Colorado Physical Health Performance Measure Validation Report

Fiscal Year 2010–2011

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1. Validation of Performance Measures Overview

The Colorado State Medicaid agency, the Department of Health Care Policy and Financing (the Department) requires three mandatory external quality review (EQR) activities as per the Balanced Budget Act of 1997 (BBA), 42 Code of Federal Regulations (CFR) 438.358. One of these activities is the validation of performance measures. The Department has contracted with Health Services Advisory Group, Inc. (HSAG), an external quality review organization (EQRO), to conduct the validation of performance measures for two managed care organizations (MCOs)—Denver Health Medicaid Choice (DHMC) and Rocky Mountain Health Plans (RMHP)—and for the Department's Primary Care Physician Program (PCPP) for fiscal year (FY) 2010–2011.

HSAG's role in the validation of performance measures was to ensure that the validation activities were conducted as outlined in the Centers for Medicare & Medicaid Services (CMS) publication, *Validating Performance Measures: A Protocol for Use in Conducting External Quality Review Activities,* Final Protocol, Version 1.0, May 1, 2002 (the CMS Performance Measure Validation Protocol).

The primary objectives of the performance measure validation process were to:

- Evaluate the accuracy of the performance measure data collected by the MCOs and the PCPP.
- Determine the extent to which the specific performance measures calculated by the MCOs and the PCPP (or on behalf of the MCOs and the PCPP) followed the specifications established for each performance measure.

The Department opted to use selected National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS®)[1-1,1-2] measures as the performance measures for validation. Because the MCOs and the PCPP are required to calculate and submit HEDIS performance measures and undergo an NCQA HEDIS Compliance Audit™,[1-3] HSAG validated the results from the audits to meet the BBA requirements. Developed and maintained by NCQA, HEDIS is a set of performance data broadly accepted in the managed care environment as an industry standard. The Department identified calendar year 2010 (reporting year 2011) as the measurement period for validation.

Each MCO underwent an NCQA HEDIS Compliance Audit through an NCQA-licensed audit organization of its choice and submitted the audited results and audit statement to HSAG. The PCPP also underwent an NCQA HEDIS Compliance Audit, which was conducted by HSAG. For the MCOs and the PCPP, the audit process was performed according to NCQA protocol. The audits were conducted in compliance with NCQA's *2011 HEDIS Compliance Audit: Standards, Policies, and Procedures*, *Volume 5*. The NCQA HEDIS Compliance Audit is consistent with the CMS Performance Measure Validation Protocol. The purpose of conducting a HEDIS audit is to ensure that rates submitted by the MCOs and the PCPP are reliable, valid, accurate, and can be compared to one another.

[1-1] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[1-2] HEDIS formerly stood for Health Plan Employer Data and Information Set.
[1-3] NCQA HEDIS Compliance Audit™ is a trademark of NCQA.

The NCQA-licensed audit organizations validated, at a minimum, a set of performance measures selected by the Department. The measures, which are listed in Table 1-1, are HEDIS measures that follow the definitions outlined in NCQA's *HEDIS 2011 Technical Specifications, Volume 2*.

Table 1-1—Colorado Medicaid 2011 Performance Measure Reporting Set
Childhood Immunization Status
Well-Child Visits in the First 15 Months of Life
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
Adolescent Well-Care Visits
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents
Prenatal and Postpartum Care
Children's and Adolescents' Access to Primary Care Practitioners
Adults' Access to Preventive/Ambulatory Health Services
Chlamydia Screening in Women
Adult BMI Assessment
Annual Monitoring for Patients on Persistent Medications
Use of Imaging Studies for Low Back Pain
Controlling High Blood Pressure
Pharmacotherapy Management of COPD Exacerbation
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis
Inpatient Utilization: General Hospital/Acute Care
Ambulatory Care Utilization
Frequency of Selected Procedures
Antibiotic Utilization

Technical Methods of Analysis

HSAG followed a set of outlined policies and procedures to conduct the validation of performance measures. The Department specified that HSAG would conduct an NCQA HEDIS Compliance Audit of Department-specified measures to satisfy the requirements. The Department required that each MCO undergo an NCQA HEDIS Compliance Audit performed by an NCQA-certified HEDIS compliance auditor (CHCA) contracted with an NCQA-licensed organization.

The CMS Performance Measure Validation Protocol identifies key types of data that should be reviewed. As part of the validation process, HSAG aggregated several sources of HEDIS-related data to determine if the licensed organizations' audit process met CMS requirements.

During the HEDIS audit, data management processes were reviewed using findings from the NCQA HEDIS Record of Administration, Data Management, and Processes (Roadmap) review; interviews with key staff members; and a review of queries and output files. Data extractions from systems used to house production files and generate reports were reviewed, including a review of data included in the samples for the selected measures. Based on validation findings, the licensed organizations produced an initial written report identifying any perceived issues of noncompliance, problematic measures, and recommended opportunities for improvement. The licensed organizations also produced a final report with updated text and findings based on comments on the initial report.

This performance measure validation report uses two primary sources—NCQA's Interactive Data Submission System (IDSS) data output reports and the final audit reports—to tabulate overall HEDIS reporting capabilities and functions for the MCOs and the PCPP. The IDSS contained the final HEDIS rates that were verified, reviewed, and locked by the licensed organizations. The auditor-locking mechanism in the IDSS tool ensured that no information could be changed without the consent of NCQA and the auditor. The IDSS review process allowed the licensed organizations to assess the reasonability of the rates submitted by the MCOs and the PCPP.

The final audit report (FAR) included information on the MCOs' and the PCPP's information system (IS) capabilities; each measure's reportable results; medical record review (MRR) validation results; the results of any corrected programming logic, including corrections made to numerators, denominators, or sampling used for final measure calculation; and opportunities and recommendations for improvement of data completeness, data integrity, and health outcomes.

The following is a table identifying the key audit steps that HSAG validated and the source of the data used.

