

State of Georgia



Department of Community Health
Georgia Families Program

AMERIGROUP Community Care

**PERFORMANCE IMPROVEMENT
PROJECTS REPORT
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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) through its Division of Medical Assistance Plans is responsible for administering the Medicaid program and the Children’s Health Insurance Program (CHIP) for the State of Georgia and overseeing quality improvement activities. The State refers to its Medicaid managed care program as Georgia Families and to its CHIP program as PeachCare for Kids[®]. For the purposes of this report, “Georgia Families” refers to all Medicaid and PeachCare for Kids[®] members enrolled in managed care.

The Georgia Families program serves the majority of Georgia’s Medicaid and CHIP populations. The DCH requires its contracted Care Management Organizations (CMOs), serving the Georgia Families members, 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 that are expected to have a favorable effect on health outcomes and member satisfaction. DCH requires the CMOs to report the status and results of each PIP annually. AMERIGROUP Community Care (AMERIGROUP) 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 other two required activities include the evaluation of CMO compliance with State and federal regulations and the validation of CMO performance measures.

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 health care, 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 health care in targeted areas of low performance, or in areas identified as State priorities or health care issues of greatest concern. The DCH required its CMOs to conduct 10 PIP studies during the 2013 calendar year and submit them for validation in 2014. 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 health care.

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’s PIPs. AMERIGROUP submitted PIPs to HSAG between June 30, 2014, and August 1, 2014, and HSAG validated the PIPs between July 1, 2014, and August 15, 2014. The validated data represent varying measurement time periods as described in Table 2-3 through Table 2-12.

For PIPs initiated prior to January 1, 2012 (*Childhood Obesity*), HSAG used a validation methodology based on the Centers for Medicare & Medicaid Services (CMS) validation protocols.¹⁻¹ For PIPs initiated on or after January 1, 2012 (*Adolescent Well-Care Visits, Annual Dental Visits, Appropriate Use of ADHD Medications, Avoidable Emergency Room Visits, Childhood Immunizations—Combo 10, Comprehensive Diabetes Care, Member Satisfaction, Postpartum Care and Provider Satisfaction*), HSAG used CMS’ updated validation protocols.¹⁻² Compared to the 2002 CMS PIP protocols, the changes made to the 2012 protocols consisted of reversing the order of Activities III and IV, and Activities VII and VIII. These changes did not impact HSAG’s validation process.

Table 1-1—CMS Protocol Changes

PIP Activity	CMS 2002 Protocol	CMS 2012 Protocol
Clearly Defined Study Indicator(s)	Activity III	Activity IV
Correctly Identified Study Population	Activity IV	Activity III
Appropriate Improvement Strategies	Activity VII	Activity VIII
Sufficient Data Analysis and Interpretation of Results	Activity VIII	Activity VII

HSAG evaluated the following components of the quality improvement process:

1. The technical structure of the PIPs to ensure AMERIGROUP designed, conducted, and reported PIPs using sound methodology consistent with the CMS protocol for conducting PIPs. HSAG’s review determined whether a PIP could reliably measure outcomes. Successful execution of this component ensures that reported PIP results are accurate and capable of measuring real and sustained improvement.
2. The outcomes of the PIPs. Once designed, a PIP’s effectiveness in improving outcomes depends on the systematic identification of barriers and the subsequent development of relevant interventions. Evaluation of each PIP’s outcomes determined whether AMERIGROUP improved its rates through the implementation of effective processes (i.e., barrier analyses, intervention design, and evaluation of results) and, through these processes, achieved statistically significant improvement over the baseline rate. Once statistically significant improvement is achieved across all study indicators, HSAG evaluates whether

¹⁻¹ U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. EQR Managed Care Organization Protocol. *Validating Performance Improvement Projects: A Protocol for Use in Conducting Medicaid External Quality Review Activities, Final Protocol, Version 1.0, May 2002.*

¹⁻² U.S. 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.

AMERIGROUP was successful in sustaining the improvement. The goal of HSAG's PIP validation is to ensure that DCH and key stakeholders can have confidence that reported improvement in study indicator outcomes is supported by statistically significant change and the CMO's improvement strategies.

CMO Overview

The DCH contracted with AMERIGROUP beginning in 2006 to provide services to the Georgia Families program population. Prior to 2012, AMERIGROUP served the eligible population in the Atlanta, North, East, and Southeast geographic regions of Georgia. In early 2012, the CMO expanded coverage statewide and added the Central and Southwest regions.

Study Rationale

The purpose of a PIP is to achieve, through ongoing measurements and interventions, significant improvement sustained over time in clinical or nonclinical areas. Although HSAG has validated AMERIGROUP's PIPs for seven years, the number of PIPs, study topics, and study methods has evolved over time.

AMERIGROUP submitted 10 PIPs for validation. The PIP topics included:

- ◆ Adolescent Well-Care Visits
- ◆ Annual Dental Visits
- ◆ Appropriate Use of ADHD Medications
- ◆ Avoidable Emergency Room Visits
- ◆ Childhood Immunizations—Combo 10
- ◆ Childhood Obesity
- ◆ Comprehensive Diabetes Care
- ◆ Member Satisfaction
- ◆ Postpartum Care
- ◆ Provider Satisfaction

Study Summary

AMERIGROUP's June 30, 2014, through August 1, 2014, PIP submissions included six clinical HEDIS-based PIPs (*Adolescent Well-Care Visits*, *Appropriate Use of ADHD Medications*, *Childhood Immunizations—Combo 10*, *Childhood Obesity*, *Comprehensive Diabetes Care*, and *Postpartum Care*); two clinical PIPs not based on HEDIS specifications (*Avoidable Emergency Room Visits* and *Annual Dental Visits*); and two nonclinical PIPs: *Member Satisfaction* and *Provider Satisfaction*.

Table 1-2 outlines the key study indicators incorporated for the six clinical HEDIS-based PIPs.

Table 1-2—Clinical HEDIS-based Study Topics and Indicator Descriptions

Study Topic	Study Indicator Description
<i>Adolescent Well-Care Visits</i>	The percentage of members 12–21 years of age who had at least one comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year.
<i>Appropriate Use of ADHD Medications</i>	<ol style="list-style-type: none"> 1. The percentage of members 6–12 years of age as of the Index Prescription Start Date (IPSD) with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with a practitioner with prescribing authority during the 30-day Initiation Phase. 2. The percentage of members 6–12 years of age as of the Index Prescription Start Date (IPSD) with an ambulatory prescription dispensed for ADHD medication, who remained on the medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least two follow-up visits with a practitioner from 31–300 days following the IPSD. One of the two visits (during days 31–300) may be a telephone visit with a practitioner.
<i>Childhood Immunizations—Combo 10</i>	The percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps, rubella (MMR); three H influenza type B (HiB); three hepatitis B (HepB); one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday.
<i>Childhood Obesity</i>	The percentage of members 3–17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of BMI percentile documentation, nutrition counseling and physical activity counseling.
<i>Comprehensive Diabetes Care</i>	The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had a HbA1c control < 7.0%, LDL-C control < 100mg/ml, and BP control < 140/90 mmHg.
<i>Postpartum Care</i>	The percentage of deliveries of live births by members that were followed by a postpartum visit on or between 21 and 56 days after delivery.

Table 1-3 outlines the key study indicators for the two clinical non-HEDIS PIPs.

