



## **2014 Performance Measure Project Report**

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

November 2015

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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 encounter data submitted by its contracted managed care organizations (MCOs). DHS retained MetaStar to conduct an independent audit of DHS' 2014 performance measures and processes. 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 V (ISCAT).

MetaStar, Inc.'s (MetaStar's) audit included a review of DHS' information systems. The review was designed to collect information documenting the effect DHS' management practices had on the performance measurement process. The review was not intended to evaluate the overall effectiveness of DHS' systems. Rather, its focus was 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, translated, stored, analyzed, and reported.

DHS selected twenty-seven performance measures for examination, all of which are derived from the Healthcare Effectiveness Data and Information Set (HEDIS<sup>®</sup>)<sup>1</sup> 2015 Technical Specifications. DHS selected measures suited to encounter data, internal quality improvement objectives, and other state agency requirements.

DHS maintained effectiveness regarding the production of information and deliverables for both federal and state statutory program requirements. DHS has been able, due to its methodology, to create reports specific to Medicaid populations and across programs. Also, DHS performance measurement data are used in contract and performance incentive decision-making.

This report addresses important opportunities and recommendations for future validation projects. Opportunities focus on understanding differences between DHS and MCO results, maintaining gains in process efficiency and project timeliness in the upcoming years.

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

## 2014 Performance Measures Project Report

### Project Background

Performance measures are designed to provide data on health care processes or outcomes. Over time, performance measures are used to quantify the impact of changes and improve the quality of health care. Standardized performance measures are required for all state Medicaid managed care programs by federal law. States utilize these performance measures to direct improvements in the quality of care. MCOs can utilize performance measures to implement appropriate interventions to gain or maintain momentum for quality. Like Minnesota, several other states (Arkansas, Arizona, Iowa, Ohio, Oklahoma, South Dakota and Wisconsin, among others) have chosen to meet their federal obligation to produce performance measures by calculating performance measures using encounter data.

DHS believes that in addition to the primary objective of producing performance measures, utilizing encounter data will result in:

- A decreased administrative and financial burden for MCOs;
- Providing DHS with the ability to examine performance measures for specific populations and subpopulations;
- Providing DHS with the opportunity to specify measurement time frames and enrollment criteria that are most useful in purchasing the highest quality health care services at the most economical cost; and
- Review variations of DHS Medicaid programs specific to the performance measures undergoing encounter data validation

Utilizing encounter data to produce performance measures required DHS to contract with MetaStar to test and validate that its performance measures are consistent with federal requirements. MetaStar's review of DHS performance measures also helps identify potential data integrity improvement opportunities.

Overall, the purpose of the 2014 Performance Measures Project Report is to assess activities conducted to produce the 2014 performance measures and make recommendations that lead to greater accuracy and efficiencies in next year's project.

### ***Performance Measure Process Assessment***

The process of data validation consisted of auditing the general project processes used by DHS, reviewing the data flow between the MCOs and DHS, reviewing all documentation used to calculate the performance measures, and the demonstration of DHS' capacity to produce reliable and accurate performance measures. This began with a review of DHS' processes and concluded with review of the final measurement results. (See: 2014 Performance Measure Validation Report for details of the process.)

#### Federal Regulation and HEDIS Technical Specification Review

MetaStar assessed the extent to which DHS' information system meets the requirements set forth in BBA protocol 42 CFR 438.242 and the CMS Protocols regarding External Quality Review standards. The system's ability to collect, analyze, integrate, and report data was crucial to meeting these requirements, as well as ensuring accurate performance measure reporting. Because DHS' system uses MCO encounter data, the assessment included examinations of DHS' ability to monitor the data for accuracy and completeness. Validation consisted of a review of DHS' data management processes, evaluation of algorithmic compliance with specifications, and verification and benchmarking of the final performance measures selected for review. To assess DHS' performance measures, MetaStar adopted a three-phase validation process approach: pre-onsite, onsite, and post-onsite activities, consistent with the CMS Protocols.

MetaStar and DHS chose to use an approach with as much stringency as called for in other performance measure reviews, including the strict methodology used in HEDIS Compliance Audits<sup>TM1</sup>. The validation process began with the pre-onsite phase of a complete review and updating of the Information System Capabilities Assessment (ISCA) system documentation. During the onsite, MetaStar staff and DHS staff held a detailed discussions pertaining to DHS systems, process of measure coding, and potential issues with the system limitations. Post-onsite activities included thorough source code review of all SAS programs, data trending for each measure and program, and further investigation into outliers and anomalies with analysis of potential impact on rates. Throughout the process, source code review was performed at a line-by-line level to ensure that measure specifications were met exactly; where measure specifications could not be met due to lack of complete or accurate data, reviewers determined using statistical analysis whether final measure rates were reportable or biased based on those issues.

