NATIONAL QUALITY FORUM

Pediatric Performance Measures 2016-2017

Committee Orientation & Measure Evaluation Tutorial

Suzanne Theberge, Senior Project Manager
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February 16, 2017

Welcome

Project Team

Robyn Y. Nishimi, PhD, Senior Consultant

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Kate McQueston, Project Manager, MPH

Madison Jung, Project Analyst

Agenda for the Call

- Welcome & NQF staff introductions
- CMS introduction: Karen Matsuoka, PhD, Chief Quality Officer, Medicaid
- Standing Committee introductions
- Overview of NQF, the Consensus Development Process, and Roles of the Standing Committee, Co-chairs, NQF staff
- Overview of NQF's portfolio of pediatric measures
- Review of project activities and timelines
- Overview of NQF's measure evaluation criteria
- SharePoint tutorial
- Next steps

CMS Welcome

Pediatric Performance Measures Standing Committee

Co-Chairs:

- John Brookey, MD, FAAP (Co-Chair)
- Jeffrey Susman, MD (Co-Chair)

Committee Members:

- Lauren Agoratus, MA
- Martha Bergren, DNS, RN, NCSN, APHN-BC, FNASN, FASHA, FAAN
- James Bost, MD, PHD
- Tara Bristol-Rouse, MA
- Karen Dorsey, MD, PHD
- Maureen Ediger
- David Einzig, MD
- Deborah Fattori, MSN, RN, PPCNP-BC
- Kerri Fei, MSN, RN
- Jonathan Finkelstein, MD, MPH
- Karen Harpster, PHD, OTR/L
- Amy Houtrow, MD, PHD, MPH
- David Keller, MD
- Kraig Knudsen, MD
- Susan Konek, MA, RD, CSP FAND
- Marlene Miller, MD, MSc
- Rajiv Modak, MD
- Jill Morrow-Gorton, MD
- Ricardo Quinonez, MD, FAAP
- Jeff Schiff, MD, MBA
- Carol Stanley, MS, CPHQ
- Jonathan Thackeray, MD, FAAP

Inactive:

- James Duncan, MD, PHD
- Kevin Slavin, MD, FAAP
- Virginia Moyer, , MD, MPH

Overview of NQF, the CDP, and Roles

The National Quality Forum: A Unique Role

Established in 1999, NQF is a non-profit, non-partisan, membership-based organization that brings together public and private sector stakeholders to reach consensus on healthcare performance measurement. The goal is to make healthcare in the U.S. better, safer, and more affordable.

Mission: To lead national collaboration to improve health and healthcare quality through measurement

- An Essential Forum
- Gold Standard for Quality Measurement
- Leadership in Quality

NQF Activities in Multiple Measurement Areas

- **Performance Measure Endorsement**
  - *650+ NQF-endorsed measures across multiple clinical areas*
  - *22 empaneled Standing Committees*
- **Measure Applications Partnership (MAP)**
  - *Advises HHS on selecting measures for 20+ federal programs, Medicaid, and health exchanges*
- **National Quality Partners**
  - *Convenes stakeholders around critical health and healthcare topics*
  - *Spurs action on patient safety, early elective deliveries, and other issues*
- **Measurement Science**
  - *Convenes private and public sector leaders to reach consensus on complex issues in healthcare performance measurement such as attribution, alignment, sociodemographic status (SDS) adjustment*

NQF Consensus Development Process (CDP)

7 Steps for Measure Endorsement

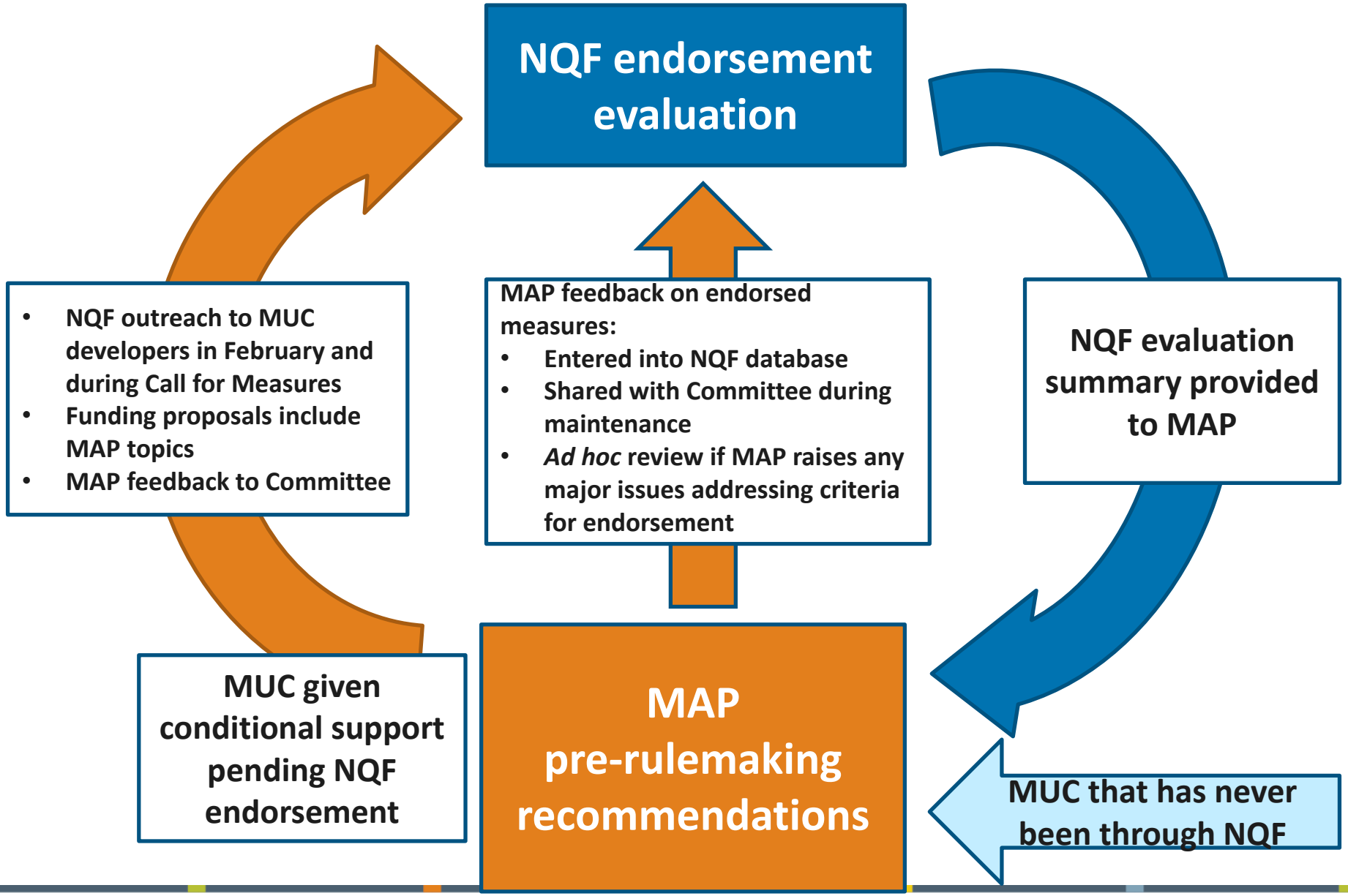
- Call for nominations for Standing Committee
- Call for candidate standards (measures)
- Candidate consensus standards review
- Public and member comment
- NQF member voting
- Consensus Standards Approval Committee (CSAC) ratification and endorsement
- Appeals