Table 1-3—Clinical Non-HEDIS Study Topic and Study Indicator Descriptions

Study Topic	Study Indicator Description
<i>Annual Dental Visits</i>	<ol style="list-style-type: none"> 1. The percentage of members 1–20 years of age who received any dental service during the measurement period (CMS 416 12A). 2. The percentage of members 1–20 years of age who received preventive dental services during the measurement period (CMS 416 12B). 3. The percentage of members 6–9 years of age who received a sealant on a permanent molar during the measurement period (CMS 416 12D).
<i>Avoidable Emergency Room Visits</i>	<ol style="list-style-type: none"> 1. The percentage of ER visits for “avoidable” diagnoses (dx382–Acute Suppurative otitis:382.9–Unspecified otitis:462–Acute pharyngitis:465.9–Acute upper respiratory infection:466–Acute bronchitis:786.2–Cough) among members under 21 years of age who had a visit to the ED in three selected Children’s Healthcare of Atlanta facilities in the Atlanta region. 2. The percentage of ER visits for “avoidable” diagnoses (dx382–Acute Suppurative otitis: 382.9–Unspecified otitis: 462–Acute pharyngitis: 465.9–Acute upper respiratory infection: 466 –Acute bronchitis: 786.2–Cough) among members under 21 years of age who had a visit to the ED in selected hospitals in the CMO’s expansion population.

Table 1-4 outlines the key study indicators incorporated for the two satisfaction-based PIPs.

The effectiveness of the *Member Satisfaction* PIP was measured using the Consumer Assessment of Healthcare Providers and Systems (CAHPS) 5.0H, Medicaid Child Survey. This survey provided information on parents’ experiences with their child’s provider and CMO.

The final AMERIGROUP PIP topic was *Provider Satisfaction*. AMERIGROUP contracted with a vendor to produce and administer a survey to document the effectiveness of this performance improvement project.

Table 1-4—Satisfaction-Based Study Indicators

Survey Type	Question	Survey Question
Member	#36	The percentage of respondents who rate the health plan an 8, 9, or 10 in response to the question “Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your child’s health plan?”
Provider	#49	The percentage of providers who respond “very satisfied” or “somewhat satisfied” to the question “Please rate your overall satisfaction with Amerigroup.”

Validation Overview

HSAG obtained the data needed to conduct the PIP validation from AMERIGROUP's PIP Summary Forms. These forms provided detailed information about AMERIGROUP's completed PIP activities.

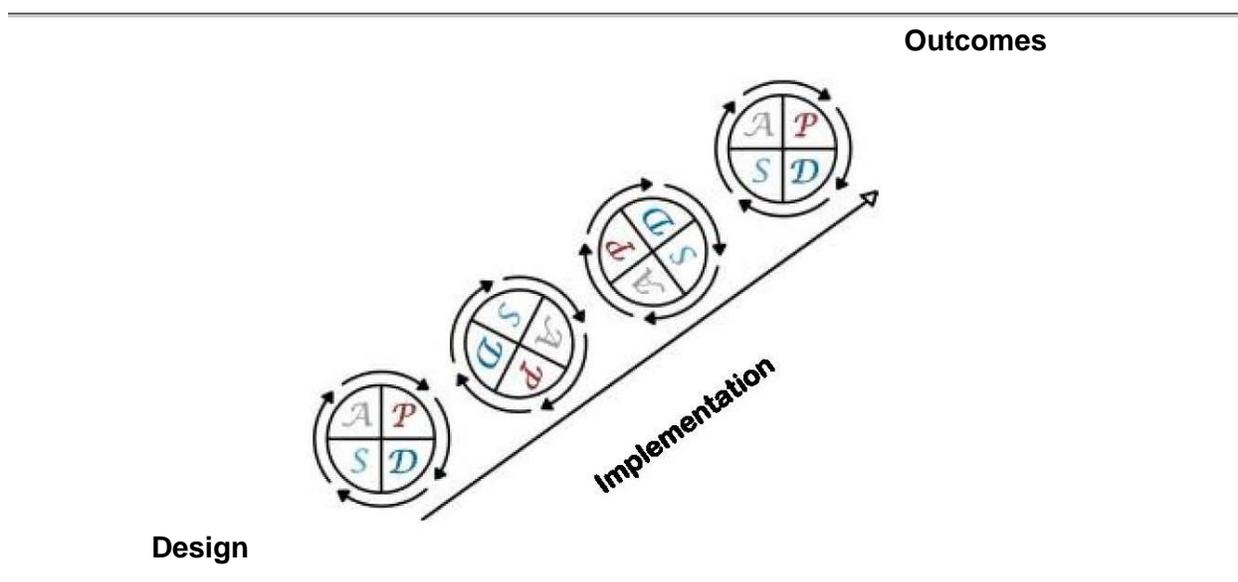
Each required activity was evaluated on one or more elements that form a valid PIP. The HSAG PIP Review Team scored each evaluation element within a given activity as *Met*, *Not Met*, *Not Applicable*, or *Not Assessed*. In consultation with DCH and in an effort to more clearly distinguish when evaluation criteria for each element were fulfilled, HSAG removed *Partially Met* from the scoring options for this year's validation cycle. HSAG designated some of the evaluation elements deemed pivotal to the PIP process as critical elements. For a PIP to produce valid and reliable results, all of the critical elements had to be scored *Met*. Given the importance of critical elements to the scoring methodology, any critical element that received a *Not Met* score resulted in an overall validation status for the PIP of *Not Met*. The CMO was also given a *Not Met* validation status if less than 80 percent of all evaluation elements were scored *Met*. HSAG provided a *Point of Clarification* when the CMO fully met the evaluation element criteria and only minor documentation edits not critical to the validity of the PIP were recommended to the CMO.

In addition to the overall validation status (e.g., *Met*) HSAG provided an overall percentage for all evaluation elements (including critical elements) scored *Met*. HSAG calculated the overall percentage by dividing the total number of elements scored *Met* by the total number of elements scored *Met* and *Not Met*. HSAG also calculated a critical element overall percentage by dividing the total number of critical elements scored *Met* by the sum of the critical elements scored *Met*, and *Not Met*.

Figure 1-1 illustrates the three stages of the PIP process: Design, Implementation, and Outcomes. The Design stage establishes the methodological framework for the PIP. The activities in this stage include development and documentation of the study topic, question, indicators, population, sampling, and data collection. A sound study design is necessary for the successful implementation of improvement strategies.

Once the study design is established, the PIP process moves into the Implementation stage. This stage includes data analysis and implementation of improvement strategies. During the Implementation stage, the CMOs should incorporate a continuous or rapid cycle improvement model such as the Plan-Do-Study-Act (PDSA) Cycle to determine the effectiveness of the implemented interventions.

Figure 1-1—PIP Stages Incorporating the PDSA Cycle



The PDSA cycle includes the following actions:

- ◆ **Plan**—conduct barrier analyses; prioritize barriers; develop targeted intervention(s) to address barriers; and develop an intervention evaluation plan for each intervention
- ◆ **Do**—implement intervention; track and monitor the intervention; and record the data
- ◆ **Study**—analyze the data; compare results; and evaluate the intervention’s effectiveness
- ◆ **Act**—based on the evaluation results, standardize, modify, or discontinue the intervention

The PDSA cycle is repeated throughout each measurement period. The implementation of effective improvement strategies is necessary to improve PIP outcomes. The final Outcomes stage evaluates for statistically significant and sustained improvement of the project outcomes. Once statistically significant improvement in the outcomes is achieved, the improvement must be sustained in a subsequent measurement period. If the outcomes do not improve, the CMO’s responsibility is to continue the PDSA cycle until statistically significant improvement is achieved and sustained.

HSAG’s Validation Scoring Methodology

The scoring methodology evaluates whether or not the CMO met all the documentation requirements according to the CMS protocols, as well as evaluates whether or not all study indicators have achieved statistically significant improvement over the baseline rate. In Activity IX (real improvement achieved), the CMO must achieve statistically significant improvement across all study indicator(s) between the baseline and a subsequent measurement period to receive a *Met* score. For Activity X (sustained improvement achieved), HSAG assesses for sustained improvement once all study indicators achieve statistically significant improvement over the baseline and the CMO reports a subsequent measurement period. All study indicators must achieve statistically significant improvement and sustain this improvement to receive a *Met* validation score in Activity X.

