

Measure Developers' Workshop

November 15, 2012



NATIONAL
QUALITY FORUM

Agenda: Day-2

- Recap of Day-1
- Discussion of Measurement Gap Areas
- Discussion of eMeasures
- Developer Feedback Session

Filling Critical Measure Gaps: Addressing Key Priority Areas and Accelerators of Progress



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**Measure Developer
Workshop**

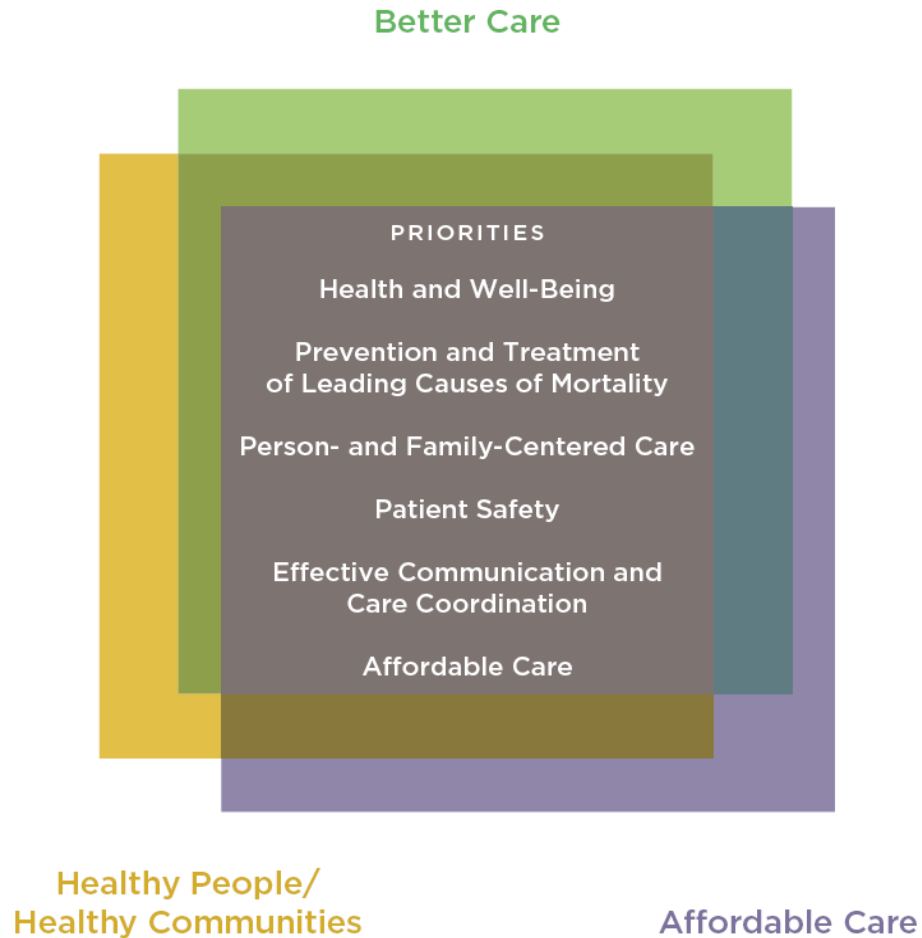
November 15, 2012

Today's Objectives

- Understand key measure gaps for high priority areas based on preliminary analysis from NQF's 2012 Gaps Report
- Consider implications for development and use of patient-reported outcomes & disparities-sensitive measures
- Understand key accelerators and barriers to filling gaps
- Synthesize measure developer input for integration into the 2012 Gaps Report

HHS's National Quality Strategy (NQS)

Aims and Priorities



National Quality Strategy Priority: Affordable Care



NQS Affordable Care Goals:

- Ensure affordable and accessible high-quality healthcare for people, families, employers, and governments
- Reduce national per capita healthcare costs
- Support and enable communities to ensure accessible high-quality care while reducing unnecessary costs

