NATIONAL QUALITY FORUM

Meeting Summary

Surgery Standing Committee – Measure Evaluation Meetings

The National Quality Forum (NQF) convened the Surgery Standing Committee for an in-person meeting on February 13, 2019 and a web meeting on February 20, 2019 to evaluate 15 measures.

Welcome, Introductions, and Review of Meeting Objectives

NQF welcomed the Standing Committee and participants to the meeting. NQF staff reviewed the meeting objectives. Committee members each introduced themselves and disclosed any conflicts of interests. One of the Committee members was recused from the discussion and voting on all of the measures due to a conflict of interest.

Topic Area Introduction and Overview of Evaluation Process

NQF staff provided an overview of the topic area and the current NQF portfolio of 50-endorsed surgical measures. Additionally, NQF reviewed the Consensus Development Process (CDP) and the measure evaluation criteria.

Measure Evaluation

The Surgery Standing Committee evaluated 15 measures for endorsement consideration. During the in-person meeting on February 13, 2019, the Committee evaluated five measures. The Committee recommended two composites, #2561 STS Aortic Valve Replacement (AVR) Composite Score (STS) and #2563 STS Aortic Valve Replacement (AVR) + Coronary Artery Bypass Graft (CABG) Composite Score, for continued endorsement. The Committee voted but did not reach consensus on #0122 Risk-Adjusted Operative Mortality for Mitral Valve (MV) Replacement + CABG Surgery and #0114 Risk-Adjusted Postoperative Renal Failure for *Use*, a must-pass criterion for maintenance measures. The Committee also voted on *Importance to Measure and Report, Scientific Acceptability* and *Feasibilit*y for #0118. A quorum was subsequently lost; therefore, the Committee continued discussing #0118 but did not vote on the remaining criteria including *Use, Usability* and Recommendation for Endorsement. The Committee reconvened on February 20, 2019 via a web meeting to resume its discussion and voting for #0118 and the remaining 10 measures the Committee did not evaluate during the in-person meeting. However, a quorum was not present at the start of the meeting, so the Committee discussed the remaining measures but did not vote during the web meeting. Because a quorum was not present at any time during the web meeting, NQF staff provided the Committee a copy of the transcript from the in-person meeting, a recording of the web meeting, and an online survey tool to submit their votes within 48 hours.

Overarching Issues

Several overarching issues emerged during the Committee's discussion of the measures. The Committee factored these issues into their ratings and recommendations for multiple measures. These issues are not repeated in detail for each individual measure.

Scientific Acceptability Criterion– Levels of Analysis, Race and Risk-Adjustment, and Score-Level Validity Testing Methodology

Levels of Analysis

The measures submitted for evaluation are specified for clinician groups and hospital/facilities; therefore, two sets of testing are expected. Group practice or individual cardiothoracic surgeons participating in the STS Adult Cardiac Surgery Database (ACSD) are the measured entities included in the testing and analysis provided by the developer; however, it was not clear if the testing and analysis also included hospital/facilities. In the measure submission form, the developer noted that, "At the option of the surgeon or surgical group, the ACSD participant can include a hospital and/or associated anesthesiologists. It is for this reason that we have indicated (on the Specifications tab, question #S.20) that this measure is specified/tested for both the "clinician: group/practice" and "facility" levels of analysis." The developer confirmed that physicians are the accountable entity for these measures rather than hospital/facilities. However, NQF guidance states that the level of analysis must align with testing; therefore, "hospital/facilities" will be removed from the specifications. Additional testing at the facility level is required for endorsement at both levels of analysis.

Race and Risk-Adjustment

The Scientific Methods Panel and Committee members questioned the developer's approach for including race in the risk-adjustment model. Per the developer, race was included as a "genetic factor" as it relates to effects of medication efficacy and prevalence of certain diseases like diabetes and hypertension, rather than being considered a social factor. The Committee agreed that race should not be included in the risk adjustment model and requested performance results to be stratified by race, gender, and other non-modifiable factors.

Score-Level Validity Testing Methodology

The Committee generally agreed the validity testing was sufficient. However, the Scientific Methods Panel and Committee members expressed concern about the score-level testing methodology, noting that the star-rating consistency over time is expected and is not an appropriate approach to demonstrating validity. They also questioned the utility of the content validation approach for these measures. Committee members also questioned if being a low volume provider could impact performance of the measures.

