

QUALITY MEASURES FOR PROVIDER PEER GROUPING

Issue Paper Prepared for the Provider Peer Grouping Advisory Group
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Introduction

The Provider Peer Grouping Advisory Group will need to consider a number of issues related to the quality component of Minnesota's provider peer grouping system. Most of these issues will need to be considered separately for total care and for the specific conditions recommended for peer grouping.

This issue paper provides background information on the key issues and decisions that will need to be made to construct the quality component of peer grouping. This process will involve several steps:

- **Selection of quality measures:** The quality component for the analysis of total care will include a combination of quality measures. How many and which quality measures should be included in a combination measure designed to reflect overall quality of care? Should assessment of quality for specific conditions be based on one or multiple quality measures?
 - What combination of outcome, process, structure, patient experience and perhaps other types of measures is most appropriate to achieve this goal? The Advisory Group will need to consider this set of issues separately for total care and for each of the specific conditions recommended for peer grouping, and separately for physician services and inpatient hospital care as applicable.
 - Should the quality measures used in peer grouping come only from the sets of measures to be publicly reported through MDH's contract with MN Community Measurement, or should other sources (such as calculation from the multipayer claims database) be used as well?
- **Attribution to the provider level:** Attribution rules related to quality measures are largely defined as a function of how specific quality measures are constructed. It will likely be necessary to aggregate the unit of analysis on quality measures upward or downward to the unit of analysis that will be used for measurement of resource use and unit price.
- **Adjustment for differences in risk across a provider's patient population:** This stage of the analysis will involve adjusting for differences in payer mix, patient demographics and severity of illness, and the removal of outliers as appropriate.
- **Combining quality measures into an overall quality score, separately for total care and for each specific condition:** In calculating an overall quality score, both for total care and for specific conditions, how should the selected quality measures be weighted in comparison to each other? What strategy should be used when data for a

selected measure is missing or does not meet the threshold for minimum number of observations?

TYPES OF QUALITY MEASURES

- **Structural quality measures** focus upon the capacities and resources available for the delivery of health care services. Measures related to health information technology, staffing levels, and workforce availability are common.
- **Process measures** assess whether care provided to patients is consistent with clinical practice guidelines that have been shown to produce optimal outcomes for patients. Examples include screening for breast or cervical cancer among certain age groups of women.
- **Patient experience measures** of quality focus on patient satisfaction with aspects of medical care such as waiting times, availability, ease of appointment scheduling, and effectiveness of patient/physician communications.
- **Outcome measures** focus upon the results of medical care. Outcome measures relate to results of treatment of acute and chronic conditions. Such measures include: optimal care for chronic conditions, mortality rates, some types of medical errors, and hospital readmission.

The Advisory Group will need to consider what combination of these types of measures is most appropriate to use for the peer grouping analysis and what specific quality measures should be included. The Advisory Group will also need to consider the tradeoffs between a broad array of quality measures and the efforts required by providers to submit data on those measures that require direct data submission.

PROVIDER ATTRIBUTION

MN Community Measurement currently reports select physician quality measures at two levels. For measures collected as part of the Healthcare Effectiveness Data and Information Set (HEDIS) required of health plans, the measures are reported to MN Community Measurement by health plans at the medical group level. MN Community Measurement's attribution rules for HEDIS measures generally fall into one of three categories:

- Responsibility for care is attributed to the primary care physician who saw the patient most frequently in the measurement period;
- In the event a patient had the same number of visits to more than one primary care physician, responsibility for care is attributed to the primary care physician who most recently saw the patient.
- In some instances, accountability for care may be attributed to a specialist.

For measures collected directly from clinics by MN Community Measurement, the results are reported at the clinic site level. Responsibility for care is attributed to the physician who reports data on behalf of a specific patient. It is possible for care to be attributed to multiple physicians if both a specialist and a primary care physician report data related to the same patient.

Hospital measures reported from various sources are reported at the facility level (as opposed to a hospital system level).

RISK ADJUSTMENT

Risk adjustment is defined by the IOM as “a process that modifies the analysis of performance measurement results by those elements of the patient population that affect results, are out of the control of providers, and are likely to be common and not randomly distributed.”¹ Similar to risk adjustment for resource use, factors that should be considered for risk adjustment include:

- Demographic factors including patient age, gender, geographic region, socioeconomic status, or race/culture;
- Health status differences including diagnostic history, co-morbid conditions, severity of illness, and risk of mortality;
- Insurance benefit variation focused primarily on payer mix adjustments for patients with public vs. private insurance. (In the context of risk adjustment of quality measures, payer mix is a proxy for other risk factors rather than a direct issue as in adjusting cost.)