Measure Application Partnership (MAP)

In pursuit of the National Quality Strategy, the MAP:

- Informs the selection of performance measures to achieve the goal of improvement, transparency, and value for all
- Provides input to HHS during pre-rulemaking on the selection of performance measures for use in public reporting, performance-based payment, and other federal programs
- Identifies gaps for measure development, testing, and endorsement
- Encourages measurement alignment across public and private programs, settings, levels of analysis, and populations to:
  - *Promote coordination of care delivery*
  - *Reduce data collection burden*

CDP-MAP INTEGRATION – INFORMATION FLOW



Role of the Standing Committee
General Duties

- Act as a proxy for the NQF multi-stakeholder membership
- Serve 2-year or 3-year terms
- Work with NQF staff to achieve the goals of the project
- Evaluate candidate measures against the measure evaluation criteria
- Respond to comments submitted during the review period
- Respond to any directions from the CSAC

Role of the Standing Committee
Measure Evaluation Duties

- All members review ALL measures
- Evaluate measures against each criterion
  - *Indicate the extent to which each criterion is met and rationale for the rating*
- Make recommendations to the NQF membership for endorsement
- Oversee pediatric portfolio of measures
  - *Promote alignment and harmonization*
  - *Identify gaps*

Role of the Standing Committee Co-Chairs

- Co-facilitate Standing Committee (SC) meetings
- Work with NQF staff to achieve the goals of the project
- Assist NQF in anticipating questions and identifying additional information that may be useful to the SC
- Keep SC on track to meet goals of the project without hindering critical discussion/input
- Represent the SC at CSAC meetings
- Participate as a SC member

Role of NQF Staff

- NQF project staff works with SC to achieve the goals of the project and ensure adherence to the consensus development process:
  - *Organize and staff SC meetings and conference calls*
  - *Guide the SC through the steps of the CDP and advise on NQF policy and procedures*
  - *Review measure submissions and prepare materials for Committee review*
  - *Draft and edit reports for SC review*
  - *Ensure communication among all project participants (including SC and measure developers)*
  - *Facilitate necessary communication and collaboration between different NQF projects*

Role of NQF Staff
Communication

- Respond to NQF member or public queries about the project
- Maintain documentation of project activities
- Post project information to NQF website
- Work with measure developers to provide necessary information and communication for the SC to fairly and adequately evaluate measures for endorsement
- Publish final project report

Questions?