Aggregate Validation Findings

HSAG organized, aggregated, and analyzed AMERIGROUP’s PIP data to draw conclusions about the CMO’s quality improvement efforts. The PIP validation process evaluated both the technical methods of the PIP (i.e., the study design) and the outcomes associated with the implementation of interventions. Based on its review, HSAG determined the overall methodological validity of the PIPs, as well as the overall success in achieving improved study indicator outcomes. The results are presented in Table 2-1.

**Table 2-1—Performance Improvement Project Validation Scores
for AMERIGROUP Community Care**

PIP	Percentage of Evaluation Elements Scored <i>Met</i>	Percentage of Critical Elements Scored <i>Met</i>	Validation Status
<i>Adolescent Well-Care Visits</i>	98%	100%	<i>Met</i>
<i>Annual Dental Visits</i>	71%	82%	<i>Not Met</i>
<i>Appropriate Use of ADHD Medication</i>	92%	91%	<i>Not Met</i>
<i>Avoidable Emergency Room Visits</i>	74%	73%	<i>Not Met</i>
<i>Childhood Immunization—Combo 10</i>	98%	100%	<i>Met</i>
<i>Childhood Obesity</i>	94%	93%	<i>Not Met</i>
<i>Comprehensive Diabetes Care</i>	86%	86%	<i>Not Met</i>
<i>Member Satisfaction</i>	93%	100%	<i>Met</i>
<i>Postpartum Care</i>	88%	86%	<i>Not Met</i>
<i>Provider Satisfaction</i>	90%	86%	<i>Not Met</i>

Three of the 10 PIPs, *Adolescent Well-Care Visits*, *Childhood Immunizations—Combo 10*, and *Member Satisfaction* received an overall *Met* validation status. The remaining seven PIPs received a *Not Met* score for one or more critical evaluation elements, which resulted in a *Not Met* validation status.

Table 2-2 displays the combined validation results for all 10 AMERIGROUP PIPs validated. This table illustrates the CMO’s application of the PIP process and its success in implementing all 10 projects. Each activity was composed of individual evaluation elements scored as *Met* or *Not Met*. Elements receiving a *Met* score satisfied the necessary technical requirements for a specific element. The validation results presented in Table 2-2 show the percentage of applicable evaluation elements that received a *Met* score by activity. Additionally, HSAG calculated an overall percentage of *Met* scores across all activities for all 10 PIPs. Appendix A provides the detailed scores from the validation tool for each of the 10 PIPs.

**Table 2-2—Performance Improvement Project Validation Results
for AMERIGROUP Community Care (N=10 PIPs)**

PIP Stage	Activity	Percentage of Applicable Elements	
		<i>Met</i>	<i>Not Met</i>
Design	Appropriate Study Topic	95% (54/57)	5% (3/57)
	Clearly Defined, Answerable Study Question(s)	100% (20/20)	0% (0/20)
	Correctly Identified Study Population	96% (27/28)	4% (1/28)
	Clearly Defined Study Indicator(s)	100% (58/58)	0% (0/58)
	Valid Sampling Techniques (if sampling was used)	100% (42/42)	0% (0/42)
	Accurate/Complete Data Collection	93% (77/83)	7% (6/83)
Design Total		97% (278/288)	3% (10/288)
Implementation	Sufficient Data Analysis and Interpretation of Results	90% (78/87)	10% (9/87)
	Appropriate Improvement Strategies	62% (23/37)	38% (14/37)
Implementation Total		81% (101/124)	19% (23/124)
Outcomes	Real Improvement Achieved	63% (25/40)	38% (15/40)
	Sustained Improvement Achieved	100% (2/2)	0% (0/2)
Outcomes Total		64% (27/42)	36% (15/42)
Percentage of Applicable Evaluation Elements Scored <i>Met</i>		89% (406/454)	

Overall, 89 percent of the evaluation elements across all 10 PIPs received a *Met* score. AMERIGROUP demonstrated strong performance in the Design stage; however, the CMO was less successful in the Implementation and Outcomes stages. The following subsections highlight HSAG's validation findings associated with each of the three PIP stages.

Design

AMERIGROUP met 97 percent of the requirements across all 10 PIPs for the six activities within the Design stage. The technical design of each PIP was sufficient to measure and monitor PIP outcomes. The solid foundation of the PIPs allowed for the CMO to progress to the next stage of the PIP process.

Implementation

AMERIGROUP met 81 percent of the requirements for the two activities within the Implementation stage. The most common errors in the Sufficient Data Analysis and Interpretation of Results activity were incorrect, incomplete, or inconsistent documentation of the findings in the narrative interpretation. Additionally, the CMO reported inaccurate data components and performed statistical testing incorrectly in some of the PIPs. In the Appropriate Improvement Strategies activity, AMERIGROUP did not document sound and comprehensive causal/barrier analysis processes in most of its PIPs. The documented improvement strategies did not all appear to be system changes that were likely to induce long-term change in the study indicators. The CMO also did not consistently document that it revised interventions in response to the lack of statistically significant improvement in the study indicators.

Outcomes

This year, all 10 PIPs were evaluated for achieving statistically significant improvement over baseline. Four PIPs (*Adolescent Well-care Visits*, *Childhood Immunizations—Combo 10*, *Childhood Obesity*, and *Member Satisfaction*) achieved statistically significant improvement over baseline across all study indicators at the current measurement period. The *Annual Dental Visits* PIP achieved statistically significant improvement from baseline to Remeasurement 1 for two of the three study indicators. Only two of the 10 PIPs, *Childhood Immunizations—Combo 10* and *Childhood Obesity*, progressed to the point of being assessed for sustained improvement. Sustained improvement is defined as statistically significant improvement in performance over baseline that is maintained or increased for at least one subsequent measurement period. Additionally, the results of the most current measurement period must reflect improvement when compared to baseline results. Both PIPs assessed for sustained improvement achieved it for all study indicators during the current measurement period.

PIP-Specific Outcomes

Analysis of Results

Each table below displays the study indicator rates for each measurement period of the PIP, including the baseline period and each subsequent measurement period. Statistically significant changes between remeasurement periods are noted with an upward or downward arrow followed by an asterisk. Statistical significance is based on the p value calculated from a statistical test comparing measurement period rates. Differences in these rates that resulted in a p value less than 0.05 were considered statistically significant. Please note that it is possible for a percentage point difference between measurement period rates to appear large without being statistically significant. In certain instances, the study indicator denominators may not be large enough to have sufficient power to detect statistically significant difference. Similarly, the reverse may also occur: a *small* percentage point difference between measurement period rates with *large* denominators may result in a small percentage point difference that is statistically significant because larger denominators have greater power to detect statistically significant differences.

If the PIP achieved statistically significant improvement over the baseline rate during a previous measurement period, it was then reviewed for sustained improvement. Additionally, the most current measurement period's results must reflect statistically significant improvement when compared to the baseline results for all study indicators. PIPs that did not achieve statistically significant improvement (i.e., did not meet the criteria to be assessed for sustained improvement) were not assessed (NA). Comparisons of study indicator results that utilized HEDIS measures were made using the Medicaid HEDIS 2012 Audit, Means, Percentiles, and Ratios (reflecting the 2011 calendar year [CY]).

AMERIGROUP was not successful in achieving the desired outcomes for all study indicators. Four of the 10 PIPs achieved statistically significant improvement over baseline across all study indicators, and only two PIPs demonstrated sustained improvement over baseline.

