NATIONAL QUALITY FORUM
Driving measurable health improvements together

Meeting Summary

Neurology Standing Committee – Fall 2020 Measure Evaluation Web Meeting

The National Quality Forum (NQF) convened the Neurology Standing Committee for a web meeting on February 5, 2021 (Day 1), and an additional web meeting on February 24, 2021 (Day 2), to complete the measure evaluation (see presentation slide deck). Both web meetings were administered by the Neurology project team:

- Chelsea Lynch, MPH, MSN, RN, CIC, director
- Oroma Igwe, MPH, manager
- Ngozi Ihenacho, MPH, analyst
- Jesse Pines, MD, MBA, MSCE, consultant
- Monika Harvey, PMP, project manager

Additional meeting facilitation on Day 2 was provided by Matt Pickering, PharmD, senior director.

Welcome, Introductions, and Review of Meeting Objectives

NQF welcomed the Standing Committee and participants to both web meetings. NQF staff reviewed the meeting objectives. Standing Committee members each introduced themselves and disclosed any conflicts of interest at the first meeting. Members of the Standing Committee had no conflicts of interest to report.

Quorum (15 Standing Committee members) was met and maintained for the entirety of both meetings (17 out of 22 Standing Committee members attended Day 1 and 15 out of 22 Standing Committee members attended Day 2). The vote totals reflect members present and eligible to vote at the time of the vote.

Topic Area Introduction and Overview of Evaluation Process

NQF staff provided an overview of the topic area and the current NQF portfolio of endorsed measures. There are currently 12 endorsed measures in the Neurology portfolio. Additionally, NQF reviewed the Consensus Development Process (CDP) and the measure evaluation criteria.

A measure is recommended for endorsement by the Standing Committee when the vote margin on all must-pass criteria (Importance, Scientific Acceptability, Use), and overall, is greater than 60 percent of voting members in favor of endorsement. A measure is not recommended for endorsement when the vote margin on any must-pass criterion or overall is less than 40 percent of voting members in favor of endorsement. The Standing Committee has not reached consensus if the vote margin on any must-pass criterion or overall is between 40 and 60 percent, inclusive, in favor of endorsement. When the Standing Committee has not reached consensus, all measures for which consensus was not reached will be released for NQF member and public comment. The Standing Committee will consider the comments and re-vote on those measures during a webinar convened after the commenting period closes.

Measure Evaluation

During the meeting, the Neurology Standing Committee evaluated one measure for endorsement consideration. Additional details of the Standing Committee's deliberations will be compiled and provided in the draft technical report. NQF will post the draft technical report on April 1, 2021, for public comment on the NQF website. The draft technical report will be posted for 30 calendar days until April 30, 2021.

Rating Scale: H – High; M – Medium; L – Low; I – Insufficient; NA – Not Applicable

NQF #3596 Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Acute Ischemic Stroke Hospitalization With Claims-Based Risk Adjustment for Stroke Severity (Yale New Haven Health Services Corporation/Center for Outcomes Research and Evaluation (Yale/CORE))

Description: The measure estimates the hospital-level, risk-standardized mortality rate (RSMR) for patients discharged from the hospital with a principal discharge diagnosis of acute ischemic stroke. The outcome is all-cause 30-day mortality, defined as death from any cause within 30 days of the index admission date, including in-hospital death, for stroke patients. This is a re-specified measure with a cohort and outcome that is harmonized with the current publicly reported claims-based stroke mortality measure from the Centers for Medicare & Medicaid Services (CMS) and includes the National Institutes of Health (NIH) Stroke Scale as an assessment of stroke severity upon admission in the risk-adjustment model. This measure uses Medicare fee-for-service (FFS) administrative claims for the cohort derivation, outcome, and risk adjustment.; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Inpatient/Hospital; **Data Source**: Claims, Enrollment Data, Other, Registry Data

Measure Steward/Developer Representatives at the Meeting

- Susannah Bernheim, MD, MHS, director, Quality Measurement Programs, CORE
- Doris Peter, PhD, consultant, CORE
- Darinka Djordjevic, PhD, project manager, CORE
- Alex Ferrante, research associate, CORE
- Erica Norton, BS, project coordinator II, CORE

Standing Committee Votes

- Evidence: Pass-9; No Pass-8 (9/17 – 53 percent, Consensus Not Reached)
- Performance Gap: H-2; M-10; L-3; I-2 (12/17 – 71 percent, Pass)
- Reliability: Yes-15; No-2 (15/17 – 88 percent, Pass)
    - This measure was deemed as complex and evaluated by the NQF Scientific Methods Panel (SMP); it passed with a moderate rating for reliability (H-3; M-5; L-0; I-0). Please see the Scientific Methods Panel (SMP) meeting summary for more information. The Standing Committee voted to uphold the SMP's decision.
- Validity: Yes-11; No- 6 (11/17 – 65 percent, Pass)
    - This measure was deemed as complex and evaluated by the NQF SMP; it passed with a moderate rating for validity (H-1; M-5; L-2; I-0). The Standing Committee voted to uphold the SMP's decision.
- Feasibility: H-4; M-9; L-2; I-0 (13/15 – 87 percent, Pass)
- Use: Pass-14; No Pass-1 (14/15 – 93 percent, Pass)
- Usability: H-1; M-12; L-1; I-1 (13/15 – 87 percent, Pass)