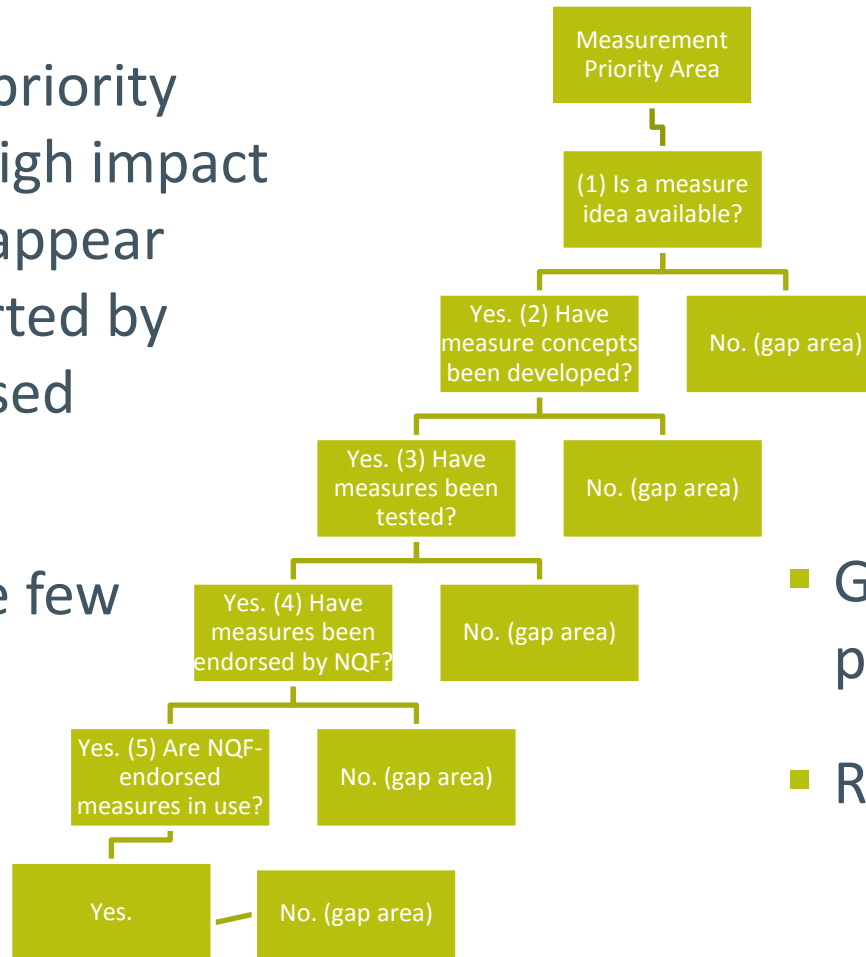


Medicare High-Impact and Child Health Conditions

| Medicare High-Impact Conditions | Medicare High-Impact Conditions |
|---------------------------------------|--|
| Major Depression | Tobacco Use |
| Congestive Heart Failure | Overweight/Obese (≥ 85 th percentile BMI for age) |
| Ischemic Heart Disease | Risk of developmental delays or behavioral problems |
| Diabetes | Oral Health |
| Stroke/Transient Ischemic Attack | Diabetes |
| Alzheimer's Disease | Asthma |
| Breast Cancer | Depression |
| Chronic Obstructive Pulmonary Disease | Behavior or conduct problems |
| Acute Myocardial Infarction | Chronic Ear Infections (3 or more in the past year) |
| Colorectal Cancer | Autism, Asperger's, PDD, ASD |
| Hip/Pelvic Fracture | Developmental delay (diag.) |
| Chronic Renal Disease | Environmental allergies (hay fever, respiratory or skin allergies) |
| Prostate Cancer | Learning Disability |
| Rheumatoid Arthritis/Osteoarthritis | Anxiety problems |
| Atrial Fibrillation | ADD/ADHD |
| Lung Cancer | Vision problems not corrected by glasses |
| Cataract | Bone, joint or muscle problems |
| Osteoporosis | Migraine headaches |
| Glaucoma | Food or digestive allergy |
| Endometrial Cancer | Hearing problems |
| | Stuttering, stammering or other speech problems |
| | Brain injury or concussion |
| | Epilepsy or seizure disorder |
| | Tourette Syndrome |

Measure Life Cycle

- Some NQS priority areas and high impact conditions appear well-supported by NQF-endorsed measures
- Others have few endorsed measures aligned to them



- Gaps exist at every point in the process
- Reasons???

