NATIONAL QUALITY FORUM
Driving measurable health improvements together

Meeting Summary

Renal Standing Committee – Measure Evaluation Web Meeting

The National Quality Forum (NQF) convened the Renal Standing Committee for a web meeting on June 16 and 18, 2020 to evaluate three measures.

Welcome, Introductions, and Review of Meeting Objectives

NQF welcomed the Standing Committee and participants to the web meeting. NQF staff reviewed the meeting objectives. Committee members each introduced themselves and disclosed any conflicts of interests. Committee members Lorien Dalrymple and Bobbi Wager both disclosed conflicts of interest on #0369 due to their role in helping to develop the measure as part of technical expert panels.

During these NQF evaluation meetings, some Committee members were unable to attend the entire meeting. There were early departures and late arrivals. The vote totals reflect members present and eligible to vote. Quorum was met and maintained for the entirety of all the meetings.

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 21 in the renal portfolio. Additionally, NQF reviewed the Consensus Development Process (CDP) and the measure evaluation criteria.

Measure Evaluation

During the meeting, the Renal Standing Committee evaluated three maintenance and no new measures for endorsement consideration. A summary of the Committee deliberations will be compiled and provided in the draft technical report. NQF will post the draft technical report on July 27, 2020 for public comment on the NQF website. The draft technical report will be posted for 30 calendar days.

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

#0369 Standardized Mortality Ratio for Dialysis Facilities (University of Michigan Kidney Epidemiology and Cost Center)

Measure Steward/Developer Representatives at the Meeting

Jack Kalbfleisch, PhD – University of Michigan Kidney Epidemiology and Cost Center
Claudia Dahlerus, PhD, MA – University of Michigan Kidney Epidemiology and Cost Center
Jonathan Segal, MD, MS – University of Michigan Kidney Epidemiology and Cost Center
Joseph Messana, MD - University of Michigan Kidney Epidemiology and Cost Center
Jesse Roach, MD – Centers for Medicare and Medicaid Services

Standing Committee Votes

- Evidence: Pass-14; No Pass-1
- Performance Gap: H-2; M-14; L-0; I-0
- Reliability: Yes-14; No-2

    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.

- The NQF Scientific Methods Panel's rating for Reliability: Moderate (H-2; M-5; L-1; I-0)
    - The Committee accepted the NQF Scientific Methods Panel's rating.

- Validity: Yes-12; No-3

    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.

    - The NQF Scientific Methods Panel's rating for Validity: High (H-4; M-4; L-1; I-0)

    - The Committee accepted the NQF Scientific Methods Panel's rating.

- Feasibility: H-7; M-6; L-1; I-1

- Use: Pass-15; No Pass-0

- Usability: H-0; M-9; L-6; I-0

Standing Committee Recommendation for Endorsement: Yes-11; No-4

The Standing Committee recommended the measure for continued endorsement.

The discussion of the measure began with an overview and a detailed review of the evidence submission. The Committee commented on the updated evidence and citations provided by the developer, stating that there were no particular concerns regarding evidence for the measure. The Committee observed that there is an appropriate measure performance gap and that there were disparities in regard to race and ethnicity. The Committee asked the developer why the combined four-year standardized mortality ratio (SMR) was different from the four-individual year SMRs. The developer clarified that the measure is a four-year measure and that the difference is due to more data available for the four-year SMR compared to the individual one-year SMRs.

The developer delivered a presentation to the Committee on the score level reliability methodologies used, namely interunit reliability (IUR) and profile interunit reliability (PIUR). The Committee noted that IUR is useful for signal-to-noise analysis while PIUR is used to determine a measure's capability of identifying outliers. The Committee also noted that this measure has been evaluated by the Scientific Methods Panel (SMP) and was given a moderate rating for reliability and a high rating for validity. The Committee expressed concerns related to the representation of pediatric patients within this measure, noting that this only represented 0.2% of the data. The Committee also noted the measure's complexity, expressing concern that the number of inputs may make it difficult to identify what interventions are resulting in improved mortality. The Committee asked the developer to comment on the inclusion of Medicare populations and the use of inpatient but not outpatient data to determine prevalent comorbidities. The developer clarified that only inpatient claims were used for the measure and that potential comorbidities were accounted for in the measure. A sensitivity analysis demonstrated inpatient claims had more a predictive impact than outpatient claims. In regard to validity, the Committee noted that the SMP stated that the correlations were statistically significant and directionally appropriate. Concerns posed by the Committee included the exclusion of non-Medicare patients and the use of in-patient claims data in the measure.