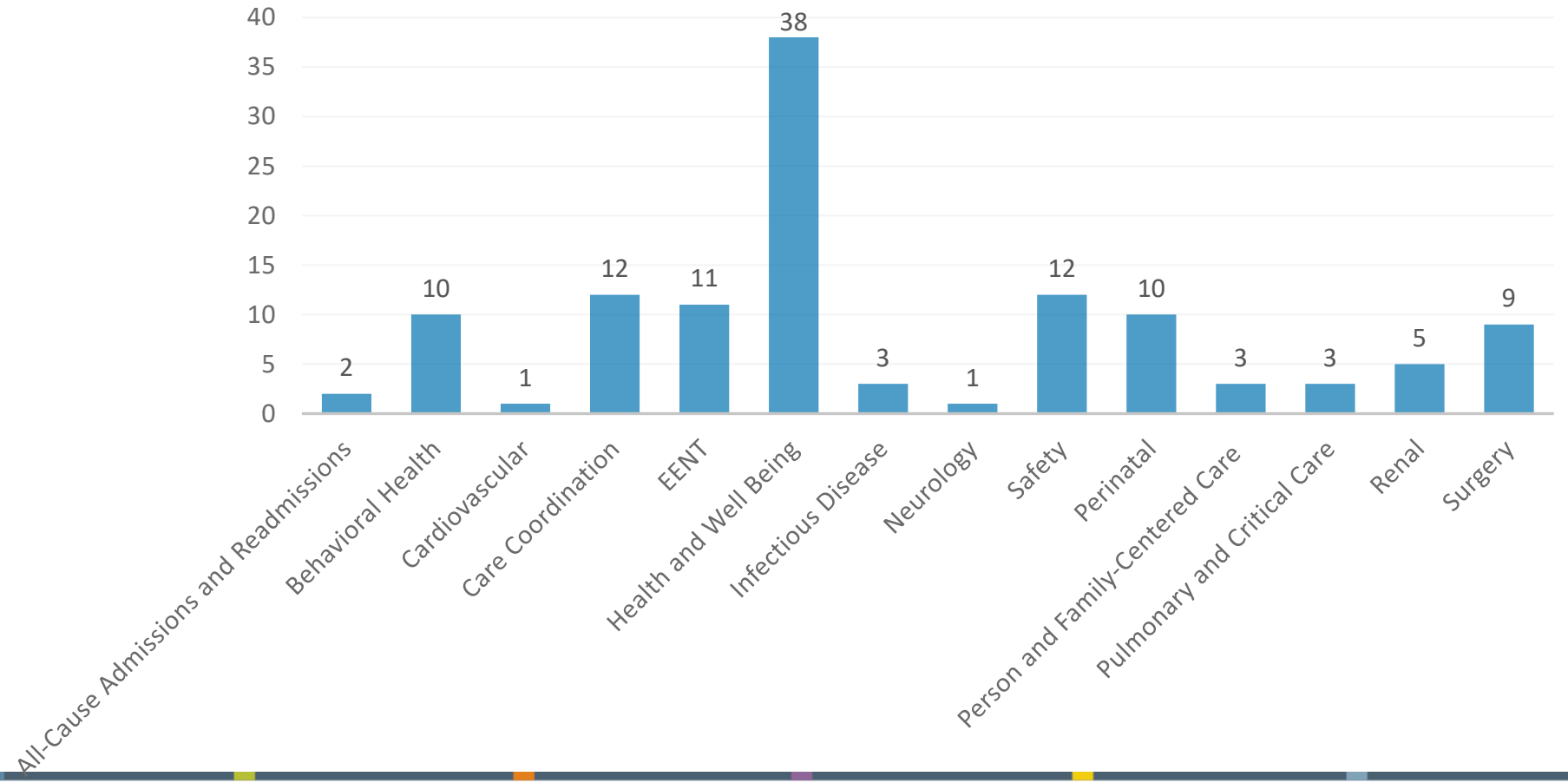
Overview of NQF's Pediatric Portfolio

Pediatric Portfolio of Measures

- This project will evaluate measures related to pediatric populations that can be used for accountability and public reporting for all populations and in all settings of care. The second phase of this project will address topic areas including:
  - *Child- and adolescent-focused clinical preventive services and follow-up to preventive services*
  - *Child- and adolescent-focused services for management of acute conditions*
  - *Child- and adolescent-focused services for management of chronic conditions*
- NQF solicits new measures for possible endorsement
- NQF currently has more than 100 endorsed measures that include a pediatric population. Endorsed measures undergo periodic evaluation to maintain endorsement – "maintenance".

Pediatric Portfolio of Measures

NQF currently has more than 100 endorsed measures within the pediatric portfolio, crossing many of our topic areas.



2015-16 Pediatric Measures Cycle: NQF-endorsed measures

- 2797: Transcranial Doppler Ultrasonography Screening Among Children with Sickle Cell Anemia
- 2789: Adolescent Assessment of Preparation for Transition (ADAPT) to Adult-Focused Health Care
- 2800: Metabolic Monitoring for Children and Adolescents on Antipsychotics
- 2801: Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics
- 2803: Tobacco Use and Help with Quitting Among Adolescents
- 2806: Adolescent Psychosis: Screening for Drugs of Abuse in the Emergency Department
- 2820: Pediatric Computed Tomography (CT) Radiation Dose

2015-16 Pediatric Measures Cycle: NQF-endorsed measures *(continued)*

- 2842: Family Experiences with Coordination of Care (FECC)-1 Has Care Coordinator
- 2843: Family Experiences with Coordination of Care (FECC) -3: Care coordinator helped to obtain community services
- 2844: Family Experiences with Coordination of Care (FECC) -5: Care coordinator asked about concerns and health
- 2845: Family Experiences with Coordination of Care (FECC) -7: Care coordinator assisted with specialist service referrals
- 2846: Family Experiences with Coordination of Care (FECC)-8: Care coordinator was knowledgeable, supportive and advocated for child's needs
- 2847: Family Experiences with Coordination of Care (FECC) -9: Appropriate written visit summary content
- 2849: Family Experiences with Coordination of Care (FECC)-15: Caregiver has access to medical interpreter when needed
- 2850: Family Experiences with Coordination of Care (FECC)-16: Child has shared care plan

2016-2017 Measures Under Review

- 2816: Appropriateness of Emergency Department Visits for Children and Adolescents with Identifiable Asthma (CAPQUAM)
- 3189: Rate of Emergency Department Visit Use for Children Managed for Identifiable Asthma - Visits per 100 Child years (CAPQUAM)
- 3136: GAPPS Rate of preventable adverse events per 1,000 patient days among pediatric patients (CEPQM)
- 3153: Continuity of Primary Care for Children with Medical Complexity (SCRI)
- 3154: Informed Coverage (CHOP)
- 3165: Overall Years of Nursing Experience (BCH)

2016-2017 Measures Under Review

- 3166: Antibiotic Prophylaxis Among Children with Sickle Cell Anemia (QMETRIC)
- 3219: Anticipatory Guidance and Parental Education (CAHMI)
- 3220: Ask About Parental Concerns (CAHMI)
- 3221: Family Centered Care (CAHMI)
- 3222: Assessment of Family Alcohol Use, Substance Abuse and Safety (CAHMI)
- 3223: Assessment of Family Psychosocial Screening (CAHMI)

Activities and Timeline

*All times ET

Meeting	Date/Time
Committee Orientation and Measure Evaluation Q&A (2 hours)	February 16, 2017 1:00-3:00pm ET
In-Person Meeting (1 day in Washington, DC)	March 2, 2017 8:00am-5:30pm ET
Post-Meeting Conference Call (2 hours)	March 10, 2017 12:00-2:00pm ET
Post Comment Call (2 hours)	May 31, 2017 2:00-4:00pm ET