Small Group Discussion: Questions to Consider

- Are these high priority need areas for your constituency group?
 - Have you developed or are you considering developing measures that would fill any of these high priority gap areas?
 - If so, which ones?
 - If not, why might you not pursue filling these gaps?
- What are the key accelerators and barriers for filling measure gaps in these high priority areas? For example:
 - Data availability
 - State of the evidence base
 - Accountability/attribution
 - Others?



Exercise



Reporting

Discussion and Next Steps

- How can we best partner to fill these critical measure gaps?
What resources can you and NQF bring to bear?
 - Goal: understand use and usefulness of NQF's work to date
 - Goal: identify key NQF activities that can support closing measure gaps working in partnership with measure developers and others

Discussion of eMeasures

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*November 26,
2012*



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Discussion Objectives

This session will include:

- Review the definition of eMeasure
- Review of Quality Data Model and Measure Authoring Tool
- Discussion of current work in the development of eMeasures
- eMeasure submission process to NQF
 - Current review process
 - Future criteria for endorsement
 - » NQF expectations
 - » Measure developer recommendations

Definitions

- What is an **eMeasure**?
 - Standardized performance measures in an electronic format that use the Quality Data Model (QDM) and the Healthcare Quality Measure Format (HQMF).
- What is **HQMF**?
 - The Health Quality Measures Format (HQMF) is a standard for representing a health quality measure as an electronic document. HQMF formally defines a quality measure (data elements, logic, definitions, etc) to support consistent and unambiguous interpretation

Sample Measure

| | |
|----------------------------|---|
| Initial Patient Population | <p>Patients aged 18 years and older before the start of the measurement period</p> <p>Patients that have a documented diagnosis of coronary artery disease before or simultaneously to encounter date</p> <p>Patients who have at least 2 outpatient or nurse facility encounters during the measurement period</p> |
| Denominator | Patients aged 18 years and older with a diagnosis of coronary artery disease |
| Numerator | Patients who were prescribed lipid-lowering therapy |
| Exclusions | Patients who have documentation of a medical, system or patient reason for not prescribed lipid lowering therapy |

Human Readable - Header

| | | | |
|---|---|--------------------------------|--------------------------------------|
| eMeasure Title | Demo - Coronary Artery Disease (CAD): Drug Therapy for Lowering LDL-Cholesterol (NQF 0074) | | |
| eMeasure Identifier (Measure Authoring Tool) | | eMeasure Version number | 0 |
| NQF Number | None | GUID | 63A24CBA-F9E7-4A52-93BE-E987B7B4E422 |
| Measurement Period | September 17, 2011 through September 17, 2012 | | |
| Measure Steward | American Medical Association - Physician Consortium for Performan | | |
| Measure Developer | National Quality Forum | | |
| Endorsed By | National Quality Forum | | |
| Description | Percentage of patients aged 18 years and older with a diagnosis of CAD who were prescribed a lipid-lowering therapy (based on current ACC/AHA guidelines) | | |
| Copyright | | | |
| Measure Scoring | Proportion | | |
| Measure Type | Process | | |
| Stratification | none | | |
| Risk Adjustment | None | | |
| Rate Aggregation | | | |
| Rationale | Studies have demonstrated that active treatment with lipid-lowering therapy is associated with stabilization and regression of coronary atherosclerotic plaques and decreased incidence of clinical events. Recent clinical trials have further documented that LDL-lowering agents can decrease the risk of adverse ischemic events in patients with established CAD. | | |
| Clinical Recommendation Statement | The LDL-C treatment goal is <100 mg/dl. Persons with established coronary heart disease (CHD) who have a baseline LDL-C 130 mg/dl should be started on a cholesterol-lowering drug simultaneously with therapeutic lifestyle changes and control of nonlipid risk factors (National Cholesterol Education Program [NCEP]). | | |
| Improvement Notation | Higher score indicates better quality | | |
| Reference | National Heart, Lung, and Blood Institute. National Cholesterol Education Program (NCEP). Third report of the NCEP on detection, evaluation, and treatment of high blood cholesterol in adults (Adult Treatment Panel III). NIH Publicat No. 01-3305.2001. | | |
| Definition | <p>Initial Patient Population(s):</p> <ul style="list-style-type: none"> -Patient Age: Patients aged 18 years and older at the beginning of the measurement period. -Diagnosis Active: Patient has a documented diagnosis of coronary artery disease. -Encounter: At least 2 visits with the physician, physician's assistant, or nurse practitioner during the measurement period. <p>Denominator(s): All patients aged 18 years and older with a diagnosis of coronary artery disease.</p> <p>Exception(s):</p> <ul style="list-style-type: none"> -Documentation of medical reason(s) for not prescribing lipid-lowering therapy (eg, clinical contraindication, drug allergy, drug interaction, drug intolerance, other medical reason(s)). -Documentation of patient reason(s) for not prescribing lipid-lowering therapy (eg, patient declined). -Documentation of system reason(s) for not prescribing lipid-lowering therapy. <p>Numerator(s): Patients who were prescribed lipid-lowering therapy.</p> <p>Exclusion(s): None</p> | | |
| Guidance | | | |
| Transmission Format | None | | |
| Initial Patient Population | None | | |
| Denominator | None | | |
| Denominator Exclusions | None | | |
| Numerator | None | | |
| Numerator Exclusions | None | | |

