



## **2014 Performance Measures Validation Report**

*An independent audit conducted by MetaStar of 2014 performance measures produced by the Minnesota Department of Human Services*

October 28, 2015

This document has been reviewed and confirmed to adhere to Accessibility Standards, Section 508 of the Rehabilitation Act, 29 U.S.C §79d.”

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## DHS' 27 Performance Measures for 2014

1. Adolescent Well-Care Visits (AWC)
2. Adults' Access to Preventive/Ambulatory Health Services (AAP) (20-44, 45-64, 65+ years)
3. Antidepressant Medication Management (AMM) (18-64, 65+ yrs.)
  - Acute Treatment
  - Continuous Treatment
4. Breast Cancer Screening (BCS) (40-64, 65-69 years.)
5. Cervical Cancer Screening (CCS) (24-64 years)
6. Childhood Immunization Status (CIS) (Combinations 2 through 10)
7. Children and Adolescents' Access to Primary Care Practitioners (CAP) (12-24 months, 25 months- 6 years, 7-11 years, 12-19 years.)
8. Chlamydia Screening in Women (CHL) (16 – 24 years)
9. Comprehensive Diabetes Care Screening (CDC) (18-64, 65-75 years)
  - HbA1c Testing
10. Use of Appropriate Medications for People with Asthma (ASM) (5-11, 12-50, 51-64 years)
11. Medication Management for People with Asthma (MMA)
12. Asthma Medication Ration (AMR)
13. Well-Child Visits First 15 Months (W15)(6 or more visits)
14. Well-Child Visits (W34) (3 – 6 years)
15. Appropriate Treatment for Children With Upper Respiratory Infection (URI) (3 months-18 years)
16. Annual Dental Visit-Children (ADV) (2-18 years)
17. Dental Visits-Adults (19-64, 65+ years)
18. Postpartum Care (PPC)
19. Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET) (13-64, 65+ years)
20. Follow-Up After Hospitalization for Mental Illness (FUH) (6-64, 65+ years)
21. Persistence of Beta-Blocker Treatment After a Heart Attack (PBH) (18-64, 65+ years)
22. Colorectal Cancer Screening (COL) (51-75 years)
23. Use of Spirometry Testing in the Assessment and Diagnosis of COPD (SPR) (40-64, 65+ years)
24. Osteoporosis Management in Women Who Had a Fracture (OMW) (67+ years)
25. Annual Monitoring for Patients on Persistent Medications (MPM) (18-64, 65+ years)
26. Human Papillomavirus Vaccine for Female Adolescents (HPV)
27. Plan All Cause Readmission (PCR)

These measures are derived from the HEDIS™ 2014 Technical Specifications published by the National Committee for Quality Assurance (NCQA). All use administrative (enrollment and encounter) data only. HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

## Executive Summary

The Minnesota Department of Human Services (DHS) elects to use standardized performance measures to assess quality of care and services provided by its contracted managed care organizations (MCOs). These measures are calculated from encounter data submitted by these organizations to DHS. In order to assure that specifications for these measures are followed, and that DHS' healthcare information system is capable of supporting such measures, DHS contracts with MetaStar for a rigorous assessment each year. This assessment meets the Centers for Medicare & Medicaid Services (CMS) performance measurement validation standards.

The assessment is not intended to evaluate the overall effectiveness of DHS' systems. Rather, the focus is on evaluating aspects of DHS' systems that specifically influence the ability to accurately report performance measures. In essence, DHS needs 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, transformed, stored, computed, analyzed, and reported.

DHS currently employs 27 performance measures (see preceding page). This set of measures focuses on early detection and management of chronic disease, basic preventive care, and access to care. The measures follow specifications found in the *Healthcare Effectiveness Data and Information Set (HEDIS)<sup>®</sup> 2015 Technical Specifications*.

DHS uses those HEDIS measures best suited to available encounter data. Although HEDIS specifications are followed closely for all measures, a few require minor modifications due to state-specific requirements or data idiosyncrasies. In addition to monitoring MCO performance, this set of measures is useful in tracking progress toward internal quality improvement objectives and in meeting other state agency requirements.