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
Hierarchy and Rationale (page 31)

- **Importance to measure and report:** Goal is to measure those aspects with greatest potential of driving improvement; 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**: 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 33-41)

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 (page 34-39)*

   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 (page 39)*

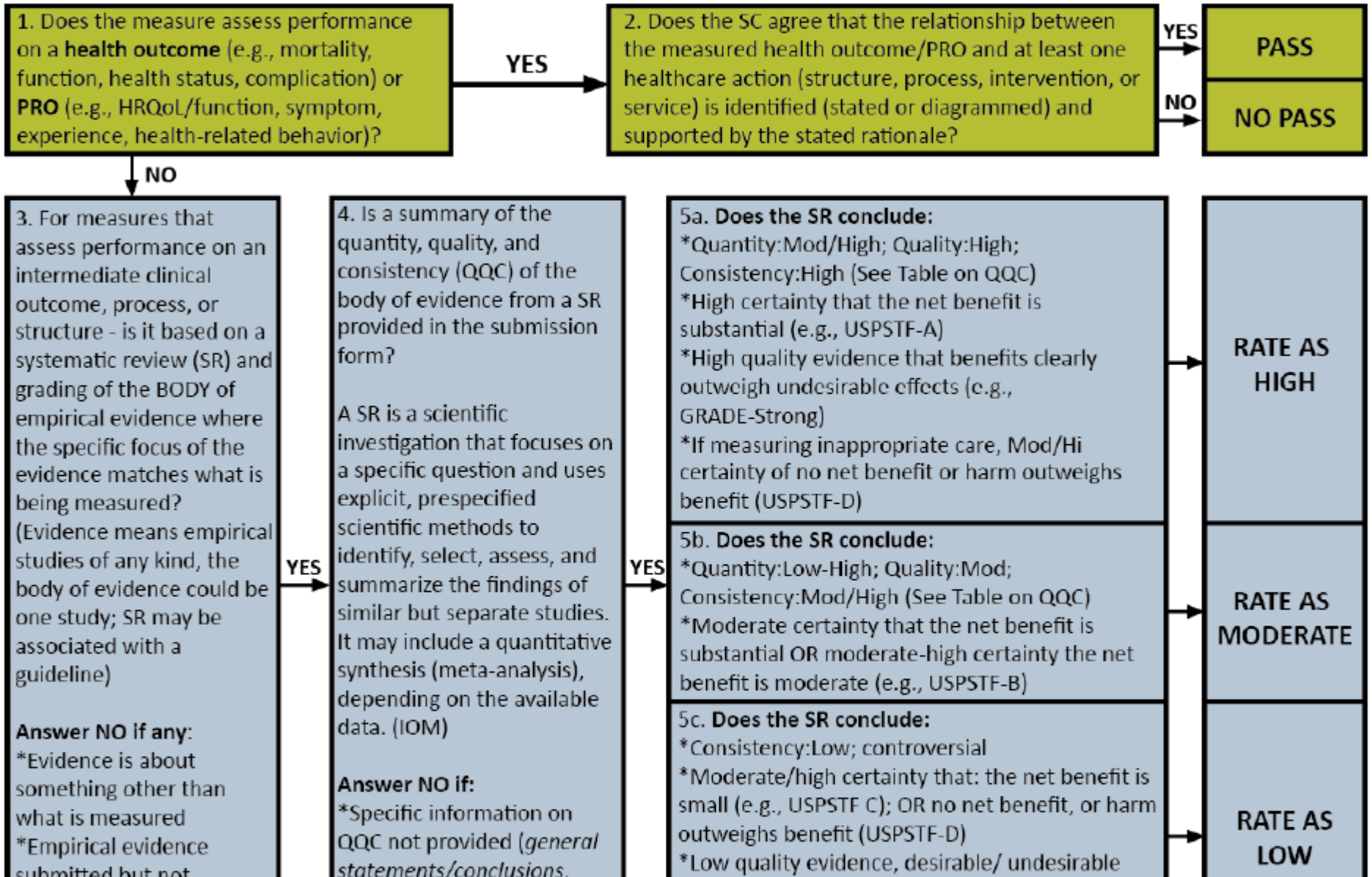
   1c. Quality construct and rationale *(composite measures only)*

Subcriteron 1a: Evidence (page 34-39)

- Outcome measures
  - *A rationale (which often includes evidence) for how the outcome is influenced by healthcare processes or structures.*
- 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*

Rating Evidence: Algorithm #1 – page 36

Algorithm #1. Guidance for Evaluating the Clinical Evidence



Criterion #2: Reliability and Validity– Scientific Acceptability of Measure Properties (page 41 - 51)

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. Specifications consistent with evidence

2b2. Validity testing—data elements or measure score

2b3. Justification of exclusions—relates to evidence

2b4. Risk adjustment—typically for outcome/cost/resource use

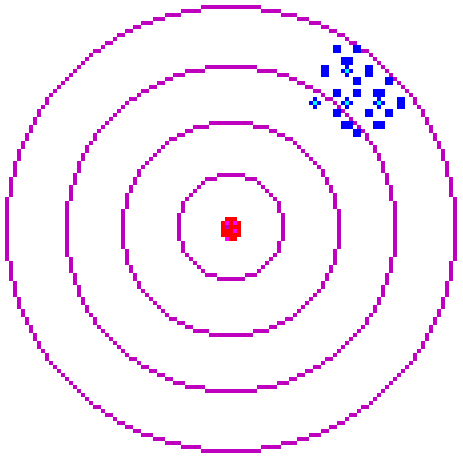
2b5. Identification of differences in performance

