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Minnesota Department of **Human Services**

2004 Performance Measures Validation Report

*An independent audit conducted by MetaStar of 2004 performance measures produced by the
Minnesota Department of Human Services*

September 2005

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Executive Summary

Standardized performance measures are required for all state Medicaid managed care programs by federal law. The Minnesota Department of Human Services (DHS) fulfilled this requirement by calculating performance measures from the encounter data submitted to the state by its contracted Managed Care Organizations (MCOs).¹ DHS retained MetaStar to conduct an independent audit of DHS's 2004 performance measures.

MetaStar's review of DHS's information systems and performance measures was designed to collect information documenting the effect DHS's management practices had on the performance measurement process. The audit was not intended to evaluate the overall effectiveness of DHS's systems. Rather, the focus was on evaluating aspects of DHS's systems that specifically impact the ability to accurately report performance measures. In essence, DHS needed to demonstrate that it has the automated systems, management practices, data control procedures, and computational procedures necessary to ensure that all performance measure information is adequately captured, translated, stored, analyzed, and reported.

DHS selected 19 performance measures for examination. All performance measure specifications were based on HEDIS^{®2} 2005 Technical Specifications. DHS selected measures based on their understanding of encounter data and its limitations, internal quality improvement objectives, and other state agency requirements. The following list of measures was found by MetaStar to be compliant with measure specifications and reportable:

- Adolescent Well-Care Visits
- Adult's Access to Preventive/Ambulatory Health Services
- Antidepressant Medication Management
- Cervical Cancer Screening
- Chemical Dependency Utilization – Inpatient Discharges and Average Length of Stay
- Childhood Immunization Status
- Children's Access to Primary Care Practitioners
- Chlamydia Screening in Women
- Colorectal Cancer Screening
- Comprehensive Diabetes Care – A1c and LDL Screening
- Follow-Up After Hospitalization for Mental Illness
- Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (AOD Dependence)
- Mental Health Utilization – Inpatient Discharges and Average Length of Stay
- Mental Health Utilization – Percentage of Members Receiving Inpatient, Intermediate Care, and Ambulatory Services
- Osteoporosis Management in Women Who Had a Fracture
- Prenatal and Postpartum Care – (Postpartum care only)
- Use of Appropriate Medications for People with Asthma
- Well-Child Visits in the First 15 Months of Life
- Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

¹BBA (42 CFR 438.358 [b][1])

²HEDIS[®] is a registered trademark of the National Committee for Quality Assurance (NCQA).

The Prenatal Care measure examines the timeliness of initial prenatal and postpartum care. The majority of obstetric and delivery care providers are paid a fee for the entire care of the patient after the delivery (“global billing”); DHS cannot accurately identify the initial prenatal care through administrative data. If the MCO data systems are not able to submit individual prenatal care visits to DHS from a validation and audit standpoint, the encounter data are deemed incomplete, and the prenatal sub measure is not reportable.

Rigorous testing was performed by DHS and MetaStar to ensure that all HEDIS 2005 Technical Specifications were met. All codes used to generate the performance measures were compared to the technical specifications. Any deviations identified were corrected and reviewed again. Measure results were reviewed and compared to historical data for reasonability testing. In addition, enrollee data was examined by DHS and MetaStar to assure that the measure was identifying all appropriate enrollees and services.³

The validation was performed following all processes required by the BBA (42 CFR 438.358 [b][1] and Centers for Medicare and Medicaid Services (CMS) Protocol *Calculating Performance Measures, Validating Performance Measures, and Appendix Z (ISCAT)*).

³ This was DHS’s first calculation of performance measures. MetaStar was impressed with the PMQI analyst’s understanding of the documentation requirements and his ability to analyze the specification requirements and document processes while producing the performance measures.

2004 Performance Measures Validation Report

Using a methodology that fulfills the requirements of CMS's EQRO Protocol, *Validation of Performance Measures*, including the *Information Systems Capabilities Assessment Tool (ISCAT)* and our extensive experience with HEDIS Compliance Audits, MetaStar validated DHS's performance measures through review of the IS systems and the processes used to prepare and report the performance measures results for data accuracy and reliability.

This audit and validation assessed the extent to which DHS's information system met the requirements set forth in 42 CFR 438.242. The system's ability to collect, analyze, integrate, and report data was integral to meeting this requirement and ensures accurate performance measure reporting. DHS's system used MCO encounter data as its data source. Therefore, the assessment included extensive examinations of DHS's ability to monitor these data for accuracy and completeness.

Validation consisted of a review of DHS's data management processes, an evaluation of the algorithmic compliance with specifications, and a verification of the final performance measures selected for review. To accurately assess DHS's performance measures, MetaStar adopted a three-phase validation process approach: pre-on-site, on-site, and post-on-site activities, as required in the CMS protocols.

An important component of the validation process was a review of DHS's information systems. This was accomplished by DHS's completion of an ISCAT with review of the ISCAT and on-site visits evaluating all processes and procedures performed by MetaStar, an independent licensed organization. CMS developed the ISCAT based on Medicare performance measure validation performed in 1997-1998 through NCQA HEDIS Compliance Audits under contracts with Island Peer Review Organization (IPRO) and The Medstat Group.

In addition, MetaStar reviewed findings from the 2000-2001 Mercer Encounter Data Validation study conducted in Minnesota. MetaStar used the Mercer study to target and identify potential areas of data concerns.

Measure Calculation Method – Administrative Versus Hybrid

DHS used encounter data to produce its performance measures. This constitutes an administrative mechanism not involving medical record review. For some measures (e.g., Prenatal and Postpartum Care), the HEDIS Technical Specifications allow a combination of administrative (claims or encounters) and medical chart review data to calculate the rates. In performance measurement, this is considered a "hybrid" method. A statistically appropriate sample size is determined, and the enrollees meeting measure denominator criteria (e.g., a live birth in 2004) are identified, and a randomly selected sample is drawn. The organization then identifies members meeting numerator criteria (e.g., a prenatal care visit in the first trimester) through administrative data. Medical charts are reviewed for all enrollees included in the sample who did not meet numerator criteria via administrative data. The hybrid method is used when a significant portion of the data is found only in the medical record (e.g., laboratory results) or when the care was provided prior to an individual's enrollment in their current MCO.

The hybrid method requires development of medical record review tools, training and oversight processes, skilled medical record reviewers, identification of potential providers of the services, coordination with provider sites, and medical record review at provider sites. It is a time consuming, resource intensive, provider-burdensome process. Because of the resources involved, DHS elected to calculate its performance measures with administrative data only. This decision impacted the performance measures reported by DHS and the interpretation of some measurement results.