Initial Patient Population =

AND: "Patient Characteristic: birth date" >= 18 year(s) starts before start of "Measurement Period"

AND: Count >= 2 of:

OR: "Encounter: Nursing Facility Encounter"

OR: "Encounter: Outpatient Encounter"

AND:

OR: "Procedure, Performed: Cardiac Surgery" starts before or during

OR: "Encounter: Nursing Facility Encounter"

OR: "Encounter: Outpatient Encounter"

OR: "Diagnosis, Active: CAD includes MI"

Denominator =

AND: "Initial Patient Population"

Denominator Exclusions =

None

Numerator =

AND:

OR: "Medication, Active: Lipid Lowering Therapy"

OR: "Medication, Order: Lipid Lowering Therapy"

during "Measurement Period"

Denominator Exceptions =

AND:

OR: "Medication, Order not done: Medical Reason HL7" for "Lipid Lowering Therapy RxNorm Value Set"

OR: "Medication, Order not done: System Reason HL7" for "Lipid Lowering Therapy RxNorm Value Set"

Data criteria (QDM Data Elements)

"Diagnosis, Active: CAD includes MI" using "CAD includes MI Grouping Value Set (2.16.840.1.113883.3.560.4.13.25)"

"Encounter: Nursing Facility Encounter" using "Nursing Facility Encounter CPT Value Set (2.16.840.1.113883.3.560.4.13.26)"

"Encounter: Outpatient Encounter" using "Outpatient Encounter CPT Value Set (2.16.840.1.113883.3.560.4.13.27)"

"Medication, Active: Lipid Lowering Therapy" using "Lipid Lowering Therapy RxNorm Value Set (2.16.840.1.113883.3.560.4.13.29)"

"Medication, Order: Lipid Lowering Therapy" using "Lipid Lowering Therapy RxNorm Value Set (2.16.840.1.113883.3.560.4.13.29)"

"Medication, Order not done: Medical Reason HL7" using "Medical Reason HL7 HL7 Value Set (2.16.840.1.113883.3.560.4.13.30)"

"Medication, Order not done: System Reason HL7" using "System Reason HL7 HL7 Value Set (2.16.840.1.113883.3.560.4.13.46)"

"Patient Characteristic: birth date" using "birth date LOINC Value Set (2.16.840.1.113883.3.560.100.4)"

"Procedure, Performed: Cardiac Surgery" using "Cardiac Surgery SNOMED-CT Value Set (2.16.840.1.113883.3.560.4.13.31)"

