National Consensus Standards for Pulmonary and Critical Care Conditions

Standing Committee Orientation

Robyn Nishimi
Shaconna Gorham
Poonam Bal
Janine Amirault

NATIONAL QUALITY FORUM

Welcome and Introductions

Project Team

- Shaconna Gorham, MS, PMP
  - Senior Project Manager
- Poonam Bal, MHSA
  - Project Manager
- Janine Amirault
  - Project Analyst
- Robyn Y. Nishimi, PhD
  - Consultant

Standing Committee

Dale Bratzler, DO, MPH

Bruno DiGiovine, MD

Kim Elliott, PhD, CPH

William Brendle Glomb, MD

Stephen Grossbart, PhD

Edgar Jimenez, MD, FCCM

David Lang, MD

Richard Murray, MD

James O'Brien, MD, MS

Susan Pollart, MD

Crystal Riley, PharmD, MHA, MBA, CPHQ, CHPIT

David Stockwell, MD, MBA

Chana West, RN, MSN

Donald Yealy, MD, FACEP

Agenda for the Call

- Overview of NQF
- Overview of the Consensus Development Process
- Overview of NQF's portfolio of Pulmonary and Critical Care measures
- Review of project activities and timelines
- Roles of the Standing Committee, Co-Chairs, NQF staff
- Overview of NQF's measure evaluation criteria
- Overview of SDS Trial Period
- SharePoint Tutorial
- Next steps

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 United States 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**
  - 600+ NQF-endorsed measures across multiple clinical areas
  - 11 empaneled standing expert 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)

8 Steps for Measure Endorsement

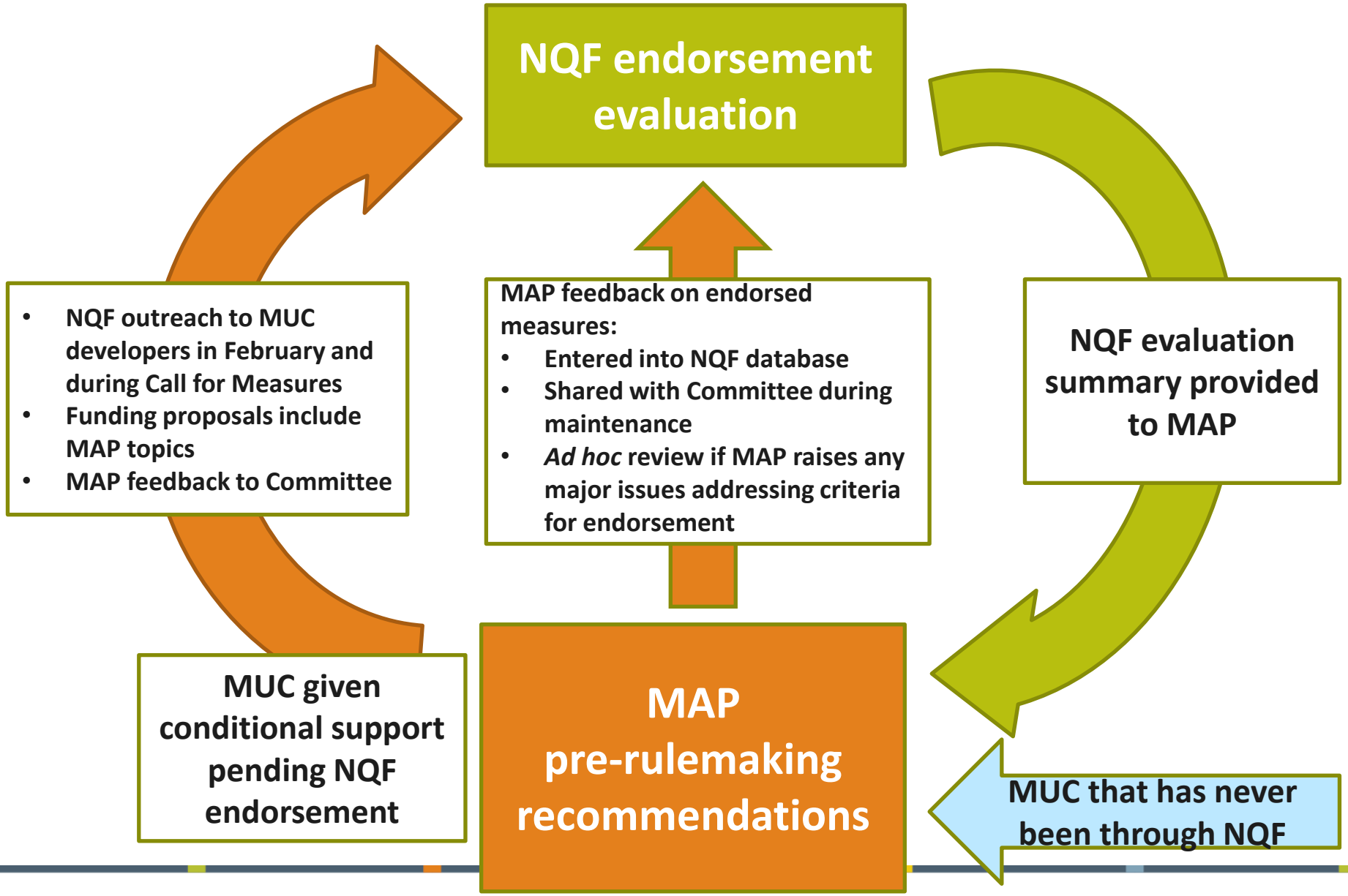
- Call for nominations for Standing Committee
- Call for candidate standards (measures)
- Candidate consensus standards review
- Public and member comment
- NQF member voting
- Consensus Standards Approval Committee (CSAC) decision
- Board ratification
- Appeals

