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ACKNOWLEDGMENTS 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) 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. Peach State Health Plan (Peach State) is one of the Georgia Families CMOs.

The validation of PIPs is one of three federally-mandated activities for state Medicaid managed care programs. The 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 Peach State’s PIPs. Peach State submitted PIPs to HSAG between June 30, 2014, and August 4, 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 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>
<thead>
<tr>
<th>Table 1-1—CMS Protocol Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearly Defined Study Indicator(s)</td>
</tr>
<tr>
<td>Correctly Identified Study Population</td>
</tr>
<tr>
<td>Appropriate Improvement Strategies</td>
</tr>
<tr>
<td>Sufficient Data Analysis and Interpretation of Results</td>
</tr>
</tbody>
</table>

HSAG evaluated the following components of the quality improvement process:

1. The technical structure of the PIPs to ensure Peach State 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 Peach State 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 Peach State

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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 Peach State beginning in 2006 to provide services to the Georgia Families program population. Prior to 2012, Peach State served the eligible populations in the Atlanta, Central, and Southwest geographic regions of Georgia. In early 2012, the CMO expanded coverage statewide and added the North, East, and Southeast 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 Peach State’s PIPs for seven years, the number of PIPs, study topics, and study methods has evolved over time.

Peach State 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

Peach State’s June 30, 2014, through August 4, 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>
<thead>
<tr>
<th>Study Topic</th>
<th>Study Indicator Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adolescent Well-Care Visits</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Appropriate Use of ADHD Medications</strong></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Childhood Immunizations—Combo 10</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Childhood Obesity</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Comprehensive Diabetes Care</strong></td>
<td>The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had a HbA1c control &lt; 7.0%, LDL-C control &lt; 100mg/ml, and BP control &lt; 140/90 mmHg.</td>
</tr>
<tr>
<td><strong>Postpartum Care</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Study Topic</th>
<th>Study Indicator Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Dental Visits</strong></td>
<td>1. The percentage of members 1–20 years of age who received any dental service during the measurement period (CMS 416 12A).</td>
</tr>
<tr>
<td></td>
<td>2. The percentage of members 1–20 years of age who received preventive dental services during the measurement period (CMS 416 12B).</td>
</tr>
<tr>
<td></td>
<td>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).</td>
</tr>
<tr>
<td><strong>Avoidable Emergency Room Visits</strong></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>
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 Peach State PIP topic was Provider Satisfaction. Peach State 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

<table>
<thead>
<tr>
<th>Survey Type</th>
<th>Question</th>
<th>Survey Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member</td>
<td>#36</td>
<td>The percentage of respondents who rate the health plan an 8, 9, or 10 in response to the question “Using any number from 0–10, where 0 is the worst health plan and 10 is the best, what number would you use to rate your child’s health plan?”</td>
</tr>
<tr>
<td>Provider</td>
<td>#42</td>
<td>The percentage of providers who respond “very satisfied” or “somewhat satisfied” to the question “Overall satisfaction with Peach State Health Plan?”</td>
</tr>
</tbody>
</table>

Validation Overview

HSAG obtained the data needed to conduct the PIP validations from Peach State’s PIP Summary Forms. These forms provided detailed information about Peach State’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**

<table>
<thead>
<tr>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Design**

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 PIP 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.
2. FINDINGS

for Peach State Health Plan

Aggregate Validation Findings

HSAG organized, aggregated, and analyzed Peach State’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>
<thead>
<tr>
<th>PIP</th>
<th>Percentage of Evaluation Elements Scored Met</th>
<th>Percentage of Critical Elements Scored Met</th>
<th>Validation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent Well-Care Visits</td>
<td>97%</td>
<td>100%</td>
<td>Met</td>
</tr>
<tr>
<td>Annual Dental Visits</td>
<td>79%</td>
<td>82%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Appropriate Use of ADHD Medication</td>
<td>86%</td>
<td>82%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Avoidable Emergency Room Visits</td>
<td>71%</td>
<td>64%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Childhood Immunization—Combo 10</td>
<td>92%</td>
<td>87%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Childhood Obesity</td>
<td>96%</td>
<td>93%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Comprehensive Diabetes Care</td>
<td>86%</td>
<td>79%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Member Satisfaction</td>
<td>89%</td>
<td>86%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Postpartum Care</td>
<td>82%</td>
<td>79%</td>
<td>Not Met</td>
</tr>
<tr>
<td>Provider Satisfaction</td>
<td>82%</td>
<td>86%</td>
<td>Not Met</td>
</tr>
</tbody>
</table>

Only one of the 10 PIPs, Adolescent Well-Care Visits, received an overall Met validation status. The remaining nine 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 Peach State 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 Peach State Health Plan (N=10 PIPs)

