NATIONAL QUALITY FORUM

Neurology, Fall 2018

Standing Committee Methods Review

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Michael Abrams, Senior Director
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Welcome

Project Team

- Debjani Mukherjee, Senior Director
- Michael Abrams, Senior Director
- Christy Skipper, Senior Project Manager

Agenda for the Call

- Standing Committee introductions
- Brief review of the Consensus Development Process
- Overview of NQF's portfolio of Neurology measures
- Overview of NQF's measure evaluation criteria
- Committee discussion
- Next steps

Neurology Standing Committee

- David Knowlton, MA
- David Tirschwell, MD, MSc
- David Andrews
- Jocelyn Bautista, MD
- Ketan Bulsara, MD
- James Burke, MD
- Michelle Camicia, MSN, RN, PHN, CRRN, CCM, FAHA
- Valerie Cotter, DrNP, AGPCNP-BC, FAANP
- Bradford Dickerson, MD, MMSC
- Dorothy Edwards, PhD
- Reuven Ferziger, MD
- Charlotte Jones, MD, PhD, MSPH
- Michael Kaplitt, MD, PhD
- Melody Ryan, PharmD, MPH
- Jane Sullivan, PT, DHS, MS
- Kelly Sullivan, PhD
- Ross Zafonte, DO

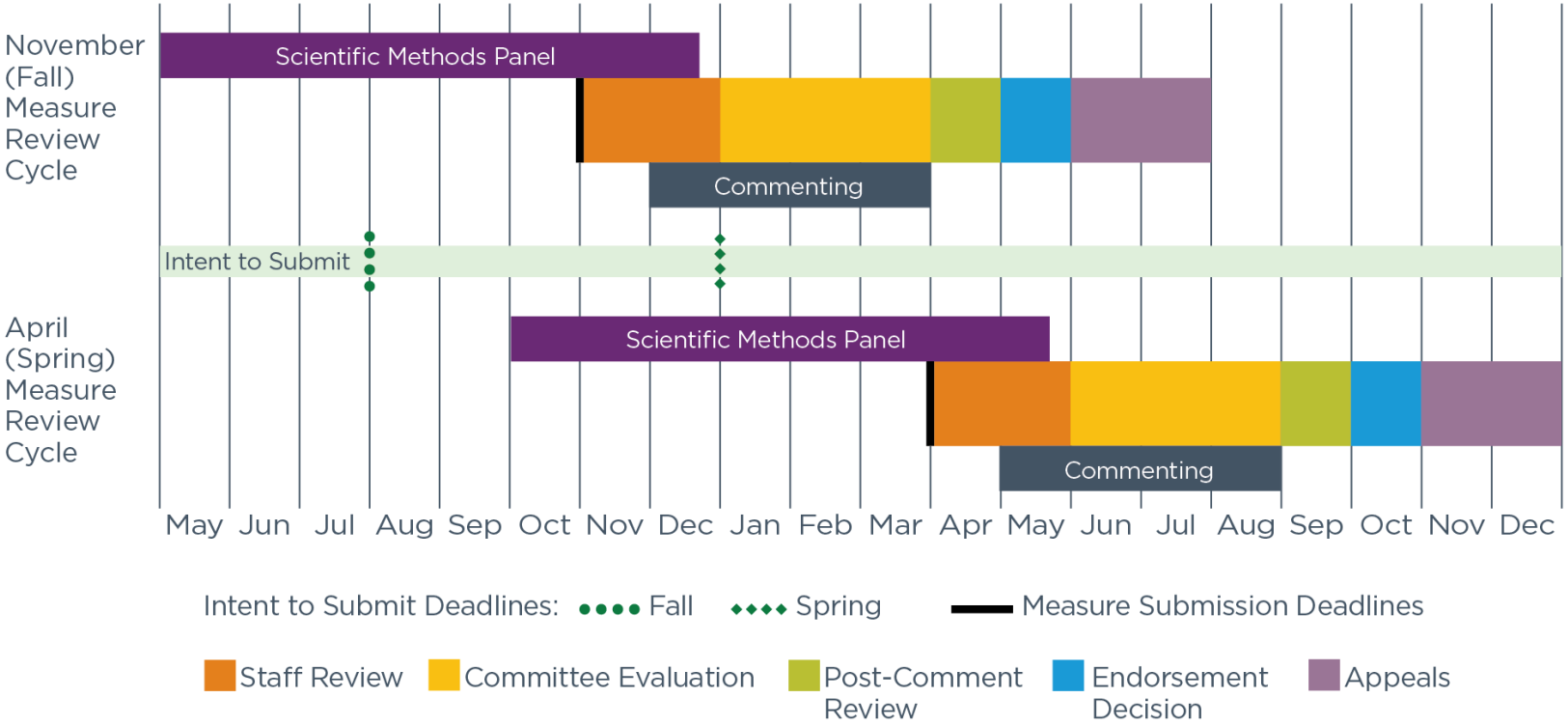
NQF Consensus Development Process (CDP)
6 Steps for Measure Endorsement

