Measure Developers' Webinar

May 20, 2013



### Agenda

- Overview of Updates to Measure Submission Form
- e-Measure Submission Testing
- Endorsement Maintenance Project Updates



# Measure Submission Form Updates



## Added Specificity for Composite Questions

- 1d.2 Describe the quality construct including: 1) the overall area of quality; 2) included component measures; and 3) the relationship of the component measures to the overall composite and to each other.
- 1d.3 Describe the rationale for constructing a composite measure, including how the composite provides a distinctive or additive value over the component measures individually.
- 1d.4 Describe how the aggregation and weighting of the component measures are consistent with the stated quality construct and rationale.

## Added Specificity for "Importance" Questions

- 1b.1 –Briefly explain the rationale for this measure (e.g., the benefits or improvements in quality envisioned by use of this measure) If a COMPOSITE (e.g., combination of component measure scores, all-ornone, any-or-none), SKIP this question and answer the composite questions.
- 1b.2 –Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. (This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (3b) under Usability and Use.

## Added Specificity for "Importance" Questions (cont.)

- 1b.3 –If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.
- **1b.4** –Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. (This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (3b) under Usability and Use.

## Added Specificity for "Importance" Questions (cont.)

 1b.5 –If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.

## Change in Language for Questions

- De.3 Specifications IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?
- S.2a HQMF If this is an eMeasure, HQMF specifications must be attached. Attach the output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)
- S.2b Data Dictionary/Code -Data dictionary, code table, or value sets (and risk model codes and coefficients when applicable) must be attached. (Excel or CSV file in the suggested format preferred - if not, contact staff)

### Change in Language for Questions (cont.)

- 2a1.2 Numerator Time Window
   — Time Period for Data (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)
- 2a1.14 Measure Specifications- Detailed risk model specifications must be in attached data dictionary/code list Excel or CSV file. Also indicate if available at measure-specific URL identified in S.1.Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or CSV file with data dictionary/code lists at S.2.

eMeasure Testing Measure Developer Webinar May 20, 2013

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# Background for Discussion eMeasure Testing

- NQF policies on eMeasures have been evolving and NQF needs to provide clear guidance to developers and steering committees on expectations for testing of eMeasures for upcoming endorsement projects
- NQF also will be reviewing, and clarifying as needed, the measure testing requirements for any type of measure (including eMeasures) in 2013
- Implementation issues were identified with retooled measures that were not tested with the eMeasure specifications
  - New requirements to assess feasibility during development and provide feasibility scorecard results, but does not replace reliability/validity testing



#### eMeasure

- Based on HL7 definition, to be considered an eMeasure, it
   *must be specified in HQMF format* and use the Quality Data
   Model (QDM)
  - HQMF and QDM may not support all measures (e.g., risk model for outcomes, composite performance measures)
  - Using the MAT ensures it uses QDM and is in HQMF format

### NQF Endorsement

All measures (including eMeasures):

- Are subject to meeting the <u>criteria</u> that are current at the time of initial submission or endorsement maintenance
- Must be tested for reliability and validity as well as other aspects under validity (exclusions, risk adjustment, identification of meaningful differences, comparability of multiple sets of specifications)
- Must be tested using the specifications and data source(s) for which they are specified (e.g., HQMF/XML and EHRs)

# NQF Testing Requirements for Any Performance Measure

NQF allows testing for reliability and validity at level of data elements or performance measure score

- Level of data element
  - All critical data elements those elements that contribute most to the computed measure score (i.e., account for identifying the greatest proportion of the target condition, event, or outcome being measured; target population; exclusions; risk factors with largest contribution to variability in a measured outcome
  - Reliability (repeatability, reproducibility) at level of data elements is assumed with computer programming
  - Data element validity assesses whether the data used by applying the eMeasure are correct (can also satisfy data element reliability)
  - Prior evidence of data element validity can be submitted

#### Testing, cont.

- Level of performance score
  - Reliability of the performance measure score assesses the ability to differentiate among those being measured (signal vs. noise) and requires analysis of computed scores for a sufficient number of providers
  - Validity of the performance measure score assesses whether the conclusions about quality based on the score are correct (face validity only at this level)
- All Other testing related to validity also applies to eMeasures
  - Exclusions, risk adjustment for outcomes/resource use, meaningful differences in performance, comparability if specified for multiple data sources (or submitted as separate measures)

#### eMeasure Testing

- At this time, testing of eMeasures may be best accomplished by focusing on data element validity - all critical data elements
  - data element validity also can satisfy data element reliability
  - may be the only viable option when testing is limited to a limited number of sites (unable to test at score level)
- Two options have been identified
  - Analyze agreement between data elements obtained using the eMeasure specifications and those obtained through abstraction via visual inspection of the **entire electronic record** (as the authoritative source) using statistical analysis such as sensitivity and specificity
  - Assess agreement between data elements obtained using the eMeasure specifications and a simulated data set (as the authoritative source) where the values of all data elements are known in advance
- Multiple sites and more than 1 EHR system strongly recommended
- Use the eMeasure specifications (i.e., HQMF) with the specified data source (e.g., EHRs)

#### eMeasure Testing

- All eMeasures must be tested using the eMeasure specifications with the specified data source (e.g., EHRs)
  - New (de novo) eMeasures
  - Previously endorsed measures re-specified (retooled) as eMeasures but without testing using the eMeasure specifications
  - Previously endorsed measures with first time eMeasure specifications

### **Discussion** Questions

How do you accomplish testing using the actual eMeasure specifications (HQMF) with EHRs?

- Number of sites, number of EHR systems
- Is a simulated data set a viable option for testing (need to create test patients) – why or why not?
- What is your experience with other approaches to validity or reliability testing?
- Was anyone planning to submit eMeasures without testing?
- Feasibility assessment approved by the CSAC and Board in April 2013
  - Submission form will have a place to attach
  - Are you currently doing feasibility assessments, ready to submit?

Endorsement Maintenance Updates