Table 2-1—Description of Data Sources Reviewed	
Data Reviewed	**Source of Data**
Pre-on-site Visit/Meeting—The initial conference call or meeting between the licensed organizations and the MCO or PCPP staff. HSAG verified that key HEDIS topics such as timelines and on-site review dates were addressed by the licensed organizations.	HEDIS 2011 FAR
Roadmap Review—This review provided the licensed organizations with background information on policies, processes, and data in preparation for on-site validation activities. The MCOs and the PCPP were required to complete the Roadmap to provide the audit team with the necessary information to begin review activities. HSAG looked for evidence in the final report that the licensed organizations completed a thorough review of all components of the Roadmap.	HEDIS 2011 FAR
Certified Software Review—If an NCQA-certified software vendor was used, HSAG assessed whether or not the software vendor was certified for the measures required by the Department.	HEDIS 2011 FAR and Software Certification Letters
Source Code Review—HSAG ensured that the licensed organizations reviewed the programming language for calculating the HEDIS measures if an NCQA-certified software vendor was not used. Source code review is used to determine compliance with the performance measure definitions, including accurate numerator and denominator identification, sampling, and algorithmic compliance (to determine if rate calculations were performed correctly, medical record and administrative data were combined appropriately, and numerator events were counted accurately). This process is not necessary if NCQA-certified software is used.	HEDIS 2011 FAR
Survey Vendor—If the MCO and PCPP used a survey vendor to perform the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) surveys, HSAG verified that an NCQA-certified survey vendor was used.[2-1] A certified survey vendor must be used if the MCOs or PCPP performed a CAHPS survey as part of HEDIS reporting.	HEDIS 2011 FAR
CAHPS Sample Frame Validation—HSAG validated that the licensed organizations performed detailed evaluations of the computer programming (source code) used to access and manipulate data, reviewed the source code to ensure that data were correctly queried in the output files, and conducted a detailed review of the survey eligibility file elements, including the health care organization's name, product line, product, unique member ID, and subscriber ID, as well as the member name, gender, telephone number, date of birth, mailing address, continuous enrollment history, and prescreen status code (if applicable).	HEDIS 2011 FAR

[2-1] CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

Table 2-1—Description of Data Sources Reviewed	
Data Reviewed	**Source of Data**
Primary Source Verification—This verification is performed to determine the validity of the source data used to generate the HEDIS rates. Auditors verify that the information from the primary source matches the output information used for HEDIS reporting. Auditors do this by tracing the movement of the data from the originating source to the HEDIS repository. HSAG verified that the licensed organizations used this methodology as part of their on-site audit process.	HEDIS 2011 FAR
Convenience Sample Validation—The auditor reviews a small number of processed medical records to uncover potential problems in the process that may require corrective action early in the medical record review (MRR) process. A convenience sample must be prepared unless the auditor determines that a health plan is exempt. NCQA allows organizations to be exempt from the convenience sample if they participated in a HEDIS audit the previous year and passed MRR validation, and if the current MRR process has not changed significantly from the previous year and the organization does not report hybrid measures that the auditor determines to be at risk of inaccurate reporting. HSAG verified that the licensed organizations determined whether or not the MCOs and the PCPP were required to undergo a convenience sample validation. HSAG also verified that if a convenience sample validation was not required by a licensed organization, the specific reasons were documented.	HEDIS 2011 FAR
Medical Record Review—The licensed organizations are required to perform a more extensive validation of medical records reviewed, which is conducted late in the abstraction process. This validation ensures that the review process was executed as planned and that the results are accurate. HSAG reviewed whether or not the licensed organizations performed a re-review of a minimum random sample of 30 medical records for each of two reported measures (if applicable) to ensure the reliability and validity of the data collected.	HEDIS 2011 FAR
IDSS Review—The MCOs and the PCPP are required to complete NCQA's IDSS for the submission of audited rates to NCQA. The auditor finalizes the IDSS by completing the audit review and entering an audit result. This process verifies that the auditor validated all activities that culminated in a rate by the MCOs or the PCPP. The auditor locks the IDSS so that no information can be changed. HSAG verified that the licensed organizations completed the IDSS review process.	HEDIS 2011 IDSS

Table 2-2 identifies the key elements reviewed by HSAG during validation activities. HSAG identified whether or not each MCO and the PCPP were compliant with the key elements as described by the licensed organizations in the final report and the IDSS. As presented in Table 2-2, a checkmark indicates that the licensed organization reviewed the HEDIS activities, which confirmed that HEDIS methodology was being followed. Some activities are identified as being compliant by inserting the name of the company the MCOs and the PCPP contracted with to perform the required tasks.

Table 2-2—Validation Activities

	DHMC	RMHP	PCPP
Licensed Organization	HealthcareData Company, LLC	Logiqual, LLC	Health Services Advisory Group, Inc. (HSAG)
Pre-on-site Visit Call/Meeting	✓	✓	✓
Roadmap Review	✓	✓	✓
Software Vendor	Verisk Health, Inc.	ViPS MedMeasures 13.0	QMark, Inc.
Source Code/ Certified Software Review	✓	✓	✓
Survey Vendor	Morpace Inc.	Not indicated in the FAR	HSAG
CAHPS Sample Frame Validation	✓	✓	✓
Primary Source Verification	✓	✓	✓
Medical Record Review	✓	✓	✓
IDSS Review	✓	✓	✓

Table 2-2 indicates that audits conducted for the MCOs and the PCPP included all of the listed validation activities. The MCOs and the PCPP used an NCQA-licensed organization to perform their HEDIS audits. In addition, the MCOs and the PCPP used an NCQA-certified software vendor for calculating rates; therefore, there was no source code review performed. Both the MCOs and the PCPP also used an NCQA-certified HEDIS survey vendor to administer the CAHPS survey(s).

HSAG summarized the results from Table 2-2 and determined that the data collected and reported for the Department-selected measures followed NCQA HEDIS methodology. Therefore, any rates and audit results are determined to be valid, reliable, and accurate.

3. Summary of Compliance With IS Standards

In addition to ensuring that data were captured, reported, and presented in a uniform manner, HSAG evaluated each MCO's and the PCPP's information system (IS) capabilities for accurate HEDIS reporting. HSAG reviewed the MCOs' and the PCPP's final reports for the licensed organizations' assessments of IS capabilities, specifically focused on those aspects of the MCOs' and the PCPP's systems that could have impacted the HEDIS Medicaid reporting set.

For the purpose of HEDIS compliance auditing, the terms "information system" or "IS" are used broadly to include the computer and software environment, data collection procedures, and abstraction of medical records for hybrid measures. The IS evaluation includes a review of any manual processes that may have been used for HEDIS reporting as well. The licensed organizations determined if the MCOs and the PCPP had the automated systems, information management practices, processing environment, and control procedures to capture, access, translate, analyze, and report each HEDIS measure.

