NATIONAL QUALITY FORUM

National Voluntary Consensus Standards for Patient Outcomes (Phases I and II)
Summary of the Main Steering Committee meeting
April 20-21, 2010

Steering Committee members present: Lee Fleisher, MD (co-chair); Joyce Dubow, MUP (co-chair); Ruben Amarasingham, MD, MBA; Lawrence Becker; E. Patchen Dellinger, MD; Anne Deutsch, PhD, RN; Brian Fillipo, MD, MMM, FACP; Linda Gerbig, RN, MSPH; Linda Groah, RN, MSN, CNOR, FAAN; Patricia Haugen; David Herman, MD; David Hopkins, MS, PhD; Dianne Jewell, PT, DPT, PhD, CCS; David Johnson, MD, FACP, FACG, FASGE; Iver Juster, MD; Burke Kealey, MD, FHM; Pauline McNulty, PhD; Lee Newcomer, MD, MHA; Vanita Pindolia, PharmD, BCPS; Amy Rosen, PhD; Barbara Turner, MD, MSEF, MA, FACP; Barbara Yawn, MD

Steering Committee members participating via conference call: Edward Gibbons, MD

NQF Staff members present: Heidi Bossley, MSN, MBA; Helen Burstin, MD, MPH; Hawa Camara, MPH; Sarah Fanta; Karen Pace, PhD, RN; Reva Winkler, MD, MPH;

Co-chairs Joyce Dubow and Lee Fleisher opened the meeting and requested that the Steering Committee members introduce themselves, provide a brief background of their interests and experience, and disclose conflicts of interests.[1] After the introduction of the Committee members, National Quality Forum (NQF) staff, measure developers present in person and on the phone, and public attendees introduced themselves.

Review of Prior Steering Committee Recommendations

The Steering Committee briefly reviewed the measures that had been voted on during conferences calls that took place in March 2010. The votes were captured using an online voting tool.

- OT1-002-09: 30-day post-hospital AMI discharge ED visit rate (Brandeis University/Centers for Medicare & Medicaid Services (CMS))— ***Not Recommended except as part of the composite measure***
- OT1-003-09: 30-day post-hospital AMI discharge evaluation and management service (Brandeis University/CMS) — ***Not Recommended except as part of the composite measure***
- OT1-004-09: 30-day post-hospital HF discharge evaluation and management service (Brandeis University/CMS)—***Not Recommended except as part of the composite measure***

[1]Burke Kealey—primary employment with HealthPartners medical group; Ivan Juster—employed by a subsidiary of Aetna, whose work related to clinical decision support has resulted in a number of measures submitted for NQF review (none currently under review); Anne Deutsch—employment with the Rehabilitation Institute of Chicago; Dianne Jewell—Board of Directors for the American Physical Therapy Association and employment with Virginia Commonwealth University; Ted Gibbons—nominated by the American College of Cardiology; Pauline McNulty—employed by Johnson and Johnson Pharmaceutical Services, LLC; Lee Fleisher—unpaid member of surgery center for quality; Brian Fillipo—employed by Connecticut Hospital Association; David Johnson—Board of Trustees for American College of Gastroenterology.

- OT1-006-09: 30-day post-hospital HF discharge ED visit rate (Brandeis University/CMS) —***Not Recommended except as part of the composite measure***
- OT1-007-09: Hospital risk-standardized complication rate following implantation of implantable cardioverter-defibrillator (ICD) (Yale University/CMS) —***Recommended***
- OT1-008-09: Hospital 30-day risk-standardized readmission rates following percutaneous coronary intervention (PCI) (Yale University/CMS) —***Recommended***
- OT1-016-09: 30-day post-hospital AMI discharge care transition composite measure (Brandeis University/CMS) —***Recommended***
- OT1-017-09: 30-day post-hospital heart failure (HF) discharge care transition composite measure (Brandeis University/CMS) —***Recommended***
- OT1-019-09: Health-related quality of life in COPD patients before and after pulmonary rehabilitation (American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR)) —***Recommended for time limited endorsement (12-24 months)***
- OT1-020-09: Functional capacity in COPD patients before and after pulmonary rehabilitation (AACVPR) —***Recommended for time-limited endorsement (12-24 months)***
- OT1-023-09: Intensive care unit (ICU) length-of-stay (LOS) (Phillip R. Lee Institute for Health Policy Studies, University of California San Francisco) —***Recommended***
- OT1-024-09: Intensive care: in-hospital mortality rate (Phillip R. Lee Institute for Health Policy Studies, University of California San Francisco) —***Recommended***

The Steering Committee was advised that the first draft report containing the above recommendations would be released for NQF Member and public comment in early May 2010.