To make its assessment, MetaStar examines extensive sets of system documentation and detailed computer program code, conducts interviews with DHS staff, and performs internal data consistency checks and comparative tests of measure results against benchmark data. Any identified system deficiencies or data problems are immediately corrected and reviewed again.

The assessment is performed following all processes required by the Balanced Budget Act (BBA) (42 CFR 438.358[b][1]) and *CMS Protocol Calculating Performance Measures, Validating Performance Measures, and Appendix Z (ISCAT)*.

The findings of MetaStar's assessment for this year are as follows:

1. Enrollment data and encounter data in DHS' healthcare information systems are complete and reliable to the degree necessary to support the performance measurement system. There are a potential 65,000 of 1,000,000 members that could have multiple member identifications. This could lead to an inflated denominator, however, the likelihood is slightly diminished due to the service criteria in several measures.
2. DHS' healthcare information systems are capable of extracting, managing, and analyzing the data in ways that enable the production of valid and reliable performance measures.

3. A team of nine SAS programmers on the Minnesota Department of Health Services Team created the SAS programs used to run the measures. A step by step process was used by all coders to promote consistency. The code was reviewed by the MetaStar team, composed of a SAS programmer and a HEDIS auditor, and approved without any negative findings.
4. DHS' selection of standard HEDIS performance measures, and its rigor in implementing these measures, ensures validity, reliability, and comparability of results. Two ATR measures were added for the 2015 review, AMR and MMA, and one non-ATR measure was added to the review, PCR.

The assessment described in this report has been conducted every year since 2005. The performance measurement system continues to keep abreast of changes in data availability and measure specifications.

## 2014 Performance Measures Validation Report

The Minnesota Department of Human Services (DHS) contracts with MetaStar to conduct an independent assessment of the Department's healthcare performance measurement system. DHS' performance measurement system primarily monitors performance among DHS' contracted managed care organizations (MCOs). MetaStar conducts an annual assessment and reports on its findings.

The purpose of MetaStar's assessment is to validate the three major components of the performance measurement system:

1. The quality of the encounter data from which DHS bases its performance measures.
2. The capabilities of DHS' information systems in extracting, managing, and analyzing data without introducing error.
3. The adequacy of measure definitions and degree to which DHS rigorously implements these definitions.

MetaStar applies a methodology that fulfills the requirements of the Centers for Medicare & Medicaid Services' (CMS) EQRO Protocol, *Validation of Performance Measures*, including the *Information Systems Capabilities Assessment Tool* (ISCAT). This methodology meets the requirements set forth in the BBA's 42 CFR 438.242 regulations. It includes an onsite visit to DHS, preceded by specified pre-onsite activities and followed by specified post-onsite activities.

### MetaStar's Credentials

MetaStar is a licensed HEDIS Compliance Audit<sup>TM1</sup> organization with extensive experience conducting these audits. The staff involved in this project include a Certified HEDIS Compliance Auditor (CHCA), acting as project manager and performing as a programmer-analysts regarding data integrity assessment, documentation review, and measure validation.

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 products for Minnesota's MCOs.

<sup>1</sup>HEDIS Compliance Audit<sup>TM</sup> is a trademark of the National Committee for Quality Assurance (NCQA).

## Data Quality Validation

### Method

DHS' healthcare performance measurement system relies on complete and accurate data. More specifically, DHS' performance measures are defined in terms of data that are available from DHS' enrollment and encounter databases. In order to validate the performance measurement system, MetaStar must verify that the content of these databases are complete and accurate enough to support this use.

MetaStar employed four approaches to validating enrollment and encounter data:

- Document review;
- Interviews;
- Operational quality reports; and
- Measure comparisons.

Each approach is capable of uncovering data integrity problems that might threaten the reliability of one or more measures.