The Committee stated no concerns on feasibility and use. It commented on the usefulness of mortality as a quality measure generally but stated no specific concerns related to usability and use.

#2977 Hemodialysis Vascular Access, Standardized Fistula Rate (University of Michigan Kidney Epidemiology and Cost Center)

Measure Steward/Developer Representatives at the Meeting

Jack Kalbfleisch, PhD – University of Michigan Kidney Epidemiology and Cost Center
Claudia Dahlerus, PhD, MA – University of Michigan Kidney Epidemiology and Cost Center
Jonathan Segal, MD, MS – University of Michigan Kidney Epidemiology and Cost Center
Joseph Messana, MD - University of Michigan Kidney Epidemiology and Cost Center
Jesse Roach, MD – Centers for Medicare and Medicaid Services

Standing Committee Votes

- Evidence: H-0; M-10; L-4; I-3
- Performance Gap: H-3; M-14; L-0; I-0
- Reliability: Yes-16; No-1
    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.
    - The NQF Scientific Methods Panel's rating for reliability: moderate (H-4; M-5; L-0; I-0)
    - The Committee accepted the NQF Scientific Methods Panel's rating.
- Validity: Yes-14; No-3
    - The NQF Scientific Methods Panel's rating for validity: moderate (H-1; M-7; L-1; I-0)
    - The Committee accepted the NQF Scientific Methods Panel's rating.
- Feasibility: H-11; M-5; L-0; I-0
- Use: Pass-16; No Pass-0
- Usability: H-2; M-11; L-2; I-2

Standing Committee Recommendation for Endorsement: Consensus Not Reached

The Standing Committee did not vote on the recommendation for endorsement at the meeting because it did not reach consensus on evidence—a must-pass criterion. The Committee will re-vote on the measure on the post-comment web meeting on September 22, 2020.

This discussion of this measure began with its overview and a review of the evidence. The Committee noted that fistula remains the preferred access route for most dialysis patients over grafts and catheters. It expressed concern that the current fistula success rate of 64% may be indicative that the remaining opportunities for improvement may include many patients for whom fistula may not be the best route, such as those in hospice care, end stage liver disease, or cancer. The Committee expressed concern that the developer provided evidence based on updated guidelines from the National Kidney Foundation's (NKF) Kidney Disease Outcomes Quality Initiative (KDOQI), which included a downgrading of the evidence to support the measure to expert opinion. It was noted that the developer supplemented the guidelines with literature that supported the measure focus.

In the discussion on performance gap, the Committee noted that, by the middle of 2017, 62.8% of prevalent hemodialysis patients were dialyzing with an AV fistula. For disparities, Hispanic ethnicity was

associated with higher odds of fistula use whereas data on the black community shows it's about 31% less likely to have fistulas than its white counterpart.

The Committee noted the score level reliability of the measure based on the IUR to be 0.75. The developer also noted that their analyses produced a PIUR about 0.95 as well, though this was not included in the submission. The Committee did not express any concerns related to the reliability. In the discussion on validity, the Committee noted the relationship between facility level quintiles of performance scores and the SMR and standardized hospitalization rate (SHR) using Poisson regression. The Committee noted that the risk adjustment is based on a multivariate logistic regression model. The adjustment is made for age, BMI at incident, nursing home status, nephrologist's care prior to end-stage renal disease (ESRD,) duration of ESRD, diabetes as primary cause of ESRD, comorbidities, and two binary indicators, including missing a CMS-2728 form; and an indicator for if at least one of the comorbidities were present. The common risk effects are assumed in order to improve computational stability in estimating facility-specific effects. The Committee noted 23% of data missingness and expressed a concern. The developer noted that this is because the measure includes patients without Medicare coverage for whom comorbidities cannot be calculated, but they are included in the model to reduce bias. The Committee considered the loss of information as a part of seeking balance in measuring an entire population and ensuring accuracy in the risk model and the presence of an adjustor in the model for those without comorbidity data.

The Committee did not express any concerns related to feasibility, noting that all reviewers considered the feasibility to be high. The Committee expressed concerns, referencing the measure's long use in federal accountability programs. The Committee noted an unintended consequence of potentially limiting patient choice when they may prefer a catheter due to downward pressure on clinicians to achieve a high fistula rate.