Although the hybrid method would produce higher rates for some performance measures, it is not necessary for comparing baseline measurements to subsequent changes. Thus, using administrative data was an appropriate mechanism for production of performance measurements. Utilizing the administrative only method, MCOs and programs may be equitably compared over time. When MCOs report performance measures themselves and are given the option of using administrative or hybrid methods, results may not be comparable between MCOs and across programs.

Encounter Versus Claims Data

After a managed care enrollee receives medical services, the provider places the information onto a claim form. Providers submit the claim form to an MCO for payment of services rendered. The MCO processes the claim and then submits the data to DHS. DHS requires that the MCO report data in a standard format and follow a standard process for data submission. The data submitted by the MCOs is considered encounter data and contains the record of the encounter between the enrollee and a provider. If the MCO provides all required elements (e.g., procedure and diagnosis codes, dates of service, enrollee identifiers, etc.) to DHS, DHS's encounter data should accurately reflect the MCO's claims data for the submitted elements. However, if an MCO requires providers to include additional information (such as test results) maintained in a separate database, the information would not be submitted to DHS, and the DHS encounter database would not contain all the data from a given claim.

In order for DHS to base quality improvement initiatives on encounter data, each MCO must submit accurate and complete encounters. The Mercer Study, *"Encounter Data Validation Study Final Encounter Analysis Report"* demonstrated that MCOs were doing a good job of submitting accurate encounter data.

Experience with DHS Encounter Data

In 2000, while under contract with DHS, MetaStar conducted a study that evaluated the concordance of nine Medicaid health plans' reported HEDIS 2000 measures with their submitted encounter data.⁴ The study consisted of two components: first, HEDIS Compliance Audits^{TM5} of three previously unaudited plans; and second, validation of the accuracy and consistency of each plan's HEDIS measures with encounter data submitted to the state.

This study familiarized MetaStar's staff with the Minnesota MCO encounter submission process and DHS's information systems.

⁴ HEDIS Compliance Audit and Encounter Validation – EQR Report, April 2001

⁵ NCQA HEDIS Compliance AuditTM is a trademark of the National Committee for Quality Assurance (NCQA).

MetaStar Credentials

DHS contracted with MetaStar, Inc. (MetaStar) to provide technical services to assist in the design, development, and establishment of written policies and procedures, as well as the production of annual performance measures based upon the Health Plan Employer Data and Information Set (HEDIS) Technical Specifications.

MetaStar is a licensed HEDIS Compliance Audit organization. The staff involved in this project included two Certified HEDIS Compliance Auditors (CHCA).

The MetaStar project staff included a project manager, two analysts for policy and procedure development, one biostatistician for trending, and one systems analyst participating in performance measurement system requirements. In 1996, the project manager began development of MetaStar's Compliance Audit Program. MetaStar's project manager was familiar with DHS and MCO requirements through project management of the HEDIS compliance Audit and Encounter Data Validation Study in 2000-2001.

The MetaStar staff primarily responsible for the development of the performance measures policies and procedures have extensive experience in documentation requirements, auditing, and data validation. One CHCA analyst had prior experience with Minnesota Medicaid through performance of HEDIS Compliance Audits for Minnesota Medicaid and Medicare programs. The other analyst had extensive experience in Medicaid membership and claims processing. The systems analyst involved in this project developed performance measurement systems for MetaStar and has experience with HEDIS measures. MetaStar's biostatistician trended performance measures for several of MetaStar's quality improvement projects and has been involved with HEDIS audits and analyses since 1998.

All MetaStar staff have quality improvement training and experience. In addition, staff routinely identifies key processes and writes policies and procedures that include supporting documentation.

As the External Quality Review Organization (EQRO) for the state of Wisconsin, MetaStar strictly abides by all the EQRO regulations. In addition, MetaStar has performed NCQA HEDIS Compliance Audits for Medicaid and Medicare Minnesota MCOs.

Audit and Data Validation

The process of audit and data validation consisted of reviewing the general processes used by DHS, the data flow between the MCOs and DHS, review of all documentation used to calculate the performance measures, and the demonstration that DHS's system has the capacity to produce reliable, accurate performance measures. This began with a review of DHS processes and concluded with review of the final measurement results.

DHS System (Process) Review

MetaStar's system assessment focused on how data flows from the MCOs to DHS and is then processed. MetaStar evaluated how DHS verified the accuracy and completeness of data each time it was received from the MCO and then transferred into the DHS encounter database (MMIS) and ultimately to the DHS performance measurement repository. The first step was to review the general data flow for encounter, provider and enrollee data, and to gather information through oral interviews with DHS staff. MetaStar also identified, as noted in the Mercer Study, past production errors and determined if procedures were developed to correct them.

Existing programs were reviewed, checking codes for missing steps and for specific documentation essential in producing a viable performance measurement system. In-house protocols were examined to better understand DHS's system and adapt any standard policies and procedures to meet specific needs. This process began during the initial on-site meeting and continued by telephone and e-mail as the project progressed.

Policies and Procedures

General Issues

The success of the 2004 Performance Measurement project depended largely on the development of sound written policies and procedures. Discussions were held with DHS to determine an efficient and effective method for documenting the processes used to calculate the performance measures. In order to validate the performance measures, there was a need for a documented audit trail. MetaStar shared best practices of MCOs and adapted these to meet DHS requirements.

System Related Issues

DHS and MetaStar discussed the processes used to validate data integrity and integrate the data into the performance measurement system. The intent of this was to assure that DHS's processes met CMS protocols. MetaStar worked with DHS to organize and produce a description of the system used to generate the performance measures. This resulted in the writing of a standard operating procedure (SOP) for data flow management beginning with receipt of encounter claims from MCOs through reporting of measures to NCQA and CMS.

Programming Issues

With MetaStar's guidance, DHS staff translated the performance measure technical specifications to DHS-specific programming specifications. These programming specifications identified data sources and data fields necessary to produce each measure. This ensured that DHS included all critical components necessary to generate performance measures. By performing this step at the beginning of the process, DHS decreased the potential for revisions based on incorrect interpretation of the technical specifications. Programming specifications identified each step necessary to compute the performance measure. This provided documentation of the analysis of the technical specifications with respect to DHS system needs. Programming specifications also allowed MetaStar to ascertain that DHS's analyst correctly interpreted performance measure technical specifications prior to the development of the source code.

Policy and procedures were created to detail and document the source code development process. These included such items as data cut-off date, maintaining and reviewing log files, field mapping, and data scrubbing.