MetaStar gathered from DHS a wide range of documentation regarding enrollment and encounter data, including special studies and periodic audits, data correction policies and procedures, issues logs, EDI specifications, staffing levels, size of databases, and uses of these data. These documents were initially collected in the first annual assessment and are updated each year as necessary. To add depth to the information available in the documentation, and to clarify where necessary, MetaStar conducts interviews with those DHS staff responsible for the data systems. MetaStar asks detailed questions to assure that enrollment data are accurately collected and securely maintained.

Enrollment data for Minnesota's publicly funded managed care programs are all maintained at the state level, so performance measurement access to this primary source is direct and relatively simple. Knowledge of its problems is readily available.

Encounter data are only as good as what are submitted by the MCO, so robust methods for error detection and correction are necessary. Operational quality reports, such as data error rates and volume discrepancies reports provide MetaStar with quantitative information about problems with encounter submissions and resolutions to those problems.

In addition to documentation review, interviews, and data quality reports, the quality of these data can be assessed in terms of the results they produce. MetaStar has access to a range of MCO, state, and national "benchmarks" against which Minnesota's public program performance measure results are compared. Large discrepancies alert the reviewers to possible underlying data problems.



## Findings

1. **Enrollment Data:** Enrollment data processes remained stable. There was no evidence that enrollment data issues followed through to the encounter data reporting process for this project. There are a potential 65,000 of 1,000,000 members that could have multiple member identifications in NES, MAXIS, and MMIS systems. This number is anticipated to increase over time. This could lead to an inflated denominator; however, the likelihood is slightly diminished due to the service criteria in several measures.
2. **Enrollment Data:** A review of DHS rates showed no evidence that enrollment shifts negatively impacted encounter data quality for 2014 reporting. Enrollment shifts were observed in MinnesotaCare which resulted in several rates being 'Not Applicable' due to small numbers. The decrease in MinnesotaCare enrollment was due to the shifts of children, pregnant women, and many adults/dependent caretakers to the MA product in 2014.
3. **Encounter Data:** There was no evidence the integrity of the encounter data was compromised. Macro libraries were created to incorporate the codes in the value set directory. This practice decreases the potential for coding errors and increases the accuracy of the rates.
4. **Encounter Data:** There is no evidence that the processes of data extraction from DHS' mainframe databases into the DHS data warehouse introduces error that is not already present in the encounters as submitted.
5. **Recommendation:** DHS should continue to observe, address, and track data quality issues that may arise during data receipt from the MCO and to identify potential reporting bias or impact from known or potential issues.
6. **Recommendation:** DHS should continue to maintain numerators and denominators to allow for exact replication in future years. These could also be used to assess changes in technical specifications, National Drug Codes, and the impact of any additional encounters.
7. **Recommendation:** DHS should continue to monitor the instances of members obtaining multiple identification numbers. It is a best practice to link multiple identification numbers with a single identifier, such as a Social Security Number.

## Information System Validation

### Method

MetaStar applies CMS' ISCAT in its assessment of DHS' information system capabilities in supporting performance reporting. The tool is modified slightly for use at a state agency rather than at an MCO.

The ISCAT process includes the following steps:

1. DHS prepares a written response to each question on the ISCAT and sends these responses to MetaStar.

2. MetaStar reviews DHS' ISCAT responses in light of the other documentation MetaStar has collected about the system.
3. MetaStar conducts an onsite visit at DHS to clarify responses or to obtain additional responses to the ISCAT question set.
4. MetaStar reassesses responses during the post-onsite period and obtains from DHS any further needed information.
5. MetaStar issues its report on the capability and reliability of the DHS system as a data source for performance measurement.

The information system capabilities assessment process is intended to validate that DHS' information system can:

- Track individual enrollees and their enrollment spans;
- Link services to enrollees;
- Ensure accuracy and currency of data;
- Avoid error in data transfer processes;
- Permit encounter replacement;
- Provide a reliable direct source for data measure production;
- Provide detailed standard operating procedures (SOPs) that direct the production of measures from the extraction point to reporting; and
- Adapt to needed changes.

Where standard operating procedures are implemented by computer programs (SAS programs), MetaStar carefully examines and tests these programs.

## Findings

MetaStar finds that DHS' healthcare data systems capably extract, manage, and analyze the available data and provide a sound platform for production of MCO-level performance measures.