<table>
<thead>
<tr>
<th>PIP Stage</th>
<th>Activity</th>
<th>Percentage of Applicable Elements</th>
<th>Met</th>
<th>Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>Appropriate Study Topic</td>
<td>100% (57/57)</td>
<td>0% (0/57)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clearly Defined, Answerable Study Question(s)</td>
<td>100% (20/20)</td>
<td>0% (0/20)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Correctly Identified Study Population</td>
<td>96% (27/28)</td>
<td>4% (1/28)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clearly Defined Study Indicator(s)</td>
<td>98% (56/57)</td>
<td>2% (1/57)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valid Sampling Techniques (if sampling was used)</td>
<td>97% (35/36)</td>
<td>3% (1/36)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accurate/Complete Data Collection</td>
<td>94% (74/79)</td>
<td>6% (5/79)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design Total</td>
<td>97% (269/277)</td>
<td>3% (8/277)</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>Sufficient Data Analysis and Interpretation of Results</td>
<td>92% (79/86)</td>
<td>8% (7/86)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appropriate Improvement Strategies</td>
<td>35% (13/37)</td>
<td>65% (24/37)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implementation Total</td>
<td>75% (92/123)</td>
<td>25% (31/123)</td>
<td></td>
</tr>
<tr>
<td>Outcomes</td>
<td>Real Improvement Achieved</td>
<td>50% (20/40)</td>
<td>50% (20/40)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sustained Improvement Achieved</td>
<td>100% (3/3)</td>
<td>0% (0/3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outcomes Total</td>
<td>53% (23/43)</td>
<td>47% (20/43)</td>
<td></td>
</tr>
</tbody>
</table>

#### Percentage of Applicable Evaluation Elements Scored *Met*

87% (384/443)

Overall, 87 percent of the evaluation elements across all 10 PIPs received a *Met* score. While Peach State’s strong performance in the Design stage indicated that each PIP was designed appropriately to measure outcomes and improvement, Peach State 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**

Peach State 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**

Peach State met 75 percent of the requirements for the two activities within the Implementation stage. In the Sufficient Data Analysis and Interpretation of Results activity, the CMO’s documentation included data inaccuracies and errors in statistical testing. In the Appropriate Improvement Strategies activity, most of the PIPs lacked sufficient documentation of the causal/barrier analysis process used to identify barriers and interventions. Some interventions were not linked to specific barriers or did not impact long-term change in the study indicators. For PIPs that achieved improvement in outcomes, the CMO did not sufficiently document monitoring, evaluation of effectiveness, or the link between evaluation results and the status of the interventions going forward.

**Outcomes**

This year, all 10 PIPs were evaluated for achieving statistically significant improvement over baseline. Three PIPs, Adolescent Well-Care Visits, Childhood Immunizations—Combo 10, and Childhood Obesity achieved statistically significant improvement over baseline for all indicators at the current measurement period. The Annual Dental Visits PIP achieved statistically significant improvement from baseline to Remeasurement 1 for one of the three study indicators. Only three of the 10 PIPs, Adolescent Well-Care Visits, 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. All three 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]).

Peach State was not successful in achieving the desired outcomes for all study indicators. Only
three PIPs achieved statistically significant improvement over baseline across all study indicators,
and the same three 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. Peach State’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**

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (1/1/11–12/31/11)</th>
<th>Remeasurement 1 (1/1/12–12/31/12)</th>
<th>Remeasurement 2 (1/1/13–12/31/13)</th>
<th>Sustained Improvement*</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>38.5%</td>
<td>39.1%*</td>
<td>42.7%*</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* 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.

In the second remeasurement period of the Adolescent Well-Care Visits PIP, Peach State
sustained statistically significant improvement in the rate of members 12–21 years of age who
had at least one well-care visit during the measurement year. The Remeasurement 2 rate of 42.7 percent was a statistically significant improvement over both the baseline and Remeasurement 1 rates. The Remeasurement 2 rate fell below the 2013 DCH target of 49.7 percent and below the 25th percentile of national Medicaid HEDIS 2012 rates. The rates reported for this PIP were based on administrative data.

A critical analysis of the CMO’s improvement strategies for this PIP demonstrated the following:

- Peach State identified barriers to improving the Adolescent Well-Care Visits indicator rate through monthly and quarterly analyses of data by a collaborative interdepartmental workgroup. The CMO summarized identified barriers in a fishbone diagram. The CMO also reported conducting “rapid cycle analysis” of intervention effectiveness through a series of Plan-Do-Study-Act (PDSA) cycles.

- Peach State implemented interventions targeting member, provider, and system-based barriers identified in the fishbone diagram; however, some of the CMO’s documented interventions were not linked to specific barriers in the PIP. During the Remeasurement 2 period, Peach State continued two ongoing interventions that were linked to member- and provider-based barriers:
  - Implementation of live telephonic outreach to assist noncompliant members in making well-care appointments to address member awareness of due well-care services.
  - Quarterly meetings with the CMO’s medical record review vendor to ensure accurate and effective education of providers on adolescent well-care documentation requirements.