#### Process Assessment Findings

DHS has adequate processes for accepting encounter data from MCOs and transferring encounter data to its Medicaid Management Information System (MMIS) and to its data warehouse. A number of encounter reports are generated and reviewed by both the Encounter Data Quality Unit (EDQU) and Health Care Research and Quality staff. If deficiencies are identified by DHS and not corrected by the MCO, the performance measure rates could be inaccurately reported.

The MMIS system electronically verifies an enrollee's social security number and the Medicare number with the appropriate federal agency. The system also contains edits for specific fields to aid in the prevention of data errors. Although the enrollee data was appropriate for performance measure calculation, DHS runs multiple enrollments systems which may lead to duplicate enrollee identification numbers being assigned to a unique enrollee. 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. The auditor also suggests conducting quality checks on the number of duplicate enrollee numbers to determine the possible impact on the performance measure rates. MCOs continue to work to maintain the accuracy of eligibility and enrollment data and have worked with DHS and county systems appropriately to maintain a system that is as free from error as possible. No measures were excluded from performance measure reporting due to specific concerns with accuracy of member-level data.

Initial review of the programs used to calculate performance measures resulted in questions regarding the code, however no adjustments were required. Final calculations for all measures included in the study met all performance measure specifications. There were no measures excluded from the study due to programming concerns.

#### Performance Measure Outcomes

DHS selected twenty-seven performance measures for examination. All measures were based on HEDIS 2015 Technical Specifications. DHS selected measures based on their understanding of encounter data and its limitations, internal quality improvement objectives, and other state agency requirements.

MetaStar and DHS staff used various methodologies to determine whether performance measure rates calculated by DHS were reasonable. Because DHS chose to use measurement year specifications "frozen" in time, and have used those specifications to calculate four years of reports for each organization for each measure applicable, clear trends can be shown. This is an obvious strength of the DHS performance measurement process over other nationally recognized performance measurement systems.

Using 2015 HEDIS Technical Specifications and calculating rates for each organization for the previous four years, reviewers were able to identify where true rate changes had occurred, versus those that were the result of changes in specifications. All changes in measure rates from measurement year to measurement year greater than or equal to five percentage points were examined. MetaStar used prior year calculations to assess if the range of variation was acceptable.

Several performance measures contained trends that are noted in the Performance Measure Validation Report. Taking into account changes in programs during 2014 and small denominators for small health plans, few significant discrepancies were noted. This evaluation supports the theory that the DHS data warehouse is stable and that changes in measure rates are more likely from true change versus variation by health plan. DHS continues to review the few outliers.

It is imperative that both latitudinal and longitudinal analysis continue to be performed to assess reportability of encounter data rates. Coding practices can change, sometimes substantially, from one year to the next. HEDIS Technical Specifications account for this change by updating measure methodology, Current Procedural Terminology, and other medical codes from year to year. Due to the washout period for codes used in HEDIS, there have not been any recognizable issues with the changing in codes between specification years. However, DHS should continue to evaluate the impact of changes to the HEDIS Technical Specifications to determine the potential impact on utilization of new codes on older data building on its current reporting process.

As part of outlier analysis noted above, MetaStar auditors used HEDIS-reported data and reported data from previous years from health plans to identify and evaluate potential issues with data comparability. When outliers were found, MetaStar and DHS used HEDIS data or knowledge of MCO data patterns in an attempt to identify means for further analysis. The use of plan-reported HEDIS data, previous years' reported data, and the use of known benchmarks aid DHS in understanding data variation where it occurs. The auditors recommend DHS continue to use all known data sources in review and analysis of outlier comparability.

Extensive line-by-line review of the source code against HEDIS Technical Specifications, as well as detailed analysis of final reporting, showed all measures to be reportable. Documentation should be reviewed and continued to be revised to match current processes for reporting of future data.

### Major Program Review

Families and Children Medical Assistance (F+C MA) reported all fourteen ATR Measures. All rates associated with F+C MA appeared stable and consistent. A significant denominator increase occurred in the Asthma Medication Ratio (AMR) and Cervical Cancer Screening (CCS) measures, this can be attributed to the expansion of MA coverage between 2013 and 2014. The Adolescent Well-Care Visits (AWC) measure had low rates across all major program categories relative to prior years.