The identification of barriers through barrier analysis, the selection of appropriate interventions to address identified barriers, and the ongoing evaluation of intervention effectiveness are necessary steps to improve outcomes. AMERIGROUP's processes for causal/barrier analysis, intervention implementation, and intervention evaluations are all essential to the overall success of the PIPs. Deficiencies were identified during the validation process in each of these areas and will be explained in further detail below.

Adolescent Well-Care

**Table 2-3—Performance Improvement Project Outcomes
for Adolescent Well-Care Visits**

Study Indicator	Baseline Period (1/1/11–12/31/11)	Remeasurement 1 (1/1/12–12/31/12)	Remeasurement 2 (1/1/13–12/31/13)	Sustained Improvement [^]
The percentage of members 12–21 years of age who had at least one comprehensive well-care visit with a PCP or an OB/GYN practitioner during the measurement year.	43.9%	46.6%	52.5%	NA
NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed. [^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period's results must reflect statistically significant improvement when compared to the baseline results for all study indicators.				

For AMERIGROUP's *Adolescent Well-Care Visits* PIP, the rate of adolescents with at least one comprehensive well-care visit increased by 5.9 percentage points from Remeasurement 1 to Remeasurement 2. While the increase from Remeasurement 1 to Remeasurement 2 was not statistically significant, the Remeasurement 2 study indicator rate was a statistically significant improvement over baseline. The Remeasurement 2 rate exceeded the DCH 2013 target rate of 49.7 percent and was between the national Medicaid HEDIS 2012 50th and 75th percentiles.

A critical analysis of the CMO's improvement process for this PIP revealed that AMERIGROUP analyzed barriers to improving the *Adolescent Well-Care Visits* study indicator rate through multidisciplinary discussion, brainstorming, and review of rates. Identified barriers were summarized in an updated fishbone diagram. Barriers that the CMO believed it could

realistically impact were identified as priorities: transportation issues, lack of awareness about when members are due for a well-care visit, and lack of member and provider incentives.

The CMO directed system-based interventions toward members and providers during the second remeasurement period to address priority barriers:

- ◆ Engagement and support of high-volume providers seeking the NCQA-Patient-Centered Medical Home (PCMH) Recognition; monitoring provider participation in the Provider Quality Incentive Program (PQIP) .
- ◆ My Health Direct program, which enables internal member service associates to schedule well-visit appointments for noncompliant members.
- ◆ “Clinic Days” educational member events to promote completion of well-care visits.
- ◆ Member outreach via live telephone calls to noncompliant members to educate and offer transportation assistance for well-care visits.
- ◆ Transportation assistance for members due for a well-care visit.

AMERIGROUP documented quantitative, intervention-specific evaluation results as part of the PIP and used evaluations of effectiveness to guide decisions about continuing, revising, or discontinuing the interventions. The CMO planned revisions to ongoing interventions aimed at achieving further improvement following the second remeasurement. Going forward, the CMO should continue quantitative evaluation of effectiveness of each intervention. Conducting ongoing evaluations and regularly reviewing evaluation results will help the CMO refine improvement strategies to fully address barriers to improvement, which should result in sustained improvement in outcomes.

Annual Dental Visits

**Table 2-4—Performance Improvement Project Outcomes
for Annual Dental Visits**

Study Indicator	Baseline (10/1/2011–9/30/2012)	Remeasurement 1 (10/1/2012–9/30/2013)	Sustained Improvement [^]
1. The percentage of EPSDT eligible members ages 1–20 who received any dental services during the measurement period (CMS 416 12A).	54.2%	56.6% ^{↑*}	NA
2. The percentage of EPSDT eligible members ages 1–20 who received preventive dental services during the measurement period (CMS 416 12B).	51.1%	49.49% ^{↓*}	NA
3. The percentage of EPSDT eligible members ages 6–9 who received preventive dental services during the measurement period (CMS 416 12D).	22.4%	26.9% ^{↑*}	NA
^{↑*} Designates statistically significant improvement over the prior measurement period (p value < 0.05). ^{↓*} Designates statistically significant decline over the prior measurement period (p value < 0.05). NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed. [^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period's results must reflect statistically significant improvement when compared to the baseline results for all study indicators.			

For first remeasurement of the *Annual Dental Visits* PIP, AMERIGROUP achieved statistically significant improvement over baseline rates for Study Indicators 1 and 3, but there was a statistically significant decline in the rate of Study Indicator 2 at Remeasurement 1. The rate for Study Indicator 2 (preventive dental services) fell below the baseline rate and continued to fall below the DCH 2013 target rate of 58.0 percent.

A critical analysis of the CMO's quality improvement process and strategies for this PIP identified several factors which likely led to the mixed study indicator performance at the second remeasurement. While AMERIGROUP completed an annual causal/barrier analysis and documented some evaluation of intervention effectiveness, the PIP documentation suggested several deficiencies in the quality improvement process.

AMERIGROUP's internal interdisciplinary team discussed baseline study indicator results, reviewed further data analysis, and conducted process reviews to identify barriers, which were summarized using a fishbone diagram. The CMO identified priority areas for intervention by considering which barriers could be most effectively impacted with known resources.

While some interventions were strongly linked to the causal/barrier analysis and study indicators, other interventions were unlikely to have a significant impact on improvement. The stronger, system-based strategies included mobile dental units accompanied by member outreach for appointment scheduling and Health Promotion coordinator visits with providers to support referrals for annual dental services. Other documented interventions, such as robotic calls to members and text messaging, may increase awareness of the importance of annual dental visits, but they would not address barriers to making and keeping dental appointments.

The CMO did not document any revision of the improvement strategies to address the statistically significant decline at Remeasurement 1 demonstrated by one of the three study indicators. Approximately six months had passed between the completion of the first remeasurement and the submission of the PIP for validation; during that time, the CMO should have conducted further drill-down analysis to determine why one study indicator declined while the other two indicators improved. The CMO should have documented follow-up analyses and implementation of new or revised interventions to address the performance decline.

The PIP documentation suggested some limitations to AMERIGROUP's methods for evaluating the effectiveness of its interventions. The CMO documented that it used the HEDIS *Annual Dental Visit* (ADV) measure as an interim, proxy measure for evaluating the effectiveness of the PIP's interventions. While the ADV measure may be similar to Study Indicator 1 (any dental service visit), it is substantially different from Study Indicators 2 (preventive dental visit) and 3 (receiving a dental sealant), which are both preventive dental services. Given the mixed performance of the study indicators, it is clear that interventions that may impact some of the study indicators will not necessarily impact all. The CMO should monitor the effectiveness of its interventions by using measures directly related to the study indicators.

Appropriate Use of ADHD Medications

**Table 2-5—Performance Improvement Project Outcomes
for Appropriate Use of ADHD Medications**

Study Indicator	Baseline Period (1/1/11–12/31/11)	Remeasurement 1 (1/1/12–12/31/12)	Remeasurement 2 (1/1/13–12/31/13)	Sustained Improvement [^]
1. The percentage of members 6–12 years of age as of the Index Prescription Start Date (IPSD) with an ambulatory prescription dispensed for ADHD medication, who had one follow-up visit with a practitioner with prescribing authority during the 30-day Initiation Phase.	44.3%	42.3%	43.1%	NA
2. The percentage of members 6–12 years of age as of the Index Prescription Start Date (IPSD) with an ambulatory prescription dispensed for ADHD medication, who remained on the medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least two follow-up visits with a practitioner from 31–300 days following the IPSD. One of the two visits (during days 31–300) may be a telephone visit with a practitioner.	61.2%	58.2%	59.2%	NA
NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed.				
[^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period's results must reflect statistically significant improvement when compared to the baseline results for all study indicators.				

