

COLORADO

Department of Health Care Policy & Financing

FY 2017–2018 Physical Health Performance Measure Validation Aggregate Report

October 2018

This report was produced by Health Services Advisory Group, Inc., for the Colorado Department of Health Care Policy and Financing.





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Validation of Performance Measures

Introduction

The Colorado State Medicaid agency, the Department of Health Care Policy and Financing (the Department), contracts with Health Services Advisory Group, Inc. (HSAG), to perform the three mandatory external quality review (EQR) activities required by the Medicaid managed care regulations released May 6, 2016. Validation of the performance measures calculated and submitted by each managed care organization (MCO) is one of these mandatory activities as articulated in 42 Code of Federal Regulations (CFR) §438.358. The Department contracted with HSAG, an external quality review organization (EQRO), to conduct the validation of performance measures for two MCOs, Denver Health Medicaid Choice (DHMC) and Rocky Mountain Health Plans Medicaid Prime (RMHP Prime), for fiscal year (FY) 2017–2018.

The Department opted to use select National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS®)¹ measures as the performance measures and calendar year 2017 as the measurement period for validation. Developed and maintained by NCQA, HEDIS is a set of performance data broadly accepted in the managed care environment as an industry standard. Because the MCOs calculated and submitted HEDIS performance measures and underwent an NCQA HEDIS Compliance Audit™.² HSAG validated the results from the audits to meet the requirements articulated in the Medicaid managed care regulations. More specifically, 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, *EQR Protocol 2: Validation of Performance Measures Reported by the MCO: A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 1, 2012.³

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

- Evaluate the accuracy of the performance measure data collected by the MCOs.
- Determine the extent to which the specific performance measures calculated by the MCOs followed the specifications established for each performance measure.

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. Since the

¹ HEDIS[®] is a registered trademark of the National Committee for Quality Assurance (NCQA).

² NCQA HEDIS Compliance Audit[™] is a trademark of NCQA. The purpose of conducting a HEDIS audit is to ensure that rates submitted by the MCOs are reliable, valid, accurate, and can be compared to one another. For a brief overview of the NCQA HEDIS Compliance Audit, please refer to Appendix A.

³ Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 2: Validation of Performance Measures Reported by the MCO: A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012. Available at: https://www.medicaid.gov/medicaid/quality-of-care/medicaid-managed-care/external-quality-review/index.html. Accessed on: Aug 28, 2018.



audits were conducted in compliance with NCQA's 2018 HEDIS Compliance Audit: Standards, Policies, and Procedures, Volume 5, and the NCQA HEDIS Compliance Audit is consistent with the CMS Performance Measure Validation Protocol, the findings and results from the NCQA HEDIS Compliance Audit can be reviewed, validated, and eventually accepted as findings for the validation of performance measures to meet the managed care requirements.

Performance Measure List

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, are HEDIS measures that follow the definitions outlined in NCQA's *HEDIS 2018 Technical Specifications*, *Volume 2*, and the reporting method required by the Department.

Table 1—Health First Colorado 2018 Performance Measure Reporting Set⁴

Performance Measures	Reporting Methodology
Childhood Immunization Status	Administrative
Immunizations for Adolescents	Administrative
Well-Child Visits in the First 15 Months of Life	Administrative
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	Administrative
Adolescent Well-Care Visits	Administrative
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents	Administrative
Appropriate Testing for Children With Pharyngitis	Administrative
Appropriate Treatment for Children With Upper Respiratory Infection	Administrative
Children's and Adolescents' Access to Primary Care Practitioners	Administrative
Prenatal and Postpartum Care	Administrative
Adults' Access to Preventive/Ambulatory Health Services	Administrative
Chlamydia Screening in Women	Administrative
Breast Cancer Screening	Administrative
Cervical Cancer Screening	Administrative
Non-Recommended Cervical Cancer Screening in Adolescent Females	Administrative

⁴ In Colorado, Medicaid is known as Health First Colorado (Colorado's Medicaid Program).