Use Criterion – Public Reporting and Transparency and Patient and Consumer Perspective

Public Reporting and Transparency

Public reporting and transparency were a reoccurring issue discussed as the Committee attempted to apply the must-pass *Use* criterion for maintenance measures. NQF criteria requires performance results are publicly reported within six years after initial endorsement. NQF further defines public reporting as transparency in the performance results about the identifiable, accountable entities that are *disclosed and available* outside of the organizations or practices whose performance is measured. The capability to verify the performance results adds substantially to transparency. Performance rates from the two composite measures #2561 and #2563 are published on the Society for Thoracic Surgeons (STS) website and meet NQF's *Use* criteria for public reporting. The remaining measures were initially endorsed in 2011 and to date have not been publicly reported. The developer disagreed that the measures are not publicly

reported because they are components of composites that are publicly reported on the STS website.

During the measure evaluation meetings, the Committee was divided on the value of public reporting and transparency. The Committee had a lengthy debate about public reporting, transparency, and NQF's must-pass *Use* criterion for maintenance measures. The Committee discussed whether individual measures that are part of publicly reported composite measure scores, though not independently publicly reported, and therefore, not transparent meet NQF's *Use* criterion.

Patient and Consumer Perspective
The patient representative on the Committee stressed that patients value transparency in quality reporting and use information about performance and quality to make important decisions about their care. The patient and consumer representatives also emphasized the importance of providing easy to access, public and meaningful information about a provider's performance.

NQF will compile a summary of the Committee deliberations in the draft technical report. NQF will post the draft technical report on March 21, 2019 for a 30-day public comment period on the NQF website.

Measure Steward/Developer Representatives at the Meetings
Mark Antman, Vinay Badhwar, Sean O'Brien, Gaetano Paone, David Shahian, Maria Sepulveda

Measure Evaluation Criteria Rating Key: H – High; M – Medium; L – Low; I – Insufficient

2561 STS Aortic Valve Replacement (AVR) Composite Score (STS)

Standing Committee Votes
- Evidence: Pass – 14; No Pass – 0
- Performance Gap: H-1; M-14; L-0; I-0
- Composite - Quality Construct and Rationale: H-8; M-6; L-0; I-0
- Reliability: H-5; M-10; L-0; I-0
    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.
- Validity: H-0; M-9; L-5; I-0
    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.
- Composite Construction: H-6; M-8; L-0; I-0
- Feasibility: H-7; M-7; L-0; I-0
- Use: Pass-12; No Pass-2
- Usability: H-2; M-10; L-2; I-0

Standing Committee Recommendation for Endorsement: Y-14; N-0
The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. The Committee accepted the Scientific Methods Panel's assessment of reliability and validity testing but had concerns with inclusion of

race in the risk model. This composite measure is publicly reported on The STS Public Reporting Online. The Committee ultimately recommended the measure for endorsement and requested that the developer provide data stratified by race during the annual update.

2563 STS Aortic Valve Replacement (AVR) + Coronary Artery Bypass Graft (CABG) Composite Score (STS)

Standing Committee Votes

- Evidence: Pass – 14; No Pass – 0
- Performance Gap: H-1; M-14; L-0; I-0
- Composite - Quality Construct and Rationale: H-8; M-6; L-0; I-0
- Reliability: H-5; M-10; L-0; I-0
    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.
- Validity: H-0; M-9; L-5; I-0
    - This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel.
- Composite Construction: H-6; M-8; L-0; I-0
- Feasibility: H-7; M-7; L-0; I-0
- Use: Pass-12; No Pass-2
- Usability: H-2; M-10; L-2; I-0

Standing Committee Recommendation for Endorsement: Y-14; N-0

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. The Committee accepted the Scientific Methods Panel's assessment of reliability and validity testing but had concerns with inclusion of race in the risk model. This composite measure is publicly reported on STS Public Reporting Online. The Committee ultimately recommended the measure for endorsement and requested that the developer provide data stratified by race during the annual update.

