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Minnesota Department of **Human Services**

2008 Performance Measure Project Report

An independent audit conducted by MetaStar of 2008 performance measures produced by
The Minnesota Department of Human Services

November 2009

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Executive Summary

Standardized performance measures are required for all state Medicaid managed care programs by federal law.[1] 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's 2008 performance measures and processes.

MetaStar, Inc.'s (MetaStar's) audit included a review of DHS's information systems. The review was designed to collect information documenting the effect DHS's management practices had on the performance measurement process. The review was not intended to evaluate the overall effectiveness of DHS's systems. Rather, its focus was on evaluating aspects of DHS's systems that specifically impact 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 25 performance measures for examination, all of which are based on Healthcare Effectiveness Data and Information Set (HEDIS®) 2009 Technical Specifications.[2] DHS selected measures suited to encounter data and its limitations, internal quality improvement objectives, and other state agency requirements.

This year's Performance Measurement Project showed continued success and enhanced methods for producing Performance Measurement Project Reports. Various process improvements in project operations and production were again achieved. These improvements allowed MetaStar and DHS to focus on changes and gain efficiencies. The final project teleconference included discussions on the direction of changes to be made in the future.

The project exhibited several strengths. DHS staff was again able to effectively and efficiently utilize internal and external resources using a system that is easily adaptable to accurately report all 25 measures. Year-to-year performance measure variability was shown to be minimal. DHS showed continued efficiencies 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 measure data are used in contract and performance measure incentive decision-making.

This report also addresses opportunities and recommendations for improvements for upcoming projects. Opportunities focus on maintaining gains in process efficiency and project timeliness in the upcoming years.

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[1] BBA (42 CFR 438.358 (b) (2)).
[2] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

2008 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 have chosen to meet their federal obligation to produce performance measures by calculating performance measures using encounter data.[3]

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;
- Increased performance measure consistency from year-to-year;
- 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
- Improving the quality of the encounter data submitted by MCOs.

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.[4]

Overall, the purpose of the 2008 Performance Measures Project Report is to assess activities conducted to produce the 2008 performance measures and make recommendations that lead to greater accuracy and efficiencies in next year's project.

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[3] Other states calculate performance measures using encounter data: Iowa, North Carolina, Ohio, Maryland, and Wisconsin, among others.
[4] See 2006 Data Integrity Report for MetaStar's improvement opportunity analysis.

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's capacity to produce reliable, accurate performance measures. This began with a review of DHS processes and concluded with review of the final measurement results.[5]

- <u>Federal Regulation and HEDIS Technical Specification Review</u>. MetaStar assessed the extent to which DHS's 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's system uses 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 algorithmic compliance with specifications, and verification and benchmarking of the final performance measures selected for review. To assess DHS's performance measures, MetaStar adopted a three-phase validation process approach: pre-on-site, on-site, and post-on-site 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. The validation process began with the pre-on-site phase of a complete review and updating of the Information System Capabilities Assessment (ISCA) system documentation. During the on-site, MetaStar staff and DHS staff held a detailed discussion of individual measure coding, possible anomalies and results using trending data from previous years, known benchmarks regionally and nationally, and HEDIS rate results when known. Post-on-site activities included 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.

- <u>Process Assessment Findings</u>. 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. Encounter volume reports are generated and reviewed by both the Encounter Data Quality Unit (EDQU) of Health Care Operations and Performance Measurement and Quality Improvement (PMQI) staff. Specifically, PMQI staff work with DHS data warehouse staff in April of each year to determine the readiness of the data warehouse for performance measure reporting based on various member and claims-volume reports and comparisons. If deficiencies are identified by the PMQI analyst and not corrected by the MCO, the performance measure rates could be inaccurately reported. In addition, if

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[5] See: 2008 Performance Measure Validation Report for details of the process.

the MCO is allowed to provide additional encounters, the performance measure rate production may be delayed.

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, there is no formal oversight of data entry as required under this standard because data for eligibility and enrollment are entered by the counties. These enrollment data are then loaded into MMIS for use in the data warehouse. Because enrollment data is entered by the counties, there are no opportunities by DHS for improvement of the process prior to being loaded into MMIS. This issue is common for all states that utilize county resources for eligibility and enrollment processing. MCOs have continued 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.

DHS has a formal and well-documented process for populating the performance measure data repository from which all performance measures are calculated. These processes meet all data requirements, include extensive quality assurance procedures, and contain a procedure for updating the performance measure data 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.

Initial review of the programs used to calculate performance measures showed some deviations from specifications. These deviations were communicated to PMQI staff who revised the program, retested and resubmitted to MetaStar for additional review until all deviations were corrected or were found to be non-material. Final calculations for all measures included in the study met all performance measure specifications. There were no measures excluded from the study due to PMQI programming concerns.