Public Comment

Several comments were offered regarding the recommendations of the first group of measures:

- Concerns were raised about the PCI readmission measure (OT1-008-09), which were similar to the comments made during the Committee's discussion of the measure in March 2010:
    - The Hospital Readmission Reduction Program includes penalties for readmissions that will affect hospitals with cardiac catheter labs compared to those that do not have catheter labs;
    - Readmission may not be directly attributable to the PCI procedure; and
    - 30 days is not the appropriate time window.
- PCI procedures are performed on patients with complex medical conditions that must also be addressed along with the procedure. It is very difficult to determine whether a readmission is due to the procedure or to any other conditions a patient may have.
- From the patient's perspective, anything that happens proximal to the procedure is part of the entire episode of care.
- PCI procedures are generally performed in the outpatient setting with limited hospital exposure.

The Committee believed that the measure considers the global perspective of the medical care provided and is not intended to reduce the readmission rate to zero. Committee members strongly supported the idea that the measure is a patient-centered measure.

Evaluation of Candidate Consensus Standards

The Steering Committee discussed and evaluated measures in a variety of topic areas. The Committee evaluated each measure using the four major criteria: Importance to Measure and Report, Scientific Acceptability of the Measure Properties, Usability, and Feasibility.

Diabetes Measures

OT1-028-09 HbA1c control for a selected population (National Committee for Quality Assurance (NCQA))

Importance to Measure and Report

- Committee members discussed: 1) The evolving evidence of the adverse consequences of too tight glycemic control and the incidence of hypoglycemia and 2) Whether the denominator ("selected population") is appropriate for aggressive HgbA1c targets. The Committee believed that it would be helpful to know the incidence of hypoglycemia in this population.

Scientific Acceptability of the Measure Properties

- Those individuals over the age of 65 years are excluded, which is appropriate because hypoglycemia is likely to occur in this population.
- The Committee questioned why the measure is not risk-adjusted or stratified. The developer clarified that the denominator has been limited to those patients for whom this level of HbA1c control is most appropriate. The need to risk-adjust the measure is under consideration.

Usability

- An issue of selection bias was raised: A clinician could potentially avoid poorly compliant patients in order to not get labeled as a "bad provider."

Feasibility

- This measure has been used in NCQA's HEDIS.
- The measure is used in Michigan to evaluate providers.
- There was concern that the use of administrative data will exclude the diagnosis of diabetes from the claim when patients have multiple comorbidities.

Recommendation for Endorsement: Committee members believed that this measure should be used with the other two NQF-endorsed® HbA1c control measures—0575: Comprehensive diabetes care: HbA1c control <8% and 0059: Hemoglobin A1c management.

Steering Committee vote to recommend if paired with NQF-endorsed measures 0575 and 0059: Yes: 15, No: 4
Steering Committee vote to recommend as a stand-alone measure: Yes: 2, No: 18, Abstain: 1

Note: Following this meeting, the measure developer notified NQF that it did not support pairing the three diabetes control measures. For this reason, the measure is not recommended.

OT1-009-09 Optimal diabetes care (MN Community Measurement)

Importance to Measure and Report

- The majority of the Committee believed that this measure addresses important areas. The Committee discussed various methods of combining measures into a composite. Some noted that the "all or none" methodology sets a high bar for performance, while others noted that this type of composite is very patient-focused because it evaluates "optimal" performance.

Steering Committee vote on importance: Yes: 18, No: 3

Scientific Acceptability of the Measure Properties

- Members questioned whether the composite encompasses all of the important aspects of care for diabetes and why eye exams or renal evaluations are not included.
- Members discussed the results of the recent ACCORD trial[2] addressing appropriate blood pressure targets for patients with diabetes, the results of which indicate no benefit for aggressive blood pressure control < 140; yet, the composite currently includes these target levels for blood pressure.
- Some members were concerned about combining the five intermediate outcome or process measures, including patients with different risks and needs, without risk-adjustment because there is much variability in patient populations.