In accordance with NCQA's *2011 HEDIS Compliance Audit: Standards, Policies, and Procedures, Volume 5*, the licensed organizations evaluated IS compliance with NCQA's IS standards. These standards detail the minimum requirements the MCOs' and PCPP's IS systems should meet, as well as criteria that any manual processes used to report HEDIS information must meet. For circumstances in which a particular IS standard was not met, licensed organizations rated the impact on HEDIS reporting capabilities and, particularly, any measure that could be impacted. The MCOs or the PCPP may not be fully compliant with many of the IS standards but may still be able to report the selected measures.

Based on a review of the final audit reports, HSAG determined that both MCOs and the PCPP were able to produce and report a reliable rate for each of the Department-required HEDIS performance measures.

As in years past, both of the MCOs and the PCPP used NCQA-certified software to produce the HEDIS measures under the scope of this year's review. The software products were certified by NCQA for all of the measures included in the review. The use of NCQA-certified software helped ensure the validity of the produced rates. Both of the MCOs and the PCPP contracted with an NCQA-licensed organization to perform the NCQA HEDIS Compliance Audit.

The PCPP and the MCOs reported their hybrid measures using electronic medical record review tools supplied by their certified software vendors. Although NCQA does not certify electronic medical record tools at this time, these tools typically have built-in edits and prompts that help ensure the reliability of the data collected. The PCPP contracted with a medical record vendor for its medical record activities, including medical record tool development and data abstraction services. The MCOs used their own staff to review medical records using their vendors' electronic tools.

The section that follows provides a summary of the MCOs' and the PCPP's key findings for each IS standard as noted in their final audit report. A more in-depth explanation of NCQA's IS standards is provided in Appendix A of this report.

IS 1.0—Medical Service Data—Sound Coding Methods and Data Capture

This standard assesses whether:

- Industry standard codes are required and captured.
- Primary and secondary diagnosis codes are identified.
- Nonstandard codes (if used) are mapped to industry standard codes.
- Standard submission forms are used.
- Timely and accurate data entry processes and sufficient edit checks are used.
- Data completeness is continually assessed and all contracted vendors involved in medical claims processing are monitored.

The Colorado MCOs were fully compliant with IS 1.0. The PCPP was found to be substantially compliant with this standard, as it was not able to capture complete medical service data from the federally qualified health centers (FQHCs) and rural health clinics (RHCs), and incomplete data from these sources could impact administrative rates. It was determined that no rates were impacted by this, but the PCPP should work to determine how to capture these data.

IS 2.0—Enrollment Data—Data Capture, Transfer, and Entry

This standard assesses whether:

- All HEDIS-relevant information for data entry or electronic transmissions of enrollment data is accurate and complete.
- Manual entry of enrollment data is timely and accurate, and sufficient edit checks are in place.
- The health plans continually assess data completeness and take steps to improve performance.
- The health plans effectively monitor the quality and accuracy of electronic submissions.
- The health plans have effective control processes for the transmission of enrollment data.

The Colorado MCOs and the PCPP were fully compliant with IS 2.0. There were no issues or concerns noted for this standard relevant to the selected Colorado Medicaid measures.

IS 3.0—Practitioner Data—Data Capture, Transfer, and Entry

This standard assesses whether:

- Provider specialties are fully documented and mapped to HEDIS provider specialties.
- Effective procedures for submitting HEDIS-relevant information are in place.
- Electronic transmissions of practitioner data are checked to ensure accuracy.
- Processes and edit checks ensure accurate and timely entry of data into the transaction files.
- Data completeness is assessed and steps are taken to improve performance.
- Vendors are regularly monitored against expected performance standards.

The Colorado MCOs and the PCPP were fully compliant with IS 3.0. There were no issues or concerns noted for this standard relevant to the selected Colorado Medicaid measures.

IS 4.0—Medical Record Review Processes—Training, Sampling, Abstraction, and Oversight

This standard assesses whether:

- Forms or tools used for medical record review capture all fields relevant to HEDIS reporting.
- Checking procedures are in place to ensure data integrity for electronic transmission of information.
- Retrieval and abstraction of data from medical records are accurately performed.
- Data entry processes, including edit checks, are timely and accurate.
- Data completeness is assessed, including steps to improve performance.
- Vendor performance is monitored against expected performance standards.

HSAG found that all Colorado MCOs and the PCPP used medical record documentation to augment their HEDIS rates. All plans were fully compliant with IS 4.0, with the auditors noting no concerns.

IS 5.0—Supplemental Data—Capture, Transfer, and Entry

This standard assesses whether:

- Nonstandard coding schemes are fully documented and mapped to industry standard codes.
- Effective procedures for submitting HEDIS-relevant information are in place.
- Electronic transmissions of supplemental data are checked to ensure accuracy.
- Data entry processes, including edit checks, are timely and accurate.
- Data completeness is assessed, including steps to improve performance.
- Vendor performance is monitored against expected performance standards.

HSAG found that the Colorado MCOs and the PCPP used supplemental data to help augment their rates. Supplemental data were all non-claims data available to the health plans, such as laboratory results, state immunization registry information, disease management records, electronic medical records, or other internal databases. These required a more detailed review by the auditor to ensure that data were valid. The final audit reports used to review this information did not always clearly identify the data used; however, all of the plans were fully compliant with this standard. Any supplemental data used by the plans were considered reliable and valid.

IS 6.0—Member Call Center Data—Capture, Transfer, and Entry

This standard assesses whether member call center data are reliably and accurately captured. Since the health plans and the PCPP were not required to report call center measures, this standard was not applicable.

IS 7.0—Data Integration—Accurate HEDIS Reporting, Control Procedures that Support HEDIS Reporting Integrity

This standard assesses whether:

- Nonstandard coding schemes are fully documented and mapped to industry standard codes.
- Data transfers to the HEDIS repository from transaction files are accurate.
- File consolidations, extracts, and derivations are accurate.
- The repository structure and formatting are suitable for HEDIS measures and enable required programming efforts.
- Report production is managed effectively and operators perform appropriately.
- HEDIS reporting software is managed properly.
- Physical control procedures ensure HEDIS data integrity.

All of the MCOs and the PCPP were fully compliant with IS 7.0. All of the plans contracted with a certified software vendor to produce the reported HEDIS measures. There were no issues or concerns identified by the auditors.

4. Audit Findings

Each of the measures reviewed by the licensed organizations received an audit result consistent with the NCQA categories listed in Table 4-1. To produce these valid HEDIS rates, data from various sources, including provider, claims/encounter systems, and enrollment data, must be audited. The auditor scrutinizes these processes and makes a determination as to the validity of the data collected. The licensed organizations used a variety of audit methods, including analysis of computer programs, medical record abstraction results, data files, samples of data, and staff interviews to determine a result for each measure.