1. **Enrollment Data:** DHS implemented a new enrollment system, NES. DHS continues to operate the enrollment system for public healthcare programs so it is in a position to directly impact the quality of these data. Its unique enrollee identifier is used throughout the system, allowing enrollment spans, encounters, and fee-for-service claims to be easily tracked by each individual enrollee.
2. **Encounter Data:** The encounter data reporting process is stable and measure findings support this observation. No substantial issues were noted with DHS' capability to accurately extract and report measures using encounter data.
3. **Documentation:** The DHS performance measurement system continues to be strong in its use of detailed SOPs that guide production of the measures. Volume comparisons and error rate comparisons indicate when encounter data are complete and reliable enough for measure production.

4. Recommendations: DHS should ensure they continue to document and utilize detailed policies and procedures for testing each new and updated measure. A measure Internal Quality Control (IQC) plan should include comparison of the performance measure rate to rates reported by MCOs and review of individual enrollees to determine if they are appropriately included or excluded from the numerators and denominators. DHS should also continue to assure that report results can be reproduced in instances where there are questions or further analysis is required.
5. There are multiple enrollment systems used at DHS. The auditor suggests creating a flowchart that demonstrates the integration of all of the enrollment systems and specifically how these systems are used (inputs and outputs) for the performance measurement project.

## **Validation of Measures**

### **Method**

DHS recognizes the importance of employing valid and reliable performance measures. Furthermore, these measures must be well suited to available data (i.e., the enrollment and encounter data) in the DHS healthcare data system. MetaStar's role is to assess the validity and reliability of the chosen measures and to verify that the manner in which these measures are implemented satisfies these definitions.

DHS employs a set of HEDIS measures developed by the National Committee for Quality Assurance (NCQA). The advantage in using these measures is that they have "passed the test" for validity and reliability. Their definitions are precise in terms of the available data. They are widely employed in the healthcare field and offer many opportunities for comparison. MetaStar's task is to verify that DHS has implemented the chosen measures correctly.

DHS chose to utilize MCO-submitted encounter data to calculate its performance measures. It is important to understand the steps that occur as medical information is translated into encounter data. Once an enrollee receives medical services, the provider places the information onto a claim form. Providers submit the claim form to a MCO. 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' encounter data should accurately reflect the MCO's claims data for the submitted elements. However, if an MCO obtains additional service information (such as test results or service information from external entities) that are maintained separately from claims, the information would not be submitted to DHS, and the DHS encounter database would not contain all the data from a given service.

The exclusive use of encounter data to calculate performance measures is known as the administrative method. HEDIS Technical Specifications allows for some measures (e.g., Prenatal and Postpartum Care) to be calculated using a combination of administrative (claims or encounters) and medical chart review data; this is considered a "hybrid" method. 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 but fails to be recorded in a claim.

To use the hybrid method, a statistically appropriate sample size is determined. Enrollees meeting measure denominator criteria (e.g., a live birth in 2013) are identified, and a randomly selected sample of those enrollees is drawn. Medical charts are then reviewed for all enrollees included in the sample who did not meet numerator criteria via administrative data. Final rates, then, include both administrative and medical record data in the numerator for the measure.

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. It can be a time consuming, resource intensive, provider-burdensome process. Due to the additional resources involved with hybrid data collection, DHS elected to calculate its performance measures with administrative data only.

Although the hybrid method may produce higher rates for some measures, they are not necessary for comparing baseline measurements to subsequent changes to assess MCO performance on the measures chosen for this project. Thus, using administrative data is an appropriate mechanism for the production of performance measurements. Utilizing the administrative only method, MCOs and programs may be equitably compared by DHS 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.

Once DHS has drafted or revised computer programs to calculate performance measure rates, MetaStar performs thorough code review of all measures. DHS computer programmers and MetaStar analysts examine in detail the SAS programs written by DHS and compare the operations in the code to the operations specified in the HEDIS specifications. MetaStar's familiarity with the HEDIS specifications, with the DHS performance measurement platform, and with the SAS programming language, are important ingredients in this process.