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 21, Minimally: 1, Not at all: 0

Usability

- The measure is readily understood by patients and the public.

Steering Committee vote on usability: Completely: 6, Partially: 13, Minimally: 2, Not at all: 0

Feasibility

- The measure has been in use in Minnesota for several years.

Steering Committee vote on feasibility: Completely: 15, Partially: 2, Minimally: 5, Not at all: 0

Recommendation for Endorsement: The Steering Committee recommended this measure with conditions. It requested that the blood pressure targets be reviewed and revised by the measure developer in light of the ACCORD trial results.

Steering Committee vote to recommend, conditional on the developer's response to reviewing the findings from the ACCORD trial: Yes: 15, No: 4, Abstain: 1

[2]ACCORD Study Group, Effects of intensive blood-pressure control in type 2 diabetes mellitus, *N Engl J Med*, 2010;362(17):1575-1585. Epub 2010 Mar 14.

(See Addendum for follow-up.)

OT1-029-09 Diabetes composite (NCQA)
This candidate measure combines nine process and outcome measures, including eight measures that are currently endorsed by NQF as stand-alone measures.

Importance to Measure and Report

- The Steering Committee unanimously agreed that a composite measure on this topic is important.
- A Committee member noted that compared to measure OT1-009-09 that evaluates "optimal" performance, this measure represents the quality of diabetes care from a different perspective because it does not use the "all or none" methodology and would likely appeal to different audiences.

Steering Committee vote on importance: Yes: 22, No: 0

Scientific Acceptability of the Measure Properties

- In the future, as this composite measure continues to be tested and used, more empiric evidence outlining why the aspects of care included in the composite were selected should be provided.
- The Committee noted that the weightings used to develop the score are based on expert opinion.

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 16, Minimally: 6, Not at all: 0

Usability

- As constructed with weighting, this measure is more likely to be useful for providers and clinicians rather than patients or the public.

Steering Committee vote on usability: Completely: 5, Partially: 14, Minimally: 3, Not at all: 0

Feasibility

- The composite measure is used in NCQA's Physician Recognition Program (PRP).

Steering Committee vote on feasibility: Completely: 11, Partially: 11, Minimally: 0, Not at all: 0

Recommendation for Endorsement: Yes: 13, No: 8, Abstain: 1

Cross-Cutting Measures

OT2-006-09 Medicare health outcomes survey-physical component summary score (PCS) and mental summary score (MCS) (NCQA)

Importance to Measure and Report

- To date, few functional status measures have been endorsed.
- This measure has been in use for many years, although current data suggest there is very little discrimination in the results. The developer is concerned that the measure is overly risk-adjusted, and it is planning to review the measure in the near future.
- The Committee unanimously agreed to defer a recommendation on the measure pending more information from the developer:
    - What are the plans and timetable for review of the measure, particularly the risk-adjustment?
    - What is known about actionability? How can results be improved?
    - What constitutes meaningful change?
    - How are adjustments for race and socioeconomic status included?

The measure developer agreed that further consideration of the measure should occur after its review and has withdrawn this measure at this time.

OT2-007-09 Care for older adults: advance care planning, functional status assessment, pain screening (NCQA*)*
The Steering Committee believed that this measure addresses processes of care and not outcomes. Although these processes were viewed as important, the measure was determined to be out of scope for this project.

Steering Committee vote: In scope: 2, Out of Scope: 20

OT2-022-09 Proportion of patients with a chronic condition that have a potentially avoidable complication during a calendar year (Bridges to Excellence (BTE))
The measure developer presented the background on the development of the measure as a by-product of its work for the Prometheus episode payment model. When determining the appropriate care a patient should receive during an episode (defined as one year), the developer created the concept of "potentially avoidable complications" (PACs) – things that should not generally occur to patients. The PACs were identified by an expert panel as three types: PACs associated with the index condition; PACs associated with comorbidities; and PACs associated with a patient safety failure. The measure is a sum of all PACs occurring during the year as determined by coding from administrative data. The developer advises that present on admission conditions and patient factors that are considered risk factors are not PACs. To date the measure has only been developed in the commercial population for patients under 65 years of age. The developer acknowledges that not all PACs are avoidable all the time, and zero PACs is not an appropriate target.