Measure Applications 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



Pulmonary and Critical Care Portfolio of Measures

- This project will evaluate measures related to Pulmonary and Critical Care conditions that can be used for accountability and public reporting for all populations and in all settings of care. This project will address topic areas that include:
  - Asthma management
  - COPD mortality
  - Pneumonia management and mortality
  - Critical care mortality and length of stay
- NQF solicits new measures for possible endorsement
- NQF currently has more than 30 endorsed measures within the area of Pulmonary and Critical Care. Endorsed measures undergo periodic evaluation to maintain endorsement – “maintenance”.

Pulmonary and Critical Care Portfolio of NQF-endorsed measures *Measures for maintenance evaluation

ASTHMA

0283*	Asthma in Younger Adults Admission Rate (PQI 15)
0728-Reviewed in Health and Well Being Phase 1	Asthma Admission Rate (pediatric)
0047*	Asthma: Pharmacologic Therapy for Persistent Asthma
1799*	Medication Management for People with Asthma (MMA)
1800*	Asthma Medication Ratio (AMR)

ASTHMA/CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

0275*	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate (PQI 5)

Pulmonary and Critical Care Portfolio of NQF-endorsed measures *Measures for maintenance evaluation

CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

0091*	COPD: spirometry evaluation
0102*	COPD: inhaled bronchodilator therapy
0577*	Use of Spirometry Testing in the Assessment and Diagnosis of COPD
0700- To be reviewed in Person and Family Centered Care 2016-2017	Health-related Quality of Life in COPD patients before and after Pulmonary Rehabilitation
0701- Currently under review in Person and Family Centered Care 2015	Functional Capacity in COPD patients before and after Pulmonary Rehabilitation
1891- To be reviewed in Readmissions 2016-2017	Hospital 30-Day, All-Cause, Risk-Standardized Readmission Rate (RSRR) following Chronic Obstructive Pulmonary Disease (COPD) Hospitalization
1893*	Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) following Chronic Obstructive Pulmonary Disease (COPD) Hospitalization

Pulmonary and Critical Care Portfolio of NQF-endorsed measures *Measures for maintenance evaluation

PNEUMONIA

0231- To be reviewed in Health and Well Being 2016-2017	Pneumonia Mortality Rate (IQI #20)
0279*	Bacterial Pneumonia Admission Rate (PQI 11)
0468*	Hospital 30-day, all-cause, risk-standardized mortality rate (RSMR) following pneumonia hospitalization
0506- To be reviewed in Readmissions 2016-2017	Hospital 30-day, all-cause, risk-standardized readmission rate (RSRR) following pneumonia hospitalization
0708*	Proportion of Patients Hospitalized with Pneumonia that have a Potentially Avoidable Complication (during the Index Stay or in the 30-day Post-Discharge Period)