Once any programming problems found via code review are fixed by DHS, MetaStar begins the process of comparing the results of those programs to MCO, state, and national benchmarks. In this instance, the process can uncover implementation problems not readily identifiable in the SAS code.

In cases where DHS-to-benchmark discrepancies cannot be explained on the basis of enrolled population differences or service system differences, MetaStar obtains raw data from DHS and runs test programs to identify the source of the discrepancies. Both MetaStar and DHS compare results of the current year (2014) to previous years and to results reported to NCQA by individual MCOs through NCQA's HEDIS Interactive Data Submission System.

## Findings

1. For 2015 reporting, DHS updated prior year's source code when available. Required and optional exclusions were consistently applied. Most MCOs apply these exclusions, and this helps to assure denominators are as comparable as possible to that using standard HEDIS methodology produced by MCOs.
2. MetaStar finds DHS correctly implements all necessary critical components of measure specifications to generate valid, reliable, and useful performance measures. This includes

documentation within the SAS program code and in adjunct procedural descriptions to facilitate understanding of program logic. No discrepancies were found between code and specifications at the time of reporting.

3. For each of the performance measures noted in this report, MetaStar adopts the NCQA reporting format that has two formal validation findings – “Report” or “Not Report”. For measurement year 2014 reporting, MetaStar designated all performance measure source code with Report status (see Appendix B).

### **NCQA Identified Trends**

NCQA has identified that behavioral health is realizing some gains in quality, but overall the quality of care in behavioral health is still poor. It is anticipated that additional behavioral health measures will be released in the future.

There has been an issue identified with the overuse of antibiotics. Several measures are being closely monitored which include:

- Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis
- Appropriate Treatment for Children With Upper Respiratory Infection
- Appropriate Testing for Children With Pharyngitis

NCQA has identified four high performing measures:

- Imaging Studies for Low Back Pain
- Adult BMI Assessment
- Colorectal Cancer Screening
- Comprehensive Diabetes Care: HbA1c Screening

The Cervical Cancer Screening measure has seen observed declines in rates. There stands to be room for improvement particularly in Medicaid plans as there is more variation and overall poorer performance.

### **HEDIS 2016 Changes**

For HEDIS 2016, NCQA retired the Use of Appropriate Medications for People with Asthma (ASM) measure. DHS will need to decide if this measure will remain in the validation study. If this measure is of interest, DHS will need to identify a process to maintain the appropriate diagnosis and procedure codes.

The HEDIS rotation policy is retired. Plans will no longer be able to report rates from the previous year for selected measures. All required measures must be reported.

The Medication Reconciliation Post Discharge measure is now no longer only a Special Needs Plan measure. CMS is requiring all Medicare Advantage plans to report this measure.

The Medication Management for People with Asthma and Asthma Medication Ratio measures are now required for Medicare according to the HEDIS specifications, in addition to Commercial and Medicaid.

There are several new measures for 2016, and they include:

- Statin Therapy for Patients with Cardiovascular Disease
- Statin Therapy for Patients with Diabetes
- Inpatient Hospital Utilization
- Emergency Department Utilization
- Hospitalization for Potentially Preventable Complications
- Utilization of the PHQ-9 to Monitor Depression Symptoms for Adolescents and Adult

NCQA revised the requirements for urine protein testing for the Comprehensive Diabetes Care Medical Attention for Nephropathy indicator; a screening or monitoring test meets criteria, whether the result is positive or negative. For Osteoporosis Management in Women Who had a Fracture, NCQA added long-acting osteoporosis therapy administered during an inpatient index episode start date to the numerator. These changes may impact on the comparability of the HEDIS 2016 results with prior years' calculations.

NCQA added a data element to collect numerator events by supplemental data to all Effectiveness of Care (EOC) measures and Utilization measures similar to ECO measures. Plans will have to report the number of hits from supplemental data for these measures, in addition to the number of hits from administrative and hybrid data.

