TO: Consensus Standards Approval Committee (CSAC)

FR: Reva Winkler, Kathryn Streeter

RE: eMeasure Feasibility Assessment Project – Comments Received

DA: March 15, 2013

The CSAC will review recommendations from the *eMeasure Feasibility Assessment* project at its March 20-21 meeting.

This memo includes a summary of the project, recommendations and themes identified from and responses to the public and NQF Member comments.

The draft report was posted for a 30-day comment period from January 22 through February 20, 2013. There is no voting. The recommendations need to be approved by the CSAC, HITAC and the Board.

Accompanying this memo are the following documents:

1. **eMeasure Feasibility Assessment Draft Report**. The draft report has been updated to reflect the changes made following the Technical Expert Panel (TEP) discussion of public and member comments. The draft report posted for comment and supplemental materials are available on the project page.
2. **Comment table**. The comment table will be posted on SharePoint. The table lists 91 comments received and the NQF/TEP responses.

CSAC ACTION REQUIRED

- Approve report and recommendations
- Follow-up on recommendations that require CSAC action

BACKGROUND

As quality measurement shifts to measures derived from electronic health records (EHRs), additional clarity about the testing is needed to assure that eMeasures can be used for a range of accountability applications, which require both precision and results that are reliable and valid. While the concepts of reliability and validity apply equally to measures derived from EHRs, the electronic health record presents additional challenges related to measure testing: widespread EHR data are not yet available for measure development and testing; there is a lack of comparability across vendor products; data elements needed for advanced measures currently may not be feasible to capture in EHRs; and provider-level variability in capture of needed data elements is likely.

Realizing the promise of EHRs as a tool for quality reporting will rest on the ability of providers, payers, certifiers, vendors and other users of the information to know that eMeasures provide valid and reliable data. During the public and member comment for the National Quality Forum's (NQF) eMeasure Review and Testing Proposal in early 2012, several organizations expressed support that eMeasure testing should incorporate the feasibility and clinical workflow requirements of data capture for the data

elements utilized in addition to reliability and validity testing. This requirement is significantly hampered by the lack of clarity and definition in the field as to what constitutes feasibility assessment for EHRs.

The purpose of the eMeasure Feasibility Assessment project was to assess the current state of feasibility assessment for new and retooled eMeasures and identify a set of principles and criteria for adequate feasibility assessment. NQF convened a 15-member Technical Expert Panel (TEP) comprised of eMeasure developers, experts in eMeasure development and testing, EHR vendors, and eMeasure users and implementers to achieve the following goals of the project:

- conduct an environmental scan of approaches to feasibility assessment from measure developers, government contractors and EHR vendors to gather the current approaches used to assess eMeasure feasibility; and
- review results of environmental scan and propose a set of feasibility recommendations, including a starter set of criteria for eMeasure feasibility assessment that will address the following considerations:
    - the timing of feasibility assessment in the course of eMeasure development (e.g., iterative testing with development, feasibility testing of fully specified eMeasures);
    - the potential differences in feasibility assessment requirements for de novo (new) eMeasures and re-specified eMeasures;
    - the number and diversity of EHRs used for testing and relation to comparability across EHRs in terms of data feasibility, validity, and reliability; and
    - the interrelationship of feasibility and validity testing of new measures.

DRAFT REPORT

Goals of eMeasure Feasibility Assessment

The TEP identified the following goals for eMeasure feasibility Assessment:

- to provide a uniform approach to assessment of feasibility that enables communication among stakeholders to understand the degree to which an eMeasure is feasible for use;
- to discover issues with feasibility early in the development process so that alternatives may be considered by developers;
- to conserve eMeasure development resources by identifying feasibility issues early in development prior to formal testing;
- to advise stakeholders if feasibility issues have been identified to fully inform future eMeasure users;
- to promote more rapid evolution in EHR functionality for current measures as well as to build the capability for more complex, EHR enabled eMeasures in the future; and
- to further define NQF criteria for feasible as applied to eMeasures.

Overarching Principles

The following key principles guided the TEP's recommendations for eMeasure feasibility assessment:

- There is a spectrum of eMeasure feasibility that depends on the maturity of EHR systems and the context for the eMeasure implementation. Until agreement is reached that everyone must achieve the same level of interconnection and maturity, feasibility will be variable across all EHR implementations.
- The feasibility assessment is different than reliability and validity testing of an eMeasure, and there are several domains in which feasibility should be assessed: data availability, data accuracy, data standards, and clinical workflow.
- The balance between feasibility and validity and reliability and the usefulness of the measure for care improvement is critical. The value of an eMeasure reflects a balance between the quality improvement potential in the eMeasure and the feasibility, including costs.
- Feasibility assessment should not restrict the development of new quality measures that capitalize on the features of EHRs or address important areas of measures such as care coordination and patient reported outcomes that may be challenging at the present time.
- Collaborative measure development efforts should seek out innovation in the field and learn from high quality organizations.

Recommendations

Recommendation 1: Assess feasibility throughout eMeasure development. Feasibility should be considered early in the eMeasure development process and assessed throughout the entire duration of eMeasure development as an agile, iterative process. Greater collaboration among measure developers, EHR vendors, terminology specialists, and providers is recommended at all stages of development.

Recommendation 2: Framework for eMeasure feasibility assessment. A framework for assessing eMeasure feasibility would provide a common language and provide decision-makers with valuable information about the technical feasibility of eMeasures. Assessment of the feasibility of data elements while a measure is being conceptualized and specified can identify significant feasibility issues before the eMeasure is field tested.