IMAGING

0513*	Thorax CT: Use of Contrast Material

Pulmonary and Critical Care Portfolio of NQF-endorsed measures *Measures for maintenance evaluation

CRITICAL CARE

0334*	PICU Severity-adjusted Length of Stay
0335*	PICU Unplanned Readmission Rate
0343*	PICU Standardized Mortality Ratio
0702*	Intensive Care Unit (ICU) Length-of-Stay (LOS)
0703*	Intensive Care: In-hospital mortality rate

New Measures (Not Yet Endorsed)

2794	Rate of Emergency Department Visit Use for Children Managed for Identifiable Asthma: A PQMP Measure
2816	Appropriateness of Emergency Department Visits for Children and Adolescents with Identifiable Asthma: A PQMP Measure
2852	Optimal Asthma Control
2856	Pharmacotherapy Management of COPD Exacerbation

Activities and Timeline

***All times ET**

Meeting	Date/Time
Orientation Call	February 3, 2016, 1:00-3:00 PM ET
Measure Evaluation Q & A Calls *(you can choose which one of these to attend; the same material is covered on both)*	February 16, 2016, 12:00-2:00 PM ET February 18, 2016, 1:00-3:00PM ET
Workgroup Calls *(you will be assigned to one of these four calls)*	March 1, 2016, 12:00-2:00 PM ET March 3, 2016, 1:00-3:00 PM ET March 8, 2016, 12:00-2:00 PM ET March 10, 2016, 1:00-3:00 PM ET
In-Person Meeting (2 days in Washington, D.C.)	March 15-March 16, 2016
Post-Meeting Conference Call	March 22, 2016, 12:00-2:00 PM ET
Post Draft Report Comment Call	June 13, 2016, 1:00-3:00 PM ET

Role of the Standing Committee Members

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 Members

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 Pulmonary and Critical Care 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 (CDP):**
  - 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 among 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

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 32)

- **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**: 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 36-38)

1. **Importance to measure and report -** Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare 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 (pages 41-42)

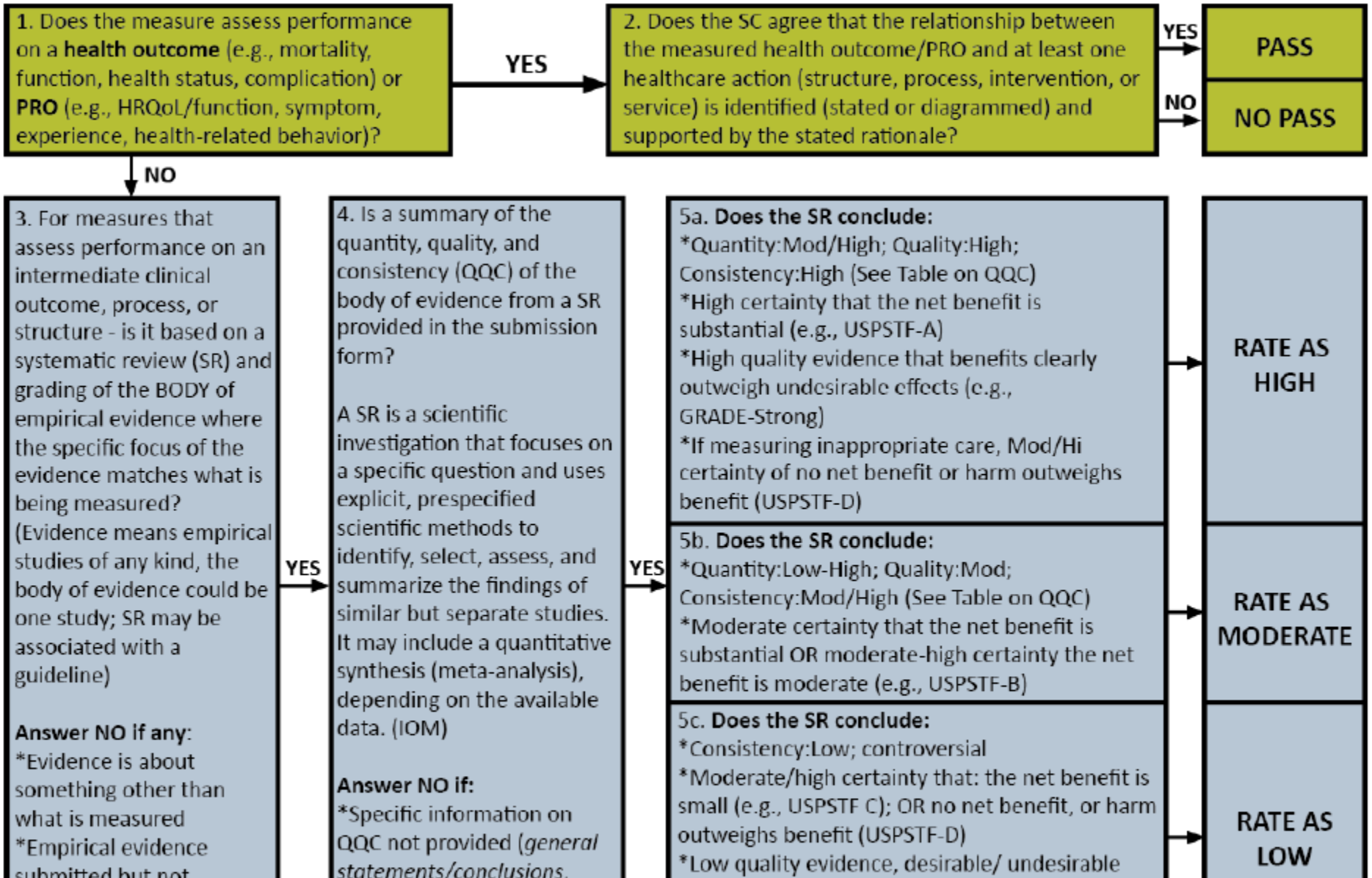
   1c. Quality construct and rationale (composite measures only)