Supplemental Data Elements

None

Quality Data Model: Overview

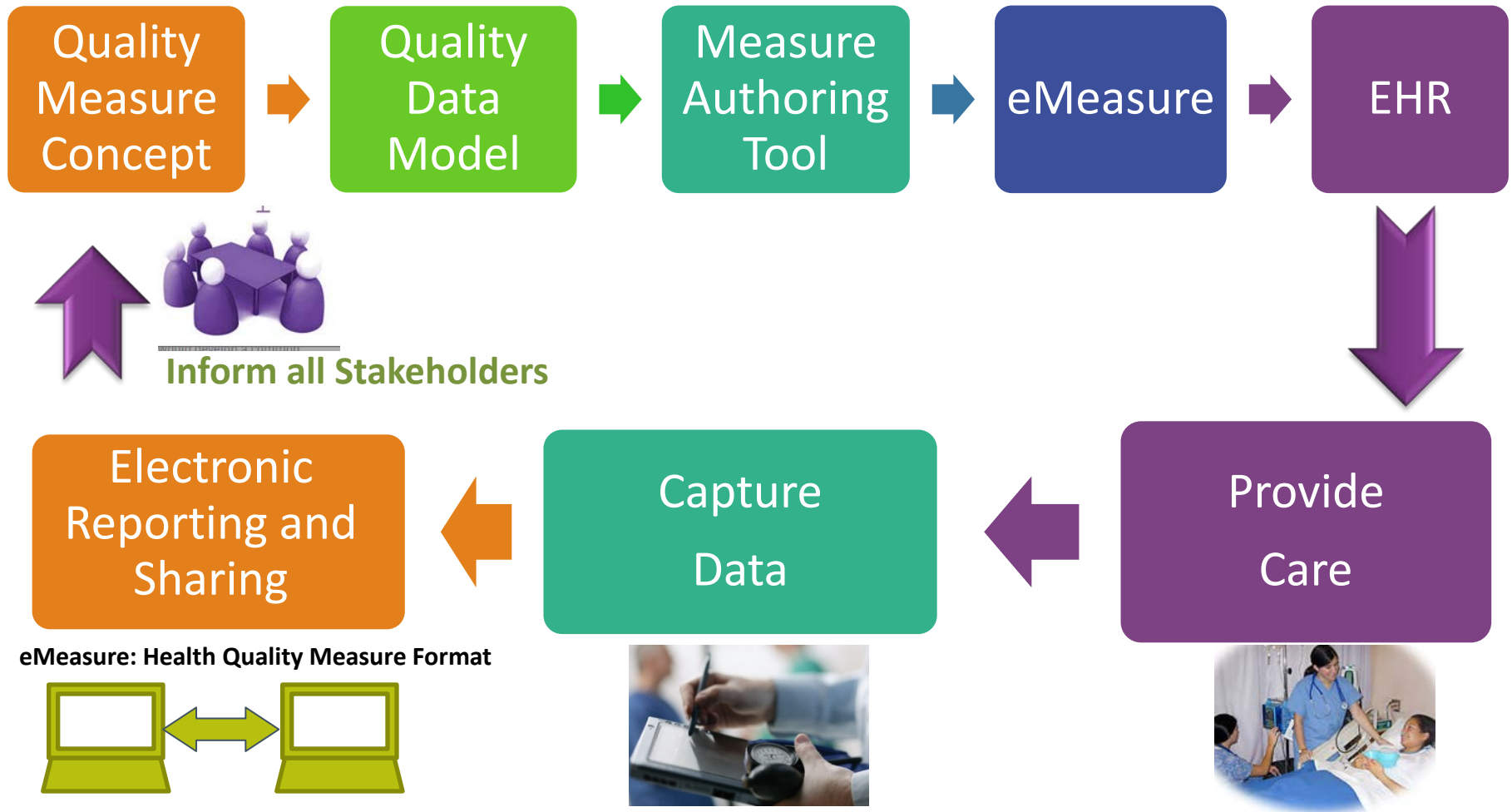
Quality Data Model (QDM): What is It?