2.1 Data element feasibility assessment. A feasibility assessment of the data elements should address the following characteristics:

- Data availability: the extent to which the data are readily available in a structured format in the EHR
- Data accuracy: the extent to which the information in the data is correct.
- Data standards**:** the extent to which the data element is coded using a nationally accepted terminology standard.

- Workflow**:** the extent to which capturing the data element fits the typical workflow for that user.

Data element feasibility scorecard. A standard score card for assessing feasibility of data elements can provide basic uniform information about feasibility of the data elements in an eMeasure. The recommended scorecard is intended as a screening tool to identify feasibility concerns early in measure development. The assessment should be a collaborative effort of measure developers, EHR vendors, and providers.

2.2 eMeasure feasibility assessment. Feasibility is not solely about the data elements. The measure specifications and the calculation logic are important to understanding the intent of the measure and the context for each data element within the logic.

Recommendation 3: Validating the data element feasibility scoring. The proposed data element feasibility scoring system must be validated which is outside the scope of this project. The scoring system should be piloted by several measure developer/EHR vendor/provider collaboratives and the results provided within 6-12 months.

Recommendation 4: Data element feasibility catalogue/repository. In order to leverage the work of others and avoid duplication of efforts, the results of the data feasibility assessments should be catalogued in a repository available to all stakeholders and reviewed annually.

Recommendation 5. NQF evaluation for endorsement. The results of the feasibility assessment(s) conducted during measure development would provide useful information to address NQF's endorsement criteria and sub-criteria, particularly in the areas of Scientific and Feasibility.

Criterion 2: Scientific Acceptability

Computers require greater precision in data collection for eMeasures compared to human abstractors.

2a.1 Precise specifications.

- Add "eMeasures should be submitted in Health Quality Measures Format (HQMF). Some types of eMeasures, such as composites, may require information in addition to the HQMF or whenever a measure is not adequately supported by HQMF."
- Revise note 9: "EHR measure specifications include data type from the QDM*, including value sets and attributes*, code lists, EHR field, measure logic, original source of the data, recorder, and setting."

Criterion 3: Feasibility

The NQF feasibility criterion is not a "must pass" criterion. The ratings of high-medium-low feasibility reflect the degree to which a measure is feasible. There is no threshold for pass/fail.

The TEP recommends these modified criteria when considering an eMeasure for NQF endorsement:

- The description of the feasibility criteria is better expressed by ""extent to *which specifications and logic require data that* are readily available or could be captured without undue burden and can be implemented for performance measurement."

- The results of the eMeasure feasibility assessment using the recommended scorecards will be included in the measure submission to NQF for consideration of endorsement. An equivalent, fully transparent alternative assessment that addresses the characteristics of eMeasure feasibility outlined in this report may be acceptable. The feasibility assessment information will include at a minimum:
    - a description of the assessment;
    - feasibility scores for all data elements; and
    - explanatory notes for all data element components scoring a "1" with plans for addressing the feasibility concerns.

- A formal analysis of missing data for all data elements should be included as a sub-criterion under Feasibility for eMeasures. The analysis for missing data may use data profiling by EHR vendors and current installations or from data generated during formal testing for reliability and validity. The number of EHR systems and provider/sites analyzed must be reported.

Recommendation 6: Composite measures. The proposed data element feasibility scorecard will assist development of composite measures by assessing the feasibility of the component measures and all of the data elements.

Recommendation 7: Greater collaborative efforts are needed for eMeasure development and implementation. The eMeasure Feasibility Assessment recommendations emphasize the need for greater collaborative efforts among all stakeholders.

Recommendation 8: Need for testing partners. During measure development there is a constant need for testing partners and pilot participants that could be facilitated by ongoing collaboratives focused on developing and implementing eMeasures.

COMMENTS AND THEIR DISPOSITION

NQF received 91 comments from 10 organizations and individuals pertaining to the TEP's recommendations and the general draft report.

Comment Themes and Technical Expert Panel Responses

Theme 1 – Greater collaboration. Commenters raised concerns that ongoing and collaborative assessments of feasibility during the development of eMeasures will require additional time and resources during the measure development process. Although several commenters were in agreement

that earlier identification of infeasible measures will be more efficient in the long run, these additional steps may impact the timeline for measurement development.

Expert Panel Response: The TEP acknowledges that assessing feasibility earlier in the measure development process does require more time and resources in the beginning. Greater effort to identify issues with feasibility in the earlier stages of measure development where adjustments can be made to avoid re-work at later stages when considerable investment has been made.

Theme 2 – Scorecard.

Comments fell into two areas:

- a required scorecard is too rigid and does not allow for flexibility in assessing feasibility; and
- requests for clarification on the definitions and operationalizing the scorecard to assess feasibility.

Expert Panel Response: The TEP continues to support a screening tool that provides uniform information about feasibility of an eMeasures that facilitates communications among stakeholders. The TEP revised the score card definitions and use in response to the comments.

Theme 3 – NQF evaluation for endorsement.

Several commenters objected to requiring a summary of the eMeasure feasibility assessment using the scorecard as part of the measure submission to NQF. Comments also requested clarification on what was expected if a data element scored low on feasibility.

Expert Panel Response: The TEP agreed that developers may discover other important aspects of feasibility not addressed by the scorecard and allowed that "an equivalent and fully transparent" summary of the feasibility assessment for the eMeasure may be acceptable. The TEP also agreed that if a developer submits an eMeasure that has a data element with a low feasibility score, the developer must provide a rationale and plan going forward.