

MINNESOTA STATEWIDE QUALITY REPORTING AND MEASUREMENT SYSTEM: RISK ADJUSTMENT OF PHYSICIAN CLINIC QUALITY MEASURES *

FOR PUBLIC REVIEW AND COMMENT

The Minnesota Department of Health (MDH) invites interested stakeholders to review and comment on the **proposed risk adjustment methodology for physician clinic quality measures** that are calculated using data submitted directly by providers in 2011. Please send your comments to health.reform@state.mn.us by **4:30 p.m. on April 4, 2011**. MDH will consider all comments received before finalizing the risk adjustment methodology for physician clinic quality measures.

The physician clinic quality measures that are calculated using data submitted directly by providers are:

- Optimal Diabetes Care
- Optimal Vascular Care
- Optimal Asthma Care
- Colorectal Cancer Screening
- Depression Remission at 6 Months

Specifications for these quality measures are posted on MDH's Health Reform website at: <http://www.health.state.mn.us/healthreform/measurement/adoptedrule/index.html>.

This document provides an overview of the Minnesota Statewide Quality Reporting and Measurement System, proposed risk adjustment methodology for physician clinic quality measures, and uses of risk adjusted quality measure results.

BACKGROUND

STATUTORY CHARGE

In May 2008, Minnesota enacted a sweeping bipartisan health reform law. Part of this comprehensive health care reform package included Minnesota Statutes 62U.02, which directs the Commissioner of Health to develop a standardized set of quality measures and a system for collecting and publicly reporting data on a subset of the standardized measures. The law also requires the Commissioner of Health to establish a methodology for risk adjusting the results of those quality measures to be publicly

* The results of hospital quality measures included in the Minnesota Statewide Quality Reporting and Measurement System are also risk adjusted when appropriate. MDH adopted the risk adjustment methodologies utilized by relevant national organizations.

- Centers for Medicare & Medicaid Services (CMS) Hospital Compare "Process of Care" Measures: The results for these measures are not risk adjusted because the measures relate to whether or not a patient received appropriate treatment rather than whether a particular outcome was achieved.
 - Agency for Health Care Research and Quality (AHRQ) Indicators: The AHRQ software used to calculate the measure results adjusts provider results based on each individual patient's severity of illness for all but two indicators (PSI 18 and PSI 19).
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reported and create a quality incentive payment system that, to the extent possible, adjusts for variations in patient population.

Risk adjustment is a process that adjusts the analysis of quality measurement by accounting for those patient-population characteristics that may independently affect results of a given measure and are not randomly distributed across all providers submitting quality measures. Risk adjustment characteristics include severity of illness, patient demographics, or payer mix. By adjusting for patient factors beyond the control of providers and that may differ among patient populations, risk adjustment allows for a more fair and equitable comparison of patient outcomes across providers.

DEVELOPMENT OF THE STATEWIDE QUALITY REPORTING AND MEASUREMENT SYSTEM AND RISK ADJUSTMENT METHODOLOGY

MDH conducted a competitive procurement process in the fall of 2008 for a contractor to assist in the development of the Minnesota Statewide Quality Reporting and Measurement System. As a result of this process, MDH has a 4-year, \$3 million contract with MN Community Measurement (MNCM) as lead member of a consortium of community organizations including the Minnesota Medical Association, the Minnesota Hospital Association, Stratis Health, and the University of Minnesota.

MDH adopted the first set of administrative rules (Minnesota Rules, Chapter 4654) establishing the Statewide Quality Reporting and Measurement System in December 2009. Physician clinics and hospitals were required to submit data needed to calculate applicable quality measures and perform risk adjustment starting January 1, 2010. MNCM collects data submitted directly by physician clinics via a web-based portal.

To meet its statutory requirement to risk adjust quality measures, MDH developed a risk adjustment strategy in early 2010 for the first set of physician clinic quality measures included in the Statewide Quality Reporting and Measurement System. The University of Minnesota (UMN) and MNCM's Measurement and Reporting Committee (MARC) reviewed the methodology in mid 2010.

Data that may be used for risk adjustment purposes must be submitted by physician clinics for these measures. In developing the risk adjustment strategy, MDH strives to collect data on and report quality measure results that are comparable across providers while minimizing the data collection burden on providers. More comprehensive risk adjustment would require additional data elements to be submitted by physician clinics. MDH, UMN, and MNCM continue to research and investigate more robust risk adjustment options.