Neither study indicator in the *Appropriate Use of ADHD Medications* PIP achieved statistically significant improvement over baseline at Remeasurement 2. While the rates of Study Indicator 1 (initiation phase follow-up visit) and Study Indicator 2 (continuation phase follow-up visit) increased from Remeasurement 1 to Remeasurement 2, the improvements were not statistically significant, and the rates of both study indicators remained below baseline. The Remeasurement 2 rates for Study Indicators 1 (initiation) and 2 (continuation) fell below the 2013 DCH target rates of 52.5 percent and 63.1 percent, respectively. In comparison with the national Medicaid HEDIS 2012 rates, the Remeasurement 2 rate for Study Indicator 1 fell between the 50th and 75th percentiles, and the rate for Study Indicator 2 was between the 75th and 90th percentiles.

An analysis of the plan's improvement strategy for this PIP identified weaknesses which may have led to the lack of statistically significant improvement at Remeasurement 2. While the desired improvement was not achieved at the second remeasurement, the CMO documented follow-up analyses and revised improvement strategies in response to the insufficient improvement.

AMERIGROUP’s interdisciplinary team discussed interim results and updated the fishbone analysis to identify barriers for the Remeasurement 2 period.

The CMO continued five provider- and member-focused interventions from the previous measurement period including e-mail of HEDIS report cards, face-to-face visits with providers, member focus groups, appointment reminder calls, and support of providers seeking the NCQA Patient-Centered Medical Home (PCMH) Recognition. During the current remeasurement period, AMERIGROUP initiated one new intervention in which a nurse practice consultant began face-to-face visits with low-performing providers. The face-to-face visits included review of the HEDIS report cards, sharing best practices to improve medication follow-up visit rates, and further follow-up with providers on specific members identified as having a “first fill” of ADHD medication.

The CMO acknowledged in the PIP Summary Form that the study indicator results demonstrated a lack of improvement and the need to redirect their improvement strategies. As a result, the CMO documented a new incentive program that was initiated in response to the lack of significant improvement during the Remeasurement 2 period. AMERIGROUP is piloting an incentive program for appointment schedulers to ensure that the ADHD medication follow-up appointments are scheduled and completed in the recommended time frames.

While AMERIGROUP documented evaluation processes and results for some interventions, the CMO stated that three interventions were continued without evaluation of effectiveness. Based on the lack of improvement over baseline demonstrated by the study indicators, it is clear that the interventions were not effectively addressing all of the critical barriers necessary for improvement in outcomes. The CMO should have an evaluation in place for each intervention to enable informed, data-driven decisions about continuing, revising, or discontinuing interventions.

Childhood Immunizations—Combo 10

**Table 2-6—Performance Improvement Project Outcomes
for Childhood Immunizations—Combo 10**

Study Indicator	Baseline Period (1/1/11–12/31/11)	Remeasurement 1 (1/1/12–12/31/12)	Remeasurement 2 (1/1/13–12/31/13)	Sustained Improvement [^]
The percentage of children 2 years of age who had four diphtheria, tetanus and acellular pertussis (DTaP); three polio (IPV); one measles, mumps, rubella (MMR); three H influenza type B (HiB); three hepatitis B (HepB); one chicken pox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday.	10.4%	31.9% ^{↑*}	37.7%	Yes
^{↑*} Designates statistically significant improvement over the prior measurement period (p value < 0.05). [^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period’s results must reflect statistically significant improvement when compared to the baseline results for all study indicators.				

AMERIGROUP achieved sustained statistically significant improvement over the baseline rate at the second remeasurement for the *Childhood Immunizations—Combo 10* PIP. The Remeasurement 2 rate represented an increase of 5.8 percentage points over the Remeasurement 1 rate and an increase of 27.3 percentage points from baseline to Remeasurement 2. The Remeasurement 2 rate also surpassed the 90th percentile of the national Medicaid HEDIS 2012 rates.

A critical review of the quality improvement process used for this PIP identified the following:

- ◆ AMERIGROUP’s team, including the medical director, medical management, quality management, and provider relations departments, reviewed data analysis results to identify barriers, which were summarized in an updated fishbone diagram. The team developed interventions based on the outcomes from the fishbone analysis and further discussion to determine priority barriers that could be most effectively impacted by the CMO.
- ◆ In CY 2013, AMERIGROUP continued member- and provider-focused interventions based on evaluation results and the improvement demonstrated during the previous measurement period. The CMO continued the PQIP provider incentive program for improving quality scores based partly on immunization rates; the distribution of corrective action plans to low-performing, high-volume providers; Health Promotion coordinator face-to-face visits with providers; live member outreach calls; “Clinic Days” events with member incentives to facilitate immunizations for noncompliant members; and the My Health Direct program, which enables internal member service associates to schedule well-visit appointments for noncompliant members.
- ◆ AMERIGROUP documented the revision of several interventions based directly on results of evaluations of effectiveness. For example, an evaluation of the “Clinic Days” events schedule determined that the event attendance rate varied by season; therefore, the CMO planned future events to occur during months with historically higher event attendance so that a greater percentage of “Clinic Days” appointments would be kept, leading to a greater number of members receiving needed immunizations. Additionally, the CMO identified several planned revisions to its member outreach call intervention, based on evaluation results, which included increasing the gift cards available as member incentives, developing a new outreach database to track due/past-due members, and measuring the volume of appointments scheduled as part of member outreach associates’ performance reviews.

Childhood Obesity

**Table 2-7—Performance Improvement Project Outcomes
for Childhood Obesity**

Study Indicator	Baseline Period (1/1/09–12/31/09)	Remeasurement 1 (1/1/10–12/31/10)	Remeasurement 2 (1/1/11–12/31/11)	Remeasurement 3 (1/1/12–12/31/12)	Remeasurement 4 (1/1/13–12/31/13)	Sustained Improvement [^]
The percentage of members 3–17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of BMI percentile documentation.	13.7%	28.5% ^{↑*}	33.3%	40.7% ^{↑*}	47.9% ^{↑*}	Yes
The percentage of members 3–17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of counseling for nutrition.	40.7%	48.8% ^{↑*}	58.3% ^{↑*}	52.3%	54.6%	Yes
The percentage of members 3–17 years of age who had an outpatient visit with a PCP or OB/GYN and who had evidence of counseling for physical activity.	35.6%	30.9%	44.9% ^{↑*}	39.8%	47.2% ^{↑*}	Yes
^{↑*} Designates statistically significant improvement over the prior measurement period (p value < 0.05). [^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period's results must reflect statistically significant improvement when compared to the baseline results for all study indicators.						

At Remeasurement 4, the AMERIGROUP *Childhood Obesity* PIP sustained statistically significant improvement over the baseline rate for all three study indicators. The Remeasurement 4 rates for Study Indicators 1 (BMI percentile documentation) and 3 (evidence of physical activity counseling) exceeded the 2013 DCH Target rates of 47.5 percent and 43.3 percent, respectively, while the rate for Study Indicator 2 (evidence of nutrition counseling) fell just below the 2013 DCH Target rate of 54.9 percent. In comparison to the national HEDIS 2012 rates, the rates for Study Indicators 1 and 3 were between their respective 50th and 75th percentiles, and the rate for Study Indicator 2 fell below the 50th percentile.

A critical review of AMERIGROUP's quality improvement process and improvement strategies for this PIP suggested that the CMO's causal/barrier analysis, evaluation of intervention effectiveness, and appropriate revision of improvement strategies helped to achieve sustained improvement across all three study indicators.

While some of the CMO's interventions clearly impacted the study indicators, the CMO continued to implement other interventions that were not directly related to the PIP's provider-based outcomes. Even though study indicators for this PIP were provider driven, AMERIGROUP continued its two-pronged approach, targeting both member and provider interventions. The study indicators, measuring provider documentation of BMI percentile and nutrition and physical activity counseling during a well-care visit, will not be impacted simply by ensuring members are compliant with well-care visits. The documented member-focused interventions that clearly will not impact the study indicators were:

- ◆ "Clinic Days" educational member events to promote completion of well-care visits.
- ◆ Transportation assistance for members due for a well-care visit.
- ◆ Text messages sent to member households via cellular phones provided by SafeLink.