2b6. Comparability of data sources/methods

2b7. Missing data

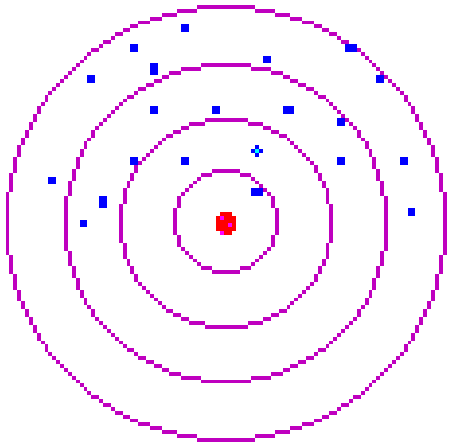
Reliability and Validity (page 42)

Assume the center of the target is the true score…



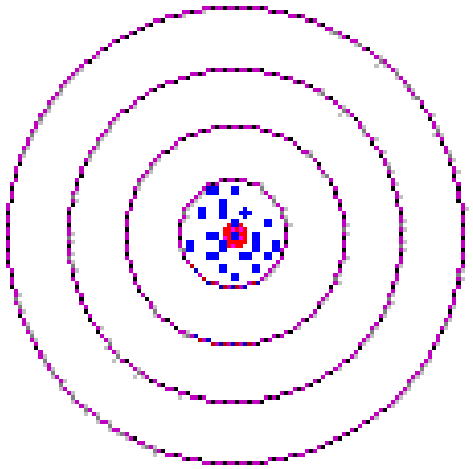
Reliable Not Valid

Consistent, but wrong



Neither Reliable Nor Valid

Inconsistent & wrong



Both Reliable And Valid

Consistent & correct

Measure Testing – Key Points (page 43)

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 (page 43)
Key points - page 44

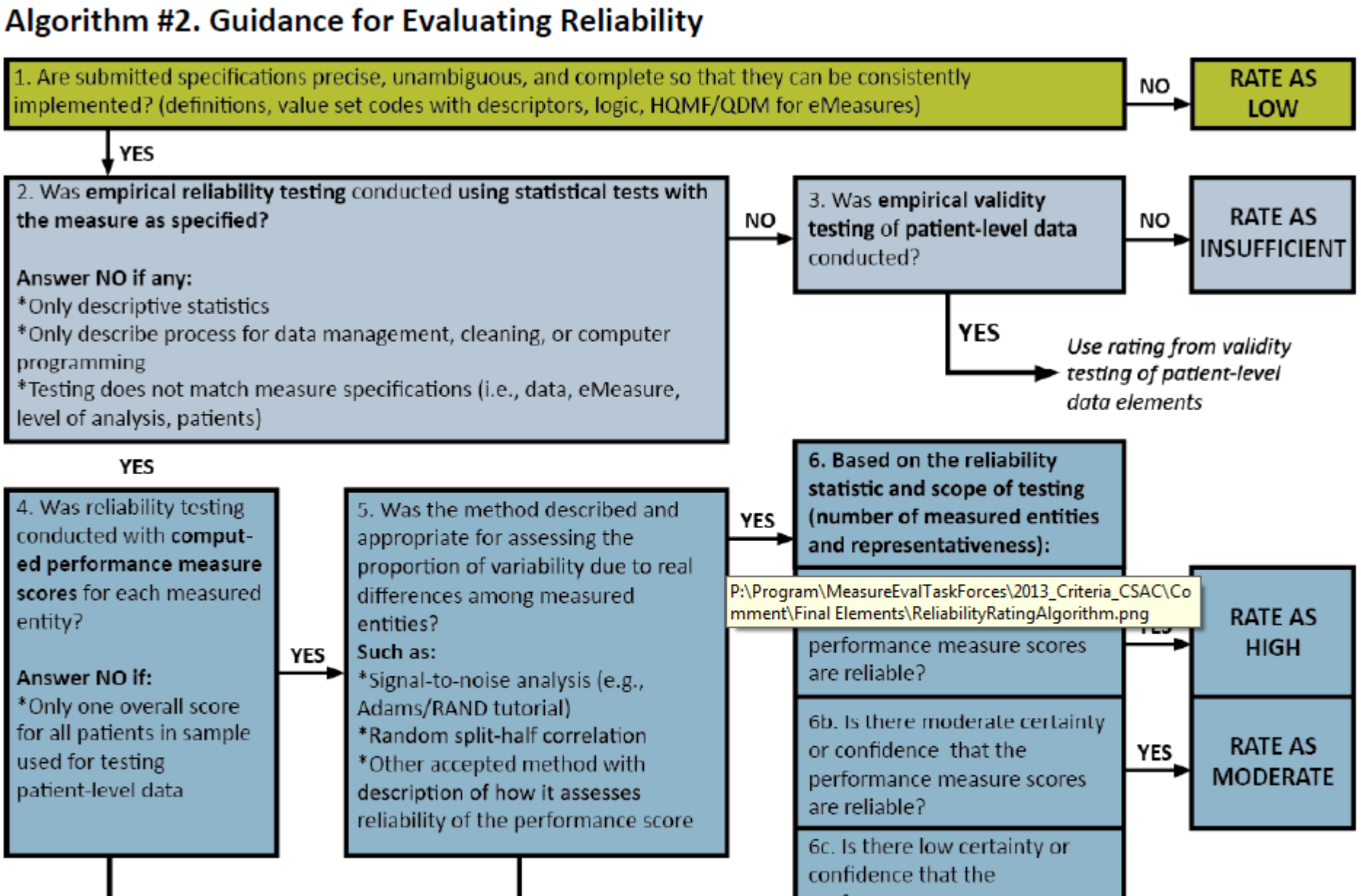
- Reliability of the ***measure score*** refers to the proportion of variation in the performance scores due to systematic differences across the measured entities in relation to random variation or noise (i.e., the precision of the measure).
  - *Example - Statistical analysis of sources of variation 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 – page 45