Subcriteron 1a: Evidence (page 36-37)

- Outcome measures
  - A rationale (which often includes evidence) for how the outcome is influenced by healthcare processes or structures.
- 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
    - » Empiric 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 38

Algorithm #1. Guidance for Evaluating the Clinical Evidence



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 (page 43 -46)

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)**

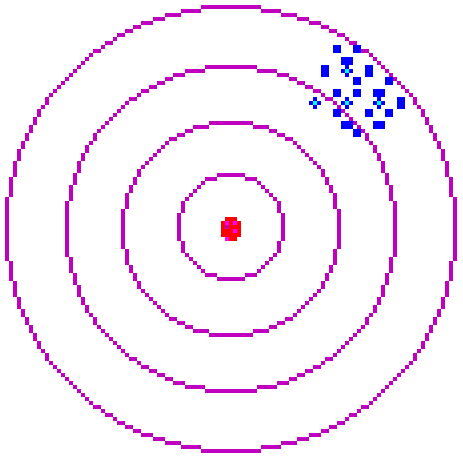
- 2a1. Precise specifications including exclusions
- 2a2. Reliability testing—data elements or measure score

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

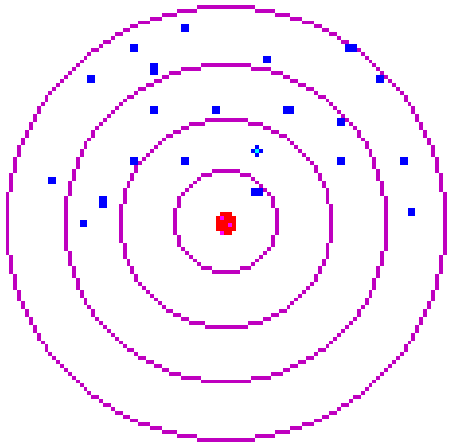
Reliability and Validity (page 45)

Assume the center of the target is the true score…



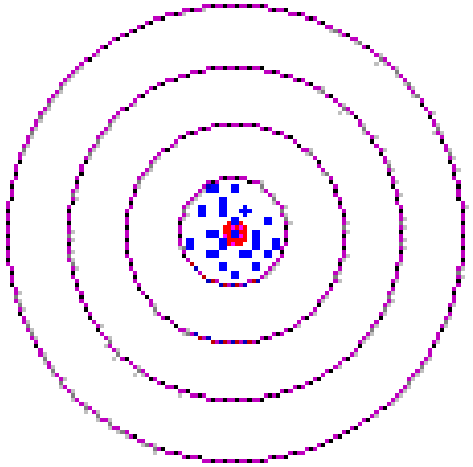
Reliable Not Valid

Consistent, but wrong



Neither Reliable Nor Valid

Inconsistent & wrong



Both Reliable And Valid

Consistent & correct

Measure Testing – Key Points (page 46)