0122 Risk-Adjusted Operative Mortality for Mitral Valve (MV) Replacement + CABG Surgery (STS)

Standing Committee Votes

- Evidence: H-14; M-0; L-0; I-0
- Performance Gap: H-11; M-4; L-0; I-0
- Reliability: M-15; L-0; I-0
- Validity: H-2; M-13; L-0; I-0
- Feasibility: H-4; M-11; L-0; I-0
- Use: Pass-8; No Pass-7
- Usability: No votes taken

Standing Committee Recommendation for Endorsement:

The Standing Committee did not vote on the recommendation for endorsement at the meeting because the Committee did not reach consensus on *Use* —a must-pass criterion. In terms of performance gap, some committee members were concerned that insufficient information was provided making it difficult to interpret but generally the Committee agreed there was room for improvement. This measure is a component of a composite measure (#3032). While the composite measure is reported on the STS website, performance of this individual measure is not reported. The Committee could not agree whether reporting the composite met criteria for use of this component measure. The Committee will re-vote on the measure on the post-comment web meeting on May 8, 2019.

0114 Risk-Adjusted Postoperative Renal Failure (STS)

Standing Committee Votes

- Evidence: Pass-14; No Pass-0;
- Performance Gap: H-2; M-10; L-2; I-0
- Reliability: M-14; L-0; I-0
- Validity: H-2; M-9; L-3; I-0
- Feasibility: H-6; M-8; L-0; I-0
- Use: Pass-6; No Pass-8
- Usability: No votes taken

Standing Committee Recommendation for Endorsement: No votes taken

The Standing Committee did not vote on the recommendation for endorsement at the meeting because the Committee did not reach consensus on *Use* —a must-pass criterion. This measure is a component of a composite measure (#0696). While the composite measure is reported on the STS website, performance of this individual measure is not reported. The Committee could not agree whether reporting the composite met criteria for use of this component measure. The Committee will re-vote on the measure on the post-comment web meeting on May 8, 2019.

0118 Anti-Lipid Treatment Discharge (STS)

Standing Committee Votes

- Evidence: H-0; M-14; L-0; I-0
- Performance Gap: H-0; M-12; L-2; I-0
- Reliability: M-13; L-1; I-0
- Validity: H-0; M-14; L-0; I-0
- Feasibility: H-3; M-11; L-0; I-0
- Use: Pass-12; No Pass-5
- Usability: H-3; M-13; L-1; I-0

Standing Committee Recommendation for Endorsement: Y-14; N-3

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a

composite measure (#0696). While the composite measure is reported on the STS website, performance of this individual measure is not reported. Committee members felt that this measure and subsequent measures meet the public reporting requirement when reported as part of a composite. Committee members expressed concern that not endorsing the measures would cause harm to the public and that there are so few existing meaningful measures and that STS shouldn't be held to a "perfect" standard.

0115 Risk-Adjusted Surgical Re-exploration (STS)

Standing Committee Votes

- Evidence: Pass-14; No Pass-3
- Performance Gap: H-1; M-12; L-3 I-1
- Reliability: M-15; L-1; I-1
- Validity: H-2; M-13; L-2; I-0
- Feasibility: H-3; M-12; L-2; I-0
- Use: Pass-11; No Pass-6
- Usability: H-2; M-13; L-2; I-0

Standing Committee Recommendation for Endorsement: Y-13; N-4

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#0696). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

0119 Risk-Adjusted Operative Mortality for CABG (STS)

Standing Committee Votes

- Evidence: Pass-16; No Pass-1
- Performance Gap: H-1; M-14; L-1 I-1
- Reliability: M-16; L-1; I-0
- Validity: H-3; M-14; L-0; I-0
- Feasibility: H-7; M-10; L-0; I-0
- Use: Pass-15; No Pass-2
- Usability: H-5; M-12; L-0; I-0

Standing Committee Recommendation for Endorsement: Y-15; N-2

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#0696). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

0120 Risk-Adjusted Operative Mortality for Aortic Valve Replacement (AVR) (STS)

Standing Committee Votes

- Evidence: Pass-17; No Pass-0
- Performance Gap: H-1; M-15; L-0 I-1
- Reliability: M-17; L-0; I-0
- Validity: H-5; M-12; L-0; I-0
- Feasibility: H-4; M-13; L-0; I-0
- Use: Pass-15; No Pass-2
- Usability: H-3; M-14; L-0; I-0

Standing Committee Recommendation for Endorsement: Y-15; N-2

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#2561). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

