NATIONAL QUALITY FORUM

Meeting Summary

MAP Rural Health Technical Expert Panel Web Meeting

The National Quality Forum (NQF) convened a public web meeting for the MAP Rural Health Technical Expert Panel on October 31, 2018.

Welcome, Introductions, and Review of Web Meeting Objectives

Suzanne Theberge, NQF Senior Project Manager, introduced the project team and conducted roll call. During roll call, Technical Expert Panel (TEP) members provided brief introductions. Ms. Theberge outlined the meeting agenda, which included:

- Background and Context
- TEP Objectives and Activities
- Considering Implications for Healthcare Performance Measurement
- Overview of CMS Quality Improvement Programs
- Low Case-Volume Recommendations to Date
- TEP Questions and Discussion
- NQF Member and Public Comment
- Adjourn

Project Scope and Objectives

Ms. Theberge provided an overview of the purpose and objectives of the 2015 MAP Rural Health project, along with a brief summary of key issues regarding performance measurement for rural providers and the recommendations from the project. She then briefly described the statutory authority of the Measure Applications Partnership and the key activities of the MAP Rural Health Workgroup to date.

Kirsten Reed, NQF Project Manager, then provided an overview of the TEP's objectives for this project. The TEP will develop recommendations for calculating healthcare performance measures when case volume is low. When developing these recommendations, the TEP will take into consideration exemptions for reporting requirements for rural providers in various CMS quality programs, as well as the heterogeneity of both the residents and healthcare providers in rural areas. These recommendations will include approaches that are actionable for measure developers who need guidance on enhancing the reliability of performance measures for rural providers.

Following Ms. Reed's overview of the project scope and objectives, the TEP and NQF staff discussed what they envisioned for the final report. In the final report, the TEP and NQF hope to explain why low case-volume is a problem, particularly in terms of reliability and validity of performance measures; consider solutions suggested in NQF's Rural Health project and catalog pros and cons of each; and explore additional methodological or other solutions.

Performance Measurement and CMS Quality Programs Overview

Karen Johnson, NQF Senior Director, provided an overview on healthcare performance measurement by briefly describing categories and types of performance measures, levels of analysis, and scientific acceptability of measure properties (i.e., reliability and validity). Ms. Johnson then facilitated a discussion with the TEP about what is meant by low case-volume, how low case-volume impacts reliability and validity, and which facets of measurement are the most important to focus on vis-à-vis low case-volume.

The TEP agreed to consider low case-volume primarily as the instance when few patients meet the measure denominator criteria. They noted that some measures, by design, will have very low numerator counts (e.g., measures of patient safety "never events"), and that consideration of how small the numerator is relative to the denominator may be of more interest than the magnitude of the numerator. With regards to program reporting requirements, the TEP decided it might be best to consider them on a case-by-case basis instead of using them to define low case-volume. They noted that thresholds for reporting often are implemented due to concerns about privacy, which are different from concerns regarding low case-volume. The TEP also discussed how to consider complete lack of service provision (e.g., a hospital does not perform deliveries). Members suggested that this was more of a missing data problem than a low case-volume problem, but thought that their low case-volume recommendations might also apply to this scenario.

The TEP also agreed that low case-volume is of concern primarily in terms of impact on the measure score, rather than at the data element level. The TEP also agreed that low case-volume impacts both reliability and validity. One TEP member provided an example of where the lack of service delivery would impact the validity of a measure, so members may have to reconsider whether this scenario should be considered a low case-volume problem.

Ms. Johnson then provided a brief summary of CMS quality improvement programs, as well as two "exemplars" to illustrate the variety and complexity of scoring methodologies used in such programs. The TEP agreed not to consider the implications of low case-volume for a collection of specific programs, but also suggested that using one program as a "case study" in which to apply recommended methodologies might be useful.

Previous Low Case-Volume Recommendations

Ms. Johnson briefly reviewed the recommendations from the 2015 MAP Rural project:

- Select measures (particularly for P4P programs) that are broadly applicable to large numbers of patients (e.g., screening measures)
- Pool data across several years (e.g., using three years of data rather than just one year)
- Aggregate data from multiple providers (e.g., combining data within regions or networks)
- Combine inpatient and outpatient data for similar measures
- Develop composite measures that expand the number of patients captured by measurement
- Present confidence intervals, numerator counts, and denominator counts

- Use indicators that do not have a denominator (e.g., number of infections per month; time since last adverse event)
- Stratify providers so that performance results are compared only among similar groups (i.e., comparing "like to like")
- Consider measures that reflect the wellness of the community (i.e., population-based measures)
- Reconsider exclusions for existing measures
- Consider measures constructed using continuous variables
- Consider ratio measures
- Employ sophisticated statistical approaches such as hierarchical modeling

One TEP member remarked that these recommendations seem primarily to benefit payers and suggested that the TEP's recommendations should focus primarily on benefiting rural providers or patients. The TEP agreed that articulating the pros and cons of the recommendations would be a useful exercise, but suggested that it be done off-line rather than on the call.

Additional Recommendations

The TEP then began a discussion of statistical methodologies that could be employed to address the low case-volume challenge. One member briefly described nomenclature, noting that several differently labeled methods are actually synonymous (e.g., hierarchical modeling, shrinkage, and reliability adjustment). This member also noted that an advantage of using a Bayesian approach in hierarchical modeling is getting both reliability adjustments as well as probability statements. TEP members agreed that, because these methodologies are so complex, a statistician should be consulted prior to implementing them. The TEP also agreed that nonparametric approaches likely would be useful in addressing the low case-volume problem. Finally, the TEP suggested using a "story" approach for the report rather than a purely mathematical approach as a way to make the content more accessible for readers.

NQF Member and Public Comment

NQF staff opened the call to allow for public comment. No public comments were offered.

Next Steps

Ameera Chaudhry, NQF Project Analyst, reviewed the upcoming activities of the TEP. The next TEP call will be held on November 13, 2018.