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 46)
Key points - page 47

- 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)

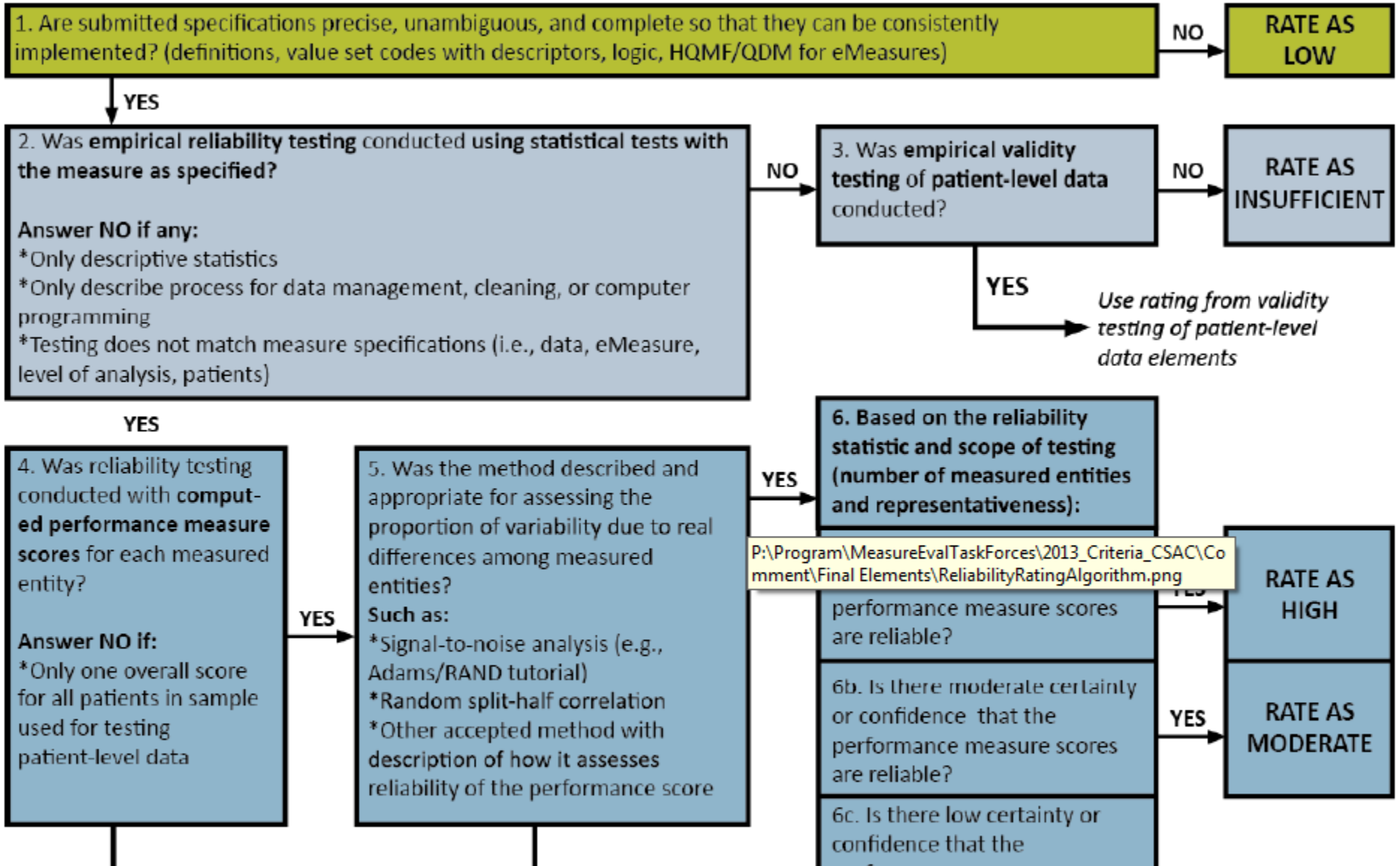
- Reliability of the ***data elements*** refers to the repeatability/reproducibility of the data and uses patient-level data
  - Example –inter-rater reliability