Table 4-1—HEDIS Audit Results

Audit Finding	Description	Audit Result
For HEDIS Measures		
The health plan followed HEDIS specifications and produced a reportable rate or result for the measure.	Reportable rate	***R***
The health plan followed HEDIS specifications but the denominator was too small to report a valid rate.	Denominator <30	*NA*
The health plan did not offer the health benefits required by the measure.	No Benefit	***NB***
1. The health plan calculated the measure but the rate was materially biased, 2. The health plan chose not to report the measure, or 3. The health plan is not required to report.	Not Reportable	***NR***

Depending on the measure, NCQA has two rules to determine significant bias.[4-1]

- Rule 1: A deviation of more than 5 percentage points from the reported rate (this includes Effectiveness of Care and most of the Access/Availability of Care measures).
- Rule 2: A deviation of more than 10 percentage points from the reported rate (this includes Health Plan Descriptive Information and most Use of Services measures).

For some measures, more than one rate is required for HEDIS reporting (e.g., *Childhood Immunization Status* and *Well-Child Visits in the First 15 Months of Life*). It is possible that the MCOs or the PCPP prepared some of the rates required by the measure appropriately but had a significant bias in others. According to NCQA guidelines, the MCOs or the PCPP would receive a result of "*R*" for the measure as a whole, but if there were significantly biased rates within the measure, they would receive an "*NR*" where appropriate.

[4-1] For a complete list of the measures that follow each bias determination rule, please refer to Appendix 10 in National Committee for Quality Assurance. *2011 HEDIS Compliance Audit™: Standards, Policies, and Procedures*, *Volume 5*. Washington D.C.; NCQA.

Each IDSS contains a completed copy of the Audit Review Table, which displays the audit result for each reported measure, the rate, and any additional comments. Table 4-2 presents the audit results assigned to the MCOs' and the PCPP's rates. Please refer to Appendix B for a comprehensive list of audit results and rates.

Table 4-2—The Colorado Medicaid Audit Results			
HEDIS 2011 Measure	**DHMC**	**RMHP**	**PCPP**
Childhood Immunization Status	***R***	***R***	***R***
Well-Child Visits in the First 15 Months of Life	***R***	***R***	***R***
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	***R***	***R***	***R***
Adolescent Well-Care Visits	***R***	***R***	***R***
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents	***R***	***R***	***R***
Prenatal and Postpartum Care	***R***	***R***	***R***
Children's and Adolescents' Access to Primary Care Practitioners	***R***	***R***	***R***
Adults' Access to Preventive/Ambulatory Health Services	***R***	***R***	***R***
Chlamydia Screening in Women	***R***	***R***	***R***
Adult BMI Assessment	***R***	***R***	***R***
Annual Monitoring for Patients on Persistent Medications	***R***	***R***	***R***
Use of Imaging Studies for Low Back Pain	***R***	***R***	***R***
Controlling High Blood Pressure	***R***	***R***	***R***
Pharmacotherapy Management of COPD Exacerbation	***R***	***R***	***R***
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	***R***	***R***	***R***
Inpatient Utilization: General Hospital/Acute Care	***R***	***R***	***R***
Ambulatory Care Utilization	***R***	***R***	***R***
Frequency of Selected Procedures	***R***	***R***	***R***
Antibiotic Utilization	***R***	***R***	***R***

Audit results: ***R = Report*** ***NR = Not Report*** ***NA = Not Applicable*** ***NB = No Benefit***

As indicated in Table 4-2, both of the MCOs and the PCPP produced reportable rates for all of the measures required by the Department. Please see Appendix B, which identifies the rate determination at the submeasure level, for more detail.

5. Conclusions and Recommendations

Conclusions

HSAG reviewed the final HEDIS audit reports and the IDSS data output reports for DHMC, RMHP, and the PCPP for reporting year 2011 (measurement year 2010). Consistent with previous years, HSAG determined that there were no major process issues that impacted HEDIS reporting for the set of measures required by the Department. Neither of the MCOs nor the PCPP was assigned a "*Not Report*" (*NR*) audit result for any of the Department-required HEDIS measures. HSAG also verified that proper HEDIS methodology was followed by the MCOs and the PCPP. The MCOs and the PCPP each contracted with an NCQA-licensed organization to perform the audit, following NCQA's requirements. As indicated in the final audit reports, each audit firm adhered to the NCQA audit requirements and methodology.

All MCOs were fully compliant with all IS Standards under the scope of the performance measure validation. The PCPP was fully compliant with all IS Standards, except IS 1.0 where the auditors noted challenges in capturing complete medical service data from Federally Qualified Health Centers (FQHCs) and Rural Health Clinics (RHCs), which could impact administrative rates.

Both of the MCOs and the PCPP contracted with NCQA-certified software vendors to calculate the HEDIS measures. The use of certified software helped to ensure the reliability of the HEDIS calculations. In addition, each organization used an electronic, vendor-developed medical record review tool. Although NCQA does not certify electronic medical record tools, these tools are more sophisticated than paper or manual processes and typically contain edits, which help prevent reviewer error and improve data accuracy.

Recommendations

HSAG offers the following recommendations with respect to performance measure reporting:

- The MCOs and the PCPP should continue to work with their providers to increase the volume of electronic claims that are received and processed. The elimination of manual processing will reduce the number of errors and improve the timeliness of the data being loaded and processed in the transactional systems.
- The MCOs and the PCPP should work with providers to ensure that complete data are being received; incomplete data from these sources may negatively affect their administrative rates.
- The MCOs and the PCPP should consider the use of supplemental data sources to enhance administrative data for HEDIS reporting. The use of supplemental data can increase reported rates and minimize the burden of medical record review. A plan should following the NCQA guidelines for using supplemental data.

- For those FQHCs or RHCs within the PCPP that contractually provide one diagnosis and one procedure code to the Department for claim adjudication; they should continue to work towards providing complete service data to the Department. Reporting all services provided during an outpatient visit will result in more accurate and better performance measure rates.
- The MCOs and the PCPP should track key milestones with vendors. It is important to have a mechanism in place to track due dates and deliverables so that all parties involved are aware of expectation. Waiting until the end of the HEDIS reporting season to receive vendor deliverables or data could jeopardize a plan's ability to report valid rates.
- Where applicable, the MCOs and PCPP should consider the use of an electronic health records (EHR) system. EHRs can aid in identifying missed patient opportunities for services such as immunizations, they also aid in providing standing orders for physicians to review and provide needed services (immunizations, BMI calculation, counseling for nutrition or physical activity), which would improve performance measure rates.