MinnesotaCare reported ten out of the fourteen ATR measures. A significant decrease in denominator was identified due to the changes in eligibility criteria experienced in 2014. Fee-For-Service had low rates for five of the fourteen ATR measures. This could be due to Minnesota legislature which requires most MA enrollees to enroll in managed care (F+C MA) unless exception qualifications are met. Enrollees in the FFS MA do not represent the entire MA population.

Minnesota Senior Care Plus (MSC+) reported Adult Ambulatory or Preventative Visit (AAP), Anti-depressant Medication Management (AMM), Breast Cancer Screening (BCS), and Comprehensive Diabetes Care (CDC) measures. All rates associated with MSC+ appeared stable and consistent with no areas of concern. The AAP measure ranked above the NCQA mean and above the 90th percentile. The BCS measure fell below the NCQA national mean, but there were no significant concerns identified.

Minnesota Senior Health Options (MSHO) serves the 65+ population who are eligible for Medical Assistance and enrolled in Medicare Part A and Part B. AAP, AMM, BCS, and CDC were the only ATR measures reported. All rates appeared stable and consistent, and all measures



associated with MSHO ranked above the NCQA national mean. AAP and AMM ranked above the 90th percentile for all MCOs.

Minnesota's Special Needs Basic Care (SNBC) serves people with disabilities ages 18 through 64 who have Medical Assistance. AAP, AMM, AMR, ASM, BCS, CCS, CDC, CHL, and MMA were the ATR measures reported. All rates appeared stable and consistent. A significant increase in denominator was noted for the AMR and ASM measures. The increase is associated with the 2011 Minnesota legislature making SNBC an opt-out program versus an opt-in program. This has led to significant increase over the past few years. Although a number of MCOs were affected by small numbers; the majority of measures ranked above the NCQA national mean.

### Performance Measure Result Caveats

Several important caveats exist in understanding reported DHS performance measure results. These caveats are necessary to ensure audiences understand the proper interpretation of the results and the comparability or non-comparability of data to other performance measurement systems.

MCOs may have access to administrative data that are not submitted to DHS. These may include internally and externally generated supplemental data sources. Examples of internal supplemental data sources include data from immunization surveys or registries, databases used to capture optional exclusions for HEDIS measures from charts, and breast cancer or cervical cancer screening surveys. Supplemental internal administrative data may also be generated as part of a case, disease, or utilization management program. External administrative data may be generated through data supplied by hospitals, laboratories, or individual providers. DHS should continue to evaluate the amount of supplemental data used by health plans and its impact on differences seen in reporting.

DHS may have additional information from other programs, MCOs, or fee-for-service (FFS) when numerator events occur during a period not connected to a member's enrollment in a specific MCO. For example, the cervical cancer screening measure required one year of continuous enrollment for the denominator. The numerator testing can occur during the continuous enrollment period or two years prior to the enrollment in the MCO.

### **Data Integrity Assessment**

Several processes occur in the flow of information from the time that health services are provided until receipt and acceptance into the DHS warehouse. In all of these processes, potential data errors may occur. Although errors at any point in the process may be small, cumulative errors may cause substantial bias in reporting. Utilizing the DHS data flowchart as a map, MetaStar examined each of the steps involved in data flow. Potential integrity issues were identified, which might include providers not submitting data to the MCO, the MCO submitting duplicate or incomplete data, or potential for loss of data integrity after receipt by DHS.

There exist several possible methods for assessing and monitoring integrity issues. These include:

- Requiring MCOs to provide an assessment of the completeness and accuracy of provider submissions;
- Monitoring encounter volume;
- Monitoring reasons encounters are not accepted by the DHS Encounter System;
- Comparing DHS-generated performance measure reports with MCO-generated HEDIS performance measures submitted to the Minnesota Department of Health; and
- Utilizing the Encounter Data Quality Unit to work one-on-one with MCOs who exceed acceptable thresholds for encounter submission.

Because both the MCO's HEDIS data reports and DHS' encounter data reports follow HEDIS Technical Specifications, a useful comparison can be made between the two. This comparison can be used to identify potential issues with DHS processes, programming, or with data integrity issues. This comparison allows DHS to identify areas for necessary intervention to ensure encounter reports are as accurate and meaningful as possible.