- Intent to Submit
- Call for Nominations
- Measure Evaluation
- Public Commenting Period with Member Support
- Measure Endorsement
- Measure Appeals

Measure Review: Two Cycles Per Year

Consensus Development Process:

Two Cycles Every Contract Year



Neurology Portfolio of NQF-Endorsed Measures

Stroke
0437 STK 04: Thrombolytic Therapy
0507 Diagnostic Imaging Stenosis Measurement in Carotid Imaging Reports
0661 Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Received Head CT or MRI Scan Interpretation within 45 minutes of ED Arrival
1952 Time to Intravenous Thrombolytic Therapy
2863 CSTK 06: Nimodipine Treatment Administered
2864 CSTK 01: National Institutes of Health Stroke Scale (NIHSS) Score Performed for Ischemic Stroke Patients
2866 CSTK 03: Severity Measurement Performed for Subarachnoid Hemorrhage and Intracerebral Hemorrhage Patients
2877 Hybrid, Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following acute ischemic stroke with risk adjustment for stroke severity

Dementia
2872 Dementia – Cognitive Assessment (approved for trial use)
2111 Antipsychotic Use in Persons with Dementia

Neurology Portfolio of NQF-Endorsed Measures with Reserve Status

Stroke
0434 STK 01: Venous Thromboembolism (VTE) Prophylaxis
0435 STK 02: Discharged on Antithrombotic Therapy
0436 STK 03: Anticoagulation Therapy for Atrial Fibrillation/Flutter
0438 STK 05: Antithrombotic Therapy By End of Hospital Day Two
0439 STK 06: Discharged on Statin Medication
0441 STK 10: Assessed for Rehabilitation

Spring 2019 Cycle

- 2872e Dementia-Cognitive Assessment (PCPI Foundation)
  - *Received approval for trial use designation in the Neurology 2015-2016 project*
- 3506 Hospitalization After Release with Missed ED Dizzy Stroke (Armstrong Institute for Patient Safety and Quality)

Questions?

Measure Evaluation Criteria Overview

NQF Measure Evaluation Criteria for Endorsement

NQF endorses measures for accountability applications (public reporting, payment programs, accreditation, etc.) as well as quality improvement.

- Standardized evaluation criteria
- Criteria have evolved over time in response to stakeholder feedback
- The quality measurement enterprise is constantly growing and evolving—greater experience, lessons learned, expanding demands for measures—the criteria evolve to reflect the ongoing needs of stakeholders

Major Endorsement Criteria *(page 28-29 in the SC Guidebook)*

- **Importance to measure and report**: Goal is to measure those aspects with greatest potential of driving improvements; if not important, the other criteria are less meaningful (**must-pass**)
- **Reliability and Validity-scientific acceptability of measure properties**: Goal is to make valid conclusions about quality; if not reliable and valid, there is risk of improper interpretation (**must-pass**)
- **Feasibility**: Goal is to, ideally, cause as little burden as possible; if not feasible, consider alternative approaches
- **Usability and Use** (**must-pass** for maintenance measures): Goal is to use for decisions related to accountability and improvement; if not useful, probably do not care if feasible
- **Comparison to related or competing measures**

Criterion #1: Importance to Measure and Report *(page 31-39)*

1. Importance to measure and report – Extent to which the specific measure focus is evidence-based and important to making significant gains in healthcare quality where there is variation in or overall less-than-optimal performance.