More information about the Statewide Quality Reporting and Measurement System can be found at: <http://www.health.state.mn.us/healthreform/measurement/index.html>.

PROPOSED RISK ADJUSTMENT METHODOLOGY FOR PHYSICIAN CLINIC QUALITY MEASURES

PRIMARY PAYER TYPE

MDH proposes to risk adjust the following physician clinic quality measure results by primary payer type for 2011 reporting:

- Optimal Diabetes Care
- Optimal Vascular Care
- Optimal Asthma Care
- Colorectal Cancer Screening

Primary payer type includes the following categories:

- Private Insurance
- Medicare
- Minnesota Health Care Programs/Uninsured/Self-pay

Primary payer mix serves as a proxy for factors that reflect differences in patient demographics and other factors that influence outcomes.

The primary payer type methodology was used to risk adjust the results from 2010 reporting. Risk adjustment by primary payer type involves adjusting the physician clinic's patient population to the statewide average payer mix. Essentially, the risk adjusted results assume that all physician clinics have the same distribution of patients between these three different categories and multiplies their actual result for each primary payer type by the statewide distribution of patients by primary payer type.

MDH utilized two strategies to address issues with small numbers in reported data, particularly among smaller clinics and/or those reporting on a sample basis. The first strategy was a decision to combine the Minnesota Health Care Programs and Uninsured/Self-pay payer type categories. This was done for two reasons: 1) given the low uninsurance rate in Minnesota, it was most likely that small number issues would occur in this payer type category and it would therefore be appropriate to combine it with another payer type category; and 2) in examining which other payer type category would be most appropriate to combine with Uninsured/Self-pay, available data showed that MN Health Care Program enrollees had more comparable results to Uninsured/Self-pay than did the other two payer type categories.

The second strategy used to address issues with small numbers in reported data is applied when a physician clinic has less than 10 patients in a payer category, the statewide rate is incorporated into the payer category rate in proportion to the number of patients under 10 in that payer category. For example, if a clinic has 6 Medicare patients, 60% of the Medicare rate for the clinic would be based on the clinic's data and 40% would be based on the statewide average rate for Medicare.

This methodology was used to risk adjust both the Optimal Diabetes Care and Optimal Vascular Care measures results that were published in the 2010 Minnesota Health Care Quality Report. The report also includes the unadjusted results.

SEVERITY

MDH proposes to risk adjust the Depression Remission at 6 Months physician clinic quality measure results by initial PHQ-9 score for 2011 reporting. Initial PHQ-9 severity scores will be grouped according to the following three categories:

- Moderate: Initial PHQ-9 score of 10 to 14
- Moderately Severe: Initial PHQ-9 score of 15 to 19
- Severe: Initial PHQ-9 score of 20 to 27

Severity was chosen as a risk adjustment variable based on concerns raised by stakeholders about the potential for differences in severity of depression among patient populations to unfairly affect results that are publicly reported. More specifically, stakeholders raised concerns that clinics treating a greater proportion of severely ill patients would have poorer remission rates compared to their peers treating less severely ill patients because patients with more severe levels of depression are less likely to achieve remission. This concern was corroborated in research summarized by the UMN in March of 2010. The UMN research summary suggests that Depression remission can vary as a function of initial severity and comorbidity. High initial severity scores are correlated with a worse response to treatment. The initial PHQ-9 score has been established as a validated indicator of initial Depression severity. The ICD 9 code 5th digit was also considered, but it was determined that the 5th digit is not uniformly or consistently used, and research questioned whether severity levels would coincide with PHQ-9 severity levels.

Primary payer type was also considered for adjustment, but research indicated that while primary payer type may affect access to care, it may not affect the likelihood of an adequate course of care once treated. There remain questions about variation in medication compliance and preferred treatment models that warrant more examination of the data.

Calculation of the risk adjusted results by initial PHQ-9 score severity category is similar to the calculation for risk adjustment by primary payer type, as it involves adjusting the physician clinic's patient population to the statewide average severity distribution. Essentially, the risk adjusted results assume that all physician clinics have the same distribution of patients between the three severity categories and multiplies their actual result for each severity category by the statewide distribution of patients by severity.

A strategy used to address issues with small numbers in reported data is applied when a physician clinic has less than 10 patients in a severity category, the statewide rate is incorporated into the severity category rate in proportion to the number of patients under 10 in that severity category. For example, if a clinic has 6 patients with moderately severe depression, 60% of the moderate rate for the clinic would be based on the clinic's data and 40% would be based on the statewide average rate for patients with moderately severe depression.