Performance Measures	Reporting Methodology
Adult Body Mass Index (BMI) Assessment	Administrative
Antidepressant Medication Management	Administrative
Follow-Up Care for Children Prescribed Attention Deficit Hyperactivity Disorder (ADHD) Medication	Administrative
Metabolic Monitoring for Children and Adolescents on Antipsychotics	Administrative
Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Administrative
Persistence of Beta-Blocker Treatment After a Heart Attack	Administrative
Comprehensive Diabetes Care (Excluding HbA1c <7 indicator)	Administrative
Statin Therapy for Patients With Diabetes	Administrative
Statin Therapy for Patients With Cardiovascular Disease	Administrative
Annual Monitoring for Patients on Persistent Medications	Administrative
Use of Imaging Studies for Low Back Pain	Administrative
Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	Administrative
Pharmacotherapy Management of Chronic Obstructive Pulmonary Disease (COPD) Exacerbation	Administrative
Medication Management for People With Asthma	Administrative
Asthma Medication Ratio	Administrative
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	Administrative
Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis	Administrative
Ambulatory Care (Per 1,000 Member Months)	Administrative
Inpatient Utilization—General Hospital/Acute Care	Administrative
Antibiotic Utilization	Administrative
Frequency of Selected Procedures (Procedures per 1,000 Member Months)	Administrative
Plan All-Cause Readmissions	Administrative
Use of Opioids at High Dosage	Administrative
Use of Opioids from Multiple Providers	Administrative



Technical Methods of Analysis

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' (LOs') audit processes met CMS requirements.

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. The IDSS contained the final HEDIS rates that were verified, reviewed, and locked by the LOs. 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 LOs to assess the reasonability of the rates submitted by the MCOs.

The following is a table identifying the key audit steps required by NCQA for the LO to conduct HEDIS Compliance Audits. The table also lists HSAG's approach in validating the LO's audit.

Table 2—Description of Data Sources Reviewed

Key Steps According to NCQA's HEDIS Compliance Audit	HSAG's Approach on Validating the LO's Audit Results
Pre-on-site Visit/Meeting —The initial conference call or meeting between the LOs and the MCO staff.	HSAG verified that key HEDIS topics such as timelines and on-site review dates were addressed by the LOs.
Roadmap Review—This review provided the LOs with background information on policies, processes, and data in preparation for on-site validation activities. The MCOs were required to complete the Roadmap to provide the audit team with the necessary information to begin review activities. ⁵	HSAG looked for evidence in the final report that the LOs completed a thorough review of all components of the Roadmap.
Certified Measures/Source Code Review—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 the MCO contracts with a vendor participating in NCQA's Measure Certification process.	If the MCO contracted with a vendor who participated in NCQA's Measure Certification process, HSAG used the final audit report (FAR) and Measure Certification Report to assess whether or not that vendor was certified for the measures required by the Department. If a vendor not participating in the NCQA's Measure Certification process was contracted, HSAG ensured that the LOs reviewed the programming language developed for the HEDIS measures.

⁵ If the MCOs contracted certain data calculation, abstraction, or reporting functions to other vendors, they are responsible for ensuring that these vendors completed specific sections of the Roadmap such that the LOs have sufficient information to evaluate all the relevant systems and processes associated with HEDIS reporting.



Key Steps According to NCQA's HEDIS Compliance Audit	HSAG's Approach on Validating the LO's Audit Results
Consumer Assessment of Healthcare Providers and Systems (CAHPS®)6 Survey Vendor and Sample Frame Validation—A certified survey vendor must be used if the MCOs performed a CAHPS survey as part of HEDIS reporting.	HSAG verified that the LO performed detailed validations on the CAHPS Sample Frame if the MCO performed a CAHPS survey as part of HEDIS reporting. If the MCO used a survey vendor to perform the CAHPS surveys, HSAG verified that an NCQA-Certified survey vendor was used.
Supplemental Data Validation —If the MCOs used any supplemental data for reporting, the LO was to validate the supplemental data according to NCQA's guideline.	HSAG verified whether the LO was following NCQA-required approach while validating the supplemental databases.
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 did not review this step since the State requires administrative rates only.
Medical Record Review Validation—The LOs 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 did not review this step since the State requires administrative rates only.
IDSS Review—The MCOs 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. The auditor locks the IDSS so that no information can be changed.	HSAG verified that the LOs completed the IDSS review process.

⁶ CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).



Validation Findings of Audit Process

Table 3 identifies the key elements used by the LO while conducting its 2018 HEDIS Compliance Audit. These key elements were reviewed by HSAG during validation activities. As presented in Table 3, a checkmark indicates that the LO 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 MCO contracted with to perform the required tasks.