DHS initiated policies and procedures for testing each new and updated measure. This was documented in an Internal Quality Control (IQC) plan. The IQC plan included comparison of the performance measure rate to rates reported by MCOs and review of individual enrollees to determine if they were appropriately included or excluded from the numerators and denominators.

DHS also performed IQC to determine that the system backup procedures performed appropriately, thus assuring that the data could be reproduced.

Consistency with CMS Protocols and HEDIS Technical Specifications

This process also assessed the extent to which DHS's information system met the requirements set forth in BBA protocol 42 CFR 438.242. The system's ability to collect, analyze, integrate, and report data was integral to meeting this requirement, as well as ensuring accurate performance measure reporting. Because DHS's system used MCO encounter data, the assessment included examinations of DHS's ability to monitor the data for accuracy and completeness.

Validation consisted of a review of DHS's data management processes, evaluation of the algorithmic compliance with specifications, and verification of the final performance measures selected for review. To accurately assess DHS's performance measures, MetaStar adopted a three-phase validation process approach: pre-on-site, on-site, and post-on-site activities.

Pre-On-site Activities

To assess DHS's underlying information systems, MetaStar adapted CMS's Information System Capabilities Assessment Tool. The ISCAT was designed to be applicable to all types of managed care organizations. Some of the questions included in the ISCAT were not applicable to a state Medicaid encounter system; however, MetaStar's audit team modified the ISCAT to meet these requirements. In addition, MetaStar took into consideration information contained in NCQA's

Baseline Assessment Tool (BAT), which is used to perform NCQA HEDIS Compliance Audits. This tool is a “refinement” of the information in the ISCAT, based on audit experience since 1998.⁶

Membership/Enrollment Data

DHS has single-person identifier for membership and enrollment data. MetaStar assessed the editing process to verify that correct and complete data were integrating under that one number. MetaStar reviewed individual enrollment histories and had DHS walk through the data flow path of the original data, including how it is maintained and checked. MetaStar’s team reviewed the processes used to enter enrollee information into the system, the mechanisms to process changes and terminations, and the process to transfer the data to each MCO.

Along with the information provided in the ISCAT, the on-site findings provided data for the assessment of the completeness, accuracy, and integrity of the enrollee data used for producing performance measures.

Encounter Data

MetaStar adapted the medical services data section of the ISCAT to focus on how encounter data was handled at the time of submission, tracking from the point of entry, and any changes that could affect the encounter process. The number of diagnoses that are submitted by each MCO and those actually captured were evaluated. State specific codes were identified, and MetaStar determined the process for mapping those codes back to standard code sets.

Since Mercer’s *Final Encounter Analysis Report* indicated that some subcontractors were having difficulty sending data to DHS, MetaStar assessed this issue to determine its effect on reportability and data completeness.

On-site Activities

During the on-site visit, MetaStar’s audit team verified DHS’s ISCAT responses. The audit team reviewed the systems used to maintain and integrate data for the performance measures and any policies, procedures, and documentation not previously reviewed. The on-site visit focused on compliance, verifying that policies and procedures were being followed.

The visit began with an entrance conference where all staff involved in the performance measures process at DHS participated. The auditors met separately with the individual staff members who completed each section of the ISCAT. Staff interviewed included those who were accountable for the encounter, enrollment, and information systems. The auditors reviewed documentation of how performance measures would be produced as well as conducted systems tests and demonstrations that were deemed necessary.

⁶ After customizing the ISCAT for DHS, MetaStar developed a crosswalk between the CMS ISCAT and the DHS ISCAT. This crosswalk identified the questions in the DHS and CMS ISCAT, included a brief description of each question, and any reason for differences between the CMS and DHS ISCAT. See Appendix A.

On-site Activity One: Assess data integration and control

The auditors reviewed documentation, policies, and procedures relating to data in DHS's system to assess the degree of data integration and control. DHS's information systems were evaluated for accuracy and completeness in terms of the types of data discussed in the pre-on-site section. The auditors determined how well the system transferred data to a performance measurement warehouse. MetaStar's team reviewed the performance measure warehouse to ensure that it contained all required data elements.

Tracking data samples backwards through the system, MetaStar assessed the system and transaction files for completeness and accuracy. MetaStar re-ran DHS programs on a sample of data and compared the results. In addition, MetaStar tested code modifications and reviewed individual results to assure that the process was performing as expected. MetaStar also compared the actual results of file transactions to the expected results using DHS's documented algorithms. This evaluated the system processes for the ability to integrate and pull the specific data comprising the measure specifications from a larger data warehouse or file.

Encounter data submission and tracking procedures were reviewed, as well as the processes in place for resubmitting any encounters with errors to ensure correct, timely, and complete data integration into the data warehouse. Computer program reports and documentation were assessed to verify the extent of subcontractor coordination and to identify the checks DHS had in place to ensure that all the data needed for each performance measure were captured without error and held securely.

The auditors assessed the performance measure data repository design, including data flowcharts and source code, to determine how data storing affected the generation of performance measure reports and analysis. The auditors evaluated the system for its ability to link enrollee data and integrate the same enrollee's data from the various data sources. They reviewed documentation for measure calculation, including activity logs and reports and confirmed that date specifications were met. In the procedure section of the interviews with staff, MetaStar reviewed software programs documentation, including documentation of building, maintaining, managing, testing, and reporting production of the data warehouse. The auditors studied DHS's documentation developed during the consulting process, including measurement compliance with the program specifications, code review, and testing.

On-site Activity Two: Assess documentation of data and processes used to calculate and report performance measures

MetaStar auditors' evaluated documentation of processes used to calculate and report performance measures. For each measure, MetaStar reviewed DHS's policies and procedures for data definitions and results testing, including any adjustments to be made after completion of processing. Programming specifications were inspected for thoroughness and valid logic.

Documentation for all data sources, including external sources and any applicable prior measurement years' data, was examined. Also examined was the documentation of the original encounter data set, which included record-level patient identifiers to validate the programming logic that created denominators, numerators, and sample sets.

On-site Activity Three: Assess processes used to produce denominators

MetaStar's objective in this activity was to determine the appropriateness of DHS's method for using data sets to identify the eligible population for each measure. Using standard code evaluation and decision point grids to guide the auditors through the review, MetaStar established whether all eligible enrollees were counted in the original population from which the denominator was drawn. The overall process DHS had in place to include all enrollees was assessed, as well as DHS's process to identify each MCO and link enrollees across MCOs. In order to determine whether the programming logic could identify, track, and link member enrollment within and across product lines by age and gender and through periods of enrollment and disenrollment, the auditors checked whether calculations of continuous enrollment criteria were correct for each measure. Assessments were made of DHS's methods for isolating an enrollee's age or range so that each measure included enrollees of an appropriate age. MetaStar verified that DHS calculated member months and years correctly when that information was used in a performance measure.