Source: NCQA's *2011 HEDIS Compliance Audit: Standards, Policies, Procedures, Volume 5*.

IS 1.0—Medical Services Data—Sound Coding Methods and Data Capture, Transfer, and Entry

IS 1.1 Industry standard codes (e.g., ICD-9-CM, CPT, DRG, etc.) are used and all characters are captured.

IS 1.2 Principal codes are identified and secondary codes are captured.

IS 1.3 Nonstandard coding schemes are fully documented and mapped back to industry standard codes.

IS 1.4 Standard submission forms are used and capture all fields relevant to HEDIS reporting. All proprietary forms capture equivalent data. Electronic transmission procedures conform to industry standards.

IS 1.5 Data entry processes are timely and accurate and include sufficient edit checks to ensure accurate entry of submitted data in transaction files for HEDIS reporting.

IS1.6 The organization continually assesses data completeness and takes steps to improve performance.

IS 1.7 The organization regularly monitors vendor performance against expected performance standards.

Rationale

The MCO must capture all clinical information pertinent to the delivery of services to provide a basis for calculating HEDIS measures. The audit process ensures that the MCO consistently captures sufficient clinical information. Principal among these practices and critical for computing HEDIS clinical measures is consistent use of standardized codes to describe medical events, including nationally recognized schemes to capture diagnosis, procedure, DRG, and DSM codes. Standardized coding improves the comparability of HEDIS measures through common definition of identical clinical events. The MCO must cross-reference nonstandard coding schemes at the specific diagnosis and service level to attain equivalent meaning. The integrity of HEDIS measures requires using standard forms, controlling receipt processes, editing and verifying data entry, and implementing other control procedures that promote completeness and accuracy in receiving and recording medical information. The transfer of information from medical charts to the MCOs' databases should be subject to the same standards for accuracy and completeness.

IS 2.0—Enrollment Data—Data Capture, Transfer, and Entry

IS 2.1 The organization has procedures for submitting HEDIS-relevant information for data entry. Electronic transmissions of membership data have necessary procedures to ensure accuracy.

IS 2.2 Data entry processes are timely and accurate and include sufficient edit checks to ensure accurate entry of submitted data in transaction files.

IS 2.3 The organization continually assesses data completeness and takes steps to improve performance.

IS 2.4 The organization regularly monitors vendor performance against expected performance standards.

Rationale

Controlling receipt processes, editing and verifying data entry, and implementing other control procedures to promote completeness and accuracy in receiving and recording member information are critical in databases that calculate HEDIS measures. Specific member information includes age, gender, benefits, product line (commercial, Medicaid, and Medicare), and the dates that define periods of membership so gaps in enrollment can be determined.

IS 3.0—Practitioner Data—Data Capture, Transfer, and Entry

IS 3.1 Provider specialties are fully documented and mapped to HEDIS provider specialties.

IS 3.2 The organization has effective procedures for submitting HEDIS-relevant information for data entry. Electronic transmissions of practitioner data are checked to ensure accuracy.

IS 3.3 Data entry processes are timely and include edit checks to ensure accurate entry of submitted data in transaction files.

IS 3.4 The organization continually assesses data completeness and takes steps to improve performance.

IS 3.5 The organization regularly monitors vendor performance against expected performance standards.

Rationale

Controlling receipt processes, editing and verifying data entry, and implementing other control procedures to promote completeness and accuracy in receiving and recording provider information are critical in databases that calculate HEDIS measures. Specific provider information includes the provider's specialty, contracts, credentials, populations served, date of inclusion in the network, date of credentialing, board certification status, and information needed to develop medical record abstraction tools.

IS 4.0—Medical Record Review Processes—Training, Sampling, Abstraction, and Oversight

IS 4.1 Forms capture all fields relevant to HEDIS reporting. Electronic transmission procedures conform to industry standards and have necessary checking procedures to ensure data accuracy (logs, counts, receipts, handoff, and sign-off).

IS 4.2 Retrieval and abstraction of data from medical records is reliably and accurately performed.

IS 4.3 Data entry processes are timely and accurate and include sufficient edit checks to ensure accurate entry of submitted data in the files for HEDIS reporting.

IS 4.4 The organization continually assesses data completeness and takes steps to improve performance.

IS 4.5 The organization regularly monitors vendor performance against expected performance standards.

Rationale

Medical record review validation ensures that record abstraction performed by or on behalf of the entity meets standards for sound processes and that abstracted data are accurate. Validation includes not only an over-read of abstracted medical records, but also a review of medical record review tools, policies and procedures related to data entry and transfer, and training materials developed by or on behalf of the entity.

IS 5.0—Supplemental Data—Capture, Transfer, and Entry

IS 5.1 Nonstandard coding schemes are fully documented and mapped to industry standard codes.

IS 5.2 The organization has effective procedures for submitting HEDIS-relevant information for data entry. Electronic transmissions of data have checking procedures to ensure accuracy.

IS 5.3 Data entry processes are timely and accurate and include edit checks to ensure accurate entry of submitted data in transaction files.

IS 5.4 The organization continually assesses data completeness and takes steps to improve performance.

IS 5.5 The organization regularly monitors vendor performance against expected performance standards.

Rationale

MCOs may use a supplemental database to collect and store data, which is then used to augment HEDIS rates. These databases must be scrutinized closely since they can be internal or external, and standard versus nonstandard. The auditor must determine whether sufficient control processes are in place related to data collection, validation of data entry into the database, use of these data. Mapping documents and file layouts may be reviewed, as well, to determine compliance with this standard.

IS 6.0—Member Call Center Data—Capture, Transfer, and Entry*

IS 6.1 Member call center data are reliably and accurately captured.

*This standard was not applicable to the measures under the scope of the audit.

IS 7.0—Data Integration—Accurate HEDIS Reporting, Control Procedures That Support HEDIS Reporting Integrity

IS 7.1 Nonstandard coding schemes are fully documented and mapped to industry standard codes.

IS 7.2 Data transfers to the HEDIS repository from transaction files are accurate.

IS 7.3 File consolidations, extracts, and derivations are accurate.

IS 7.4 The repository structure and formatting are suitable for HEDIS measures and enable required programming efforts.

IS 7.5 Report production is managed effectively and operators perform appropriately.

IS 7.6 HEDIS reporting software is managed properly with regard to development, methodology, documentation, revision control, and testing.