1a. Evidence: the measure focus is evidence-based

1b. Opportunity for Improvement: demonstration of quality problems and opportunity for improvement, i.e., data demonstrating considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or disparities in care across population groups

1c. Quality construct and rationale (composite measures only)

Subcriteron 1a: Evidence *(page 32-38)*

- Outcome measures
  - *Empirical data demonstrate a relationship between the outcome and at least one healthcare structure, process, intervention, or service. If not available, wide variation in performance can be used as evidence, assuming the data are from a robust number of providers and results are not subject to systematic bias.*
- Structure, process, intermediate outcome measures
  - *The quantity, quality, and consistency of the body of evidence underlying the measure should demonstrate that the measure focuses on those aspects of care known to influence desired patient outcomes*
    - » Empirical studies (expert opinion is not evidence)
    - » Systematic review and grading of evidence
      - *Clinical Practice Guidelines – variable in approach to evidence review*
- For measures derived from patient (or family/parent/etc.) report
  - *Evidence should demonstrate that the target population values the measured outcome, process, or structure and finds it meaningful.*
  - *Current requirements for structure and process measures also apply to patient-reported structure/process measures.*

Rating Evidence: Algorithm #1 *(page 35)*

[Screen share Evidence algorithm]

Criterion #1: Importance to measure and report

Criteria emphasis is different for new vs. maintenance measures

New measures	Maintenance measures
• Evidence – Quantity, quality, consistency (QQC) • Established link for process measures with outcomes	**DECREASED EMPHASIS**: Require measure developer to attest evidence is unchanged evidence from last evaluation; Standing Committee to affirm no change in evidence IF changes in evidence, the Committee will evaluate as for new measures
• Gap – opportunity for improvement, variation, quality of care across providers	**INCREASED EMPHASIS**: data on current performance, gap in care and variation

Criterion #2: Reliability and Validity– Scientific Acceptability of Measure Properties (pages 40 – 50)

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of health care delivery

2a. Reliability (must-pass)

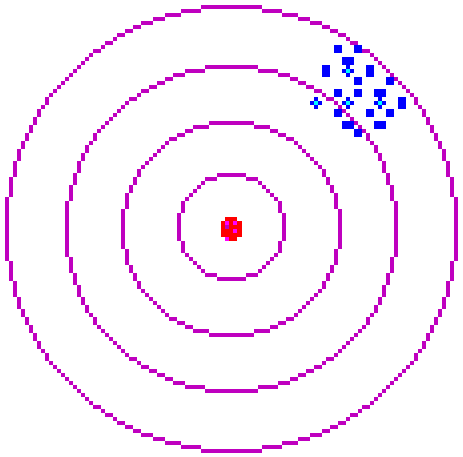
- *2a1. Precise specifications including exclusions*
- *2a2. Reliability testing—data elements or measure score*

2b. Validity (must-pass)

- *2b1. Validity testing—data elements or measure score*
- *2b2. Justification of exclusions—relates to evidence*
- *2b3. Risk adjustment—typically for outcome/cost/resource use*
- *2b4. Identification of differences in performance*
- *2b5. Comparability of data sources/methods*
- *2b6. Missing data*

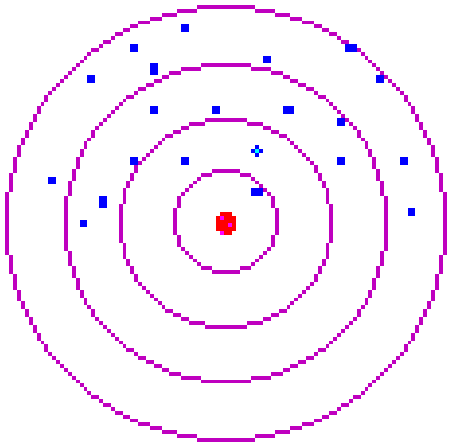
Reliability and Validity *(page 41)*

Assume the center of the target is the true score.