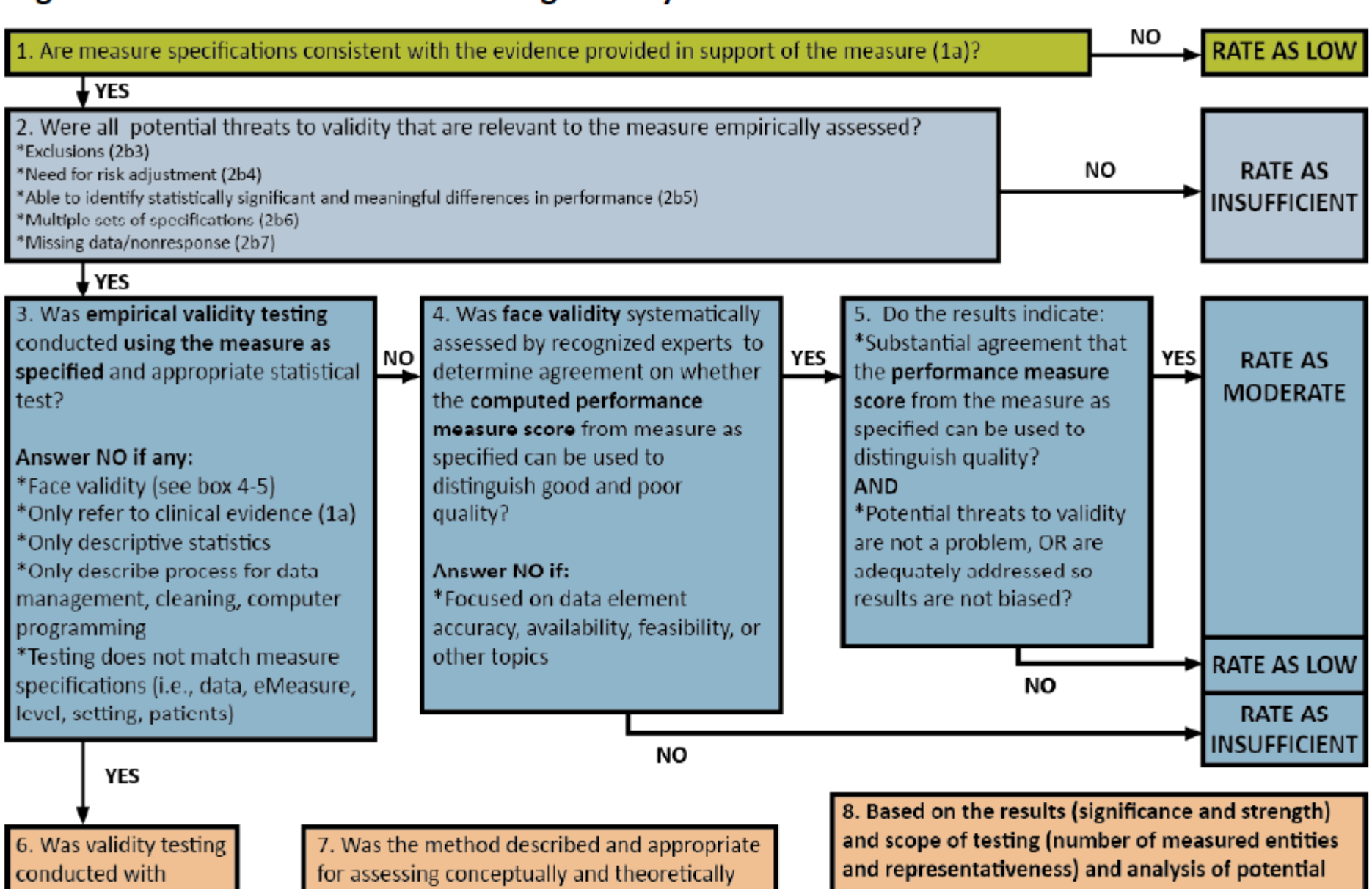
Rating Reliability: Algorithm #2 – page 45



Validity testing (pages 46 - 50)
Key points – page 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*

Rating Validity: Algorithm #3 – page 50



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 #3: Feasibility (page 51)
Key Points – page 52

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 (page 52)
Key Points – page 53

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.

4a: 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

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

4c: 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).

4d: Vetting by those being measured and 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.

Criterion #5: Related or Competing Measures (page 53-54)

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.

Evaluation process

- **Preliminary analysis**: To assist the Committee evaluation of each measure against the criteria, NQF staff will prepare a preliminary analysis of the measure submission and offer preliminary ratings for each of the criteria.
  - *These will be used as a starting point for the Committee discussion and evaluation*
- **Individual evaluation assignments:** Each Committee member will be assigned a subset of measures for in-depth evaluation.
  - *Those who are assigned measures will lead the discussion of their measures with the entire Committee*
- **Measure evaluation and recommendations at the in-person meeting:** The entire Committee will discuss and rate each measure against the evaluation criteria and make recommendations for endorsement.

Recommendation for Endorsement and Endorsement +

- The Committee votes on whether to recommend a measure for NQF endorsement.
- Staff will inform the Committee when a measure has met the criteria for possible "Endorsement +" designation:
  - *Meets evidence criteria without exception*
  - *Good results on reliability testing of the measure score*
  - *Good results on empirical validity testing of the measure score (not just face validity)*
  - *Well-vetted in real world settings by those being measured and others*
- Committee votes on recommending the "Endorsement +" designation, indicating that the measure exceeds NQF criteria in key areas.

Questions?

Scope of the SDS Trial Period

Newly-submitted measures

- **ALL measures submitted to NQF after April 15, 2015 will be considered part of the trial period**, and Standing Committees may consider whether such measures are appropriately adjusted for SDS factors as part of their evaluation.