To successfully impact the PIP's targeted outcomes, the CMO should work to improve physician compliance with these activities during well-care visits. AMERIGROUP's documented interventions that were physician-focused and could be directly linked to the study indicator performance through intervention-specific evaluation of effectiveness were:

- ◆ Distribution of corrective action plans (CAP) to physicians with noncompliant Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) medical records.
- ◆ Engagement and support of high-volume providers seeking the NCQA PCMH Recognition and monitoring through the PQIP provider incentive program.
- ◆ In-person consultation of Health Promotion coordinators with providers including review of the HEDIS report card showing performance on the study indicators and distribution of a HEDIS billing guide, which provided the correct coding for BMI documentation, nutrition counseling, and physical activity counseling.

Going forward, AMERIGROUP should continue to use intervention-specific evaluation results, linked to study indicator performance, to guide decisions about continuing/expanding, revising, or discontinuing interventions for the PIP. This approach will not only support continued performance improvement but will also help to ensure that limited resources are targeted appropriately.

Comprehensive Diabetes Care

**Table 2-8—Performance Improvement Project Outcomes
for Comprehensive Diabetes Care**

Study Indicator	Baseline Period (1/1/11–12/31/11)	Remeasurement 1 (1/1/12–12/31/12)	Remeasurement 2 (1/1/13–12/31/13)	Sustained Improvement [^]
The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had an HbA1c control < 7.0%.	32.1%	30.6%	27.7%	NA
The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had a LDL-C control < 100mg/ml.	26.4%	27.3%	27.0%	NA
The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had a BP control < 140/90 mmHg.	58.2%	55.1%	53.2%	NA
NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed.				
[^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period's results must reflect statistically significant improvement when compared to the baseline results for all study indicators.				

None of the study indicators for the Comprehensive Diabetes Care PIP achieved statistically significant improvement over baseline rates at Remeasurement 2. The rates of all three study indicators declined from Remeasurement 1 to Remeasurement 2. Additionally, the rates of Study Indicators 1 (HbA1c control < 7.0%) and 3 (BP Control < 140/90 mmHg) remained below baseline at Remeasurement 2. The Remeasurement 2 rates for all three study indicators fell below the 25th percentiles of the national HEDIS 2012 rates and below the CY 2013 DCH targets of 36.7 percent (HbA1c control < 7.0%), 35.9 percent (LDL-C control < 100 mg/ml), and 63.5 percent (BP Control < 140/90 mmHg).

Through the critical analysis of AMERIGROUP's quality improvement processes and strategies, HSAG identified a number of deficiencies that contributed to the lack of performance improvement in the Comprehensive Diabetes Care PIP.

The CMO documented that its multidisciplinary team completed a causal/barrier analysis for the Remeasurement 2 period by reviewing and discussing prior results, summarizing barriers in a fishbone diagram. Although the Remeasurement 1 results did not demonstrate any statistically significant improvement, the CMO did not identify any new barriers in the fishbone diagram for Remeasurement 2. Consequently, the interventions implemented during the Remeasurement 2 period included only slight revisions from those implemented during the Remeasurement 1 period despite the lack of improvement.

In addition to continuing interventions during the Remeasurement 2 period that did not have a significant impact on outcomes at Remeasurement 1, the CMO implemented interventions that appeared to reach a relatively small proportion of the eligible member population and often targeted diabetic screening outcomes rather than the diabetic control outcomes measured by the PIP's study indicators. While increasing the number of screened members may help to improve

the study indicator rates, interventions need to go beyond simply getting members in for screening in order to significantly improve the rates of members with HbA1c, LCL-C, and BP levels in control. Some of the interventions which focused solely on screening, that did not directly impact the study indicators included:

- ◆ Robotic calls to diabetic members to remind them of diabetic screenings.
- ◆ Member incentive program that allowed for the distribution of \$25 for every member who received an HbA1c, LDL-C, and BP screening.
- ◆ Engagement and support of high-volume providers seeking the NCQA recognized Patient Center Medical Home certification and monitoring through the PQIP provider incentive program.

Below are the member- and provider-focused interventions that AMERIGROUP implemented which could clearly impact members' control of their diabetes:

- ◆ Distributed HEDIS report cards showing providers' performance on HEDIS diabetes control measures.
- ◆ Enrolled members identified as having uncontrolled diabetes into nurse-led case management, disease management, and quality management programs.
- ◆ Held diabetes events targeting noncompliant members to provide nutritional counseling, blood pressure screening, LDL screening, and additional educational materials.

While the CMO's improvement strategies for the Remeasurement 2 period had a number of flaws, as described above, AMERIGROUP documented planned revisions for CY 2014 that were based on the study indicator findings and results of intervention-specific evaluations of effectiveness. The CMO acknowledged the lack of improvement to date and reported that they would be revisiting the causal/barrier analysis process and seeking out new improvement strategies to improve diabetic control in their members.

Avoidable Emergency Room Visits

**Table 2-9—Performance Improvement Project Outcomes
for Avoidable Emergency Room Visits**

Study Indicator	Baseline Period (1/1/11–12/31/11)	Remeasurement 1 (1/1/12–12/31/12)	Remeasurement 2 (1/1/13–12/31/13)	Sustained Improvement [^]
1. The percentage of ER visits for “avoidable” diagnoses (dx382–Acute Suppurative otitis:382.9–Unspecified otitis:462–Acute pharyngitis:465.9–Acute upper respiratory infection:466 –Acute bronchitis:786.2–Cough) among members under 21 years of age who had a visit to the ED in three selected Children’s Healthcare of Atlanta facilities in the Atlanta region.	22.8%	23.3%	23.5%	NA
Study Indicator	Baseline Period (1/1/13–12/31/13)	Remeasurement 1 (1/1/14–12/31/14)	Remeasurement 2 (1/1/15–12/31/15)	Sustained Improvement
2. The percentage of ER visits for “avoidable” diagnoses (dx382–Acute Suppurative otitis: 382.9–Unspecified otitis: 462–Acute pharyngitis: 465.9–Acute upper respiratory infection: 466 –Acute bronchitis: 786.2–Cough) among members under 21 years of age who had a visit to the ED in selected hospitals in the CMO’s expansion population.	22.3%			NA
NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed.				
[^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period’s results must reflect statistically significant improvement when compared to the baseline results for all study indicators.				

In CY 2013, for the *Avoidable Emergency Room Visits* PIP, AMERIGROUP collected Remeasurement 2 data for Study Indicator 1 (the percentage of ER visits for avoidable diagnoses in select facilities in the Atlanta region) and collected baseline data for a new Study Indicator 2, which measured the percentage of ER visits for avoidable diagnoses in select hospitals in the CMO’s expansion population. For the second remeasurement of Study Indicator 1, AMERIGROUP did not demonstrate statistically significant improvement over baseline; the rate increased from Remeasurement 1 to Remeasurement 2 by 0.2 percentage point. The Study Indicator 1 rate remained above baseline and also exceeded the DCH 2013 target rate of 21.69 percent. Because the avoidable ER visits rate was an inverse study indicator, for which a lower rate is better, the increase from Remeasurement 1 to Remeasurement 2 demonstrated a decline in performance.

AMERIGROUP reported baseline data for Study Indicator 2 (the percentage of ER visits for select avoidable diagnoses at select facilities in the expansion population). The baseline rate for Study Indicator 2 was 22.3 percent, which was below (better than) the DCH 2013 target rate of 23.38 percent.