Importance to Measure and Report

- The Steering Committee unanimously agreed that avoidable conditions are important to measure and report.

Steering Committee vote on importance: Yes: 22, No: 0

Scientific Acceptability of the Measure Properties

- The Committee clarified the methodology of the measure, particularly the severity-adjustment model, and that RAND is comparing this model to others.

Steering Committee vote on scientific acceptability: Completely: 5, Partially: 13, Minimally: 4, Not at all: 0

Usability

- The Committee believed that the measure is very usable and patient centered.

Steering Committee vote on usability: Completely: 16, Partially: 5, Minimally: 1, Not at all: 0

Feasibility

- The measure uses administrative data and is used by some health plans.

Steering Committee vote on feasibility: Completely: 14, Partially: 8, Minimally: 0, Not at all: 0

Recommendation for Endorsement: Yes: 19, No: 4

Infectious Disease Measures

OT2-013-09 Proportion of pneumonia patients that have a potentially avoidable complication (during the index stay or in the 30-day post-discharge period) (BTE)

The Committee considered most issues regarding this measure when discussing OT2-022-09.

Importance to Measure and Report

- Great salience for patients

- Because all systems will have PACs, what would be the acceptable range?

Steering Committee vote on importance: Yes: 22, No: 0

Scientific Acceptability of the Measure Properties

- The measure developer noted that a PAC would be included if it is avoidable at least 1 percent of the time.

Steering Committee vote on scientific acceptability: Completely: 9, Partially: 12, Minimally: 1, Not at all: 0

Usability

- The measure is very salient and will be fairly uncomplicated to communicate to the public.

Steering Committee vote on usability: Completely: 17, Partially: 5, Minimally: 0, Not at all: 0

Feasibility

- This measure relies very heavily on claims data.

Steering Committee vote on feasibility: Completely: 18, Partially: 4, Minimally: 0, Not at all: 0

Recommendation for Endorsement: Yes: 20, No: 2

OT2-003-09 30-day post-hospital PNA discharge ED measure (Brandeis University/ Centers for Medicare &Medicaid Services (CMS))

The Steering Committee evaluated two similar measures for heart failure and AMI in March 2010, and the same concerns were raised about this measure.

Importance to Measure and Report

- There was consensus that this is an important area to measure and report.

Steering Committee vote on importance: Yes: 19, No: 3

Scientific Acceptability of the Measure Properties

- There is no baseline comparison; the general framework is to look at people who were discharged recently from the hospital, and the nomenclature of predicted over expected is used.
- A Committee member referred to the graphs on pages 67-68 of the technical report accompanying the submission that demonstrate the effect of using hierarchical modeling —50 percent of the outliers are eliminated, which then results in little or no variation.

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 22, Minimally: 0, Not at all: 0

Usability

Steering Committee vote on usability: Completely: 5, Partially: 14, Minimally: 1, Not at all: 2

Feasibility

Steering Committee vote on feasibility: Completely: 21, Partially: 1, Minimally: 0, Not at all: 0

Recommendation for Endorsement (as a stand-alone measure): Yes: 0, No: 22

OT2-004-09 30-day post-hospital PNA discharge evaluation and management service visit measure (Brandeis University/ CMS)

The Committee discussed this measure along with measure OT2-003-09. Please see discussion points for measure OT2-003-09 above.

Importance to Measure and Report

Steering Committee vote on importance: Yes: 22, No: 0

Scientific Acceptability of the Measure Properties

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 21, Minimally: 0, Not at all: 0

Usability

Steering Committee vote on usability: Completely: 1, Partially: 18, Minimally: 1, Not at all: 0

Feasibility

SC vote on feasibility: Completely: 14, Partially: 7, Minimally: 0, Not at all: 0

Recommendation for Endorsement (as a stand-alone measure): Yes: 5, No: 17

OT2-005-09 30-day post-hospital PNA (pneumonia) discharge care transition composite measure (Brandeis University/CMS)

This measure combines three measures into a composite:

- OT2-003-09 30-day post-hospital PNA discharge ED measure
- OT2-004-09 30-day post-hospital PNA discharge evaluation and management service visit measure
- 0506 Thirty-day all-cause risk standardized readmission rate following pneumonia hospitalization (currently NQF-endorsed)

Importance to Measure and Report

- Similar to the Care Transition Composite measures for AMI and heart failure, this measure evaluates aspects of care coordination and was viewed as important.