Decision point grids were used to review all parameters required for each performance measure. The grid provided a detailed description of the measure and the elements needed for compliance with that measure's specifications. Decision point grids allowed auditors to identify and communicate any deviations to DHS. After DHS corrected the deviation, the grids were updated to reflect the corrective actions taken.

On-site Activity Four: Assess processes used to produce numerators

A clear understanding of the medical events included in the numerator was essential to properly assess the processes DHS had in place to produce numerators. MetaStar evaluated these medical events through membership/enrollment data, encounter data, and provider data. As mentioned, the focus of the evaluations was on administrative data sources, rather than through medical record reviews.

The majority of this review was almost identical to the review for denominators. MetaStar assessed the data used to produce numerators, investigated the system's ability to link data, and identified the members of the eligible population who should be counted when calculating the numerator. The use of medical event codes was assessed in terms of including or excluding enrollees in the numerator populations. Time specifications that applied to the performance measures were evaluated.

The on-site visit concluded with an exit conference where, once again, all staff were invited to attend. The auditors summarized the meetings and findings of the day, and they identified some of the strengths and areas for improvement that were discovered during staff interviews and system demonstrations. This provided an opportunity for questions and clarification between DHS staff and the validation auditors.

Post-On-site Activities

The post-on-site phase centered on analysis of the information gathered in the pre-on-site and on-site portions of the validation. Detailed analysis of MetaStar's decision point grids was undertaken. This included reviewing documentation on the grid for each of the performance measures being validated with the elements that were or were not found upon review of policies, procedures, and documentation during the on-site visit.

Measure Designation

MetaStar and DHS adopted the NCQA reporting format. This had two validation findings – “Report” or “Not Report” for each measure.

Information System Capabilities Assessment

The audit consisted of an overall information systems capabilities assessment (IS Standards), followed by an evaluation of DHS's ability to comply with specifications for performance measure determination (PMD Standards). During the audit process, the audit work was evaluated and reassessed depending on early findings regarding the IS Standards and on the potential strengths and weaknesses identified by the audit team on-site.

- *Information System Capabilities Assessment:* The first part of the audit focused on assessing DHS's overall information systems capabilities and core business functions. The IS Standards used to assess the effectiveness of the systems, information practices, and control procedures focused on the processing of medical information and on mechanisms used to calculate performance measures as the foundation for accurate reporting.
- *Performance Measurement Determination Specifications Assessment:* Following completion of the Information System Capabilities Assessment, MetaStar's audit team conducted appropriate audit verification steps to assess individual performance measures. This part of the audit focused on assessing compliance with conventional reporting practices and PMD specifications, including identification of denominator and numerator populations and assessment of algorithmic compliance.

The review of DHS's information system was designed to collect information that documented the effect of DHS's information management practices on the performance measure reporting process. The audit was not intended to evaluate the overall effectiveness of DHS's information systems. Rather, the focus was on evaluating aspects of DHS's information systems that specifically impacted the ability to accurately report performance measures. In essence, DHS needed to demonstrate that it had the automated systems, information management practices, and data control procedures needed to ensure that all information required for performance measure reporting was adequately captured, translated, stored, analyzed, and reported. In the section below, the auditors summarize the findings and describe any non-compliant issues and effects on performance measure reporting.

This section follows the standards used in NCQA Compliance Audits. Since in prior years DHS required MCOs to undergo a HEDIS Compliance Audit, it was deemed appropriate to hold DHS to the same standards that MCOs were required to meet. The appropriate ISCAT section is provided as a reference to the initial documentation prepared by DHS.

IS 1.0 Sound Coding Methods for Medical Data

ISCAT Section III

Criteria

In order to provide a basis for calculation of performance measures, DHS must be able to capture all encounter information relevant to the delivery of services. There are a number of practices that are necessary in order for this to occur, and the audit process must assure that the organization is conducting its business consistent with these practices. Principal among these, and critical for computing clinical performance measures, is that all MCOs should submit standardized codes on the

encounters. These codes can then be used to identify the medical events being reported. This would include the use of nationally recognized schemes for the capture of diagnosis and procedure codes, as well as DRG and DSM codes. The use of standardized coding improves the comparability of performance measures through common definition of identical clinical events.

Since performance measures may require that a medical event is due to a specific condition (e.g., an inpatient admission due to asthma), the system must be able to distinguish between a principal and secondary diagnosis.

Process

In order to confirm that MCO submitted encounter data containing standard coding schemes, the auditors reviewed the ISCAT, DHS's Encounter Billing Procedures Manual and HIPAA Mapping Requirements for Encounter Data, MCO submission requirements, Mercer's Study, and actual data contained in the warehouse. The audit team reviewed Mercer's Study, the ISCAT, and interviewed staff to assure that processes were in place to identify missing and/or erroneous data. Review of the data repository was performed to assure that coding conventions were maintained and that principal and secondary diagnoses were identified.

Findings

DHS contractually required MCOs to submit standardized codes on encounter data and all diagnosis and procedure codes. Upon receipt of the data, edit checks are performed by DHS to assure only accepted codes are contained on the encounters. Non-standard codes would not be accepted into the system and the encounter returned to the MCO.

On a quarterly basis, DHS's Data Management and Quality Assurance Division produces a report on the volume of encounters and the number of encounters denied. In addition, the Performance Measurement and Quality Improvement Division produces a report identifying the number of encounters failing edits that might have an impact on performance measure rates. Through these mechanisms, DHS identifies any MCO that is not submitting standardized codes and requires corrective action.

Activities performed to assess compliance with this standard did not identify concerns with the type of coding systems accepted by the system. Review of the performance measure repository, PMQI repository testing, and individual performance measure results demonstrated that the coding conventions were maintained.

IS 2.0 Data Capture, Transfer, and Entry – Medical Data

ISCAT Section III

Criteria

The integrity of performance measures requires standardized encounter data formats, control over data edits and verification, and other control procedures that promote completeness and accuracy in the encounter data. DHS must have processes to receive data, communicate data receipt and status to the submitting MCO, and also return unacceptable data to the MCO. DHS must also have processes

in place to ensure that data submitted by the MCO is accurately loaded into DHS's MMIS database and accurately transferred to the performance measure repository. Prior to preparing performance measures, DHS must determine data completeness by comparing received volume to expected volume. In addition, DHS must also examine performance measure results to identify potential data completeness concerns.