- Performance Measure Outcomes. DHS selected 25 performance measures for examination. All performance measure specifications were based on HEDIS 2009 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 wisely chose to use measurement year specifications "frozen" in time, and have then 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 measure process over other nationally recognized performance measure systems.*

Using 2008 project measurement year 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. For 2008 reporting, no specific trends emerged showing issues with any one particular organization's rate changes over any other, or where changes were noted, they were explainable or corrected in source code prior to reporting. Taking into account changes in programs during 2008 and small denominators for small health plans, few discrepancies were noted using the frozen specifications. 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.

One potential caveat to using HEDIS 2009 Technical Specifications and using one year's specification to analyze data as old as four years previous is that coding practices can change, sometimes substantially, from one year to the next. HEDIS Technical Specifications account for this change by updating measure methodology and included CPT and other medical codes from year to year. Due to the washout period for codes used in HEDIS, there have never been any recognizable issues with the changing in codes between specification years, however, DHS should consider evaluating specific code changes included in each new Technical Specification to determine any potential impact on utilization of new codes on older data.

As part of analysis of outliers as noted above, MetaStar staff use HEDIS-reported data from health plans to determine potential issues with data comparability. When outliers are found, MetaStar and DHS use HEDIS data or DHS knowledge of MCO data patterns in an attempt to identify means for further analysis. The addition of the use of the plan's reported HEDIS data from that, previous years, and the use of known benchmarks in that regard 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.*

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

  Certain HEDIS measures have always required identification of provider type (e.g., primary care provider). Due to the lack of reporting of consistent provider types by MCOs, some performance measures produced by DHS have not been able to appropriately include coding for specific provider types. Since the diagnosis and procedure codes included in these measures would generally only be used by the type of provider required in the measure, the impact on rates should be limited. However, lack of complete provider-type data in the warehouse makes analyses of discrepancies with HEDIS reports difficult. However, this does not affect comparison of trending of DHS performance measures from year-to-year. *Regardless, DHS should continue to attempt to improve the collection of accurate provider-types within the encounter system and determine any potential affects on performance measure reporting.*

  Also, MCOs may have access to administrative data that are not submitted to DHS. These may include internally and externally generated data sources. Examples of internally generated sources include data from immunization surveys or registries, or breast or cervical

cancer screening surveys, among others. 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 identify all available MCO administrative data sources as well as the data validation performed on each of these administrative sources and consider, where possible, the inclusion of additional validated data sources to ensure complete reporting.* This will allow DHS a better understanding of administrative data and its potential affect on encounter data reporting.

Data Integrity Assessment

Several processes occur in the flow of information from the time that health services occur 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 serious 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, such as providers not submitting data to the MCO, the MCO submitting duplicate data 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 newly formed 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's encounter data reports follow HEDIS technical specifications, a useful comparison can be made between the two. This comparison can be used to identify any potential issues with DHS processes or programming or with data integrity issues. This comparison allows DHS to identify possible areas for necessary intervention to ensure encounter reports are as accurate and meaningful as possible.

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 auditors recommend that DHS communicate with the MCOs to identify potential reasons, where possible.

Improvements in the 2008 Performance Measurement Project

It is important to continually improve because improvements will allow for fewer resources spent over time to ensure better outcomes and focus resources on areas where they make the most impact.

- Encounter Data Quality Unit. In the past, DHS has commissioned special studies to examine completeness of encounters. DHS now has the Encounter Data Quality Unit (EDQU) to work with MCOs on quality improvement projects regarding encounter data reporting issues and concerns. This had led to more timely identification and understanding of encounter data reporting problems and should lead to better communication with MCOs about issues and methods for correction.

- Enhanced Encounter Submission Reporting. In 2008, PMQI developed a web-based report that tracks and presents dashboards regarding encounter submission volume. This report is available across DHS's healthcare administration and should aid in identifying and communicating regarding completeness issues that might negatively affect performance measurement projects.

- Improvement in Replacement Tracking and Voids. In 2008, DHS improved the process for tracking replacements and reporting on replacement issues. DHS also improved the process for voiding encounters that were improperly submitted. Improved tracking of changes in the encounter data set helps to ensure appropriate comprehensive reporting of services for performance measure reporting.

- National Provider Identifier (NPI). One major change in the Data Warehouse relating to production of HEDIS and other performance measures was implemented. The National Provider Identifier set of codes is now obtained and "translated" into older MA provider identifiers, which allows processing of encounters to proceed as it did prior to the NPI. The addition of these codes may eventually aid DHS in appropriate coding of measures that require provider type.

- SAS-BI. In 2008, programmers received extensive training in SAS-BI and are now developing SAS-BI applications. Performance reporting is scheduled to be transferred on to the SAS-BI platform in 2009-2010. The goal of using SAS-BI is to allow programmers and the EDQU more flexible and dynamic reporting of encounter data issues to MCOs and of performance measurement rates within DHS.