- 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 48

Rating Reliability: Algorithm #2 – page 48

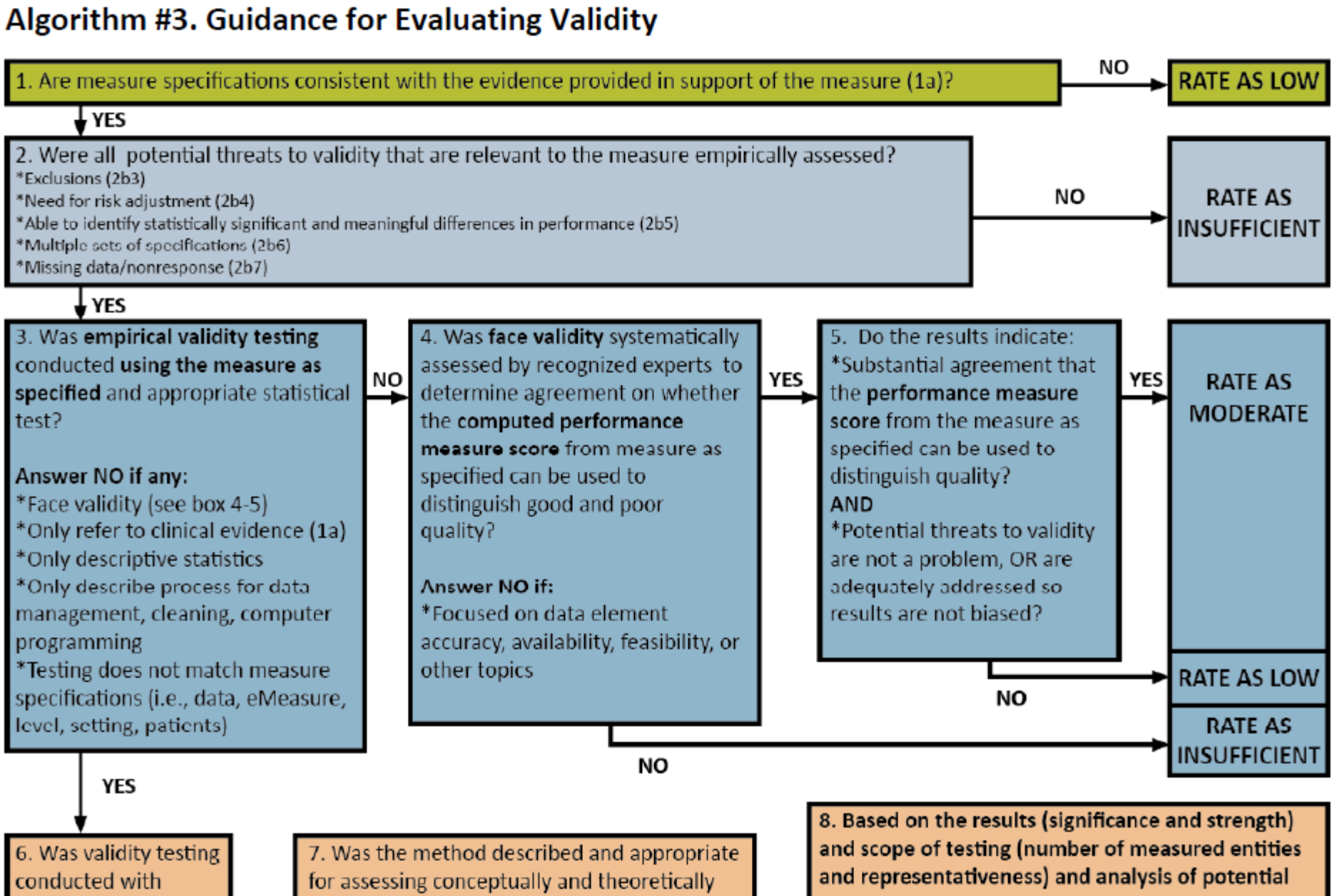
Algorithm #2. Guidance for Evaluating Reliability



Validity testing (pages 49 - 50) Key points – page 51

- **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 score appears to reflect quality of care

Rating Validity: Algorithm #3 – page 52



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 for SDS Trial Period

Criterion #3: Feasibility (page 53)
Key Points – page 54

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 54) Key Points – page 55

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).