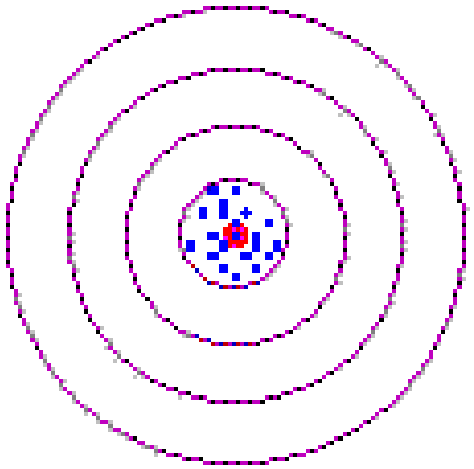
Reliable Not Valid

Consistent, but wrong



Neither Reliable Nor Valid

Inconsistent & wrong



Both Reliable And Valid

Consistent & correct

Evaluating Scientific Acceptability – Key Points (page 42)

Empirical analysis to demonstrate the reliability and validity of the measure as specified, including analysis of issues that pose threats to the validity of conclusions about quality of care such as exclusions, risk adjustment/stratification for outcome and resource use measures, methods to identify differences in performance, and comparability of data sources/methods.

Reliability Testing – Key Points *(page 43)*

- Reliability of the **measure score** refers to the proportion of variation in the performance scores due to systematic differences across the measured entities in relation to random variation or noise (i.e., the precision of the measure).
  - *Example – Statistical analysis of sources of variation in performance measure scores (signal-to-noise analysis)*
- Reliability of the **data elements** refers to the repeatability/ reproducibility of the data and uses patient-level data
  - *Example – inter-rater reliability*
- Consider whether testing used an appropriate method and included adequate representation of providers and patients and whether results are within acceptable norms
- Algorithm #2

Rating Reliability: Algorithm #2 *(page 44)*

[Screen share Reliability algorithm]

Validity Testing *(pages 45-49)*

- Empirical testing
  - *Measure score* – assesses a hypothesized relationship of the measure results to some other concept; assesses the correctness of conclusions about quality
  - *Data element* – assesses the correctness of the data elements compared to a "gold standard"
- Face validity
  - Subjective determination by experts that the measure appears to reflect quality of care
    - » Empirical validity testing is expected at time of maintenance review; if not possible, justification is required.
    - » Requires systematic and transparent process, by identified experts, that explicitly addresses whether performance scores resulting from the measure as specified can be used to distinguish good from poor quality. The degree of consensus and any areas of disagreement must be provided/discussed.

Rating Validity: Algorithm #3 *(page 49)*

[Screen share Validity algorithm]

Threats to Validity

- Conceptual
  - *Measure focus is not a relevant outcome of healthcare or not strongly linked to a relevant outcome*
- Unreliability
  - *Generally, an unreliable measure cannot be valid*
- Patients inappropriately excluded from measurement
- Differences in patient mix for outcome and resource use measures
- Measure scores that are generated with multiple data sources/methods
- Systematic missing or “incorrect” data (unintentional or intentional)

Criterion #2: Scientific Acceptability

New measures	Maintenance measures
• Measure specifications are precise with all information needed to implement the measure	NO DIFFERENCE: Require updated specifications
• Reliability • Validity (including risk-adjustment)	**DECREASED EMPHASIS**: If prior testing adequate, no need for additional testing at maintenance with certain exceptions (e.g., change in data source, level of analysis, or setting) Must address the questions regarding use of social risk factors in risk-adjustment approach

Criterion #3: Feasibility *(pages 50-51)*

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement.