Steering Committee vote on importance: Yes: 21, No: 0

Scientific Acceptability of the Measure Properties

- Steering Committee members discussed whether this measure should always be tied to an E&M visit. There are additional methods to reduce readmissions, such as the nurse making a follow-up call to the patient post hospital discharge or the physician conducting a home visit.

Steering Committee vote on scientific acceptability: Completely: 2, Partially: 19, Minimally: 0, Not at all: 0

Usability

SC vote on usability: Completely: 0, Partially: 21, Minimally: 0, Not at all: 0

Feasibility

SC vote on feasibility: Completely: 13, Partially: 8, Minimally: 0, Not at all: 0

Recommendation for Endorsement: Yes: 21, No: 0

Cardiovascular Measures

OT1-013-09 The STS CABG composite score (Society of Thoracic Surgeons (STS))
This measure combines 11 NQF-endorsed measures for coronary artery bypass surgery into four domains and yields scores for each domain and the overall composite.

Importance to Measure and Report

Steering Committee vote on importance: Yes: 22, No: 0

Scientific Acceptability of the Measure Properties

- The Committee questioned the inclusion of the reporting mechanism within the specifications of the measure, which is an approach that has not been used in other NQF-endorsed measures.
- The measure is calculated to arrive at a point estimate numerical value with confidence intervals as well as the star system.
- Committee members noted that the 98 percent confidence intervals incorporated into the star reporting system is higher than the usual 95 percent confidence intervals used in most measures. The Committee believed that standardization across measures is important.

Steering Committee vote on scientific acceptability: Completely: 15, Partially: 6, Minimally: 0, Not at all: 0

Usability

- Committee members suggested that various users of the measure should be able to determine how the measure is reported depending on the goals of their program.
- A Committee member suggested that the one-two-three star system is likely to be misinterpreted by the public as "good-better-best," when, according to the developers, the stars indicate performing below the STS average, performing at the STS average, and performing above the STS average, respectively.

Steering Committee vote on usability: Completely: 0, Partially: 17, Minimally: 3, Not at all: 1

Feasibility

- The provider has to participate in registry; however, the Committee noted that 90 percent of all CABGs performed in the United States are included in this registry.

Steering Committee vote on feasibility: Completely: 8, Partially: 12, Minimally: 1, Not at all: 0

Recommendation for Endorsement: The Steering Committee recommended the composite measure methodology with a numerical result and confidence intervals only. The Committee did not recommend that the star reporting system using the 98 percent confidence intervals be part of the endorsement. Until NQF establishes policies addressing the inclusion of reporting mechanisms, the Committee supported the composite measure only to the same extent as other measures submitted for consideration, i.e., without an embedded reporting mechanism.

Steering Committee vote to recommend the composite measure without the star reporting system and confidence intervals: Yes: 22, No: 0

OT1-030-09 Proportion of AMI patients that have a potentially avoidable complication (during the index stay or in the 30-day post-discharge period) (BTE)

This measure is similar to OT2-031-09, and both measures were discussed at the same time.

Importance to Measure and Report

- There was unanimous agreement by the Committee that this is an important issue to measure and report.

Steering Committee vote on importance: Yes: 22, No: 0

Scientific Acceptability of the Measure Properties

- The Committee again noted the atypical severity-adjustment method.
- It also noted that AMI patients undergoing CABG are excluded because it is a slightly different patient population.

Steering Committee vote on scientific acceptability: Completely: 10, Partially: 12, Minimally: 0, Not at all: 0

Usability

Steering Committee vote on usability: Completely: 10, Partially: 12, Minimally: 0, Not at all: 0

Feasibility

Steering Committee vote on feasibility: Completely: 15, Partially: 7, Minimally: 0, Not at all: 0

Recommendation for Endorsement: Yes: 23, No: 0

OT1-031-09 Proportion of stroke patients that have a potentially avoidable complication (during the index stay or in the 30-day post-discharge period) (BTE)

This measure is similar to OT2-030-09, and both measures were discussed at the same time.