IS 7.7 Physical control procedures ensure HEDIS data integrity such as physical security, data access authorization, disaster recovery facilities, and fire protection.

Rationale

Calculating HEDIS rates requires data from multiple sources. The systems used to assemble the data and to make the required calculations should be carefully constructed and tested. The MCOs' quality assurance practices and backup procedures serve as an organizational infrastructure supporting all MCO information systems. The practices and procedures promote accurate and timely information processing and data protection in the event of a disaster. Data needed to calculate HEDIS measures are produced by the MCOs' information systems and may be directly or indirectly affected by IS practices and procedures.

Appendix B. Audit Results and Rates

Table B-1—HEDIS Audit Results		
Audit Finding	**Description**	**Audit Result**
For HEDIS Measures		
The rate or numeric result for a HEDIS measure is reportable. The measure was fully or substantially compliant with HEDIS specifications or had only minor deviations that did not significantly bias the reported rate.	Report	***R***
HEDIS specifications were followed but the denominator was too small to report a valid rate.	Denominator <30	*NA*
The health plan did not offer the health benefits required by the measure.	No Benefit	***NB***
1. The health plan calculated the measure but the rate was materially biased, or 2. The health plan chose not to report the measure.	Not Reportable	***NR***

Table B-2—Denver Health Medicaid Choice Rates and Audit Results		
HEDIS Measure	**2011 HEDIS Rate**	**Audit Result**
Childhood Immunization Status		
DTaP	86.86%	***R***
IPV	95.86%	***R***
MMR	93.67%	***R***
HiB	95.38%	***R***
Hepatitis B	96.84%	***R***
VZV	92.70%	***R***
Pneumococcal Conjugate	89.54%	***R***
Combination #2	86.13%	***R***
Combination #3	85.64%	***R***
Well-Child Visits in the First 15 Months of Life		
0 Visits	0.98%	***R***
1 Visit	1.22%	***R***
2 Visits	2.69%	***R***
3 Visits	3.42%	***R***
4 Visits	7.82%	***R***
5 Visits	16.14%	***R***
6+ Visits	67.73%	***R***
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	68.37%	***R***
Adolescent Well-Care Visits	49.15%	***R***
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents		
BMI Percentile (3–11 Years)	78.59%	***R***
BMI Percentile (12–17 Years)	75.51%	***R***
BMI Percentile (Total)	77.86%	***R***
Counseling for Nutrition (3–11 Years)	79.23%	***R***
Counseling for Nutrition (12–17 Years)	66.33%	***R***
Counseling for Nutrition (Total)	76.16%	***R***
Counseling for Physical Activity (3–11 Years)	55.27%	***R***
Counseling for Physical Activity (12–17 Years)	57.14%	***R***
Counseling for Physical Activity (Total)	55.72%	***R***
Prenatal and Postpartum Care		
Timeliness of Prenatal Care	82.93%	***R***
Postpartum Care	60.98%	***R***
Children and Adolescents' Access to Primary Care Practitioners		
12–24 Months	93.92%	***R***
25 Months – 6 Years	80.01%	***R***
7–11 Years	81.48%	***R***
12–19 Years	85.31%	***R***

Table B-2—Denver Health Medicaid Choice Rates and Audit Results		
HEDIS Measure	2011 HEDIS Rate	Audit Result
Adults' Access to Preventive/Ambulatory Health Services		
20–44 Years	73.22%	***R***
45–64 Years	78.69%	***R***
65+ Years	70.21%	***R***
Total	74.29%	***R***
Chlamydia Screening in Women		
16–20 Years	73.13%	***R***
21–24 Years	72.76%	***R***
Total	72.96%	***R***
Adult BMI Assessment	82.24%	***R***
Annual Monitoring for Patients on Persistent Medications		
ACE Inhibitors or ARBs	88.49%	***R***
Digoxin	**NA**	***R***
Diuretics	87.01%	***R***
Anticonvulsants	61.71%	***R***
Total	84.67%	***R***
Use of Imaging Studies for Low Back Pain	75.47%	***R***
Controlling High Blood Pressure	66.18%	***R***
Pharmacotherapy Management of COPD Exacerbation		
Systemic Corticosteroid	60.87%	***R***
Bronchodilator	71.01%	***R***
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	44.44%	***R***
Inpatient Utilization—General Hospital/Acute Care		
Total Inpatient Discharges per 1,000 MM	9.93	***R***
Total Inpatient Average Length of Stay (in Days)	3.75	***R***
Medicine Discharges per 1,000 MM	5.87	***R***
Medicine Average Length of Stay (in Days)	3.14	***R***
Surgery Discharges per 1,000 MM	1.53	***R***
Surgery Average Length of Stay (in Days)	8.13	***R***
Maternity Discharges per 1,000 MM	5.28	***R***
Maternity Average Length of Stay (in Days)	2.52	***R***
Ambulatory Care		
Outpatient Visits per 1,000 MM	264.51	***R***
ED Visits per 1,000 MM	47.30	***R***
Frequency of Selected Procedures per 1,000 MM		
Bariatric weight loss surgery, Ages 0-19, Male and Female	0.00	***R***
Bariatric weight loss surgery, Ages 20-44, Male and Female	0.08	***R***
Bariatric weight loss surgery, Ages 45-64, Male and Female	0.08	***R***
Tonsillectomy, Ages 0–9, Male and Female	0.39	***R***
Tonsillectomy, Ages 10–19, Male and Female	0.17	***R***

Table B-2—Denver Health Medicaid Choice Rates and Audit Results		
HEDIS Measure	**2011 HEDIS Rate**	**Audit Result**
Hysterectomy, Abdominal, Ages 15–44, Female	0.08	***R***
Hysterectomy, Abdominal, Ages 45–64, Female	0.19	***R***
Hysterectomy, Vaginal, Ages 15–44, Female	0.08	***R***
Hysterectomy, Vaginal, Ages 45–64, Female	0.19	***R***
Cholecystectomy, Open, Ages 30–64, Male	0.05	***R***
Cholecystectomy, Open, Ages 15–44, Female	0.01	***R***
Cholecystectomy, Open, Ages 45–64, Female	0.08	***R***
Cholecystectomy, Closed, Ages 30–64, Male	0.21	***R***
Cholecystectomy, Closed, Ages 15–44, Female	0.59	***R***
Cholecystectomy, Closed, Ages 45–64, Female	0.41	***R***
Back Surgery, Ages 20–44, Male	0.13	***R***
Back Surgery, Ages 20–44, Female	0.04	***R***
Back Surgery, Ages 45–64, Male	0.26	***R***
Back Surgery, Ages 45–64, Female	0.34	***R***
Mastectomy, Ages 15–44, Female	0.00	***R***
Mastectomy, Ages 45–64, Female	0.15	***R***
Lumpectomy, Ages 15–44, Female	0.01	***R***
Lumpectomy , Ages 45–64, Female	0.26	***R***
Antibiotic Utilization		
Average Prescriptions PMPY for Antibiotics	0.48	***R***
Average Days Supplied per Antibiotic Prescription	9.92	***R***
Average Prescriptions PMPY for Antibiotics of Concern	0.12	***R***
Percentage of Antibiotics of Concern of All Antibiotic Prescriptions	25.79%	***R***