Variation of these risk factors, much of which is outside of the direct control of health care providers, may lead to variation in measured quality of care.

- Structural measures are provider-level measures, and do not need adjustment related to characteristics of specific patients.
- Process measures, like structural measures, are most often presented with no, or simple, risk adjustments. Process measures are already defined to include only patients for whom a particular process or service was appropriate and a provider actually treated.
- Patient experience measurement results are sometimes presented separately across demographic strata or payment source, but health status and case mix adjustment is seldom attempted. This type of adjustment is probably not feasible for peer grouping, because only the aggregate scores are publicly available, not the patient-level information that would be needed for risk adjustment.

¹ Committee on Redesigning Health Insurance Performance Measures, Payment and Performance Improvement Programs, Institute of Medicine. 2006. *Performance Measurement: Accelerating Improvement*. Washington, DC: National Academy Press.

- Unlike structural, process, and patient experience measures, outcome measures of quality are sometimes presented with risk adjustment for patient characteristics. Performance on physician care outcome measures (optimal care for diabetes, coronary artery disease, and depression) reported to MN Community Measurement is not currently risk-adjusted.² The Agency for Healthcare Quality and Research hospital inpatient quality indicators are already risk adjusted for patient characteristics using information on demographic characteristics, severity of illness and risk of mortality.

The Advisory Group will need to determine which quality measures recommended for inclusion in the peer grouping system warrant risk adjustment, and the desired scope of risk adjustment for each. The Technical Panel has been asked to consider these questions and will provide a recommendation to the Advisory Group.

Adjustment for Outliers

Outlier adjustments are less common and to some degree less necessary in quality measurement than they are in resource use and cost analysis, for several reasons. First, quality measures are usually defined very specifically to only include appropriate cases, which means that “outlier” cases often fall outside of the scope of a particular quality measure by definition. In addition, the potential impact of outlier cases on a quality score is smaller than the potential impact when analyzing resource use and/or cost. This is because for an individual patient most quality measures are defined in binary terms – a patient either received a necessary service or not, or met a clinical quality threshold or not. In contrast, for resource use and cost measurement, outliers (for example, a case that costs ten times more than the average for a particular condition) can have a much greater influence on the results of calculations of totals and averages.

Similar to risk adjustment for quality measures in general, the issue of outlier adjustment for quality measures is relevant primarily for outcome measures.

COMBINING QUALITY MEASURES INTO AN OVERALL QUALITY SCORE

The quality component for the analysis of total care will include a combination of quality measures. The Advisory Group will need to consider the breadth of quality measures that should be included to create a representative picture of provider quality. The Advisory Group will also need to consider whether to use a single or combined quality measure for specific conditions.

Health plans whose tiered networks include a quality component are using combined measures of quality. Minnesota health plans have developed composite measures to indicate whether members with diabetes, coronary artery disease, and preventive care received the bundles of care included in the scores and had achieved the desired

² Minnesota Statutes 62U.02 requires quality measures included in the statewide quality reporting system to be risk adjusted when appropriate. Risk adjustment will initially be performed through a payer mix adjustment.

intermediate health outcomes. Development of these composite measures involves linking data from different types of quality measures to form a composite quality measure. This is challenging given that data originates from different sources and include different populations of patients. For example, process measures largely rely on administrative data, while outcome and patient experience measures are reported directly by providers.

The methods for creating composite quality measures are still evolving. A composite measure's specific components and the way in which those components are weighted compared to each other will likely affect provider comparisons. For example, different weightings of process versus outcome metrics can lead to highly divergent provider rankings³.

In creating a composite quality measure for total care, the Advisory Group will need to consider how to weight the quality measures included in the analysis. This necessitates a consideration of how significant the issues/conditions being measured are in relation to each other as well as the range of measures that will reasonably reflect overall quality of care.

KEY QUESTIONS

- What quality measures should be included in the analysis of total care for physicians? What quality measures should be included in the analysis of total inpatient care for hospitals? How should these various quality measures be weighted in comparison to each other?
- Should the analysis of specific conditions include a composite quality measure? What quality measures should be included in the analysis of specific conditions for physicians? What quality measures should be included in the analysis of specific conditions for hospitals?
- What types of quality measures should be risk adjusted in the peer grouping analysis? For which types of risk factors (demographics, severity of illness, and/or payer mix) should results be adjusted?

³ Scholle, SH, J Roski, JL Adams, DL Dunn, EA Kerr, DP Dugan, and RE Jenson. "Benchmarking Physician Performance: Reliability of Individual and Composite Measures." *American Journal of Managed Care*, December 2008, Vol. 14, No. 12, pp 829-838.