Most rate discrepancies outside five percentage points were explainable due to the stringency of data collection and error checking processes already in place. However, when a non-explainable, significant discrepancy of larger than five percentage points is identified by comparing a health plan's HEDIS reported administrative rate for a measure and the DHS rate, the auditor recommends that DHS through the EDQU continue to communicate with the MCOs to continue to identify potential reasons.

### **Improvements in the 2014 Performance Measurement Project**

As with any project, it is important to continually improve processes to allow for fewer required resources, to ensure better outcomes, and to focus resources on areas where they make the most impact.

#### SharePoint (MyMetaStar)

Both DHS staff and the MetaStar audit team continued to use MyMetaStar, MetaStar's SharePoint site, for transfer of all code review, analysis, and work papers. This allows transparency and timeliness in the audit process. MetaStar staff provided all reports via e-mail as well for efficiency of report retrieval of DHS staff.

#### Data Analysis

MetaStar completed the analysis and benchmarking process by categorizing each measure by Major Program Category, then by MCO, and further by age group. Each grouping was then identified as being above or below the NCQA National Percentile mean. The Actual NCQA Percentile was then applied to each grouping. Longitudinal analytics were applied to review the performance measures over the last four years. Comparisons were performed for percent of change in denominator between 2013 and 2014, as well as, percent of change in rate between 2013 and 2014. Further calculation was also performed to identify the percentage point difference between 2013 and 2014 for all measures. All measures with a +/- 5 percentage point change were highlighted. All analysis performed was provided to MN DHS.

MetaStar analysis and benchmarking processes were improved to individual performance measure worksheets with findings for each product line and age specific trend and benchmark findings. The worksheets were provided to DHS for review as well as a summarized table of questions for comment to promote accurate performance measure reporting.

#### Encounter data quality

DHS increased efforts to assure the completeness and accuracy of data. Additional edits were added to the encounter processing system to provide more information to the MCOs on data. The DHS reporting team is in the process of implementing additional reports to the MCOs.

#### Source Code

MetaStar's SAS programmer conducted the initial review of all source code programs. A secondary review was conducted by the Certified HEDIS Compliance Auditor. This review process promotes a thorough review of the SAS source code programs used to produce the performance measure rates.

### **Strengths of the 2014 Performance Measurement Project**

#### Minimal Trending Variability

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.

#### Federal and Statutory Program Efficiencies

DHS has chosen to use an internal performance measurement reporting process. This creates efficiency to meet federal statutory and waiver program obligations. Using encounter data for performance measurement meets external quality review requirements and results in a greater use of required encounter data. Also, by using administrative measures based on encounter data, this ensures that performance measures are less prone to variability and reduces the inefficient use of chart abstractions for hybrid performance measures.

#### Data Availability for Contract Decisions

DHS is able to use available, audited, comparable data to identify points for contract decision-making. Performance measure programs are being used increasingly across the nation to identify contract incentives or pay-for-performance program specifications. The use of stringently audited and produced administrative data rates aids in the assurance of comparability of these data when used for these reasons.

### **Opportunities and Recommendations from 2014**

MetaStar and DHS identified several opportunities for improvement during the 2014 Performance Measurement Project. Opportunities focus on additional process efficiencies and improved communications to ensure an effective project implementation each year. These opportunities and recommendations are discussed below.

### Enrollment Duplication

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 Systems Capabilities Assessment (ISCA)

The current ISCA template used for the DHS Performance Measurement Project has been in place for several years with only minor modifications. The process has been stable overall, and the template has worked well. The auditor recommends that DHS and MetaStar reevaluate the ISCA template during the upcoming year to ensure it continues to be useful and effective in capturing data surrounding DHS encounter data capture and reporting processes. MetaStar has suggested reviewing the Wisconsin EQRO ISCA to be used for the 2016 performance measure audit.

### Electronic Health Record (EHR).

Many MCOs are supplementing reporting with the use of EHR data for traditional HEDIS reporting. MCOs are incorporating laboratory data either within their EHR or as part of HEDIS supplemental reporting. The auditors recommend DHS consider adding measures where EHR's may provide a valid source of data. Together, EHR data and laboratory data could present additional opportunities to DHS for measure reporting.

### Source Code and Performance Measure Production

MetaStar suggest DHS evaluate the value a certified HEDIS measure vendor may provide in producing the HEDIS rates for the 2016 performance measure project. This will minimize the requirement for source code review, and may expedite this portion of the review which is important to complete timely due to other vendors requiring the information from DHS.

### **Summary and Conclusions**

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.