Process

Through the ISCAT, on-site demonstration, and review of individual encounters, the auditors assessed whether the encounter data used to calculate performance measures contained critical data such as diagnosis, procedure, date of service, enrollee information, place of service, date of birth, and gender. In addition, this process verified the receipt of electronic encounter data and that the data was accurately transferred to the performance measure repository.

The auditors examined claims completeness through review of DHS volume reports, encounter data rejection, Mercer's Study, interviews with DHS staff, and PMQI performance measure repository completeness assessments. In addition, the audit team examined individual encounter data for each performance measure included in the study.

Findings

DHS required MCOs to submit data in a standardized format. This format contained all critical elements required for performance measure reporting.

DHS has formal processes for the submission of electronic encounter data. After MCO data are received and loaded into MMIS, record counts are verified to assure that MMIS contains all submitted encounter data. DHS appropriately notifies the submitting MCO of the number of encounters received and loaded into MMIS.

When DHS loads the data into MMIS, approximately 100 edits are performed. If an encounter does not pass an edit, the information is written to a remittance form provided to the MCO on a routine basis. The MCO is responsible for correcting the data.

When data are transferred from MMIS into the data repository, formal processes are in place to assure the integrity of the data transfer. Transfers to the performance measurement repository followed a standard operating procedure. In addition, PMQI staff perform several analyses to assess the data quality. Review of individual data demonstrated the appropriate transfer of data between systems.

DHS has adequate processes for accepting encounter data from MCOs and transferring encounter data to the MMIS and the performance measure data warehouse. Although encounter volume reports are generated and reviewed by DHS, DHS does not have a formal process to notify an MCO when encounter submissions are less than expected. Because of this, the PMQI analyst must perform additional analyses to assess the completeness of the database prior to the computation of performance measure rates. If deficiencies are identified by the PMQI analyst and not corrected by the MCO, the performance measure rates may be under reported. If the MCO is allowed to provide additional encounters, the performance measure rate production may be delayed. The auditors recommend that DHS monitor encounter submission to ensure that MCOs submit data in a timely fashion.

The auditors reviewed the Data Warehouse Readiness Report on May 15, 2005. This report demonstrated large variances in encounter submission volume by quarter and indicated that some MCOs' 2004 encounter data was incomplete. Although the MCOs submitted additional encounter data, thus assuring complete data for performance measure calculation, the lack of on-going completeness monitoring resulted in additional work for PMQI staff and prevented PMQI staff from meeting its internal timeline for performance measure production. If PMQI staff had been required to meet the internal June 15, 2005, performance measure reporting deadline, measures for some MCOs would not have been reportable.

DHS does not have a process in place to monitor an MCO's resubmission of rejected encounters. Not monitoring resubmission of rejected encounters also places the data at risk. The MCO has no incentive to correct and resubmit the data on a timely basis. As a result, the PMQI analyst must perform additional analyses to determine the completeness of the data. Review of the analyses does not demonstrate a significant negative impact on the performance measure rates.

Because DHS does not monitor completeness at the point of encounter data submission, PMQI's analysts must perform several encounter data assessments. PMQI's process to assess encounter data completeness and accuracy was formally documented, and they investigated all potential performance measure concerns. Analytic staff in other departments must also perform completeness and accuracy assessments to assure the validity of calculations. Although there was no negative impact on performance measure rates, the lack of a formal assessment at the point of encounter receipt results in a duplication of effort within DHS.

IS 3.0 Data Capture, Transfer, and Entry – Enrollee Demographics

ISCAT Section II

Criteria

The use of standardized forms; control over receipt processes; data entry edits and verification; and other control procedures, such as data audits, promoting completeness and accuracy in receiving, and recording enrollee demographic and enrollment information are critical in developing databases that will support accurate calculation of performance measures. Specific enrollee information must include age, sex, program type (PGMAC, PMAP, MinnesotaCare, MSHO), and the enrollment dates that define time periods included in the study.

Process

Through the ISCAT, enrollee forms, interviews, and examination of enrollee data, the auditors assessed whether the performance measure system contained the information necessary to meet performance measure specifications. Data fields were assessed to ascertain that they were the appropriate size for receiving the required information. Specific edits and data verification procedures were reviewed to examine the procedures used to ensure data accuracy. DHS staff were interviewed to assess the training and oversight processes of data entry. The audit team reviewed the time-to-process standards and results to determine the completeness of the data at the time the performance measures were calculated.

Findings

DHS has processes to collect and enter enrollee demographic information. All data systems reviewed contained the demographic information necessary for performance measure reporting. Review of time-to-process standards results showed that enrollee demographic information was complete when the performance measures were calculated.

The system electronically verifies social security number and the Medicare number with the appropriate federal agency. DHS's enrollment system has edits for specific fields to aid in the prevention of data errors. Although the enrollee data was appropriate for performance measure calculation, there is no formal oversight of data entry as required under this standard.

IS 4.0 Data Integration Meets the Demands of Accurate Reporting

ISCAT Sections IV

Criteria

The often complex calculations of performance measures may require data from a number of different sources. The schemes or systems utilized to assemble the data and to make the required calculations should be carefully constructed and tested. The performance measure system must contain all elements necessary for the required measures. Formal processes should be in place to assess the transfer of data and to ensure that all appropriate data are included.

Process

The audit team reviewed the ISCAT, the performance measure repository procedures, documentation and testing, and the final performance measure results. In addition, the audit team interviewed PMQI staff. The auditors reviewed procedures to ensure that all appropriate data were identified and included in the repository. Actual results were compared to expected results (prior information reported by MCOs and national data) to verify the effectiveness of the consolidations. Any areas of potential concern were analyzed through source code review, generation of additional queries, and close examination of encounter data. Inspection of programming source code and enrollee data was performed to assess the mechanisms used to link data across all data sources to satisfy data integration requirements (e.g., identifying an enrollee with a given disease/condition).

Findings

DHS has formal processes for populating the performance measure repository. This process identified all data requirements, included extensive quality assurance procedures, and contained a procedure for updating the performance measure repository in the event repository requirements change. Review of the documentation for the performance measure repository and the repository itself showed that it contained all required elements.

DHS performed extensive testing of the performance measure warehouse after each data load. Following a formal procedure, DHS staff appropriately assessed that the data transfer performed as expected. Review of DHS's results showed that DHS's procedures effectively transfer data.