Previously-endorsed measures

- **Measures undergoing endorsement maintenance review during the trial period** will also be considered "fair game" for consideration of SDS adjustment.
- Other paths for evaluation of SDS adjustment for endorsed measures:
  - *Ad hoc requests*
  - *Conditional endorsement (e.g., Readmissions, Cost & Resource Use)*

Standing Committee Evaluation

- The Standing Committee will be asked to consider the following questions:
  - *Is there a conceptual relationship between the SDS factor and the measure focus?*
  - *What are the patient-level sociodemographic variables that were available and analyzed during measure development?*
  - *Does empirical analysis (as provided by the measure developer) show that the SDS factor has a significant and unique effect on the outcome in question?*
  - *Does the reliability and validity testing match the final measure specifications?*

A more in-depth look: Conceptual Description

- The Standing Committee should review the information provided by developers and consider the following questions:
  - *Is there a conceptual relationship between the SDS factor(s) and the measure focus?*
  - *Is the SDS factor(s) present at the start of care?*
  - *Is the SDS factor(s) caused by the care being evaluated?*

A more in-depth look: Data and Variables

- The Standing Committee should review the patient-level sociodemographic variables that were available and analyzed during measure development
- The Standing Committee should consider the following questions:
  - *How well do the SDS variables that were available and analyzed align with the conceptual description provided?*
  - *Are these variables available and generally accessible for the measured patient population?*

A more in-depth look: Empirical Analysis

- The Standing Committee should examine the two sets of empirical analyses provided by the developer.
  - *First, review the analyses and interpretation of the importance of the SDS variables in their risk adjustment model*
  - *Second, for the trial period, the measure developer must report and compare performance scores with and without SDS factors in the risk adjustment model. Formal hypothesis testing is not required but there should be a discussion about whether the differences in the scores are substantial.*

Testing and Specifications for Stratification

- **T**he measure developer should provide updated reliability and validity testing of the measure as specified
- If a performance measure includes SDS variables in its risk adjustment model, the measure developer must provide the information required to stratify a clinically-adjusted-only version of the measure results by the relevant SDS variables.
- For more information, please see the project webpage: http://www.qualityforum.org/Risk_Adjustment_SES.aspx