RISK ADJUSTMENT CALCULATION EXAMPLE

The following table presents an example of the risk adjustment methodology. In table one, Clinic A and Clinic B each have the same quality performance for their patients who are insured by different payers (each achieves 65% optimal diabetes care for private/commercial patients, 45% for state public programs,

and 55% for Medicare). However, because Clinic A and Clinic B serve different proportions of patients from each of these payers, their overall quality scores are different if there is no adjustment for payer mix: Clinic A’s unadjusted score is 60%, and Clinic B’s score is 55%, despite the fact that the two clinics are achieving similar outcomes for similar patient populations.

The basic risk adjustment for payer type is calculated as follows: each clinic’s score for each payer type is multiplied by the statewide average distribution of patients by payer – in this illustration, each clinic’s private insurance score is multiplied by .55 (the percentage of patients statewide with private insurance), the state public programs score is multiplied by .15, and the Medicare score is multiplied by .30. After this adjustment is made, Clinic A and Clinic B achieve the same overall quality score (59%), which is more accurately reflective of the fact that they achieve the same results for similar populations.

TABLE ONE:

Example of Risk Adjustment Using Primary Payer Type

Unadjusted Rates: Optimal Diabetes Care				
	Private Insurance	MN Public Programs	Medicare	Total
<u>Clinic A</u>				
# of patients	250	50	100	400
% meeting measure	65%	45%	55%	60%
<u>Clinic B</u>				
# of patients	100	100	200	400
% meeting measure	65%	45%	55%	55%
<u>Statewide average</u>				
% distribution of patients †	55%	15%	30%	100%

Rates Adjusted to Statewide Average Payer Mix	
Clinic A	59%
Clinic B	59%

Table two shows the impact of risk adjustment on reported results. The “minimum” and “maximum” columns respectively show the smallest and largest absolute difference of the risk adjustment methodology. Risk adjustment can either increase or decrease a clinic’s results. The “Middle 80 percent range difference” column shows how most clinic scores were impacted by removing clinics which could be considered outliers in terms of how much risk adjustment affected their reported results. The “median

† Based on 2009 dates of service for providers that reported data under the Minnesota Statewide Quality Reporting and Measurement System.

difference” column shows the median difference between risk adjusted and unadjusted results for the full range of physician clinics.

TABLE TWO:

Differences between Risk Adjusted and Unadjusted Rates

Physician Clinic Quality Measure	Absolute Difference Minimum	Absolute Difference Maximum	Middle 80 percent range difference	Median difference
Optimal Diabetes Care	0%	17%	0 - 2%	1%
Optimal Vascular Care	0%	10%	0 - 2%	1%

As table two demonstrates, risk adjustment did not significantly adjust reported results for most physician clinics. Risk adjustment did, however, matter for physician clinics with unusually high or low percentages of Minnesota Health Care Program, Medicare, or private insurance patient populations or for physician clinics whose performance with a particular population was especially high or low.

USES OF RISK ADJUSTED RESULTS

2010 MINNESOTA HEALTH CARE QUALITY REPORT

MDH released its first annual public report on the quality of physician clinic and hospital health care services in November 2010. Rates published in the main part of the report are risk adjusted where appropriate, while the technical appendices show both unadjusted and risk adjusted results. Physician clinic quality measures included two measures for which data was submitted directly by physician clinics for 2009 dates of service: Optimal Diabetes Care (ODC) and Optimal Vascular Care (OVC). The report also included the results of 11 Healthcare Effectiveness Data and Information Set (HEDIS) measures and 43 hospital measures.

More information about MDH’s 2010 Minnesota Health Care Quality Report can be found at: <http://www.health.state.mn.us/healthreform/measurement/report/index.html>

QUALITY INCENTIVE PAYMENT SYSTEM

The risk adjusted results of a subset of the quality measures included in the 2010 Minnesota Health Care Quality Report will be used for payments to physician clinics based on improvement or achievement of established benchmarks.

More information about the Quality Incentive Payment System can be found at: <http://www.health.state.mn.us/healthreform/measurement/qips.html>

PROVIDER PEER GROUPING SYSTEM

The quality measure results included in the 2010 Minnesota Health Care Quality Report are a critical building block of provider peer grouping, which will compare providers on a combined measure of risk adjusted cost and quality.

More information about the Provider Peer Grouping System can be found at:

<http://www.health.state.mn.us/healthreform/peer/index.html>

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