From the beginning of the study through the generation of performance measure results, the audit team and PMQI staff compared the actual results to those expected. The audit did not identify problems concerning data integration.

IS 5.0 Control Procedures Support Data Integrity for Reporting

ISCAT Sections IV

Criteria

DHS's quality assurance practices and backup procedures serve as the necessary infrastructure supporting all of the organization's information systems. As such, they promote accurate and timely information processing and protect data in the event of system failure. The data needed for calculation of performance measures is an output of the organization's information systems and may be directly or indirectly impacted by those practices and procedures. DHS needs to have a process governing report production, including review of results, adherence to policies and procedures, compliance with production timelines, and documentation of all aspects of the reporting system.

DHS must have procedures in place to ensure the physical safety of the data. Fire protection, computer system backup procedures, and data access security must be in place.

Process

Through the ISCAT, on-site visits, and communication with DHS, the audit team remained apprised of DHS's timelines and report production processes. All documentation related to the report process (policies, procedures, quality assurance results, and performance measure results) were reviewed by the audit team. The processes were discussed with DHS throughout the study. DHS revised and/or added procedures based on MetaStar's review. All revised documentation was submitted to MetaStar's audit team and the review cycle was repeated.

Throughout the study, review of performance measure source code, report documentation, discussions with DHS staff, and review of programming output logs were performed to assess adherence to documented policies and procedures. Through the ISCAT, on-site demonstration, and documentation review, the audit team assessed whether DHS's processes and documentation complied with report program specifications, code review methodology, and testing.

Assessment of MCO submission requirements, MCO volume reports, and DHS's estimate of data completeness from prior years was performed to assess if DHS's final date to include encounter data in the performance measure repository was adequate.

MetaStar's audit team used the ISCAT, interviews, and on-site observations to assess physical security and data access authorization.

Findings

DHS has processes in place to determine its measure production timeline and to monitor adherence to the timeline. Delays in the initial timeline were caused by MCOs not submitting data in a timely fashion and difficulties in contracting with NCQA for the data submission process. There were no delays caused by DHS.

At the beginning of the study, DHS and MetaStar discussed the requirements necessary for compliance with this standard. Appropriate documentation was developed and reviewed. One individual is responsible for performance measure generation.

Assessment of Adherence to the PMD Technical Specifications

A detailed review of the processes used to prepare the performance measures is an integral part of every performance measure audit. Auditors review specifications, computer programs, record review tools, and procedures (both manual and automated) used by DHS to prepare each performance measure. The goal of this portion of the audit is to determine whether or not each performance measure is implemented in compliance with the measure's technical specifications.

In auditing individual performance measures, auditors reviewed each of the following standards:

PMD 1.0 Denominator Identification

ISCAT Section V

Criteria

The performance measures reviewed are encounter-based measures, and as such, it is critical that DHS properly enumerate the set of enrollees who are candidates for the service or event being measured. The enumeration of this set is called the denominator, and the subsequent enumeration of those in the set who satisfy additional criteria constitute the numerator. Determining the denominator set typically involves identifying all individuals satisfying certain criteria related to age, gender, diagnosis, and having received certain medical services in certain time frames. The auditor's task is to assess the extent to which the organization has properly identified the denominator according to the appropriate technical specifications.

Process

Through review of the Data Warehouse Readiness Report, MetaStar's audit team assured that DHS performed tests to evaluate the completeness of the data used to determine denominator populations. Review of the results, DHS's comparisons to prior data, and individual enrollee data was performed to validate the accuracy and completeness of the denominator populations. Review of individual enrollee data and the formula to calculate enrollee age and/or date ranges was performed to assess adherence to the specifications. Performance measure source code and individual enrollee data were reviewed for adherence to the measure specification time frame and clinical event requirements. Individual enrollee data was examined to assure an unduplicated count for the measures. In addition, when appropriate, MetaStar wrote queries to identify denominators and validate DHS source code.

Findings

Initial review of the programs used to identify denominators showed some deviations from specifications. These deviations were communicated to PMQI staff who revised the program, retested, and resubmitted to MetaStar for another review. Final denominators for all measures included in the study met all performance measure specifications. There were no measures excluded from the study due to PMQI denominator identification concerns, except the prenatal sub-measure discussed earlier in this report.

PMD 2.0 Numerator Identification

ISCAT Section V

Criteria

After identification of the denominator population, DHS must determine if these enrollees met the numerator qualifications. Such decisions should be based on evidence methodologies specified by the performance measure specifications (e.g., CPT codes). The objective of the auditor is to examine the data and the processes employed by DHS in making these determinations to verify that they accurately include all patients who qualified for the numerator, as well as exclude those who do not.

Process

Performance measure source code, individual results, and benchmarks were reviewed to assess whether DHS's programming appropriately identified the specified medical and service events (e.g., diagnoses, procedures, prescriptions, and date of claims payment). Source code and individual results were examined to ascertain that all appropriate time frames for numerator events met performance measure specifications. If multiple events were required to meet numerator criteria, source code and individual data were reviewed to verify that the numerator was appropriately identified.

Findings

Initial review of the programs used to identify numerators showed some deviations from specifications. These deviations were communicated to PMQI staff who revised the program, retested, and resubmitted the program and results to MetaStar for review. Final numerators for all measures included in the study met all performance measure specifications. There were no measures excluded from the study due to PMQI numerator identification concerns.

PMD 3.0 Algorithmic Compliance

ISCAT Section V

Criteria

Algorithmic compliance addresses a variety of issues associated with the production of performance measure reports beyond counting (numerator and denominator) populations. It includes proper algorithms in medical decision-making, such as classification as a diabetic or determining gestation parameters and live birth.

Process

Based on numerator and denominator results, MetaStar calculated performance measure results. MetaStar also reviewed final performance measurement results from production runs to those manually entered into the performance measure report. Since DHS did not perform medical record review, data integration and further algorithmic compliance did not need to be assessed.

Findings

Review of performance measure results showed algorithmic compliance. There were no issues identified through the study.

PMD 4.0 Documentation

All Sections of the ISCAT

Criteria

Reported performance results cannot be verified unless an organization can produce adequate documentation of the data and processes used to prepare its reports. An adequate “audit trail” describes the performance measure preparation process from beginning to end and includes a project plan, programming specifications, source code, computer queries, sample lists, completed record review tools, validation summaries, and many other documents.

