SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Confidence Level
<i>7-Day Inpatient Discharge Follow-up</i>	The percentage of inpatient discharges from Peachford Hospital for members with a primary diagnosis of mental illness that were followed by a visit with a mental health practitioner within 7 days of discharge.	40.0%	45.0%	52.4%	<i>High Confidence</i>
<i>Adolescent Well-Child Visits</i>	The monthly percentage of GF 360° members 11–21 years of age assigned to Georgia Family Care, LLC, who received an annual adolescent well-child visit	42.9%	48.9%	44.9%	<i>Low Confidence</i>
<i>Appropriate Use of ADHD Medications</i>	The monthly percentage of members 6–12 years of who received an initial ADHD medication prescription at Harbin Clinic and returned for a follow-up visit within 30 days of initial prescription fill.	39.5%	44.5%	100%	<i>High Confidence</i>