Standing Committee Recommendation for Endorsement: Consensus Not Reached

The Standing Committee did not vote on the recommendation for endorsement at the meeting because they did not reach consensus on evidence—a must-pass criterion. The Standing Committee expressed

no concerns with there being one or more healthcare actions that could be achieved to improve stroke mortality. However, some Standing Committee members were concerned that the outcome of stroke mortality in isolation, even after risk adjustment, would not drive improvements in healthcare, as preventing mortality alone is not the ultimate goal of stroke care. Functional outcomes, which are not captured in this measure, were thought to be more important, as well as ensuring that patient and family preferences are considered. The Standing Committee expressed additional concerns regarding potential unintended consequences in which hospitals might implement heroic means to achieve survival without consideration of a poor functional outcome to improve performance on this measure. The Standing Committee will re-vote on the measure at the post-comment web meeting on May 25, 2021.

To begin the Standing Committee's discussion, a Standing Committee co-chair presented an overview of the measure, describing that it estimates the hospital-level, risk-standardized mortality rate (RSMR) for patients discharged from the hospital with a principal discharge diagnosis of acute ischemic stroke. The outcome is all-cause, 30-day mortality, defined as death from any cause within 30 days of the index admission date, including in-hospital death, for stroke patients. The Standing Committee co-chair mentioned that an earlier version of the measure was submitted to the Neurology Standing Committee for review in 2016 and was not recommended for endorsement because International Classification of Diseases, Tenth Revision (ICD-10) codes and the NIH Stroke Scale were not available in claims data at the time of that submission.

CORE Director Susannah Bernheim from the Quality Measurement Group represented the measure developer team. She reiterated the co-chair's point about the NIH Stroke Scale and highlighted that the measure includes ischemic stroke patients, and that the outcome is all-cause mortality 30 days from the time of admission. The developer also noted that there is a similar non-NQF-endorsed measure: #3596 *Hospital 30-Day, All-Cause RSMR Following Ischemic Stroke Hospitalization Measure*. NQF #3596 improves on this measure by adding the NIH Stroke Scale for risk adjustment. Although the measure had shown major improvements over time, the developer noted that there is room for some hospitals to improve their mortality rates compared with the best hospitals in the country.

The Standing Committee shared concerns about the evidence criteria. First, the lead discussant described that the presence of NIH Stroke Scale data was lower than expected, since only 55 percent of hospital admissions ratings used a stroke scale in 2019. The measure developer explained that in 2016, the NIH Stroke Scale was slowly adopted among hospitals when the hospitals started to integrate the NIH Stroke Scale into administrative claims data for CMS. As of 2021, the data are closer to the national average of 60 percent, but it is more difficult for smaller hospitals to meet the standard. The developer also explained that CMS had introduced an implementation plan for this measure to address missing data for some smaller hospitals.

Second, the lead discussant raised the issue of whether stroke mortality is the right outcome measure to drive improvements in healthcare. In particular, the lead discussant proposed that disability would be a more suitable outcome considering that it represents the larger goal of hospital-based stroke care. The lead discussant described to the Standing Committee a series of observational studies showing a relationship between specific processes that can be performed in hospitals to have an impact on stroke mortality rates, such as speediness of care, lower complications, and timely imaging. However, the larger concern was that the measure did not include functional outcomes (i.e., disability) as is commonly used in stroke clinical trials. The concern is that there may be an inverse relationship between disability and death, in which most of the patients can survive but at the cost of severe disability. One Standing Committee member expressed concern that a measure that considers death but not disability can

create a potentially problematic scenario in which hospitals might choose survival with severe disability over death to perform better on the measure.

Another Standing Committee member posed a question to the group about whether there are actions that healthcare providers can take to influence stroke mortality. This question had also been addressed earlier, and it was agreed that one or more actions could be implemented to influence stroke mortality. Multiple Standing Committee members agreed that improved risk adjustment for patient preference or provider practices could help mitigate the potential unintended consequences of a singular focus on stroke mortality measurement. One of the co-chairs also mentioned that the measure excluded hospice patients, which addressed some, but not all, of the concerns regarding patient preferences.

Additional discussion from the Standing Committee members was held regarding the extent to which one accepts an imperfect measure. One Standing Committee member suggested that withholding the endorsement for this criterion might be acceptable so that the developer can offer a measure that uses functional outcomes, such as the modified Rankin or Barthel Index. Ultimately, the Standing Committee did not reach consensus on the evidence criterion.

The Standing Committee's discussion on performance gap centered on the two-percentage point gap in mortality between the hospitals in the 25th and 75th percentiles and whether this gap was wide enough to warrant national performance measurement. One Standing Committee member pointed out that the data presented a fair number of outliers, suggesting a wider performance gap in those instances. There were no additional discussions regarding performance gap and the Standing Committee voted to pass the measure on the performance gap criterion with a moderate rating.