- A standard structure to represent quality measures precisely and accurately in a standardized format that can be used across electronic patient care systems

Role in Quality Measurement

- Provides a standard way to describe concepts clearly and consistently for use across all quality measures
- Creates a common language across all healthcare stakeholders so quality measurement data can be consistently represented and shared across electronic patient care systems
- Only standard for eMeasures that exists today

eMeasure Conceptual Flow



Measure Authoring Tool (MAT): Overview

MAT: What is It?

- A web-based, publicly-available tool that allows measure developers to create and maintain quality measures in an electronic format (eMeasures)

Role in Quality Measurement

- Simplify the process of creating an eMeasure
- Standardize how eMeasures are expressed, for greater comparability
- Provides a quality measure in a standardized XML file that can be read by both humans and computer systems

[http://www.qualityforum.org/Topics/HIT/Measure_Authoring_Tool_\(MAT\)/Measure_Authoring_Tool_\(MAT\).aspx](http://www.qualityforum.org/Topics/HIT/Measure_Authoring_Tool_(MAT)/Measure_Authoring_Tool_(MAT).aspx)

Measure Authoring Tool

Key Features and Functions

- Create and share eMeasures and their corresponding code lists with other users
- Create and reuse standard value sets and other measure components, limiting rework as new eMeasures are developed
- Use the Quality Data Model (QDM) as the structure to fully define and express eMeasures in a standard way, and
- Export eMeasures in an EHR-readable format to enable collection of comparable healthcare quality data



Questions?

Discussion: Current Work in eMeasures

- What is your organization's experience or involvement with eMeasures?



- De novo versus retooling

eMeasure Review Checklist

NQF's current process for review includes:

- **Measure descriptions** (initial patient population, denominator, numerator, etc.) verified for consistency between MSEW 5.0 and eMeasure
- **Data Element Checks**
 - Verify that the Data Elements in the Logic are also in the Data Criteria
 - Verify that the data elements in the Data Criteria section are in the Logic
 - Verify that all Data Elements are listed in the Value Set spreadsheet
 - Use the Data Criteria section to compare each datatype/attribute in the eMeasure to the QDM
- **Logic Checks**
 - Verify that logic reads with the intent of the measure from the MSEW 5.0
- **Value Set Checks**
 - Ensure that Value set groupings have all their incorporated value sets present
 - Ensure that code and code system match value set title
 - Ensure that codes within each value set conform to the identified code system

eMeasure Submission to NQF: Evaluation Criteria

- **Importance:** no differences from traditional measures.
- **Scientific Acceptability:** Testing Task Force report outlines expectations for de novo and respecified measures.
- **Usability:** no differences from traditional measures.
- **Feasibility:** eMeasure Feasibility Testing project to help identify criteria.

Measure Evaluation Criteria: Scientific Acceptability

NQF's Measure Testing Task Force Report (2012) provides the following guidance:

- eMeasures should be specified in accordance with the QDM.
- Testing Approaches:
 - Focus testing at the data element level on validity.
 - » If empirical validity testing of the data elements is conducted, then separate reliability testing of the data elements is not required.
 - » Testing may be conducted on a sample of measured entities.
 - Apply eMeasure to a simulated data set that reflects standards for EHRs.
 - » Data set should include patient data with elements needed for the specified measure.
 - » Because the simulated data set is constructed, the values for the data elements and scores are known.

Measure Evaluation Criteria: Feasibility

Public and member comments on NQF's eMeasure Review and Testing Proposal (2012) included:

- eMeasure testing should incorporate the feasibility of data capture for the data elements utilized in addition to reliability and validity testing.
- A lack of clarity and definition in the field as to what constitutes feasibility testing for EHRs significantly hampers this requirement.

eMeasure Feasibility Testing Project

Project overview:

- Project purpose is to assess the current state of feasibility for new and retooled measures and identify a set of principles and criteria for adequate feasibility testing.
- Technical Expert Panel is meeting at NQF on December 7th.
- **eMeasure Feasibility Testing Guidance Report** will provide recommendations on eMeasure feasibility and testing criteria.

Discussion: Future eMeasure Endorsement Criteria

As a measure developer, what are your perspectives and recommendations for future eMeasure feasibility criteria?



Thank you!

Questions?