## **Final Thoughts**

This is the eleventh year that DHS has calculated HEDIS measures using encounter data. The system developed during the 2004 Performance Measure project allowed DHS to efficiently and effectively update the measures. The process used by DHS demonstrates that the system is easily maintained and adapted. Throughout the process, DHS staff remains committed to meeting rigorous standards and thoroughly documenting its methods. DHS maintains a solid foundation for producing valid and reportable performance measures.

## Appendix A: MetaStar's Detailed Assessment of DHS Information System Capabilities

The audit consisted of an overall information systems capabilities assessment (IS Standards), followed by an evaluation of DHS 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 onsite.

- *Information System Capabilities Assessment:* The first part of the audit focused on assessing DHS 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 information system was designed to collect information that documented the effect of DHS information management practices on the performance measure reporting process. The audit was not intended to evaluate the overall effectiveness of DHS information systems. Rather, the focus was on evaluating aspects of DHS 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 HEDIS Compliance Audits. MDH requires MCOs to undergo an NCQA HEDIS Compliance Audit, and DHS follows the same national standards that MCOs are 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 Encounter Billing Procedures Manual; and HIPAA Mapping Requirements for Encounter Data, MCO submission requirements, and actual data contained in the warehouse. The audit team reviewed 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.

On a regular basis, DHS staff produces reports on the volume of encounters and the number of encounters denied. In addition, DHS produces reports 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.

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 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 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, onsite 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, interviews with DHS staff, and 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. As noted previously, DHS continues to work to ensure encounter data including ancillary data and denied service data are appropriately incorporated for 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, edits are performed. If an encounter does not pass an edit, the information is written to a remittance form and provided to the MCO on a routine basis. The MCO is responsible for correcting the data.

DHS has adequate processes for accepting encounter data from MCOs and transferring encounter data for reporting. Encounter volume reports are generated and reviewed by DHS.

DHS Encounter Data Quality Unit addresses key work areas including:

- Improving DHS ability to estimate costs of managed care;
- Improving DHS ability to analyze encounter data at a more detailed level;

- Improving the completeness and accuracy of health plan-submitted data;
- Avoiding artificially inflated measurements due to duplication; and
- Improving communication regarding encounter data with managed care organizations.

### **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, 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 members 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. DHS indicated there was a backlog of processing due to the ACA requirements and NES implementation. The 2014 technical deficiency error rate was found to be 41.6%. These deficiencies were resolved to the degree that reporting would be minimally impacted.

The system electronically verifies social security number and the Medicare number with the appropriate federal agency. DHS 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 Section 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 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, documented processes for reporting performance measures from encounter data. Review of DHS results showed that DHS procedures effectively utilized encounter data for reporting.

From the beginning of the study through the generation of performance measure results, the audit team and DHS 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 Section IV

### Criteria

DHS 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, onsite visits, and communication with DHS, the audit team remained apprised of DHS 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.

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

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

MetaStar's audit team used the ISCAT, interviews, and onsite 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. Overall, DHS met its internal timeline. DHS has appropriate documentation of the project. There was no evidence that data or reporting were compromised due to breaches in either physical security or data access.

The DHS reporting process includes running source programming code against the warehouse rather than a repository. It is recommended that DHS save individual enrollee level data each measure calculated. This data could then be used for analysis in the instances where code must be rerun, helping to assure changes in measure findings are explainable over time.

## 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 Encounter Data Submission reports, 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 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 minor deviations from specifications. These deviations were communicated to DHS staff who revised the programs, retested, and resubmitted to MetaStar for additional review. Final denominators for all measures included in the study met performance measure specifications. There were no measures excluded from DHS performance measurement report due to denominator identification concerns.

## **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 programming appropriately identified the specified medical and service events (e.g., diagnoses, procedures, prescriptions, and date of claims payment).

### Findings

Initial review of the programs used to identify numerators found no negative findings. Results from DHS were compared to national benchmarks and prior year's results. In addition, MetaStar compared them to HEDIS 2014 MCO results. Final numerators for all measures included in the study met all performance measure specifications. There were no measures excluded from DHS performance measurement report due to 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 reviewed performance measure results as calculated. MetaStar also compared DHS results with MCO reported HEDIS results. 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 sufficient documentation of performance measure production. Appropriate procedures are written for each critical production step.