- The CMO initiated two new interventions during the second remeasurement period, targeting provider- and member-based barriers:
  - Large and small group provider education and engagement sessions, promoting the practice of completing due well-care services during sports physical appointments and sick visits, to address provider-missed opportunities for delivering well-care services.
  - Collaboration with an Atlanta FQHC to implement and facilitate the “Convenient Time” pilot program, which offered well-care appointments during after-school/work hours. The pilot program, targeting member schedule barriers, included transportation assistance and a gift card member incentive for completed appointments.

Peach State reported quantitative evaluation results for some interventions but not others. For example, the CMO documented evaluating the "Convenient Time" pilot program with data to support that the teens had well-care visits. In contrast, the CMO did not document quantitative evaluation results of the in-person provider education intervention, which prevented measuring the impact of this intervention on the well-care study indicator. HSAG encourages Peach State to have processes in place to evaluate the effectiveness for each of its interventions. Without a method to evaluate the impact of each intervention on the study indicator, the CMO is less capable to make data-driven decisions about when to initiate, continue, modify, or discontinue interventions.
Annual Dental Visits

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

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline (10/1/2011–9/30/2012)</th>
<th>Remeasurement 1 (10/1/2012–9/30/2013)</th>
<th>Sustained Improvement^</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The percentage of EPSDT eligible members ages 1–20 who received any dental services during the measurement period (CMS 416 12A).</td>
<td>48.8%</td>
<td>48.2%↓*</td>
<td>NA</td>
</tr>
<tr>
<td>2. The percentage of EPSDT eligible members ages 1–20 who received preventive dental services during the measurement period (CMS 416 12B).</td>
<td>44.5%</td>
<td>45.0%↑*</td>
<td>NA</td>
</tr>
<tr>
<td>3. The percentage of EPSDT eligible members ages 6–9 who received preventive dental services during the measurement period (CMS 416 12D).</td>
<td>15.7%</td>
<td>14.9%↓*</td>
<td>NA</td>
</tr>
</tbody>
</table>

↑* 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, Peach State achieved statistically significant improvement over the baseline rate for Study Indicator 2, but there was a statistically significant decline in the rates of Study Indicators 1 and 3 at Remeasurement 1. The Remeasurement 1 rate for Study Indicator 2 did not reach the 2013 DCH target rate of 58.0 percent.

A critical review of Peach State’s quality improvement processes revealed some issues that may have contributed to the mixed study indicator results. The CMO’s collaborative workgroup completed a causal/barrier analysis and summarized the identified barriers in a fishbone diagram. The CMO initiated three interventions during the baseline measurement period to address provider and member barriers and continued these interventions during the Remeasurement 1 period. The CMO did not document any revised or new interventions during the Remeasurement 1 period. The three ongoing interventions are described below.

- Peach State implemented a provider-based intervention, “Preventistry Provider Sealant Program,” to increase the frequency of sealants being placed on child and adolescent teeth. The intervention was targeted at changing provider practices of delaying the application of sealants and providing preventive and restorative care without applying sealants.
- To address lack of member awareness of dental benefits and recommended services, the CMO implemented a care gap alert system that notifies Member Services and other internal staff when a member is due or past-due for a preventive dental visit. Member Services staff are able to pass this information onto members during inbound and outbound telephone calls.
Peach State implemented a secure member Web portal to improve member awareness of due/past-due preventive dental services. The Web portal notifies members who signed up to access their electronic health record when they are due for a dental visit.

In addition to the interventions described above, Peach State documented a number of ongoing “standardized interventions.” The CMO did not document the specific barrier that each standardized intervention addressed and did not report evaluations of effectiveness for these interventions.

The mixed study indicator results for this PIP illustrate the importance of evaluating the impact of interventions on each study indicator. The CMO documented evaluations of effectiveness for some interventions but not others. The CMO did not report an evaluation for the care gap alert system or for any of Peach State’s “standardized interventions.” The CMO should document the evaluation of the effectiveness for each intervention, and the link between evaluation results and decisions to continue, revise, or discontinue implementation should be documented. To achieve meaningful improvement across all study indicators, HSAG encourages Peach State to implement ongoing, quantitative evaluations of each intervention and revise interventions, as needed, based on evaluations of effectiveness, study indicator performance, and causal/barrier analyses.

### Appropriate Use of ADHD Medications

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

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (1/1/11–12/31/11)</th>
<th>Remeasurement 1 (1/1/12–12/31/12)</th>
<th>Remeasurement 2 (1/1/13–12/31/13)</th>
<th>Sustained Improvement^</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>43.7%</td>
<td>43.7%</td>
<td>43.0%</td>
<td>NA</td>
</tr>
<tr>
<td>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.</td>
<td>57.4%</td>
<td>58.6%</td>
<td>57.7%</td>
<td>NA</td>
</tr>
</tbody>
</table>

^ 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.

NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed.
Neither study indicator in the *Appropriate Use of ADHD Medications* PIP achieved statistically significant improvement from baseline to Remeasurement 2. The rates of both study indicators, follow-up visits during the initiation phase (Study Indicator 1) and follow-up visits during the continuation and maintenance phases (Study Indicator 2), declined from Remeasurement 1 to Remeasurement 2. The Remeasurement 2 rates for Study Indicators 1 and 2 fell below the CY 2013 DCH targets of 52.5 percent and 63.1 percent, respectively. In comparison with the national Medicaid HEDIS 2012 rates, Peach State’s CY 2013 rate for Study Indicator 1 fell between the 50th and 75th percentiles and its Study Indicator 2 rate fell between the 75th and 90th percentiles.

The critical analysis of Peach State’s improvement processes and strategies revealed several factors that contributed to the decline in study indicator performance for this PIP. For the causal/barrier analysis, the CMO reported using a data-driven process and identifying priority barriers; however, the PIP documentation did not include any data supporting identified barriers or results of data analysis. Additionally, some of the documented interventions were not associated with specific barriers. While some interventions were system changes to support long-term improvement, others were not.

Interventions implemented at the provider and member levels included:

- Continued Pharmacy Liaison education visits to non-psychiatric practitioners with high-volume ADHD prescriptions.
- Continued implementation of a clinical practice guideline (CPG) compliance program.
- Participated in an ongoing Quality Improvement and Public Relations collaboration to educate behavioral health providers on HEDIS measures and the ADHD CPG.
- Initiated live telephone calls to parents of members who were identified as having filled an ADHD medication prescription following a four-month negative medication history. The telephone calls served to verify that a follow-up appointment was scheduled, offer transportation assistance, and stress the importance of keeping the appointment.
- Conducted large and small group provider education and engagement sessions to ensure that providers understand the requirements for the HEDIS ADHD medication follow-up measures. At the sessions, the CMO distributed a HEDIS Quick Reference Book, which provides tips on ensuring the follow-up visits occur within the required time frames.

Peach State did not provide sufficient documentation on the evaluation and monitoring of intervention effectiveness. HSAG strongly recommends that Peach State implement a quantitative process to evaluate the effectiveness of each intervention’s impact on the study indicator rates. The CMO should report the specific evaluation processes and results used during its documented PDSA cycles for the PIP and continue to revisit the evaluation and causal/barrier analyses until meaningful improvement is achieved. Effective evaluation and data analyses allow limited resources to be directed toward those interventions that will have the greatest positive impact on outcomes.
**Childhood Immunizations—Combo 10**

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

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (1/1/11–12/31/11)</th>
<th>Remeasurement 1 (1/1/12–12/31/12)</th>
<th>Remeasurement 2 (1/1/13–12/31/13)</th>
<th>Sustained Improvement^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>17.6%</td>
<td>27.9%^*</td>
<td>36.3%^*</td>
<td>Yes</td>
</tr>
</tbody>
</table>

^* Designates statistically significant improvement over the prior measurement period (p value < 0.05).

^a 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 *Childhood Immunizations—Combo 10* PIP, Peach State sustained statistically significant improvement over baseline at the second remeasurement. From baseline to Remeasurement 2, the rate of eligible child members who had received all necessary immunizations by their second birthday increased by 18.7 percentage points. The Remeasurement 2 rate of 36.3 percent exceeded the 90th percentile of the national Medicaid HEDIS 2012 rates.

Peach State’s collaborative workgroup used a PDSA-based approach to improving the *Childhood Immunizations—Combo 10* indicator rate. The workgroup identified barriers using a fishbone diagram. While some of the documented interventions were linked to specific barriers in the fishbone diagram, other interventions were not clearly linked to specific barriers. The CMO’s HEDIS Steering Committee collaborated with the PIP workgroup to develop and refine interventions to address identified member, provider, and system-based barriers including member awareness of the recommended immunization schedule, missed provider opportunities for administering vaccines, and provider awareness of the timing requirement for the HEDIS *Childhood Immunization—Combination 10* measure. The CMO implemented the following interventions to address identified barriers:

- Continued implementation of the care gap internal system alert accessible via secure portal to Peach State staff and members, letting them know about due or past due preventive services.

- Initiated large and small group provider education and engagement sessions to ensure that providers understand the vaccination timing requirements for the HEDIS *Childhood Immunization—Combination 10* measure. At the sessions, the CMO distributed a HEDIS Quick Reference Book, which provided tips to facilitate timely vaccinations.

- Conducted live telephone outreach to members who were due/past due for immunizations. Peach State staff offered assistance with appointment scheduling, transportation assistance, and a member gift card incentive for completed immunizations.
Peach State documented that a PDSA approach was used to implement, test, and continue or revise improvement strategies; however, the CMO did not fully document the results of specific PDSA cycles for each intervention. HSAG anticipated that the CMO would have documented a data-driven evaluation for each intervention. HSAG recommends that Peach State more fully describe and document the evaluation of each intervention’s effectiveness, to support ongoing sustained improvement in outcomes for this PIP.