Process

As described in the IS sections, all documentation related to the production of performance measures was reviewed. This documentation included the following:

- Programming specifications and data sources
- Data reported in prior years by the MCOs
- Dated job logs or computer runs for denominators and numerators with record counts
- Sources of any supporting external data or prior year’s data used in reporting
- Computer queries, programming logic, or source code used to create final denominators and numerators and interim data files

Findings

DHS has excellent documentation of performance measure production. Appropriate procedures are written for each critical production step. PMQI’s documentation allows reproduction of the process and protects PMQI in the event of personnel changes. MetaStar was impressed with the PMQI analyst’s understanding of documentation requirements and his ability to analyze the specification requirements and document processes while producing the performance measures.

Measure Validation

This process assessed the extent to which DHS’s information system met the requirements set forth in 42 CFR 438.242. The system’s ability to collect, analyze, integrate, and report data was integral to meeting this requirement, as well as to ensure accurate performance measure reporting. DHS’s system used MCO encounter data. Thus, the assessment included extensive examinations of DHS’s ability to monitor the data for accuracy and completeness.

A detailed review of the preparation processes used to calculate the performance measures is an integral part of every audit. MetaStar’s audit team reviewed the specifications, computer programs, record review tools, and processes (both manual and automated) used by DHS to prepare the performance measures. The goal of this portion of the audit was to determine whether or not each performance measure was in compliance with performance measure technical specifications.

The audit presents two alternative audit designations for each performance measure: “Report” and “Not Report.”

- “Report” (R) indicates that the measure is compliant or substantially compliant with the measure specifications and there were no IS issues to substantially bias the performance report. Any concerns with the implementation of the specifications or data availability did not result in a significant bias in the final rate for the measure.
- “Not Report” (NR) indicates that the measure was not compliant with the performance measure specifications. Concerns regarding the implementation of the performance measure specifications or concerns regarding data availability created significant bias in the rate.

Performance Measure	Report Status
Adolescent Well-Care Visits	Report
Adults’ Access to Preventive/Ambulatory Health Services	Report
Antidepressant Medication Management	Report
Cervical Cancer Screening	Report
Chemical Dependency Utilization—Inpatient Discharges and Average Length of Stay	Report
Childhood Immunization Status	Report
Children’s Access to Primary Care Practitioners	Report
Chlamydia Screening in Women	Report
Colorectal Cancer Screening	Report
Comprehensive Diabetes Care – A1c and LDL Screening	Report – A1c and LDL Screening
Follow-Up After Hospitalization for Mental Illness	Report
Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (AOD Dependence)	Report

Mental Health Utilization—Inpatient Discharges and Average Length of Stay	Report
Mental Health Utilization—Percentage of Members Receiving Inpatient, Intermediate Care, and Ambulatory Services	Report
Osteoporosis Management in Women Who Had a Fracture	Report
Prenatal and Postpartum Care	Report Postpartum Care Not Report Prenatal Care
Use of Appropriate Medications for People with Asthma	Report
Well-Child Visits in the First 15 Months of Life	Report
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	Report

Final Thoughts

Prior to this study, DHS had not internally calculated performance measures. DHS desired to develop a performance measurement system that efficiently and effectively produced the performance measure rates and was easily maintained and adapted. Throughout the process, DHS staff committed to meeting rigorous standards and thoroughly documenting the process. DHS succeeded in establishing a solid foundation for producing valid and reportable performance measures.



MetaStar.

APPENDIX A

Minnesota Department of Human Services

2005 Performance Measure Validation

Information System Capabilities Assessment Tool (ISCAT) Crosswalk

Comparison between the MN DHS ISCAT and the CMS ISCAT

This document compares the CMS Information System Capabilities Assessment Tool (ISCAT) with the MN Department of Human Services (DHS) ISCAT. The tables below are organized according to Section S of the MN DHS ISCAT. In each table, the first two columns contain the question identifier for the MN DHS ISCAT and the CMS ISCAT. The third column includes a brief description of the question and what, if any, changes were made to the CMS ISCAT question to adapt it for use in the MN DHS ISCAT.

MN ISCAT Section I: General Information

CMS Section I: General Information

MN ISCAT	CMS ISCAT	Description/Reason for Change
1	A	General contact information.
NA	B-C	Managed Care Organization Specific Information, Deleted from ISCAT.
NA	D	Omitted because provided previously.
2	E	Formal IS capability assessment in the past.
3	NA	Added measure table to confirm measure production.

MN ISCAT Section II: Enrollment Information

CMS Section III: B. Enrollment System

MN ISCAT	CMS ISCAT	Description/Reason for Change
1	Section II, 1	Adapted Section II Table to more accurately identify membership data and so that DHS may more easily complete the ISCAT.
2	15	Expanded CMS Section III Question B15. Added table to record the information captured by the enrollment system and to determine if any measure at-risk of 'Not Report' due to missing information.
3	3	Enrollee identifier.
4	4-6	Multiple Identification numbers.
5	6	When can enrollee ID change.
6	7	Newborn tracking.
7	NA	Added tracking of retroactive enrollments and disenrollments. If captured, may utilize date MCO notified for continuous enrollment.
8-17	NA	Added to assess the accuracy, timeliness and quality assurance of enrollee data.
NA	7-8	Linking of individuals enrolled in both Medicare and Medicaid.
NA	9	Question concerning the frequency of updating of Medicaid enrollee information. Not an issue at DHS since entered into system when enrolled.
NA	10-12	Moved to Section IV – Data Integration. These questions concerned with continuous enrollment.

NA	13	Question if MCO has restrictions for when Medicaid enrollees can enroll or disenroll deleted. DHS has set policy for enrolling and disenrolling. This does not need to be covered in the ISCAT.
	14	Question regarding method used to calculate member months and member years. This is covered through source code review.
18-19	1-2	Questions regarding system changes and/or upgrades that occurred during the measurement year.
20-22	16	Questions regarding pharmacy and vision benefits. Needed to evaluate potential differences in rates by program.