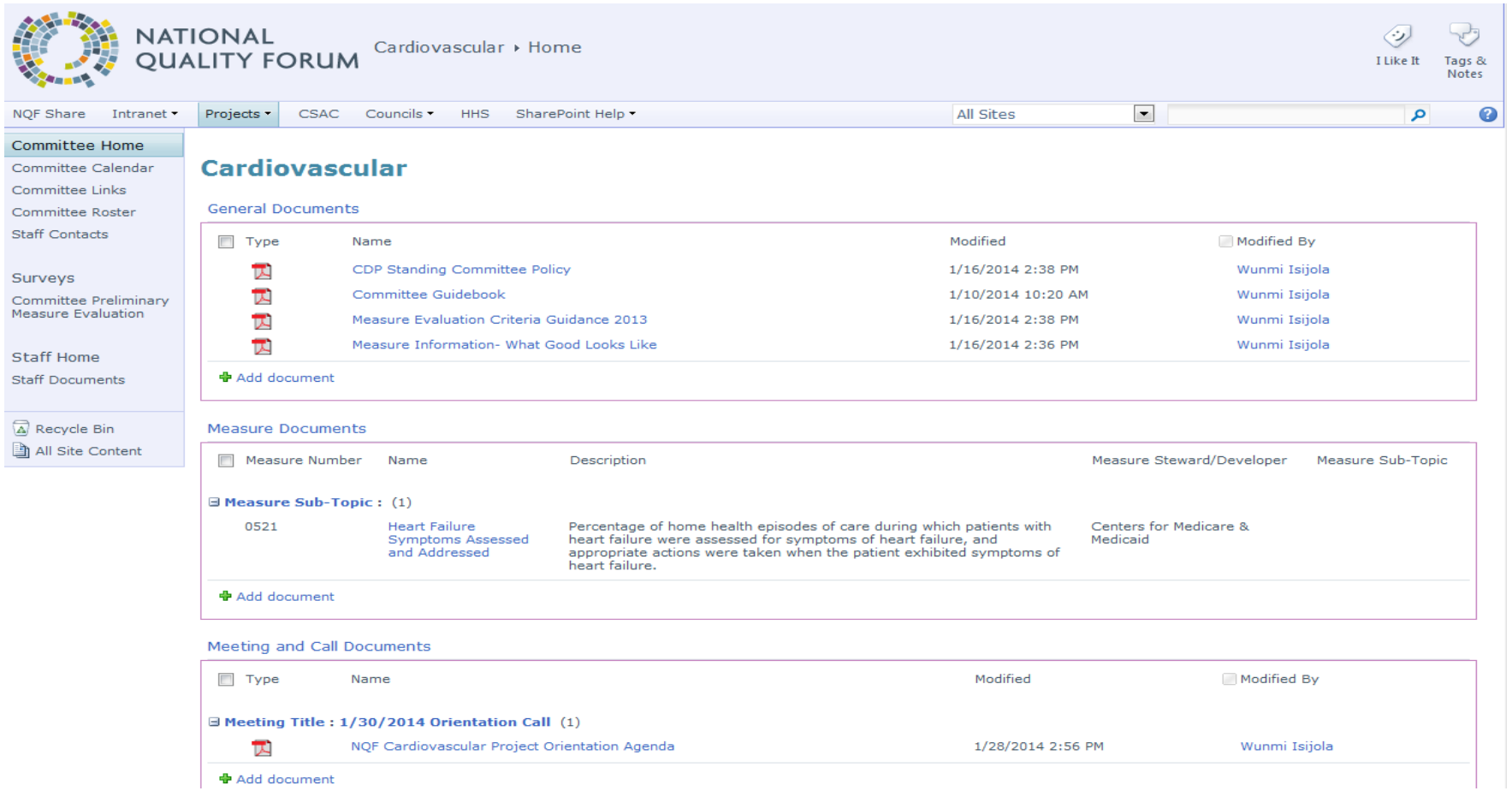
SharePoint Overview

SharePoint Overview

http://share.qualityforum.org/Projects/Pediatric/SitePages/Home.aspx

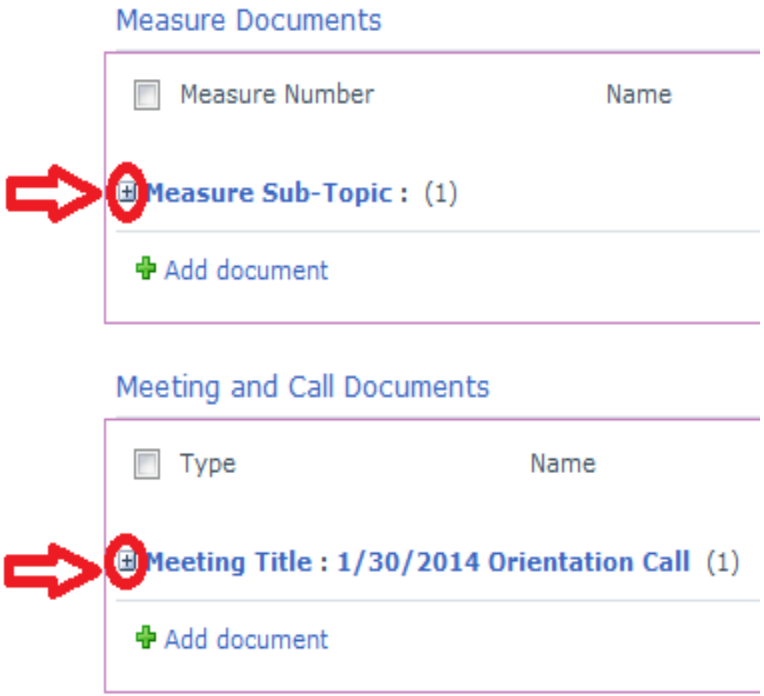
- Accessing SharePoint
- Standing Committee Policy
- Standing Committee Guidebook
- Measure Document Sets
- Meeting and Call Documents
- Committee Roster and Biographies
- Calendar of Meetings

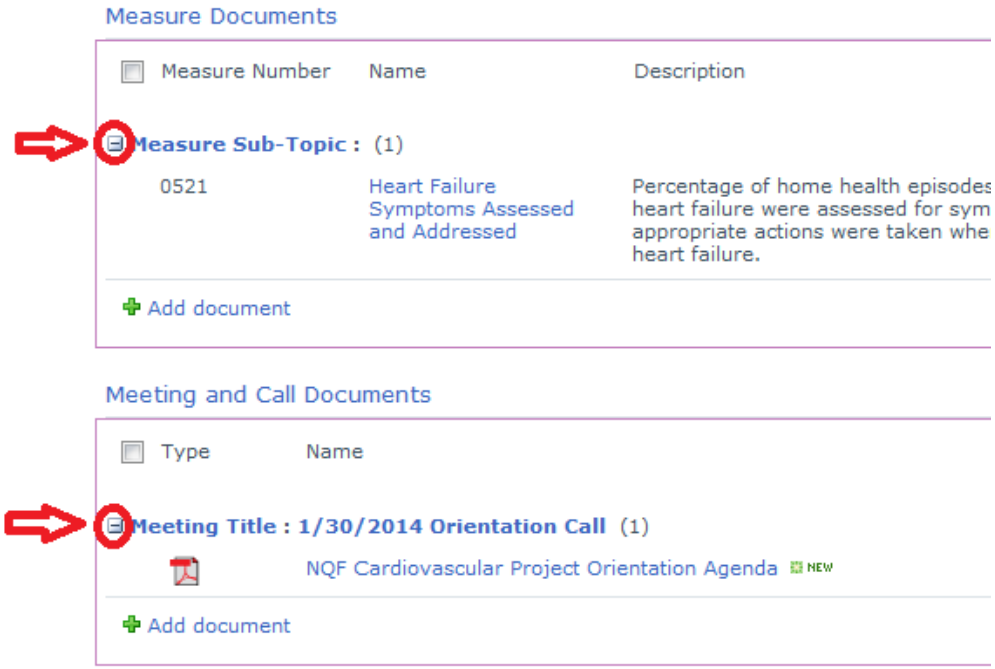
SharePoint Overview



SharePoint Overview

- Please keep in mind:
  - + and – signs :





Measure Worksheet and Measure Information

- Measure Worksheet
  - *Preliminary analysis and preliminary ratings*
  - *Pre-evaluation comments*
  - *Public pre-meeting comments*
  - *Information submitted by the developer*
    - » Evidence and testing attachments
    - » Spreadsheets
    - » Additional documents

Timeline

Meeting	Date/Time
Call for Nominations	*October 7 – November 7, 2016*
Call for Measures	*October 7 – December 7, 2016*
Pre-Meeting Comment Period	February 10 – 23, 2017
In-person Meeting	March 2, 2017
Comment Period	April 13 – May 12, 2017
NQF Member Vote	June 12 – 26, 2017
Consensus Standards Approval Committee	July 11 – 12, 2017
Appeals	July 17 – August 15, 2017

Next Steps

- Measures to Committee: February 10, 2017
- In-person Meeting (Washington, DC): March 2, 2017
- Post-Meeting Call: Friday, March 10, 2017
- Post-Comment Call: Wednesday, May 31, 2017

Project Contact Information

- Email: Pediatric Performance Measures PediatricPerformanceMeasures@qualityforum.org
- NQF Phone: 202-783-1300 (note–general NQF line)
- Project page: http://www.qualityforum.org/Pediatric_Project_2016-2017.aspx
- SharePoint site: http://share.qualityforum.org/Projects/Pediatric/SitePages/Home.aspx

Questions?