**Childhood Obesity**

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (1/1/09–12/31/09)</th>
<th>Remeasurement 1 (1/1/10–12/31/10)</th>
<th>Remeasurement 2 (1/1/11–12/31/11)</th>
<th>Remeasurement 3 (1/1/12–12/31/12)</th>
<th>Remeasurement 4 (1/1/13–12/31/13)</th>
<th>Sustained Improvement^</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>32.1%</td>
<td>29.0%</td>
<td>22.7%↑*</td>
<td>47.7%↑*</td>
<td>51.2%</td>
<td>Yes</td>
</tr>
<tr>
<td>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.</td>
<td>36.7%</td>
<td>45.5%↑*</td>
<td>40.7%</td>
<td>56.0%↑*</td>
<td>58.1%</td>
<td>Yes</td>
</tr>
<tr>
<td>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.</td>
<td>28.2%</td>
<td>32.0%</td>
<td>29.4%</td>
<td>47.7%↑*</td>
<td>54.6%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

↑* Designates statistically significant improvement over the prior measurement period (p value < 0.05).
↓* Designates statistically significant decline in performance 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.

The *Childhood Obesity* PIP demonstrated sustained improvement over baseline for all three study indicators at Remeasurement 4. The Remeasurement 4 rates for all three study indicators—BMI percentile documentation, evidence of nutrition counseling, and evidence of physical activity counseling—surpassed the respective CY 2013 DCH target rates of 47.5 percent, 54.9 percent, and 43.3 percent. When compared to the national Medicaid HEDIS 2012 rates, the Remeasurement 3 rates for all three study indicators fell between the 50th and 75th percentiles.
Despite the sustained improvement in the study indicators, a critical review of the CMO’s quality improvement strategies revealed some opportunities for improvement in its PIP processes.

- The CMO’s collaborative workgroup and HEDIS Steering Committee contributed to the causal/barrier analysis and intervention development for the PIP. The analysis process included data analysis results, and workgroup findings were reviewed monthly to monitor the progress of interventions and assess barriers to improvement. Identified barriers were summarized in a fishbone diagram; however, specific data to support the barriers were not documented. Additionally, the PIP included some interventions that were not directly linked to specific barriers.

- Peach State’s identified barriers were grouped into two categories: missed provider opportunities, and provider awareness and compliance with documentation requirements for the HEDIS Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC) measure.

- The CMO documented the implementation of several interventions aimed at improving member compliance with child/adolescent well-care visits, which were not directly related to the provider-driven study indicators. To address the provider-based barriers, Peach State implemented the following interventions:
  - Held quarterly meetings with the medical record review vendor to reinforce content and materials for practitioner training on BMI percentile documentation, counseling for nutrition, and counseling for physical activity.
  - Initiated large and small group provider education and engagement sessions to ensure providers understood that the components of the HEDIS WCC measure should be addressed during well visits for all members, not just those members identified as obese. At the sessions, the CMO distributed a HEDIS Quick Reference Book, which provided tips to ensure that providers meet the documentation requirements for the HEDIS WCC measure.

While Peach State reported evaluating the effectiveness of interventions through monthly administrative rate review and provider feedback, the CMO did not document any quantitative, intervention-specific evaluation results for the PIP. The PIP documentation should include both the processes and results of each intervention’s evaluation, to support ongoing sustained improvement in outcomes.
Comprehensive Diabetes Care

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

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (1/1/11–12/31/11)</th>
<th>Remeasurement 1 (1/1/12–12/31/12)</th>
<th>Remeasurement 2 (1/1/13–12/31/13)</th>
<th>Sustained Improvement^</th>
</tr>
</thead>
<tbody>
<tr>
<td>The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had an HbA1c control &lt; 7.0%.</td>
<td>28.8%</td>
<td>27.6%</td>
<td>24.1%</td>
<td>NA</td>
</tr>
<tr>
<td>The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had a LDL-C control &lt; 100mg/ml.</td>
<td>27.5%</td>
<td>20.4% ↓*</td>
<td>23.4%</td>
<td>NA</td>
</tr>
<tr>
<td>The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had a BP control &lt; 140/90 mmHg.</td>
<td>58.0%</td>
<td>53.7%</td>
<td>53.6%</td>
<td>NA</td>
</tr>
</tbody>
</table>

NA Statistically significant improvement over baseline and a subsequent measurement must occur for all study indicators before sustained improvement can be assessed.

↓* Designates statistically significant decline in performance 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.

None of the study indicators in the Comprehensive Diabetes Care PIP achieved statistically significant improvement over baseline at Remeasurement 2; all three study indicator rates remained below baseline. While there was a non-statistically significant increase in the rate for Study Indicator 2 (LDL-C < 100 mg/ml) from Remeasurement 1 to Remeasurement 2, the rates for Study Indicators 1 (HbA1c < 7.0%) and 3 (BP < 140/90 mmHg), declined. The rates for all three study indicators fell 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). The Remeasurement 2 rates for all three study indicators also fell below the 25th percentile of the respective national Medicaid HEDIS 2012 rates.

A critical analysis of the CMO’s improvement strategies identified some weaknesses which may have led to the lack of improvement in this PIP’s study indicator rates.