MN ISCAT Section III: Encounter Data

CMS ISCAT Section III: A. Administrative Data

MN ISCAT	CMS ISCAT	Description/Reason for Change
1	NA	General processes for encounter data submission, receipt and uploads.
2 Table III.A Table III.B	1-3	Modified questions regarding required data elements. All data is submitted electronically. The MN ISCAT Tables request more information than the CMS protocol in order to evaluate any potential impact on performance measures. Also included additional data elements in the tables. Since DHS requires all health plans to submit data in the same format, details on specific types of data were omitted from the table.
3-4	4	Number of diagnosis and procedure codes DHS requires MCOs to submit and if any MCOs unable to submit the maximum number of diagnoses.
5	5	Process used to distinguishing between primary and secondary diagnoses.
Requested Documentation	NA	Added a request for the format used by MCO to submit data.
6	10a	Modified question: Requests a description on the process used to upload submitted data.
7	7	Requests a description on the process used to verify files loaded completely and accurately. Need to assure that DHS is maintaining the integrity of the data.
8-9	6	Requests information about the edit checks applied to encounter data to ensure accuracy of data. The CMS question is concerned only with missing information (e.g. no diagnosis), the MN ISCAT questions are concerned with all edit failures.
NA	8	Removed question regarding ability of data processors to change claim/encounter information.
NA	9	Question asking if any situation where content of field is different from description of field (e.g., are pseudo numbers used). MN is receiving data from MCOs in a MN specified format. This question would be appropriate for data entry.

NA	10b	Question regarding data received through intermediaries. Data received from intermediaries is identified in the Mercer report. Changes will be reviewed at the on-site visit.
10	21	Added question on the process to monitor resubmission of encounters that failed DHS edits. Impacts on completeness of the data base when performance measures are calculated. CMS q 21 deals with.
11	NA	Requests description of data warehouse used to store encounter data.
12	NA	Requests type and number of staff responsible key steps in processes to maintain the data warehouse.
NA	11-12	Deleted because not processing Medicaid data, only uploading encounter data.
13-18		Process to maintain warehouse.
19	15	Number of years of data on-line.
NA	16	Deleted because not processing data.
NA	17-19, 22	Deleted because not processing (adjudicating) data.
20. Table III E 21. Table III F	20	Modified table requesting information needed to evaluate data completeness – detailed for each health plan.
NA	21-22	Removed questions regarding processes for suspending claims.
22 - 23	23	Expanded on question regarding data completeness studies to include questions on monitoring and assessment processes for data completeness.
24	NA	Added question regarding data completeness studies.
25	NA	Added question regarding barriers to obtaining complete encounter data.
26	NA	Added question regarding steps taken to improve completeness of encounter data.
27 – 29	NA	Added questions regarding contractual agreements with MCOs to submit complete and accurate encounter data.
30	NA	Added question regarding any other activities undertaken to encourage MCOs to submit complete and accurate encounter data.
31	NA	Added question regarding any actions taken against MCOs that regularly failed to submit complete and accurate encounter data.
32-33	13-14	Questions regarding system changes and/or upgrades that occurred during the last three years.
NA	24a-24l	Removed questions regarding claim adjudication processes.
NA	25a-25c	Removed questions regarding monitoring claim adjudication processes and audit results.

CMS Section III. C. Ancillary Systems

MN ISCAT	CMS ISCAT	Description/Reason for Change
NA	All	DHS not using ancillary data at this time.

MN ISCAT Section IV: Performance Measure Report

CMS ISCAT Section II: IS – Data Processing Procedures and Personnel – and

CMS ISCAT Section III: D. Integration and Control of Data for Performance Measure Reporting

MN ISCAT	CMS ISCAT	Description/Reason for Change
1	9 Sec. II: 1-2	Modified questions regarding structure of data repository used for performance measure data.
2-3	12, 15	Questions regarding process to update/change and testing system used to produce performance measure reports.
4	Sec. II: 14	Question asking how organization knows if changes to encounter/enrollment systems affect performance measure reporting and what prompts organization to make those changes.
5	1	Requesting flow chart of systems/data integration and file consolidation.
6	2-3	Question regarding process/procedure used to consolidate enrollment and encounter data.
7	3a	Question asking number of different data sources.
8-11	3b-3e Sec. II: 6	Question asking what control processes are in place to ensure accuracy and completeness of file consolidations.
12	3 (no #4) Sec. II: 3	Modified question to ask for record layouts/what data elements pulled from each file/dataset data used to calculate performance measure results.
13	5	Question regarding algorithms used to check the reasonableness of the data.
14	6-7 Sec. II: 12	Modified questions regarding storage and maintenance of files used to calculate performance measure results to evaluate organizations ability to reproduce results.
15	Sec. II: 3-4	Modified question to ask for list of all software applications and mainframe system programs utilized to calculate performance measure results.
NA	8	Removed question regarding external vendor data.
16-17	Sec. II: 5	Modified questions asking for number, experience and background of programmers responsible for performance measure production.
18	Sec. II: 7	Question regarding processes used to measure programmers' performance.
NA	Sec. II: 8	Removed question: none of DHS performance measure programming work is outsourced.
19	Sec. II: 9	Question asking for average years of experience of programmers in organization.

20	Sec. II: 10	Modified question asking for approximation of resources (time, money) spent per programmer, per year for training on software and performance measure production.
21-22	Sec. II: 10, Sec. II: 12	Modified questions asking what type of training is provided to programmers.
NA	Sec. II: 11	Removed question regarding programmer turnover rate.
23	14 Sec. II: 12	Question regarding back-up staff for programmers responsible for performance measure production.
24-25	10 Sec. II: 12	Modified question asking to describe process used to produce performance measure reports including, production logs and run controls.
26	11	Modified question asking to describe documentation of report generations.
27	11, 15 Sec. II: 13	Modified question asking to describe what version control method/process used.
28	12	Question regarding procedures to test processes used to create performance measure reports.
29	NA	Question regarding logic/programs for calculating continuous enrollment.
30	13 Sec. II: 15	Modified question to describe internal process for obtaining management level approval/sign-off on individual performance measures.
NA	Sec. II: 16	Removed questions regarding data processing staff responsible for claims adjudication.
NA	Sec. II: 17	Moved questions regarding system security to MN Section V.

CMS Section IV: Provider Data

MN ISCAT	CMS ISCAT	Description/Reason for Change
NA	All	DHS does not collect provider data for use in performance measure production.

MN ISCAT Section V: Security

CMS ISCAT Section II: Information Systems – Data Processing Procedures and Personnel

MN ISCAT	CMS ISCAT	Description/Reason for Change
1	17a	Modified (split) question to ask frequency of file back-ups and where back-up files are stored.
2	17e	Modified question asking to describe processes in place to control access to performance measure data files/repository systems.
3	17d	Question asking for description of physical security in place for performance measure data system.
4	NA	Added question asking what mechanisms in place to protect data in the event of a power failure.

5	17a, 17b	Modified questions asking how data protected from system failures and program errors to prevent loss of data and data corruption.
NA	17c	Removed question. Data completeness issues covered in MN ISCAT Section III.
6	NA	Added question asking if needed to restore data during measurement year.
7	NA	Added question asking if any data was lost during measurement year.