Criteria #3-4: Feasibility and Usability and Use

New measures	Maintenance measures
Feasibility	
• Measure feasible, including eMeasure feasibility assessment	NO DIFFERENCE: Implementation issues may be more prominent
Usability and Use	
• 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 (page 55-56)

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 (PA) of the measure submission.
  - The PA should be used as a starting point for the Committee's discussion and evaluation
- **Individual evaluation assignments:** Each Committee member will be assigned a subset of measures for in-depth evaluation.
  - Discussion of each measure is initiated by the subgroup who did the in-depth evaluation, but the entire Committee is expected to participate in decision making

Evaluation process (continued)

- **Workgroup calls for new Committees:** To assist Committee members with their first evaluations, Committee members and measures will be divided into groups for preliminary calls to discuss measures and share initial thoughts
  - Ensures initial familiarity with measures
  - Allows "practice" with NQF criteria and processes
  - Gives early feedback to developers of Committee questions or concerns
- **Measure evaluation and recommendations at the in-person meeting:** The entire Committee will discuss and rate each measure against the criteria and make recommendations for endorsement.

Questions?

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SDS Trial Period Overview

Background

- NQF convened an **SDS Expert Panel** to consider if, when, and how outcome performance measures should be adjusted for socioeconomic status (SDS) or related demographic factors
- There are at least two diverging perspectives on SDS adjustment:
  - Adjusting for sociodemographic factors will mask disparities
  - Adjusting for sociodemographic factors is necessary to avoid making incorrect inferences in the context of comparative performance assessment
- The Panel recommended, and the NQF Board approved, a **two-year trial period** during which adjustment of measures for SDS factors will no longer be prohibited

Background

- Each measure must be assessed individually to determine if SDS adjustment is appropriate
  - Not all outcomes should be adjusted for SDS factors (e.g., central line infection would not be adjusted)
  - Need conceptual basis (logical rationale, theory) and empirical evidence
- Efforts to implement SDS adjustment may be constrained by data limitations and data collection burden

Scope

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** also will 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)

SDS Trial Period Evaluation Process

- The Standing Committee will continue to evaluate the measure as a whole, including the appropriateness of the risk adjustment approach used by the measure developer
- The Standing Committee will continue to use the validity criterion to evaluate the appropriateness of the sociodemographic factors, as well as the clinical factors, used in the risk adjustment model
- NQF staff has completed preliminary analyses of the measures submitted in this project and will identify areas where the Committee should focus to ensure requirements under the NQF SDS trial period have been met

Standing Committee Evaluation

- The Standing Committee will be asked to consider the following questions:
  - Is there a conceptual relationship between the SDS factor(s) 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(s) 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 the 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

- The 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

Questions?

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SharePoint Overview

http://share.qualityforum.org/Projects/Pulmonary%20and%20Critical%20Care%202015/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

Measure Worksheet and Measure Information

- Measure Worksheet
  - Preliminary analysis
  - Pre-evaluation comments
  - Public comments
  - Information submitted by the developer
    - Evidence and testing attachments
    - Spreadsheets
    - Additional documents

Next Steps

- Measure Evaluation Q&A Calls
  - February 16, 2016 at 12:00-2:00 PM ET **or**
  - February 18, 2016 at 1:00-3:00PM ET
- Work Group calls
  - March 1, 2016 at 12:00-2:00 PM ET
  - March 3, 2016 at 1:00-3:00 PM ET
  - March 8, 2016 at 12:00-2:00 PM ET
  - March 10, 2016 at 1:00-3:00 PM ET
- In-Person Meeting
  - Tuesday, March 15 - Wednesday, March 16, 2016

Project Contact Info

- Email: pulmonary@qualityforum.org
- NQF Phone: 202-783-1300
- Project page:

http://www.qualityforum.org/Pulmonary_and_Critical_Care_Project.aspx

- SharePoint site:
- http://share.qualityforum.org/Projects/Pulmonary%20and%20Critical%20Care%202015/SitePages/Home.aspx

Questions?

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