## Appendix B: Measure Validation Calendar Year 2014 Dates of Services

This process assessed the extent to which DHS 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 system used MCO encounter data. Thus, the assessment included extensive examinations of DHS 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, 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.

Individual measure analysis findings are as follows for the all plan rates:

<b>Measure</b>	<b>Findings</b>	<b>Status</b>
1. Adolescent Well-Care Visits	Rates have been stable over time. Rates compared to the national NCQA Benchmark were below the mean and below the 10 <sup>th</sup> percentile.	<b><i>Report</i></b>
2. Adult Ambulatory or Preventive Visit (20-44, 45-64, 65+ years)	Rates appear stable over time. Rates compared to the national NCQA Benchmark were above the mean with the exception of MinnesotaCare.	<b><i>Report</i></b>
3. Antidepressant Medication Management (18-64, 65+ years.) <ul style="list-style-type: none"> <li>• Acute Treatment</li> <li>• Continuous Treatment</li> </ul>	Rates appear stable over time for each MCO; however, there is variation amongst the MCOs. Some rates were hovering near the NCQA 10 <sup>th</sup> percentile and some were above the 90 <sup>th</sup> percentile.	<b><i>Report</i></b>
4. Breast Cancer Screening (40-64, 65-69 years)	Rates appear stable over time. Most rates were above the NCQA national mean. MCO rates varied between the 10 <sup>th</sup> percentile and the 75 <sup>th</sup> percentile.	<b><i>Report</i></b>



<b>Measure</b>	<b>Findings</b>	<b>Status</b>
5. Cervical Cancer Screening (21-64 years)	Rates were comparable and have consistently decreased over time. Rates compared to the NCQA Benchmark were below the national mean, with the exception of F+C MA. There is a national trend of decreased rates.	<b>Report</b>
6. Childhood Immunizations Combinations 2 through 10	Rates appear stable over time. Small numbers affected MinnesotaCare due to the changes in eligibility for 2014. Most rates compared to the NCQA Benchmark were below the national mean, with the exception of Combinations 6 & 8 for F+C MA.	<b>Report</b>
7. Children Primary Care Practitioners Visits (12-24 months, 25 months – 6 years, 7-11 years, 12-19 years.)	Rates for F+C MA appear stable over time. Rates compared to the NCQA Benchmark were above the national mean. Rates compared to the NCQA Benchmark were below the national mean for FFS MA. Small numbers affected MinnesotaCare due to changes in eligibility for 2014.	<b>Report</b>
8. Chlamydia Screening in Women (16 – 24 years)	Rates were consistent from previous years. MCOs ranges varied from the 10 <sup>th</sup> percentile to the 90 <sup>th</sup> percentile.	<b>Report</b>
9. Diabetes Screening (18-64, 65-75 years) <ul style="list-style-type: none"> <li>HbA1c Testing</li> </ul>	Diabetes screening rates were consistent from prior years. Most MCO rates were above the NCQA national mean with the exception of MCS+.	<b>Report</b>
10. Use of Appropriate Medication for People with Asthma (5 – 11, 12-50, 51-64 years)	Rates appear stable and consistent over time. Rates compared to the NCQA Benchmarks were above the national mean with the exception of one age group (51-64) for FFS MA.	<b>Report</b>
11. Medication Management for People with Asthma	Rates appear stable and consistent over time. All MCOs and product lines were between the NCQA 10 <sup>th</sup> and 90 <sup>th</sup> percentile benchmarks. Small numbers affected MinnesotaCare due to changes in eligibility for 2014.	<b>Report</b>
12. Asthma Medication Ratio	Rates appear consistent from prior years. Small numbers affected many MCOs.	<b>Report</b>
13. Well-Child Visits First 15 Months (6 or more visits)	Rates appear consistent from prior years. Small numbers affected MinnesotaCare due to changes in eligibility for 2014.	<b>Report</b>