Strengths of the 2008 Performance Measurement Project

- Trending Variability Continues to Be Minimal. Again, in 2008, evaluation of trends has shown little discrepancy by using the same specifications for comparison. This allows DHS to see true rate changes that might be attributable to MCO quality interventions or to improvements in encounter data accuracy and completeness. Using these findings, MCOs and DHS can more efficiently focus efforts toward quality over time.

- Federal and Statutory Program Efficiencies. Because DHS has chosen to use an internal performance measurement reporting process to meet federal statutory and waiver program obligations, these obligations can be met with efficiency. Using performance measurement from encounter data to meet external quality review requirements results in greater use of required encounter data. Also, using administrative measures based on encounter data helps

to ensure that performance measures are less prone to variability and reduce the inefficient use of chart abstractions for hybrid performance measures.

- <u>Opportunity for Measure Specificity to Medicaid Subpopulations.</u> Again due to DHS's use of standard specifications across data collected from all programs and subprograms including waiver programs in Medicaid, and the use of enrollment data across programs and organizations, final rates are more robust. Additional analysis can be performed by DHS staff to identify trends in health care in Medicaid regardless of organization, and useful comparisons can be made between organizations, programs, and subprograms when necessary. Because of HEDIS continuous enrollment criteria, similar comparisons cannot be made; services could potentially be lost from analysis in alternate measurement systems where member data is not available between programs, subprograms, or organizations. DHS continually uses performance measure results in an attempt to identify disparities between programs and systems. Additionally, it is common that legislators request data on certain Medicaid populations or subpopulations; DHS's system allows these requests to be met with no additional data burden on health plans.

- <u>Data Availability for Contract Decisions.</u> DHS is able to use available, audited, comparable data to identify points for contract decision-making. Increasingly across the nation, such performance measure programs are being used to identify contract incentives or pay-for-performance program specifications. Again, the use of stringently audited and produced administrative data rates aids the assurance of comparability of these data when used for these reasons.

Opportunities and Recommendations for 2009

MetaStar and DHS identified several opportunities for improvement during the 2008 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.

- <u>Complete Diagnosis Code Reporting.</u> Currently, DHS cannot verify which MCOs are submitting all or fewer than all diagnoses from a standard claim. DHS believes that all of the large and medium size MCOs are likely submitting all diagnoses because of the financial losses possible in risk adjustment. It is possible that one or more than one MCO is not submitting all possible diagnoses on a claim. Due to the shift to the UB-04 inpatient claim in 2008, some MCOs likely did not have claims systems in place that accommodated all possible codes. *The auditors recommend that the EDQU prioritize this issue in the coming year to determine both the relevance of the issue to performance reporting and any possible impact. The EDQU might consider implementing a fairly simple prevalence study among the number of codes received in the encounter data set to identify differences between MCOs before initiating corrective action.*

- <u>Special Needs Population (SNP) Reporting.</u> DHS and the State of Minnesota have frequently been shown to be forward-thinking regarding the need for performance reporting of MCOs offering services to CMS-defined SNPs. Due to the nature of the

reporting performed centrally by DHS, members in this performance measure project can be tracked between and among MCOs as well as between programs, ensuring a more robust view of SNP member care in the entire state. *The auditors recommend DHS continue its current method for reporting that includes continuous tracking of members between care sites and program levels. Due to small numbers of enrollees per MCO, the bundling of final rates to the state level can be performed by DHS and should be useful in determining impact of interventions state-wide on various programs. The robustness of the DHS dataset should provide unique opportunities for aggregate level to drilldown level reporting to ensure the most appropriate and effective care is being provided to this resource-intense population.*

Summary and Conclusions

In the 2008 project, PMQI continued its steady and efficient rate production and substantially enhanced the performance measure system in various ways. The system remained otherwise stable and usable and trending analysis again showed comparability with previously reported rates. Since the beginning of the performance measure project, DHS has been able to identify process gaps and improvements and has acted on them to ensure an effective project and process outcome. As in previous years of the project, the validation of the performance measures verified the stability of the processes reviewed during the prior year. Enhancements made to the encounter data quality in 2008 show a continued commitment by DHS to the reaching the most effective methods in performance measure reporting.

The 2008 Performance Measure Validation Report contains details regarding actual performance measure validation. DHS was required to meet the same standards as MCOs for the measures included in this report. As demonstrated by the report status of the measures, DHS produced accurate performance measures. Without an audit and review of details for selected measures, programming errors may occur or small process changes could have an adverse affect on measure results. *If these were not identified through the audit process, the performance measure reports would be less accurate, and business decisions would be made on inaccurate data. It is for those reasons MetaStar believes DHS should continue to undergo an annual validation of its performance measures.*

DHS has demonstrated the overall validity of the system used to produce performance measures. The 2009 Performance Measurement Project Report should be focused on additional process improvements including continued efficiencies in the validation process and continued focus on accuracy and comparability of outlier measure results.