The critical analysis of AMERIGROUP's quality improvement process and strategies for the *Avoidable Emergency Room Visits* PIP suggested several areas that need to be addressed in order to achieve statistically significant improvement in the avoidable ER visits rate. The CMO documented the multidisciplinary team that was involved in the quality improvement process and the cause and effect diagram that was used to summarize identified barriers. Team discussions included a review of prior study indicator results and considered all potential barriers. Priority barriers were identified based on whether they could be realistically impacted by the CMO. The interventions, targeting providers and members, addressed priority barriers such as lack of member knowledge about alternatives to ER care, lack of an established medical home for members, provider after-hours accessibility, and provider protocols for handling after-hours care needs and ER visit follow-up. Specific interventions implemented during CY 2013 were:

- ◆ Case management program for ER “ultra-utilizers.”
- ◆ On-site visits to 20 PCPs who have high-utilizing members and providing materials on the value of PCMHs.
- ◆ Member outreach via automated telephone calls and mailings.

Based on the PIP documentation submitted for validation, the CMO did not tailor the interventions to specifically target the expansion population for the new Study Indicator 2. It appeared that the interventions were meant to address both the Metro Atlanta member population (Study Indicator 1) and the expansion population (Study Indicator 2).

Although AMERIGROUP implemented some system changes identified through causal/barrier analysis, such as the case management program for ER “ultra-utilizers” and on-site PCP visits promoting PCMHs, Study Indicator 1 did not demonstrate improvement and instead demonstrated a trend of performance decline at Remeasurement 1 and Remeasurement 2. The CMO documented that each intervention was individually effective but, considering the PIP results to date, the interventions did not result in any improvement in the study indicator rate. This pattern suggests that the causal/barrier analysis was incomplete. Either the CMO did not identify all of the critical barriers to improving the avoidable ER visits rate or the interventions implemented to date were not sufficient to address the barriers. AMERIGROUP should revisit the causal/barrier analysis for this PIP, reviewing intervention evaluation results and performing additional drill-down analyses, to identify key drivers of avoidable ER visits that have not yet been addressed.

Member Satisfaction

**Table 2-10—Performance Improvement Project Outcomes
for Member Satisfaction**

Study Indicator	Baseline (2/22/12–5/9/13)	Remeasurement 1 (2/7/14–5/2/14)	Sustained Improvement [^]
The percentage of respondents who rate the health plan an 8, 9, or 10 in response to Q36 – “Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your child’s health plan?”	85.8%	90.7% ^{↑*}	NA
^{↑*} Designates statistically significant improvement over the prior measurement period (p value < 0.05). NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed. [^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period’s results must reflect statistically significant improvement when compared to the baseline results for all study indicators.			

AMERIGROUP achieved statistically significant improvement over baseline at Remeasurement 1 for the *Member Satisfaction* PIP. The study indicator rate from baseline to the first remeasurement increased by 4.9 percentage points.

A critical assessment of the quality improvement strategies applied to the *Member Satisfaction* PIP suggested some strengths and weaknesses in AMERIGROUP’s approach. The CMO’s quality improvement team reviewed processes, prior survey results, and additional data analyses, discussing all potential barriers to improving member satisfaction. The results of the causal/barrier analysis were summarized in an updated fishbone diagram.

The CMO used a three-pronged improvement strategy, implementing interventions focused on system changes, providers, and members. The CMO implemented 10 ongoing interventions to address physician awareness of member satisfaction, timeliness of care, member transportation issues, lack of access in rural areas, and member understanding of benefit coverage. Two new interventions implemented during the Remeasurement 1 period focused on improving provider understanding and awareness of member issues. To address lack of provider awareness of member dissatisfaction, the CMO presented member satisfaction results to all Provider Relations staff in an effort to help providers better understand and advocate for member needs. Additionally, AMERIGROUP distributed a provider tip sheet that covered the most commonly denied prescriptions and acceptable formulary replacements.

Although AMERIGROUP’s causal/barrier analysis process appeared to be sound and the CMO implemented system changes that resulted in statistically significant improvement at the first remeasurement, the PIP documentation did not provide details on how interventions were evaluated for effectiveness. The CMO also did not describe how successful interventions would be standardized to promote and sustain further improvement in member satisfaction. Going forward, the CMO should ensure that each intervention is accompanied by ongoing evaluation of effectiveness. Evaluation results, in combination with repeated causal/barrier analyses, should be used to drive continuation, expansion, and/or revision of improvement strategies. The ongoing

assessment of effectiveness is necessary to achieve sustained significant improvement in outcomes.

Postpartum Care

**Table 2-11—Performance Improvement Project Outcomes
for Postpartum Care**

Study Indicator	Baseline (1/1/12–12/31/12)	Remeasurement 1 (1/1/13–12/31/13)	Sustained Improvement [^]
The percentage of deliveries of live births by members that were followed by a postpartum visit on or between 21 and 56 days after delivery.	59.5%	60.8%	NA
NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed.			
[^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period's results must reflect statistically significant improvement when compared to the baseline results for all study indicators.			

For the *Postpartum Care* PIP, there was a non-statistically significant increase in the study indicator rate of 1.3 percentage points from baseline to Remeasurement 1. The Remeasurement 1 rate fell below the 2013 DCH target rate of 71.1 percent. In comparison with the national HEDIS 2012 rates, the study indicator rate fell between the 25th and the 50th percentiles.

A critical review of the quality improvement processes and strategies used by AMERIGROUP for this PIP revealed several shortcomings that may have prevented the CMO from achieving the desired improvement in outcomes.

The CMO's quality improvement team reviewed baseline PIP results and identified priority barriers that could be realistically impacted during their causal/barrier analysis. The team documented the factors impacting postpartum care rates using a key driver diagram. While the diagram included a global goal and SMART Aim, the documented aim required revision in order to truly be SMART (specific, measurable, achievable, realistic, and time-bound). The key drivers documented by AMERIGROUP were eligibility issues, postpartum program design, quality improvement data processes, Medicaid administration and payment procedures, provider practices, and member knowledge and behaviors. The CMO's documented SMART Aim was "To statistically significantly improve the percentage of Medicaid eligible women who receive postpartum care within 21-56 days after their live birth." The SMART Aim should be revised to specify the amount of improvement in the postpartum rate being sought and should provide a date by which the improvement will be achieved.

To address the identified key drivers, AMERIGROUP implemented the following interventions:

- ◆ Member outreach via phone calls and text to schedule postpartum care visits
- ◆ Pilot incentive program for OB provider schedulers to ensure completion of postpartum visits among eligible members
- ◆ Member incentive program for completion of postpartum visit

- ◆ Nurse consultant visits to low-performing providers to share best practices and facilitate improvement of postpartum visit rate

In response to the lack of statistically significant improvement in the study indicator rate and intervention evaluation results, the CMO documented planned intervention specific revisions for the following measurement period. The revisions include contracting a new vendor to complete telephone outreach to members due for a postpartum visit, seeking enhanced member contact information through an outside vendor, and incorporating appointment scheduling rate into the performance reviews of member outreach associates.

While the CMO documented the use of intervention effectiveness evaluations to determine revisions needed to achieve the desired improvement in outcomes, the PIP documentation lacked detail on the methods used to evaluate some of the interventions and quantitative evaluation results were not documented for all interventions. Going forward, AMERIGROUP should ensure that each intervention is accompanied by an ongoing, quantitative evaluation of effectiveness so that improvement strategies can be refined, as needed, in order to successfully impact barriers and outcomes. Effectiveness evaluation results should be used in conjunction with the results of a revisited causal/barrier analysis process. After reviewing study indicator and evaluation data, the CMO should review all identified key drivers and secondary drivers impacting postpartum care rates to ensure the key driver diagram is comprehensive and the SMART Aim is specific, measurable, and time-bound.