Table 3—Validation Activities

	DHMC	RMHP Prime
Licensed Organization	Attest Health Care Advisors	DTS Group
Pre-on-site Visit Call/Meeting	✓	✓
Roadmap Review	✓	✓
Software Vendor	Verscend Technologies Inc.	Inovalon, Inc.
Source Code/Certified Measure Review	✓	✓
Survey Vendor	Morpace Inc.	DSS Research
CAHPS Sample Frame Validation	✓	✓
Primary Source Verification	✓	✓
Medical Record Review Validation	✓	✓
IDSS Review	√	√

Table 3 indicates that the audit conducted for the MCOs included all of the listed validation activities. As required, the MCOs used an NCQA-LO to perform the annual HEDIS audits. In addition, the MCOs contracted with vendors to calculate and produce rates, and all of these vendors achieved full measure certification status through NCQA for the reported HEDIS measures. Both the MCOs also used an NCQA-Certified HEDIS survey vendor to administer the CAHPS survey(s). HSAG also determined that the data collected and reported for the Department-selected measures followed NCQA HEDIS methodology. Therefore, rates and audit results are valid, reliable, and accurate.



Compliance With IS Standards

In addition to ensuring that data were captured, reported, and presented in a uniform manner, HSAG evaluated each MCO's information system (IS) capabilities for accurate HEDIS reporting. HSAG reviewed the IS capabilities assessments of the MCOs, which were conducted by LOs and included in the final audit reports. The review specifically focused on those system aspects that could have impacted the reporting of the selected HEDIS Medicaid measures.

For the purpose of HEDIS compliance auditing, the terms "information system" and "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 LO determined if the MCOs 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 2018 HEDIS Compliance Audit: Standards, Policies, and Procedures, Volume 5, the LO evaluated IS compliance with NCQA's IS standards. These standards detail the minimum requirements that the MCOs' 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, the LO rated the impact on HEDIS reporting capabilities and, particularly, any measure that could be impacted. The MCOs may not be fully compliant with many of the IS standards but may still be able to report the selected measures.

Based on HSAG's reviews, both MCOs' information systems and processes were compliant with all IS standards and the HEDIS determination reporting requirements.

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



Table 4—Summary of Compliance With IS Standards

NCQA's IS Standards	IS Standards Compliance Findings Based on HEDIS 2018 FAR Review
IS 1.0—Medical Services Data—Sound Coding Methods and Data Capture, Transfer, and Entry	RMHP Prime was compliant with IS Standard 1.0 for medical services data capture and processing.
 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 auditor determined that RMHP Prime only accepted industry standard codes on industry standard forms. All data elements required for HEDIS reporting were adequately captured. RMHP Prime continued to receive pharmacy data from Express Scripts, RMHP Prime 's pharmacy benefits manager. DHMC was partially compliant with IS Standard 1.0 for medical services data capture and processing. The rates for <i>Childhood Immunization Status</i> were impacted;
 IS 2.0—Enrollment Data—Data Capture, Transfer, and Entry 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. 	however, the rates were reportable. The MCOs were compliant with IS Standard 2.0 for enrollment data capture and processing. The auditor determined that all current policies and procedures maintained by the MCOs met HEDIS requirements. Data elements required for reporting were captured. Adequate validation processes were in place, ensuring data accuracy.
 IS 3.0—Practitioner Data—Data Capture, Transfer, and Entry 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. 	The MCOs were compliant with IS Standard 3.0 for practitioner data capture and processing. The auditor determined that the MCOs appropriately captured and documented practitioner data. Data validation processes were in place to verify practitioner data. In addition, for accuracy and completeness, the MCOs reviewed all provider data received from delegated entities.

timely entry of data into the transaction files.



NCQA's IS Standards	IS Standards Compliance Findings Based on HEDIS 2018 FAR Review
 Data completeness is assessed and steps are taken to improve performance. Vendors are regularly monitored against expected performance standards. 	
IS 4.0—Medical Record Review Processes— Training, Sampling, Abstraction, and Oversight	The MCOs were compliant with IS Standard 4.0 for medical record review processes.
 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. 	The auditor determined that the data collection tool used by the MCO was able to capture all data fields necessary for HEDIS reporting. Sufficient validation processes were in place to ensure data accuracy. HSAG did not review this step since the State requires administrative rates only.
IS 5.0—Supplemental Data—Capture, Transfer, and Entry	The MCOs were compliant with IS Standard 5.0 for supplemental data capture and processing.
 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. 	The auditor reviewed the transaction file for the HEDIS repository and observed that it contained all data fields required for HEDIS reporting. In addition, the auditor interviewed staff to confirm appropriate quality processes for the data source and to determine if primary source verification was needed on all supplemental data that were in nonstandard form.



standards.