The Standing Committee then discussed the Scientific Acceptability criteria. For reliability, the Standing Committee expressed concerns about the reliability of the measure's use in small hospitals and whether the reliability with a subset of hospitals can be generalized to a broader set of hospitals. There were also questions about the reasoning behind the exclusion of hospitals with less than 25 cases from the study. The developer replied that the larger in size the hospital is, the greater the reliability score will be. The developer also countered that there is no agreed definition of an acceptable reliability score. Lastly, the developer mentioned that there is a 25-case cutoff with no public reporting for hospitals with less than 25 cases. The SMP evaluated this measure and passed it with a moderate rating for reliability. The Standing Committee voted to uphold the SMP's decision.

The Standing Committee's discussion on the validity criterion included a few questions regarding the measure's performance beyond the small sample size and whether the correlation with the Star Rating measures was acceptable for use. The Standing Committee also expressed concerns regarding whether the measure might be omitting patient preferences on treatment depending on the race of the patient; they also questioned the accuracy of the NIH Stroke Scale. The measure developer acknowledged that patient preferences are a complicated issue; in addition, some risk of survivor bias and access to care factors might also be at work. The SMP passed the measure with a moderate rating for validity. The Standing Committee voted to uphold the SMP's decision.

To begin the discussion on the feasibility criterion, NQF Senior Director Matt Pickering invited Dr. Bernheim to review the feasibility information for NQF #3596. (Additional details on the feasibility of this measure are covered in the fall 2020 draft technical report.) Dr. Pickering then turned the discussion to the lead discussant, who asked the developer for clarification on the imputation strategy used for hospitals that do not have an NIH Stroke Scale score for at least 60 percent of their stroke admissions. The developer noted that CMS stated that in the early implementation phases, the imputation plan would be to impute zeros for hospitals that do not have at least 60 percent of their stroke admissions

with an identified NIH Stroke Scale score. This could increase the use of the NIH Stroke Scale in the future. A Standing Committee member asked NQF staff for clarification on whether the Standing Committee was supposed to be deciding on the measure as it relates to feasibility for the scenario in which the developer offered it (which is greater than 60 percent with NIH Stroke Scale score recorded) or whether they were to consider the measure as applied to all hospitals, regardless of their current NIH Stroke Scale score reporting level. NQF staff reminded the Standing Committee of the primary question surrounding the feasibility criterion, which is whether data for those hospitals that are reporting or could report are readily available. NQF staff added that there is imputation logic for hospitals that are not reporting, which is addressed under the validity criterion. The Standing Committee continued to seek clarity on the imputation strategy, and NQF staff explained that it is understood that not all hospitals can measure the outcome at the outset; nevertheless, more hospitals will be able to measure it over time as the use and reporting of the NIH Stroke Scale increase. Additionally, NQF staff explained that they regarded the measure as feasible with the limitation of sole reporting of the hospitals that truly report that data. NQF staff encouraged the Standing Committee to evaluate the measure as it is presented to the Standing Committee and consider whether the measure is feasible to be measured in hospitals that do report the NIH Stroke Scale. A Standing Committee member expressed that the measure is clearly feasible if the focus is on hospitals that have the data. The Standing Committee shared no additional questions, held no additional discussion on the feasibility criterion, and passed the measure on feasibility with a moderate rating.

The Standing Committee's discussion on the use criterion started with a summary of the use criterion, and they did not pose any questions or discussion regarding use of the measure. The Standing Committee voted to pass the measure on the use criterion.

The lead discussant proceeded with a summary of the usability criteria and the associated measure information. A Standing Committee member inquired generally about the usability criterion and the degree of certainty surrounding attribution for new measures; this Standing Committee member specifically asked whether attribution is presumably always going to be uncertain to a large degree and whether the usability criterion is often assessed without a great deal of evidence. NQF staff offered clarification to the Standing Committee on the usability criterion and improvement assessment. NQF staff also advised the Standing Committee to focus on identifying evidence of benefits and harms, as provided by the developer. Additionally, in the absence of performance data for this new measure, NQF staff pointed to the improvement data provided by the measure's testing results. A Standing Committee member added that an existing and similar measure showed improvements over time. The developer reiterated the basis for the creation of NQF #3596 and explained that the measure had been introduced largely as a response to the stroke community's request for a more useful measure that incorporates the NIH Stroke Scale. The Standing Committee voted and passed the measure with a moderate rating on the usability criterion.

The Standing Committee will re-vote on the evidence criterion during the post-comment meeting on May 25, 2021. If the Standing Committee votes to pass the measure on evidence, it will also vote on the overall suitability of the measure and have a discussion on related and competing measures during the post-comment meeting.

Public Comment

No public or NQF member comments were provided during the measure evaluation meeting.

Next Steps

NQF will post the draft technical report on April 1, 2021, for public comment for 30 calendar days. The continuous public commenting period with member support will close on April 30, 2021. NQF will reconvene the Standing Committee for the post-comment web meeting on May 25, 2021.