Importance to Measure and Report

Steering Committee vote on importance: Yes: 20, No: 2

Scientific Acceptability of the Measure Properties

- The Committee noted that Cardiovascular TAP members were concerned about the inclusion of some PACs—particularly coma because it is not always avoidable. The developer advised that it is reviewing the PACs with its expert advisors, but even if a PAC is preventable only 1 percent of the time, it is included because it is considered to be an opportunity for improvement.

Steering Committee vote on scientific acceptability: Completely: 4, Partially: 17, Minimally: 0, Not at all: 0

Usability

Steering Committee vote on usability: Completely: 4, Partially: 17, Minimally: 0, Not at all: 0

Feasibility

Steering Committee vote on feasibility: Completely: 14, Partially: 7, Minimally: 0, Not at all: 0

Recommendation for Endorsement: Yes: 22, No: 1

OT1-011-09 Post-operative stroke or death in asymptomatic patients undergoing carotid endarterectomy (Society for Vascular Surgery (SVS))

Importance to Measure and Report

- Stroke is clearly an adverse event after carotid endarterectomy (CEA), and measuring its occurrence is important.
- Stroke and death are traditional outcomes to monitor after CEA. Committee members noted that after revascularization with stents, symptomatic patients should be monitored post operatively for AMI. The developer should consider including this in the measure because it is another important event to track.

Steering Committee vote on importance: Yes: 22, No: 2

Scientific Acceptability of the Measure Properties

- Committee members noted that the identification of post-operative stroke likely depends on who is making the assessment (whether it is the neurologist or surgeon) or on whether a standardized assessment tool is used. Competing incentives may affect reliability of making the stroke diagnosis
- Because a typical hospital stay is two days, observation is limited. What are the data for 30, 60, or 90 days out? Future measures should include longer timeframes.
- Disparities are not well addressed.

Steering Committee vote on scientific acceptability: Completely: 2, Partially: 9, Minimally: 9, Not at all: 2

Usability

Steering Committee vote on usability: Completely: 1, Partially: 13, Minimally: 6, Not at all: 2

Feasibility

- The measure is currently used in two registries.

Steering Committee vote on feasibility: Completely: 3, Partially: 12, Minimally: 5, Not at all: 2

Recommendation for Endorsement: Yes: 5, No: 17

OT1-010-09 Acute myocardial infarction (AMI) mortality rate (Agency for Healthcare Research and Quality (AHRQ))

This candidate measure was compared to an NQF-endorsed in-hospital AMI mortality measure from The Joint Commission (TJC). TJC no longer reports its in-hospital AMI mortality measure on its website in favor of CMS's 30-day mortality measure.

Importance to Measure and Report

- In-hospital data is still important along with 30-day mortality data.

Steering Committee vote on importance: Yes: 21, No: 1

Scientific Acceptability of the Measure Properties

- The definition is aligned with the CMS measure.
- The measure is based on the principal diagnosis of AMI. and patients who experience AMI during hospitalization for other conditions, such as surgery, are not included (approximately 30 percent of AMIs). The Committee expressed concern that these patients are not being accounted for in any measure at this time.
- This measure is more inclusive than the TJC measure because it includes transfers into the hospital.
- The measure includes all ages, and the 30-day mortality measure is limited to ages 65 years and older.
- Reliability testing was performed on two samples: n = 25 with reliability of 90 percent and n = 100 with reliability of 98 percent.

Steering Committee vote on scientific acceptability: Completely: 13, Partially: 7, Minimally: 0, Not at all: 0

Usability

- The measure is based on administrative data, and the risk-adjustment methodology is widely available.

Steering Committee vote on usability: Completely: 17, Partially: 3, Minimally: 0, Not at all: 0

Feasibility

- Missing the discharge disposition is extremely rare (less than 1/10 of a percent).

Steering Committee vote on feasibility: Completely: 17, Partially: 3, Minimally: 0, Not at all: 0

Recommendation for Endorsement: Yes: 21, No: 0

Additional Recommendations for Future Consideration:

- Consider developing another measure that captures secondary diagnoses of AMI to account for the 30 percent who are not included in this measure.
- Compare the results when data are generated using codes compared to medical record abstraction.