Peach State’s collaborative workgroup reviewed administrative rates monthly as part of the causal/barrier analysis process. Identified barriers were summarized in a fishbone diagram. For Remeasurement 2, the CMO prioritized member barriers, such as disease management knowledge and missing appointments, and the provider barrier, lack of knowledge about clinical practice guidelines and HEDIS requirements. While some of the interventions implemented during the second remeasurement period were system changes likely to impact the diabetic control study indicators, other interventions targeted diabetic screenings and would not directly improve diabetes control measures.

To address member barriers, the CMO continued implementation of the contractually required diabetes disease management program, conducted live telephone outreach to members due/past due for diabetes services, and offered member incentives for completing diabetes visits. Provider-focused interventions included a collaborative effort by the Quality Improvement and
Provider Relations departments to enhance provider education on HEDIS specifications for the study indicators and educational provider mailings regarding diabetes service coding requirements.

While Peach State reported that it monitored monthly administrative rates to evaluate intervention effectiveness, the CMO did not link evaluation results to decisions about continuing, revising, or discontinuing the interventions. To achieve significant improvement in the study indicators, the CMO should ensure that decisions about future intervention implementation are closely based on intervention-specific evaluation results and ongoing causal/barrier analyses.

**Avoidable Emergency Room Visits**

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

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (1/1/11–12/31/11)</th>
<th>Remeasurement 1 (1/1/12–12/31/12)</th>
<th>Remeasurement 2 (1/1/13–12/31/13)</th>
<th>Sustained Improvement^</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>22.4%</td>
<td>24.9%↑*</td>
<td>24.4%↓*</td>
<td>NA</td>
</tr>
<tr>
<td>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.</td>
<td>23.8%</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
</tbody>
</table>

^ Designates statistically significant increase over the prior measurement period (p value < 0.05) in an inverse study indicator, indicating a performance decline.

* Designates statistically significant decrease from the prior measurement period (p value < 0.05) in an inverse study indicator, indicating performance improvement.

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, Peach State 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. There was a statistically significant decrease in the Study Indicator 1 rate from Remeasurement 1 to Remeasurement 2. Because the avoidable ER visits rate was an inverse study indicator, for which a lower rate is better, the decrease demonstrated an improvement in performance from Remeasurement 1 to Remeasurement 2. The Remeasurement 2 rate remained above the baseline rate; therefore, the inverse study indicator has not demonstrated improvement over baseline.

Peach State 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 23.8 percent, which was higher (worse than) the DCH 2013 target rate of 23.38 percent.

The critical analysis of Peach State’s improvement processes revealed several factors that contributed to the lack of statistically significant improvement over baseline in the avoidable ER visits rate. The CMO documented the results of its causal/barrier analysis in a fishbone diagram; however, the diagram included no new information compared to the fishbone diagram attached for the collaborative *Avoidable Emergency Room Visits* PIP submitted for validation last year. The PIP documentation also did not provide any specific data or analysis results supporting the identified barriers, and the barriers were not prioritized.

Peach State implemented three system-based interventions to improve the avoidable ER visit rate during calendar year 2013:

- An ER case management program, providing live outreach to members who frequent the emergency room.
- Distribution of an educational flyer in new member packets explaining when it is appropriate to seek care in an emergency room and providing information on contracted urgent care facilities.
- Face-to-face visits with six provider groups, identified through claims data, whose members had visited an emergency room for one of the six avoidable diagnoses targeted in the PIP. Medical Director and Provider Relations representatives visited the providers, presented the claims data, and discussed strategies for preventing future avoidable ER visits.

Peach State expanded implementation of interventions to the expansion population during calendar year 2013. The CMO implemented the same interventions in both the metro Atlanta area, measured by Study Indicator 1, and the expansion population areas, measured by Study Indicator 2. Peach State did not report modifying the interventions to specifically target the expansion populations.

While Peach State documented some intervention-specific evaluations of effectiveness, the CMO did not clearly document all evaluation results, linking implementation to performance in the study indicator. For example, the targeted face-to-face visits intervention with six providers was evaluated for effectiveness, showing a decrease in avoidable ER visits rates for the six selected
providers. The CMO concluded, based on this evaluation, that this intervention was responsible for the study indicator rate decrease from Remeasurement 1 and Remeasurement 2. The CMO did not, however, document any data (e.g., a comparison of the avoidable ER visits rate with and without the participating providers’ members included) illustrating the impact of the participating providers on the overall avoidable ER visits rate. In the future, HSAG recommends that the CMO ensure that the evaluation process for each intervention be linked directly to overall study indicator performance to more effectively guide decisions about future implementation.

**Member Satisfaction**

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

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (3/13/13–5/22/13)</th>
<th>Remeasurement 1 (2/25/14–5/1/14)</th>
<th>Sustained Improvement^</th>
</tr>
</thead>
<tbody>
<tr>
<td>The percentage of respondents who rate the health plan an 8, 9, or 10 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?”</td>
<td>87.0%</td>
<td>84.9%</td>
<td>NA</td>
</tr>
</tbody>
</table>

^ 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.