3a: Clinical data generated during care process
3b: Electronic sources
3c: Data collection strategy can be implemented

Criterion #4: Usability and Use *(pages 51-52)*

Extent to which potential audiences (e.g., consumers, purchasers, providers, policymakers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

Use (4a) Must-pass for maintenance measures

4a1: Accountability and Transparency*: Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement.*

4a2: Feedback by those being measured or others*: Those being measured have been given results and assistance in interpreting results; those being measured and others have been given opportunity for feedback; the feedback has been considered by developers.*

Usability (4b)

4b1: Improvement*: Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated.*

4b2: Benefits outweigh the harms*: The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).*

Criteria #3-4: Feasibility and Usability and Use

Feasibility

New measures	Maintenance measures
• Measure feasible, including eMeasure feasibility assessment	NO DIFFERENCE: Implementation issues may be more prominent

Usability and Use

New measures	Maintenance measures
• Use: used in accountability applications and public reporting	**INCREASED EMPHASIS**: Much greater focus on measure use and usefulness, including both impact and unintended consequences
• Usability: impact and unintended consequences	

Criterion #5: Related or Competing Measures *(pages 52-53)*

If a measure meets the four criteria and there are endorsed/new **related** measures (same measure focus or same target population) or **competing** measures (both the same measure focus and same target population), the measures are compared to address harmonization and/or selection of the best measure.

- 5a. The measure specifications are harmonized with related measures **OR** the differences in specifications are justified.
- 5b. The measure is superior to competing measures (e.g., is a more valid or efficient way to measure) **OR** multiple measures are justified.

Updated Guidance for Measures that Use ICD-10 Coding

- For CY2019 and beyond, reliability testing should be based on ICD-10 coded data.
- Validity testing should be based on ICD-10 coded data
- If providing face validity (FV), both FV of the ICD-10 coding scheme and FV of the measure score as an indicator of quality are required update

Electronic Clinical Quality Measures (eCQM)

- "Legacy" eCQMs
  - *Beginning September 30, 2017 all respecified measure submissions for use in federal programs will be required to the same evaluation criteria as respecified measures – the "Bonnie testing only" option will no longer meet endorsement criteria*
- For all eCQMs: Reliance on data from structured data fields is expected; otherwise, unstructured data must be shown to be both reliable and valid

eCQM Endorsement Requirements

- Must meet all of the existing endorsement criteria
- Submitted as a separate measure even if the same or similar measure exists for another data source (e.g. claims or registry)
- Value sets used by the measure must be published in the VSAC (reduces implementation and harmonization issues)
- Documentation of testing on > 1 EHR system from > 1 EHR vendor is required for Scientific Acceptability
- Submissions must include Feasibility assessment
- Test results from a simulated dataset (i.e., Bonnie) to confirm measure logic is loading and calculating as intended

Evaluation Process

- **Preliminary analysis (PA)**: To assist the Committee evaluation of each measure against the criteria, NQF staff and Methods Panel (if applicable) will prepare a PA of the measure submission and offer preliminary ratings for each criterion.
  - *The PA will be used as a starting point for the Committee discussion and evaluation*
  - *Methods Panel will complete review of Scientific Acceptability criterion for complex measures*
- **Individual eval**uation: Each Committee member will conduct an in-depth evaluation on all measures under review
  - *Each Committee member will be assigned a subset of measures for which they will serve as lead discussant in the evaluation meeting*

Evaluation Process

- **Measure evaluation and recommendations at the in-person/web meeting**: The entire Committee will discuss and rate each measure against the evaluation criteria and make recommendations for endorsement.
- **Staff will prepare a draft report** detailing the Committee's discussion and recommendations
  - *This report will be released for a 30-day public and member comment period*
- **Post-comment call**: The Committee will re-convene for a post-comment call to discuss comments submitted
- **Final endorsement decision by the CSAC**
- **Appeals (if any)**

Questions?

Activities and Timeline

*All times ET

- Web Meeting 2 – April 25, 1-3 pm ET

Project Contact Info

- Email: neurology@qualityforum.org
- NQF phone: 202-783-1300
- Project page: http://www.qualityforum.org/Neurology_.aspx
- SharePoint site: http://share.qualityforum.org/Projects/Neurology%202015/SitePages/Home.aspx


THANK YOU