OT1-012-09 Coronary artery bypass graft (CABG) procedure and postoperative stroke during the hospitalization or within 7 days of discharge (Ingenix)

Importance to Measure and Report

- The Committee believed that this measure did not add value to NQF's current measure portfolio. NQF has previously endorsed a risk-adjusted, 30-day postoperative stroke morbidity measure for CABG patients from the Society of Thoracic Surgeons.

Steering Committee vote on importance: Yes: 20, No: 0

Scientific Acceptability of the Measure Properties

- The Committee asked why seven days was chosen for follow-up. The developer advised that seven days was selected based on input by its expert panel.
- The Committee asked why the measure is not harmonized with the other measures in terms of timeline, i.e., 30 days from admission.
- There were concerns that a key population (patients with a history of stroke), which would be an indicator of risk, was excluded.
- Committee members believed that the measure should be risk-adjusted due to the large number of risk factors for stroke.

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 8, Minimally: 12, Not at all: 0

Usability

Steering Committee vote on usability: Completely: 2, Partially: 17, Minimally: 1, Not at all: 0

Feasibility

Steering Committee vote on feasibility: Completely: 2, Partially: 17, Minimally: 1, Not at all: 0

Recommendation for Endorsement: Yes: 2, No: 18

Surgery Measures

OT2-002-09 Risk adjusted colorectal surgery outcomes measure (American College of Surgeons (ACS))

Importance to Measure and Report

Steering Committee vote on importance: Yes: 22, No: 0

Scientific Acceptability of the Measure Properties

- The risk-adjustment model uses a parsimonious set of clinical risk factors collected in the database.
- The measure has been specified for broader implementation by hospitals that do not participate in National Surgical Quality Improvement Program (NSQIP).

Steering Committee vote on scientific acceptability: Completely: 11, Partially: 11, Minimally: 0, Not at all: 0

Usability

Steering Committee vote on usability: Completely: 11, Partially: 11, Minimally: 0, Not at all: 0

Feasibility

- Includes capability for non-NSQIP hospitals to participate.

Steering Committee vote on feasibility: Completely: 7, Partially: 13, Minimally: 2, Not at all: 0

Recommendation for Endorsement: Yes: 22, No: 0

OT1-015-09 Risk adjusted care mix adjusted elderly outcomes measure (ACS)

Importance to Measure and Report

- The Committee supported the broad scope of the measure.

Steering Committee vote on importance: Yes: 21, No: 0

Scientific Acceptability of the Measure Properties

- The measure has been specified for broader implementation by hospitals that do not participate in NSQIP.

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 12, Minimally: 8, Not at all: 1

Usability

Steering Committee vote on usability: Completely: 0, Partially: 1, Minimally: 16, Not at all: 4

Feasibility

- A committee member highlighted the data abstraction burden and the need to conform to the NSQIP methodology as challenges for non-NSQIP hospitals.

Steering Committee vote on feasibility: Completely: 0, Partially: 7, Minimally: 12, Not at all: 2

Recommendation for Endorsement: Yes: 22, No: 0

Additional Recommendations for Future Consideration:

- An analysis that is stratified by age cohorts might be useful.
- An outcome measure specific to hip fracture is urgently needed for the >65 years of age group.

Gastrointestinal Measures

OT2-014-09 Opioid-related symptom distress scale (Pfizer)
The Committee noted that large areas of the submission form were left blank regarding this measure, and the developer was neither present to provide additional information nor provided information upon NQF staff request previously. The Committee unanimously agreed that the measure could not be evaluated with the limited information submitted.

OT2-009-09 Gastrointestinal hemorrhage mortality rate (AHRQ)
This measure is a revised measure focusing more on hemorrhage from esophageal varices than on broader causes of hemorrhage. AHRQ has not completed full validation of this new version of the measure, which is based on the International Classification of Diseases, Ninth Revision, Clinically Modifications (ICD-9-CM) codes rather than on current procedural terminology (CPT codes). The risk model is based on all patient refined diagnosis related groups (APR DRGs) and includes alcoholic liver disease. The Committee asked about end-of-life issues that are not readily captured in claims data. The Committee discussed with the measure developer the need for additional information, particularly on the reliability of the new denominator and the validity of claims coding compared to medical record abstraction before making a recommendation.

Additionally, NQF staff needs to discuss with AHRQ the original measure, which is part of an NQF-endorsed composite measure and revision of the composite as well.