R = Report   ***NR = Not Report***   ***NA = Not Applicable***   ***NB = No Benefit***

Table B-3—Rocky Mountain Health Plans Rates and Audit Results		
HEDIS Measure	2011 HEDIS Rate	Audit Result
Childhood Immunization Status		
DTaP	86.62%	***R***
IPV	95.38%	***R***
MMR	93.92%	***R***
HiB	95.13%	***R***
Hepatitis B	95.38%	***R***
VZV	93.92%	***R***
Pneumococcal Conjugate	84.91%	***R***
Combination #2	82.24%	***R***
Combination #3	78.59%	***R***
Well-Child Visits in the First 15 Months of Life		
0 Visits	0.90%	***R***
1 Visit	0.30%	***R***
2 Visits	0.30%	***R***
3 Visits	2.69%	***R***
4 Visits	5.97%	***R***
5 Visits	8.66%	***R***
6+ Visits	81.19%	***R***
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	68.10%	***R***
Adolescent Well-Care Visits	49.88%	***R***
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents		
BMI Percentile (3–11 Years)	64.80%	***R***
BMI Percentile (12–17 Years)	56.07%	***R***
BMI Percentile (Total)	62.53%	***R***
Counseling for Nutrition (3–11 Years)	61.51%	***R***
Counseling for Nutrition (12–17 Years)	54.21%	***R***
Counseling for Nutrition (Total)	59.61%	***R***
Counseling for Physical Activity (3–11 Years)	48.03%	***R***
Counseling for Physical Activity (12–17 Years)	55.14%	***R***
Counseling for Physical Activity (Total)	49.88%	***R***
Prenatal and Postpartum Care		
Timeliness of Prenatal Care	96.95%	***R***
Postpartum Care	77.44%	***R***
Children and Adolescents' Access to Primary Care Practitioners		
12–24 Months	99.27%	***R***
25 Months – 6 Years	89.96%	***R***
7–11 Years	92.37%	***R***
12–19 Years	93.41%	***R***

Table B-3—Rocky Mountain Health Plans Rates and Audit Results		
HEDIS Measure	2011 HEDIS Rate	Audit Result
Adults' Access to Preventive/Ambulatory Health Services		
20–44 Years	87.71%	***R***
45–64 Years	91.81%	***R***
65+ Years	96.13%	***R***
Total	90.77%	***R***
Chlamydia Screening in Women		
16–20 Years	47.38%	***R***
21–24 Years	46.51%	***R***
Total	46.96%	***R***
Adult BMI Assessment	60.10%	***R***
Annual Monitoring for Patients on Persistent Medications		
ACE Inhibitors or ARBs	86.03%	***R***
Digoxin	**NA**	***R***
Diuretics	89.44%	***R***
Anticonvulsants	69.23%	***R***
Total	84.09%	***R***
Use of Imaging Studies for Low Back Pain	69.95%	***R***
Controlling High Blood Pressure	80.06%	***R***
Pharmacotherapy Management of COPD Exacerbation		
Systemic Corticosteroid	39.02%	***R***
Bronchodilator	65.85%	***R***
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	48.60%	***R***
Inpatient Utilization—General Hospital/Acute Care		
Total Inpatient Discharges per 1,000 MM	11.57	***R***
Total Inpatient Average Length of Stay (in Days)	2.92	***R***
Medicine Discharges per 1,000 MM	3.80	***R***
Medicine Average Length of Stay (in Days)	3.02	***R***
Surgery Discharges per 1,000 MM	2.64	***R***
Surgery Average Length of Stay (in Days)	4.73	***R***
Maternity Discharges per 1,000 MM	10.29	***R***
Maternity Average Length of Stay (in Days)	1.91	***R***
Ambulatory Care		
Outpatient Visits per 1,000 MM	437.76	***R***
ED Visits per 1,000 MM	56.89	***R***
Frequency of Selected Procedures per 1,000 MM		
Bariatric weight loss surgery, Ages 0-19, Male and Female	0.00	***R***
Bariatric weight loss surgery, Ages 20-44, Male and Female	0.23	***R***
Bariatric weight loss surgery, Ages 45-64, Male and Female	0.11	***R***
Tonsillectomy, Ages 0–9, Male and Female	1.36	***R***
Tonsillectomy, Ages 10–19, Male and Female	1.09	***R***

Table B-3—Rocky Mountain Health Plans Rates and Audit Results		
HEDIS Measure	**2011 HEDIS Rate**	**Audit Result**
Hysterectomy, Abdominal, Ages 15–44, Female	0.20	***R***
Hysterectomy, Abdominal, Ages 45–64, Female	0.27	***R***
Hysterectomy, Vaginal, Ages 15–44, Female	1.26	***R***
Hysterectomy, Vaginal, Ages 45–64, Female	0.62	***R***
Cholecystectomy, Open, Ages 30–64, Male	0.00	***R***
Cholecystectomy, Open, Ages 15–44, Female	0.00	***R***
Cholecystectomy, Open, Ages 45–64, Female	0.18	***R***
Cholecystectomy, Closed, Ages 30–64, Male	0.81	***R***
Cholecystectomy, Closed, Ages 15–44, Female	1.59	***R***
Cholecystectomy, Closed, Ages 45–64, Female	1.43	***R***
Back Surgery, Ages 20–44, Male	0.75	***R***
Back Surgery, Ages 20–44, Female	0.49	***R***
Back Surgery, Ages 45–64, Male	0.74	***R***
Back Surgery, Ages 45–64, Female	1.16	***R***
Mastectomy, Ages 15–44, Female	0.04	***R***
Mastectomy, Ages 45–64, Female	0.27	***R***
Lumpectomy, Ages 15–44, Female	0.20	***R***
Lumpectomy , Ages 45–64, Female	0.45	***R***
Antibiotic Utilization		
Average Prescriptions PMPY for Antibiotics	1.09	***R***
Average Days Supplied per Antibiotic Prescription	9.90	***R***
Average Prescriptions PMPY for Antibiotics of Concern	0.40	***R***
Percentage of Antibiotics of Concern of All Antibiotic Prescriptions	36.66	***R***