At the first remeasurement for the *Member Satisfaction* PIP, Peach State reported a decline in the rate of member satisfaction. The rate of respondents giving Peach State a score of “8” or higher declined 2.1 percentage points from baseline to Remeasurement 1.

A critical assessment of the improvement strategies Peach State used for the *Member Satisfaction* PIP suggested several factors that contributed to the lack of improvement demonstrated at the first remeasurement. The CMO’s multidisciplinary team reviewed data analysis results and completed a fishbone diagram to identify barriers impacting member satisfaction. The PIP documentation did not include a process for prioritizing barriers. The fishbone diagram included system and provider barriers; two barriers on the diagram, “Limited specialist participating with Medicaid/CMOs” and “Member difficulty in obtaining information/assistance from the Member Services Call Center” were circled, but the purpose of the circles was not documented.

Peach State documented the implementation of two interventions to address member perceptions:

- To address members’ perceived lack of access to specialists, the CMO conducted outreach to specialists in the Metro Atlanta area to confirm participation and appointment availability.
- To address members’ perceived difficulty obtaining assistance from the Member Services Call Center, the Member Services Department developed an internal program to improve call quality and customer service.
The CMO documented plans for new and revised interventions to address the decline in the study indicator at Remeasurement 1. Peach State is focused on developing a “culture of organizational-wide quality involvement using front line and senior level staff.” Future interventions will emphasize customer service improvements and access to specialists. The CMO should also revisit the causal/barrier analysis process to determine if all relevant barriers have been identified and use analysis results to rank barriers by priority, to effectively address the key drivers of overall member satisfaction.

Postpartum Care

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

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline (1/1/12–12/31/12)</th>
<th>Remeasurement 1 (1/1/13–12/31/13)</th>
<th>Sustained Improvement^</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>71.6%</td>
<td>61.8%↓*</td>
<td>NA</td>
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</tbody>
</table>

↓* Designates statistically significant decline in performance 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.

There was a statistically significant decline in the study indicator rate for the Postpartum Care PIP at Remeasurement 1. The Remeasurement 1 rate declined by 9.8 percentage points from the baseline rate; the study indicator rate fell below the 2013 DCH target rate of 71.1 percent and below the 50th percentile of the national HEDIS 2012 rates.

Critical analysis of Peach State’s improvement strategies revealed several deficiencies in the processes used, resulting in a lack of improvement in the study indicator. The PIP lacked sufficient documentation of the causal/barrier analyses conducted for the baseline and Remeasurement 1 periods. The CMO did not document the tools or step-by-step processes used for the baseline causal/barrier analysis process. Additionally, not all of the documented interventions were linked to specific barriers. Finally, in an analysis of the Remeasurement 1 study indicator performance, the CMO concluded that the rate decline was likely due to a difference in the composition of the samples for each measurement period. Given that the study indicator is an audited HEDIS measure, which followed HEDIS sampling methodologies, it was unlikely that the two samples would yield results that are not comparable. A more productive approach to the Remeasurement 1 drill-down analysis would be to revisit the causal/barrier analysis process and determine whether all relevant barriers have been identified and whether interventions need to be revised or added to address the root causes of lack of improvement.

To address barriers related to provider and member awareness and motivation, Peach State detailed the implementation of three system-wide interventions, in addition to numerous ongoing
standardized interventions. The three interventions, specific to the Postpartum Care PIP, implemented during the first remeasurement period were:

- A collaborative partnership with the Obstetrics (OB) Society to increase provider awareness about the importance of completing postpartum visits between 21 and 56 days after delivery.
- A bonus program for providers who accurately code postpartum visits within the specified time frame, using appropriate ICD-9 codes.
- The Healthy Start Program, in which clinical staff met with members before they left the hospital, after giving birth, to provide education on postpartum care and assist with scheduling the postpartum visit.

Given the statistically significant decline in the study indicator rate, HSAG would have expected to see documentation of new or revised interventions to address the lack of improvement. Peach State reported that its team conducted a drill-down analysis in response to the Remeasurement 1 results; however, the PIP documentation did not include planned revisions to the improvement strategies. Additionally, while Peach State documented the evaluation of some interventions, the documentation was incomplete. Evaluations for some interventions, such as the Healthy Start program, used claims data. Other interventions, such as the provider bonus program and the OB Society partnership, did not have documented evaluation processes or results. The CMO should use both drill-down analyses and results of intervention evaluations to identify barriers that have not been addressed; new or revised interventions should be implemented to address persistent barriers to improvement.

**Provider Satisfaction**

<table>
<thead>
<tr>
<th>Study Indicator</th>
<th>Baseline Period (11/14/12–1/16/13)</th>
<th>Remeasurement 1 (9/1/13–10/31/13)</th>
<th>Sustained Improvement^</th>
</tr>
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<tr>
<td>The percentage of providers answering, “very satisfied” or, “somewhat satisfied” to Q42 – “Overall satisfaction with Peach State Health Plan?”</td>
<td>76.3%</td>
<td>74.2%</td>
<td>NA</td>
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</tbody>
</table>

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.

