Composite Measure Evaluation Guidance In-Person Meeting

November 2, 2012

NATIONAL QUALITY FORUM

Welcome and Introductions

Overview and Context

Purpose of Meeting

Main Goal of Project: To update NQF's guidance on evaluating composite performance measures for potential NQF endorsement

- Identify appropriate evaluation methods for various types of composite performance measures.
- Identify any unique considerations for evaluating composite performance measures in relation to NQF's endorsement criteria.
- Develop guidance for evaluating and submitting composite performance measures for NQF endorsement.

Resources

- Meeting agenda
- Briefing memo
- NQF Measure Evaluation Criteria
- Composite criteria
- Composite submission form

Context

- All NQF-endorsed measures are considered suitable both for performance improvement and accountability
  - NQF does not currently endorse performance measures for specific accountability applications
- The term “composite measure” may refer to scales or instruments to assess individuals (e.g., PHQ-9, CAHPS) or to performance measures used to assess healthcare providers
  - NQF endorses only performance measures
  - It does not endorse the instruments and scales used with individuals (see PRO project)

NQF Experience with Composite Performance Measures

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- 2007-Present
  - 28 submitted measures flagged as composites
    - 22 currently endorsed
      - 3 all-or-none
      - 6 based on CAHPS
      - 5 based on other surveys/instruments
      - 8 combinations of individual performance measures
- Some have been through endorsement maintenance
- Limited systematic information on impact of composite measures (*updated Usability and Use criteria information to follow*)

Issues (1)

- Distinguishing between instrument-level composites vs. performance measure composites
- Inconsistent implementation of guidance and forms
  - All-or-none did not seem to fit the additional analyses indicated for composites
  - Some developers did not identify measures as composites
  - Composite form only recently implemented for online submission

Issues (2)

- Difficulty applying requirement that individual component performance measures be NQF-endorsed or meet all criteria
  - How to apply to all-or-none?
- Difficult to interpret “not important enough as an individual measure” (some have interpreted as not needing to meet Importance criteria of evidence, impact, performance gap)
- Evaluation of components challenging
  - Not endorsed as stand-alone measures
  - Competing with endorsed measures
  - Not harmonized to endorsed stand-alone measures

Examples: Issues with Components

- **30-Day Post-Hospital Discharge Care Transition Composites**
  - 30-day readmission (previously endorsed); emergency department visit (endorsed in composite only); E&M visit (endorsed in composite only)
- **Optimal Vascular Care (#0076)**
  - LDL less than 100, blood Pressure less than 140/90, tobacco-Free Status, daily aspirin use (unless contraindicated)
- **Patient Safety for Selected Indicators (#0531)**
  - Iatrogenic pneumothorax (0346); postoperative DVT or PE (0450); postoperative wound dehiscence (0368); decubitus ulcer (not endorsed); selected infections due to medical care (not endorsed); postoperative hip fracture (not endorsed); postoperative sepsis (not endorsed)

Issues (3)

- Evidence for each component
  - Might not meet updated guidance on evaluating evidence
  - Even if component measures were previously endorsed, it
  - would depend on when it was endorsed
- The purpose and quality construct for the composite often not adequately explained beyond description of component measures
- Submitted composite measure specifications insufficient
  - Incomplete
  - Difficult to understand
  - Difficult to evaluate the analyses

Six Composites Not Endorsed

- Lack of variability and overall high performance on the composite performance score
- Lack of evidence supporting the components of an all-or-none measure
- Withdrawn from consideration by the measure steward
- Component performance measures were not endorsed and did not meet criteria
- Composite measures included some component performance measures that lost endorsement and/or missing data had a substantial impact
- Some components that were more representative of quality of care were not included in composite measure

Questions??

Guided Panel Discussion

Guided Discussion Questions (1)

- Does the conceptual model for a composite performance measure dictate measure construction and methods of evaluation, and if so, how?
- What are the primary issues regarding selection of component performance measures and their conceptual relationships that need to be addressed?
- Should we continue to endorse measures that contain measures that are OK only within composite?
- If reliability and validity of the final composite performance measure score is adequately demonstrated, are additional analyses of the components and structure of the composite necessary?

Guided Discussion Questions (2)

- Can analyses such as factor analysis and internal consistency reliability be applied when the unit of analysis is providers (vs. people) and the data are performance measure scores (vs. item responses)?
- If a composite performance measure does not fit either of the main conceptual approaches delineated in Table 1, what is appropriate justification? (e.g., composite just includes what's available: the component performance measures are not correlated and also do not cover the scope of the quality construct)
- What is the conceptual model for composite performance measures with a main purpose to increase reliability?
- Does the principle of increased reliability with increased number of items hold for all-or-none measures when components are reduced to one data point?

Appropriate Methods of Evaluating Various Types of Composites

Applying NQF Measure Evaluation Criteria to Composite Performance Measures

Measure Submission Form: Review and Evaluation

Taxonomy

Next Steps

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- Conference call: November 15th
- Draft report released for 30-day comment: November 28
- CSAC review of draft report for comment: December 10
- Conference call to adjudicate comments: January 3
- CSAC review of final recommendations: January 8
- Board Ratification