R = Report   ***NR = Not Report***   ***NA = Not Applicable***   ***NB = No Benefit***

Table B-4—PCPP Rates and Audit Results		
HEDIS Measure	**2011 HEDIS Rate**	**Audit Result**
Childhood Immunization Status		
DTaP	86.37%	***R***
IPV	95.62%	***R***
MMR	94.16%	***R***
HiB	97.32%	***R***
Hepatitis B	93.67%	***R***
VZV	95.38%	***R***
Pneumococcal Conjugate	93.19%	***R***
Combination #2	81.75%	***R***
Combination #3	80.78%	***R***
Well-Child Visits in the First 15 Months of Life		
0 Visits	1.30%	***R***
1 Visit	0.65%	***R***
2 Visits	1.30%	***R***
3 Visits	3.25%	***R***
4 Visits	11.69%	***R***
5 Visits	24.68%	***R***
6+ Visits	57.14%	***R***
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	70.07%	***R***
Adolescent Well-Care Visits	47.69%	***R***
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents		
BMI Percentile (3–11 Years)	48.35%	***R***
BMI Percentile (12–17 Years)	44.38%	***R***
BMI Percentile (Total)	46.72%	***R***
Counseling for Nutrition (3–11 Years)	56.61%	***R***
Counseling for Nutrition (12–17 Years)	44.38%	***R***
Counseling for Nutrition (Total)	51.58%	***R***
Counseling for Physical Activity (3–11 Years)	45.45%	***R***
Counseling for Physical Activity (12–17 Years)	44.97%	***R***
Counseling for Physical Activity (Total)	45.26%	***R***
Prenatal and Postpartum Care		
Timeliness of Prenatal Care	84.01%	***R***
Postpartum Care	70.35%	***R***
Children and Adolescents' Access to Primary Care Practitioners		
12–24 Months	96.94%	***R***
25 Months – 6 Years	88.43%	***R***
7–11 Years	90.38%	***R***
12–19 Years	91.66%	***R***

Table B-4—PCPP Rates and Audit Results		
HEDIS Measure	**2011 HEDIS Rate**	**Audit Result**
Adults' Access to Preventive/Ambulatory Health Services		
20–44 Years	83.58%	***R***
45–64 Years	87.96%	***R***
65+ Years	85.99%	***R***
Total	85.77%	***R***
Chlamydia Screening in Women		
16–20 Years	30.54%	***R***
21–24 Years	27.68%	***R***
Total	29.39%	***R***
Adult BMI Assessment	35.52%	***R***
Annual Monitoring for Patients on Persistent Medications		
ACE Inhibitors or ARBs	89.49%	***R***
Digoxin	**NA**	***R***
Diuretics	87.36%	***R***
Anticonvulsants	70.62%	***R***
Total	83.16%	***R***
Use of Imaging Studies for Low Back Pain	71.12%	***R***
Controlling High Blood Pressure	43.31%	***R***
Pharmacotherapy Management of COPD Exacerbation		
Systemic Corticosteroid	62.50%	***R***
Bronchodilator	75.00%	***R***
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	40.09%	***R***
Inpatient Utilization—General Hospital/Acute Care		
Total Inpatient Discharges per 1,000 MM	11.51	***R***
Total Inpatient Average Length of Stay (in Days)	4.90	***R***
Medicine Discharges per 1,000 MM	6.97	***R***
Medicine Average Length of Stay (in Days)	4.19	***R***
Surgery Discharges per 1,000 MM	3.02	***R***
Surgery Average Length of Stay (in Days)	7.68	***R***
Maternity Discharges per 1,000 MM	2.62	***R***
Maternity Average Length of Stay (in Days)	2.63	***R***
Ambulatory Care		
Outpatient Visits per 1,000 MM	409.99	***R***
ED Visits per 1,000 MM	63.92	***R***
Frequency of Selected Procedures per 1,000 MM		
Bariatric weight loss surgery, Ages 0-19, Male and Female	0.01	***R***
Bariatric weight loss surgery, Ages 20-44, Male and Female	0.08	***R***
Bariatric weight loss surgery, Ages 45-64, Male and Female	0.09	***R***
Tonsillectomy, Ages 0–9, Male and Female	1.02	***R***
Tonsillectomy, Ages 10–19, Male and Female	0.73	***R***

Table B-4—PCPP Rates and Audit Results		
HEDIS Measure	**2011 HEDIS Rate**	**Audit Result**
Hysterectomy, Abdominal, Ages 15–44, Female	0.40	***R***
Hysterectomy, Abdominal, Ages 45–64, Female	0.21	***R***
Hysterectomy, Vaginal, Ages 15–44, Female	0.30	***R***
Hysterectomy, Vaginal, Ages 45–64, Female	0.07	***R***
Cholecystectomy, Open, Ages 30–64, Male	0.03	***R***
Cholecystectomy, Open, Ages 15–44, Female	0.06	***R***
Cholecystectomy, Open, Ages 45–64, Female	0.00	***R***
Cholecystectomy, Closed, Ages 30–64, Male	0.29	***R***
Cholecystectomy, Closed, Ages 15–44, Female	1.07	***R***
Cholecystectomy, Closed, Ages 45–64, Female	0.71	***R***
Back Surgery, Ages 20–44, Male	0.19	***R***
Back Surgery, Ages 20–44, Female	0.21	***R***
Back Surgery, Ages 45–64, Male	0.57	***R***
Back Surgery, Ages 45–64, Female	0.67	***R***
Mastectomy, Ages 15–44, Female	0.02	***R***
Mastectomy, Ages 45–64, Female	0.11	***R***
Lumpectomy, Ages 15–44, Female	0.16	***R***
Lumpectomy , Ages 45–64, Female	0.14	***R***
Antibiotic Utilization		
Average Prescriptions PMPY for Antibiotics	1.25	***R***
Average Days Supplied per Antibiotic Prescription	10.56	***R***
Average Prescriptions PMPY for Antibiotics of Concern	0.47	***R***
Percentage of Antibiotics of Concern of All Antibiotic Prescriptions	37.94%	***R***

R = Report   ***NR = Not Report***   ***NA = Not Applicable***   ***NB = No Benefit***