#2978 Hemodialysis Vascular Access, Long-term Catheter Rate (University of Michigan Kidney Epidemiology and Cost Center)

Measure Steward/Developer Representatives at the Meeting

Jack Kalbfleisch, PhD – University of Michigan Kidney Epidemiology and Cost Center
Claudia Dahlerus, PhD, MA – University of Michigan Kidney Epidemiology and Cost Center
Jonathan Segal, MD, MS – University of Michigan Kidney Epidemiology and Cost Center
Joseph Messana, MD - University of Michigan Kidney Epidemiology and Cost Center
Jesse Roach, MD – Centers for Medicare and Medicaid Services

Standing Committee Votes

- Evidence: H-0; M-15; L-0; I-2
- Performance Gap: H-3; M-14; L-0; I-0
- Reliability: Yes-17; No-0
    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.
    - The NQF Scientific Methods Panel's rating for reliability: moderate (H-4; M-5; L-0; I-0)
    - The Committee accepted the NQF Scientific Methods Panel's rating.
- Validity: Yes-15 ; No-1
    - The NQF Scientific Methods Panel's rating for validity: moderate (H-1; M-6; L-2; I-0)

- The Committee accepted the NQF Scientific Methods Panel's rating.

- Feasibility: H-10; M-6; L-0; I-0
- Use: Pass-16; No Pass-0
- Usability: H-0; M-14; L-1; I-1

Standing Committee Recommendation for Endorsement: Yes-16; No-0

The Standing Committee recommended the measure for continued endorsement.

This measure was noted to be a companion measure to NQF #2977. Following an overview of the measure, the Committee reviewed the evidence submitted in its support, which was also drawn from the KDOQI guidelines and supplementary evidence from the literature provided by the developer. As with measure NQF #2977, the Committee noted that the evidence has been downgraded in the KDOQI guidelines, but also noted that the evidence indicates increased infection associated with catheters. The Committee also noted that catheter lock and catheter cap solutions are not included in the evidence submission.

The discussion on performance gap noted that the analysis of CROWNWeb data from 2018 indicated the facility-level mean percentage of patient-months with a long-term catheter was 12.4%. The Committee also reviewed submitted disparities in information indicating that advanced age, female sex, ethnicity, dialysis vintage, and unemployment status are statistically significant predictors for odds of long-term catheter use.

Related to reliability, the Committee noted very little change in the specifications since its last submission. The testing was conducted at the measure score level by calculating an IUR with bootstrapping, IUR = 0.76 with no PIUR provided. In the discussion on validity, the Committee noted the relationship between facility level quintiles of performance scores and the SMR and SHR using Poisson regression. The Committee noted that any missing vascular access information in the performance data is assumed to be catheter use. The developer clarified that this is to encourage providers to ensure that vascular access route is documented, noting that relatively small portion of providers represents less than 2% of those measured. The SMP reviewed this measure and expressed some concerns related to the comorbidity conditions, namely that the measure is not adjusted. The Committee generally agreed that the exclusion of comorbidities and lack of risk adjustment is correct. The Committee also discussed that the identification of differences in population needs related to vascular access may need stratification. The developer noted that the factors related to risk adjustment are primarily due to appropriateness of fistula use, thus risk adjustment would be appropriate for the fistula measure and that exclusions are more appropriate for a catheter measure. The exclusions are for pediatrics, hospice care, and comorbidities associated with limited life expectancy. The Committee also discussed missing data and its impact on validity, as well as the impact of patient choice in the presence of known risks. Severity of cardiovascular disease and heart failure was also discussed as potential inclusions in modelling, but the developer noted that they have not been successful in getting appropriate ICD-10 codes with sufficient detail to allow for this.

Data collection was noted to be conducted via claims and CROWNWeb with no concerns expressed by the Committee related to feasibility. The measure was noted to be used in Dialysis Facility Compare and prospective inclusion in ESRD Quality Incentive Program in 2021, with no concerns expressed on the measure's current use. Related to usability, the Committee noted that patient choice remains a challenge as a potential unintended consequence.

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 July 27, 2020 for public comment for 30 calendar days. The continuous public comment with member support will close on August 25, 2020. NQF will re-convene the Standing Committee for the post-comment web meeting on September 22, 2020.