Provider Satisfaction

**Table 2-12—Performance Improvement Project Outcomes
for Provider Satisfaction**

Study Indicator	Baseline (8/1/12–11/30/12)	Remeasurement 1 (7/1/13–9/30/13)	Sustained Improvement[^]
The percentage of providers who respond, “Very satisfied” or, “Somewhat satisfied” to Q48 – “Please rate your overall satisfaction with Amerigroup.”	79.6%	84.2%	NA
NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed.			
[^] Sustained improvement is defined as statistically significant improvement in performance over baseline for all study indicators that is maintained or increased for at least one subsequent measurement period. Additionally, the most current measurement period’s results must reflect statistically significant improvement when compared to the baseline results for all study indicators.			

In AMERIGROUP’s *Provider Satisfaction* PIP, there was a non-statistically significant increase of 4.6 percentage points in the study indicator rate from baseline to Remeasurement 1.

The CMO’s interdisciplinary quality improvement team conducted a causal/barrier analysis for the Remeasurement 1 period, utilizing both a cause and effect diagram and a key driver analysis. All identified barriers were discussed by the team, and barriers believed to be primarily under the CMO’s control were identified as priorities. Priority barriers included claims payment accuracy, lack of staff support to the provider community, lack of responsiveness during claims payment

dispute process, and helpfulness of clinical practice guidelines for patient management. To address these priority barriers, AMERIGROUP implemented the following interventions, each of which can impact overall provider satisfaction:

- ◆ Increased the use of a proactive claims audit process to ensure accuracy of claims payment.
- ◆ Hired additional staff in Provider Relations, Operations / Claims, and Quality Management departments to increase support for providers.
- ◆ Enhanced processes involved in claims processing, payments, and claims payment disputes such as processed claims monitoring and additional staff training.
- ◆ Created a centralized online claims and appeals tool and tutorial for the provider Web site.
- ◆ Revised the clinical practice guidelines (CPGs) to a shorter, more provider-friendly format and made the CPGs more accessible on the provider Web site.

Given the lack of statistically significant improvement in the study indicator at Remeasurement 1, and the timing of the PIP's measurement periods, the PIP should have also included a description of a drill-down analysis of the Remeasurement 1 results to identify barriers not addressed. Because the Remeasurement 1 period ended in September 2013, the CMO should have documented follow-up analysis on the Remeasurement 1 survey results and the causal/barrier analysis activities occurring during the remainder of CY 2013 and the first half of CY 2014, prior to the PIP submission. As a result of the lack of statistically significant improvement, new and/or revised interventions need to be implemented during the Remeasurement 2 period to achieve the desired outcomes.

3. CONCLUSIONS AND RECOMMENDATIONS

for AMERIGROUP Community Care

Conclusions

AMERIGROUP's performance suggests a thorough application of the PIP Design stage (Activities I through VI). The sound study design of the PIPs formed the foundation for AMERIGROUP to progress to subsequent PIP stages—implementing improvement strategies and achieving real and sustained study indicator outcomes.

Although AMERIGROUP designed methodologically sound projects and implemented many interventions that were logically linked to barriers, only three of 10 PIPs demonstrated sustained statistically significant improvement over baseline. Critical examination of the CMO's quality improvement processes identified that AMERIGROUP's causal/barrier analyses were incomplete for some PIPs. The CMO reported quantitative evaluation results for some interventions but not for others. While some interventions were revised to address lack of significant improvement in the study indicators, others were not. To achieve desired improvement in outcomes across all PIPs, the CMO should ensure that the following recommendations are addressed.

Recommendations

HSAG recommends that AMERIGROUP:

- ◆ Ensure that all data components reported in each PIP are accurate and consistently documented throughout the PIP, and align with the data reported in the CMO's final audit report.
- ◆ Review narrative interpretation of PIP findings to ensure accuracy of the interpretation and consistency with results presented in table format.
- ◆ Ensure that all statistical testing is done correctly, and the documentation of the statistical testing outcomes is accurate and consistent throughout the PIP.
- ◆ Conduct causal/barrier and drill-down analyses more frequently than annually and incorporate quality improvement science such as PDSA cycles into its improvement strategies and action plans.
- ◆ Ensure that the interventions implemented to address a specific barrier are directly linked to that barrier and will directly impact PIP outcomes.
- ◆ Evaluate the efficacy of each intervention to determine if it is being successfully implemented and achieving the desired goal. The results of each intervention's evaluation for each remeasurement period should be included in the PIP.
- ◆ Design small-scale tests coupled with analysis of results to determine the success of the intervention. If the small-scale test results suggest that the intervention has been unsuccessful, the CMO should determine: (1) if the true root cause was identified—if not, the

CMO should conduct another causal/barrier analysis to isolate the true root cause or issue that is impacting improvement; and (2) if the interventions need to be revised because a new root cause was identified, or the intervention was unsuccessful. In evaluating the results of intervention testing, the CMO may find that the results of the test yield more information that directs the CMO to modify an existing intervention to yield a greater result. If the existing intervention is modified, the CMO should develop another test to evaluate the modified intervention's effectiveness if the current test is obsolete.

- ◆ Synthesize the results of intervention-specific evaluations with regular causal/barrier analyses to develop a complete picture of each PIP's progress toward improvement goals. If evaluation results suggest that individual interventions are successful but the study indicator rate(s) did not improve, the CMO should incorporate this information into further drill-down analyses to identify the true root causes of the lack of improvement.

Table A-1—AMERIGROUP Community Care’s SFY 2015 PIP Performance

Percentage of Applicable Evaluation Elements Scored <i>Met</i>											
PIP Stage	Activity	Adolescent Well-Care Visits	Annual Dental Visits	Appropriate Use of ADHD Medications	Childhood Immunizations —Combo 10	Childhood Obesity	Comprehensive Diabetes Care	Avoidable Emergency Room Visits	Member Satisfaction	Postpartum Care	Provider Satisfaction
Design	Appropriate Study Topic	100%	83%	100%	100%	100%	100%	100%	80%	83%	100%
	Clearly Defined, Answerable Study Question(s)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Correctly Identified Study Population	100%	100%	100%	100%	100%	100%	50%	100%	100%	100%
	Clearly Defined Study Indicator(s)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Valid Sampling Techniques (if sampling was used)	100%	<i>Not Applicable</i>	<i>Not Applicable</i>	100%	100%	100%	<i>Not Applicable</i>	100%	100%	100%
	Accurate/Complete Data Collection	100%	60%	100%	100%	100%	100%	40%	100%	91%	100%
Design Total		100%	86%	100%	100%	100%	100%	80%	97%	94%	100%
Implementation	Sufficient Data Analysis and Interpretation	89%	75%	100%	89%	75%	78%	100%	89%	100%	100%
	Appropriate Improvement Strategies	100%	25%	75%	100%	78%	33%	33%	75%	50%	33%
Implementation Total		92%	58%	92%	92%	77%	67%	82%	85%	85%	83%
Outcomes	Real Improvement Achieved	100%	25%	50%	100%	100%	25%	25%	100%	50%	50%
	Sustained Improvement Achieved	<i>Not Assessed</i>	<i>Not Assessed</i>	<i>Not Assessed</i>	100%	100%	<i>Not Assessed</i>	<i>Not Assessed</i>	<i>Not Assessed</i>	<i>Not Assessed</i>	<i>Not Assessed</i>
Outcomes Total		100%	25%	50%	100%	100%	25%	25%	100%	50%	50%
Validation Status		<i>Met</i>	<i>Not Met</i>	<i>Not Met</i>	<i>Met</i>	<i>Not Met</i>	<i>Not Met</i>	<i>Not Met</i>	<i>Met</i>	<i>Not Met</i>	<i>Not Met</i>