The rate for Peach State’s Provider Satisfaction PIP declined 2.1 percentage points from baseline to Remeasurement 1.

A critical review of the PIP identified problems throughout the CMO’s documented improvement process that contributed to the decline in provider satisfaction. Peach State’s documented improvement process was inadequate. In addition to an unfinished causal/barrier analysis, the CMO did not clearly document the timing of intervention implementation or report any revision of the improvement strategies.
Based on the PIP’s baseline results, Peach State identified barriers to provider satisfaction related to CMO-provider communication, access to provider representatives, and provider interest. In addition to ongoing, standardized interventions, the CMO documented two interventions that were initiated in “Q1 2013” and focused on improving the effectiveness of Provider Relations representatives:

- To ensure quality and consistency of services that providers received from Peach State’s provider representatives (PRs), the CMO changed the PR training process. The new training process included a comprehensive assessment, mandatory biweekly internal PR meetings, mandatory monthly PR training sessions, and dissemination of a monthly agenda and talking points for PR provider visits.
- To address provider awareness and access to PR field representatives, Peach State increased manager oversight of the field representatives. Manager oversight was increased through “quarterly ride-along field assessments,” increased requirements for minimum field visit productivity, and improved laptop connectivity for all field representatives.

The PR representative interventions were implemented in addition to Peach State’s ongoing standardized interventions; however, the interventions did not result in improvement of the study indicator. The CMO did not document a follow-up causal/barrier or drill-down analysis to address the decline in provider satisfaction at Remeasurement 1. Based on the PIP’s measurement periods, with Remeasurement 1 ending in October 2013, Peach State would have had at least six months to revisit the causal/barrier analysis, identify barriers that were not addressed, and plan and implement new or revised interventions. The CMO also did not document evaluation processes or results for the PIP’s interventions. To achieve meaningful improvement in provider satisfaction, Peach State should revisit the causal/barrier analysis, identify root causes that have not been addressed, implement revised interventions, and conduct ongoing evaluation of each intervention’s effectiveness in impacting the study indicator.
Conclusions

Peach State appeared to have sound methodologies in place for the PIP Design stage (Activities I through VI). The sound study design of the PIPs created the foundation for the CMO to progress to subsequent PIP stages—implementing improvement strategies and achieving real and sustained study indicator outcomes. A critical review of Peach State’s quality improvement processes, however, revealed that Peach State continues to have room for improvement in the Implementation and Outcomes stages.

In the Appropriate Improvement Strategies activity of the Implementation stage, Peach State failed to document data to support conclusions from the causal barrier analysis processes and did not describe prioritization of identified barriers. For many of the PIPs, the CMO documented interventions that were not directly linked to specific barriers; some interventions also did not target the study indicators as outcomes.

Although Peach State exhibited sound study design for its PIPs, shortcomings in the identification and implementation of improvement strategies resulted in achieving sustained improvement for only three of the 10 PIPs. In addition to incomplete causal/barrier analyses, the PIP documentation revealed that Peach State did not evaluate the effectiveness of each intervention. Evaluation processes and results were reported intermittently throughout the PIPs, and evaluation results were not always used to guide decisions about continuing or revising ongoing interventions.

Recommendations

HSAG recommends that Peach State:

- 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 report audit.
- Ensure that all statistical testing is done correctly, and the documentation of the statistical testing outcomes is accurate and consistent throughout the PIP.
- Reference and carefully follow the PIP Summary Form completion instructions in the Appropriate Improvement Strategies activity related to defining barriers and interventions and documenting the causal/barrier analysis process.
- 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. The data and results of specific PDSA cycles should be included in the PIP documentation.
Develop, document, and apply a method for identifying priority barriers for intervention. The PIP documentation should specify which barriers were identified as priorities and why.

Ensure that each intervention is directly linked to an identified barrier and to the study indicators. Additionally, the full implementation dates should be documented for each intervention. All interventions should directly impact the study indicator.

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 intervention needs to be revised because a new root cause was not identified, or the intervention was unsuccessful.

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.
# Appendix A. PIP-Specific Validation Results

for Peach State Health Plan

## Table A-1—Peach State Health Plan’s SFY 2015 PIP Performance

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<tr>
<th>PIP Stage</th>
<th>Activity</th>
<th>Adolescent Well-Care Visits</th>
<th>Annual Dental Visits</th>
<th>Appropriate Use of ADHD Medications</th>
<th>Childhood Immunizations—Combo 10</th>
<th>Childhood Obesity</th>
<th>Comprehensive Diabetes Care</th>
<th>Avoidable Emergency Room Visits</th>
<th>Member Satisfaction</th>
<th>Postpartum Care</th>
<th>Provider Satisfaction</th>
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