<b>Measure</b>	<b>Findings</b>	<b>Status</b>
14. Well-Child Visits (3 – 6 years)	Rates appear consistent from prior years. Rates compared to the NCQA Benchmark were below the national mean. Small numbers affected MinnesotaCare due to changes in eligibility for 2014.	<b>Report</b>
15. Appropriate Treatment for Children With Upper Respiratory Infection	Rates appear consistent and stable over the last four years. Rates compared to the NCQA Benchmark were above the national mean. MCO rates varied between the 50 <sup>th</sup> and 90 <sup>th</sup> percentiles.	<b>Report</b>
16. Dental Visit-Children	Rates appear consistent and stable compared to prior years. FFS MA was below the national mean and F+C MA was above the national mean with the exception of the 2-3 age group. Small numbers affected MinnesotaCare due to changes in eligibility for 2014.	<b>Report</b>
17. Dental Visits-Adults	Rates across the adult dataset were overall stable. There are no benchmarks for adult dental care.	<b>Report</b>
18. Postpartum Care	Rates appear stable compared to prior years. Compared to national NCQA Benchmarks, rates were below the 10 <sup>th</sup> percentile.	<b>Report</b>
19. Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (13-64, 65+ years)	Rates appear consistent compared to prior years. Small numbers affected many of the MCOs. All MCOs were between the 10 <sup>th</sup> and 90 <sup>th</sup> percentile benchmarks.	<b>Report</b>
20. Follow-Up After Hospitalization for Mental Illness (6-64, 65+ years)	Rates appear consistent compared to prior years. Compared to NCQA Benchmarks all rates were below the national mean. Small numbers affected many of the MCOs for the 65+ age group.	<b>Report</b>
21. Persistence of Beta-Blocker Treatment After a Heart Attack (18-64, 65+ years)	Because of small numbers, which are expected with this measure, it is difficult to make statistical comparisons.	<b>Report</b>
22. Colorectal Cancer Screening (51-75 years)	Only HEDIS Medicare benchmarks apply, this is not a standard Medicaid measure. No issues were shown with previous year comparisons, rate changes were expected and reasonable. Rates were very stable overall and eligibility changes were as expected.	<b>Report</b>

<b>Measure</b>	<b>Findings</b>	<b>Status</b>
23. Use of Spirometry Testing in the Assessment and Diagnosis of COPD (40-64, 65+ years)	Rates were stable from prior years. All MCOs were between the 10 <sup>th</sup> and 90 <sup>th</sup> national percentiles with the exception of Medica's F+C MA product being above the 90 <sup>th</sup> percentile and BluesPlus MSHO product being below the 10 <sup>th</sup> percentile. MinnesotaCare and MSC+ were affected by small numbers; however, all numbers were relatively small and therefore are subject to more volatile rates.	<b><i>Report</i></b>
24. Osteoporosis Management in Women Who Had a Fracture (67+ years)	This measure is not a HEDIS Medicaid measure, thus HEDIS Medicare benchmarks were used. Most plan rates were too small to analyze individually. Overall rates and eligibility are stable and rates compare evenly to last year's reported rates. Most plans fell below the NCQA 10 <sup>th</sup> percentile.	<b><i>Report</i></b>
25. Human Papillomavirus Vaccine for Female Adolescents	Rates appear consistent from prior years. Small numbers affected MinnesotaCare due to changes in eligibility for 2014. Compared to national NCQA Benchmarks, rates were above the national mean.	<b><i>Report</i></b>
26. Annual Monitoring for Patients on Persistent Medications (18-64, 65+ years)	Analysis did not identify any issues or concerns with rates. All MCOs were within NCQA benchmarks. Digoxin appeared to have small numbers throughout most programs.	<b><i>Report</i></b>
27. Plan All Cause Readmission	Rates are within allowable limits of change with a slight decrease in rate. National Medicare rates are also decreasing; therefore, the Minnesota Medicaid rates appear on pace with National trends. Small numbers affected MinnesotaCare due to changes in eligibility for 2014.	<b><i>Report</i></b>