NCQA's IS Standards	IS Standards Compliance Findings Based on HEDIS 2018 FAR Review
IS 7.0—Data Integration—Accurate Reporting, Control Procedures That Support Measure	RMHP Prime was compliant with IS Standard 7.0 for data integration.
Reporting Integrity	The auditor indicated that the MCO used an NCQA-
 Nonstandard coding schemes are fully documented and mapped to industry standard codes. 	certified measure vendor for data production and rate calculation. File consolidation and data extractions were performed by RMHP Prime 's staff members. Data
Data transfers to the HEDIS repository from transaction files are accurate. Element of the HEDIS repository from transaction files are accurate.	were verified for accuracy at each data merge point. The auditor also found that the MCO had adequate procedures in place to produce valid data for HEDIS
• File consolidations, extracts, and derivations are accurate.	reporting.
• The repository structure and formatting are suitable for HEDIS measures and enable required programming efforts.	DHMC was partially compliant with IS Standard 7.0 for data integration. The rates for <i>Childhood Immunization Status</i> were impacted; however, the rates were
 Report production is managed effectively and operators perform appropriately. 	reportable.
• HEDIS reporting software is managed properly.	
Physical control procedures ensure HEDIS data integrity.	
The organization regularly monitors vendor performance against expected performance	



Appendix A. Information Systems Standards

Overview of the HEDIS Compliance Audit

Developed and maintained by NCQA, HEDIS is a set of performance data broadly accepted in the managed care environment as an industry standard. Organizations seeking NCQA accreditation or wishing to publicly report their HEDIS performance results undergo an NCQA HEDIS Compliance Audit through an NCQA-licensed audit organization. The audits are conducted in compliance with NCQA's 2018 HEDIS Compliance Audit: Standards, Policies, and Procedures, Volume 5. The purpose of conducting a HEDIS audit is to ensure that rates submitted by the organizations are reliable, valid, accurate, and can be compared to one another.

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 LOs produced an initial written report identifying any perceived issues of noncompliance, problematic measures, and recommended opportunities for improvement. The LOs also produced a final report with updated text and findings based on comments on the initial report.

The FAR included information on the organization'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.

Information Systems Standards

Listed below are the Information Systems Standards published in NCQA's 2018 HEDIS Compliance Audit: Standards, Policies, and 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, HCPCS) 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 measure 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 measure reporting.
- IS 1.6 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 organization must capture all clinical information pertinent to the delivery of services to provide a basis for calculating measures. The audit process ensures that the organization consistently captures sufficient clinical information. Principal among these practices and critical for computing 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 measures through common definition of identical clinical events. The organization must cross-reference nonstandard coding schemes at the specific diagnosis and service level to attain equivalent meaning. The integrity of 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 organizations' 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 measure-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 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 provider specialties necessary for measure reporting.
- IS 3.2 The organization has effective procedures for submitting measure-relevant information for data entry. Electronic transmissions of practitioner data are checked to ensure accuracy.
- IS 3.3 Data entry processes are timely and accurate 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 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 measure reporting. Electronic transmission procedures conform to industry standards and have necessary checking procedures to ensure data accuracy (logs, counts, receipts, hand-off, and sign-off).
- IS 4.2 Retrieval and abstraction of data from medical records are 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 measure 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 measure-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

Organizations may use a supplemental database to collect and store data, which is then used to augment rates. These databases must be scrutinized closely since they can be standard, nonstandard, or member-reported. The auditor must determine whether sufficient control processes are in place related to data collection, validation of data entry into the database, and use of these data. Mapping documents (where applicable) and file layouts may be reviewed as well, to determine compliance with this standard. All supplemental databases are validated annually. Proof-of-service verification is required for nonstandard or member-reported data.

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

- IS 7.1 Nonstandard coding schemes are fully documented and mapped to industry standard codes.
- IS 7.2 Data transfers to 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 measures and enable required programming efforts.
- IS 7.5 Report production is managed effectively and operators perform appropriately.
- IS 7.6 Measure reporting software is managed properly with regard to development, methodology, documentation, revision control, and testing.
- IS 7.7 Physical control procedures ensure measure data integrity such as physical security, data access authorization, disaster recovery facilities, and fire protection.
- IS 7.8 The organization regularly monitors vendor performance against expected performance standards.

Rationale

Calculating 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 organization's quality assurance practices and backup procedures serve as an organizational infrastructure supporting all

APPENDIX A. INFORMATION SYSTEMS STANDARDS



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 measures are produced by the organization's information systems and may be directly or indirectly affected by IS practices and procedures.