0121 Risk-Adjusted Operative Mortality for Mitral Valve (MV) Replacement (STS)

Standing Committee Votes

- Evidence: Pass-17; No Pass-0
- Performance Gap: H-3; M-14; L-0 I-0
- Reliability: M-17; L-0; I-0
- Validity: H-4; M-13; L-0; I-0
- Feasibility: H-5; M-12; L-0; I-0
- Use: Pass-14; No Pass-3
- Usability: H-3; M-14; L-0; I-0

Standing Committee Recommendation for Endorsement: Y-15; N-2

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#3031). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

0123 Risk-Adjusted Operative Mortality for Aortic Valve Replacement (AVR) + CABG Surgery (STS)

Standing Committee Votes

- Evidence: Pass-17; No Pass-0
- Performance Gap: H-1; M-15; L-0 I-1
- Reliability: M-17; L-0; I-0
- Validity: H-3; M-14; L-0; I-0
- Feasibility: H-4; M-13; L-0; I-0

- Use: Pass-15; No Pass-2
- Usability: H-5; M-12; L-0; I-0

Standing Committee Recommendation for Endorsement: Y-15; N-2

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#2563). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

0129 Risk-Adjusted Postoperative Prolonged Intubation (Ventilation) (STS)

Standing Committee Votes

- Evidence: Pass-16; No Pass-1
- Performance Gap: H-1; M-14; L-1 I-1
- Reliability: M-15; L-2; I-0
- Validity: H-2; M-13; L-2; I-0
- Feasibility: H-3; M-12; L-2; I-0
- Use: Pass-11; No Pass-6
- Usability: H-2; M-13; L-2; I-0

Standing Committee Recommendation for Endorsement: Y-12; N-5

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#0696). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

0130 Risk-Adjusted Deep Sternal Wound Infection (STS)

Standing Committee Votes

- Evidence: Pass-15; No Pass-2
- Performance Gap: H-1; M-14; L-1 I-1
- Reliability: M-15; L-2; I-0
- Validity: H-3; M-13; L-1; I-0
- Feasibility: H-3; M-13; L-1; I-0
- Use: Pass-12; No Pass-5
- Usability: H-1; M-15; L-1; I-0

Standing Committee Recommendation for Endorsement: Y-13; N-4

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#0696). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

0131 Risk-Adjusted Stroke/Cerebrovascular Accident (STS)

Standing Committee Votes

- Evidence: Pass-15; No Pass-2
- Performance Gap: H-2; M-13; L-1 I-1
- Reliability: M-15; L-2; I-0
- Validity: H-4; M-11; L-2; I-0
- Feasibility: H-5; M-11; L-1; I-0
- Use: Pass-11; No Pass-6
- Usability: H-1; M-14; L-2; I-0

Standing Committee Recommendation for Endorsement: Y-12; N-5

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#0696). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

1501 Risk-Adjusted Operative Mortality for Mitral Valve (MV) Repair (STS)

Standing Committee Votes

- Evidence: Pass-17; No Pass-0
- Performance Gap: H-2; M-14; L-0 I-1
- Reliability: M-16; L-1; I-0
- Validity: H-3; M-14; L-0; I-0
- Feasibility: H-4; M-13; L-0; I-0
- Use: Pass-14; No Pass-3
- Usability: H-2; M-15; L-0; I-0

Standing Committee Recommendation for Endorsement: Y-15; N-2

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#3031). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

1502 Risk-Adjusted Operative Mortality for Mitral Valve (MV) Repair + CABG Surgery (STS)

Standing Committee Votes

- Evidence: Pass-17; No Pass-0
- Performance Gap: H-1; M-15; L-0 I-1
- Reliability: M-17; L-0; I-0
- Validity: H-4; M-13; L-0; I-0
- Feasibility: H-4; M-13; L-0; I-0
- Use: Pass-14; No Pass-3

- Usability: H-1; M-16; L-0; I-0

Standing Committee Recommendation for Endorsement: Y-15; N-2

The Standing Committee recommended the measure for continued endorsement. The Committee accepted that the evidence had not changed since its previous evaluation for this measure and believed there was enough of a gap to meet this criterion. This measure is a component of a composite measure (#3032). While the composite measure is reported on the STS website, performance of this individual measure is not reported.

Public Comment

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

Next Steps

NQF will post the draft technical report on March 21, 2019 for a 30-calendar day public comment. The continuous public comment with member support will close on April 21, 2019. NQF will re-convene the Standing Committee for the post-comment web meeting on May 8, 2019.