Following the meeting, AHRQ advised NQF staff that it is withdrawing the measure from further consideration at this time.

OT2-008-09 Bariatric surgery and complications during the hospitalization or within 180 days of discharge (Ingenix)
This measure and OT2-012-09 were discussed together because the measures are identical other than the timeframes for follow-up.

Importance to Measure and Report

- The Committee noted that several important complications are not included, such as hemorrhage and hernias.
- This measure focusing on 180 days following discharge is based on a single article in the literature.
- Because of the weight and comorbidities of the patients in this population, there is a baseline risk for adverse events; 180 days was viewed as a long period of time in which to capture events without accounting for this baseline risk.

Steering Committee vote on importance: Yes: 19, No: 0

Scientific Acceptability of the Measure Properties

- The measure is not risk-adjusted. The Committee believed that there are several factors that can affect outcomes, including the following:
  - risk varies based on the type of procedure—a band procedure is one-tenth as risky as an open procedure;
  - degree of obesity—the risk for a patient with a body mass index (BMI) greater than 50 is greater than for a patient with a BMI of 32;
  - comorbidities— multiple comorbidities are common in this population.
- Medicare patients are not included in this measure.
- Reliability testing is pending.

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 3, Minimally: 15, Not at all: 0

Usability

Steering Committee vote on usability: Completely: 0, Partially: 14, Minimally: 3, Not at all: 1

Feasibility

Steering Committee vote on feasibility: Completely: 1, Partially: 15, Minimally: 3, Not at all: 0

Recommendation for Endorsement:

Steering Committee vote to recommend as submitted: Yes: 0, No: 19, Abstain: 1
Steering Committee vote to recommend, conditional on revisions that address risk factors as outlined above: Yes: 19, No: 0, Abstain: 1
(See Addendum below for follow-up.)

OT2-012-09 Bariatric surgery and complications during the hospitalization or within 30 days of discharge (Ingenix)

This measure and OT2-008-09 were discussed together, because the measures are identical other than the timeframes for follow-up.

Importance to Measure and Report

- The Committee believed that 30 days following discharge seems to be a more reasonable timeframe for events attributable to the surgery.

Steering Committee vote on importance: Yes: 19, No: 0

Scientific Acceptability of the Measure Properties

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 9, Minimally: 7, Not at all: 1

Usability

Steering Committee vote on usability: Completely: 0, Partially: 15, Minimally: 3, Not at all: 0

Feasibility

Steering Committee vote on feasibility: Completely: 1, Partially: 17, Minimally: 0, Not at all: 0

Recommendation for Endorsement:

Steering Committee vote to recommend as submitted: Yes: 0, No: 19, Abstain: 1
Steering Committee vote to recommend, conditional on revisions that address risk factors as outlined in OT2-008-09: Yes: 19, No: 0, Abstain: 1
(See Addendum below for follow-up.)

Cancer Measures

OT2-019-09 Functional assessment of cancer therapy-general version (FACT-G) (FACIT)
OT2-015-09 Functional assessment of chronic illness therapy-fatigue (FACIT-F) (FACIT)
OT2-017-09 Functional assessment of cancer therapy-breast (FACT-B) (FACIT)
OT2-016-09 Functional assessment of cancer therapy-lung (FACT-L) (FACIT)

These four measures were discussed and voted on as a group. During the Cancer TAP review, concern was expressed that it was not clear how these measures could be used for public reporting. The Committee agreed with the TAP's conclusion that they are excellent tools to assess functional status in patients enrolled in clinical trials or for management, but further development is needed to use them for evaluating healthcare quality and performance.

Importance to Measure and Report

Steering Committee vote on importance: Yes: 21, No: 0

Scientific Acceptability of the Measure Properties

Steering Committee vote on scientific acceptability: Completely: 0, Partially: 12, Minimally: 8, Not at all: 1

Usability

Steering Committee vote on usability: Completely: 0, Partially: 1, Minimally: 16, Not at all: 4

Feasibility

Steering Committee vote on feasibility: Completely: 0, Partially: 7, Minimally: 12, Not at all: 2

Recommendation for Endorsement: Yes: 1, No: 20

OT2-010-09 Imaging timeliness of care—time between diagnostic mammogram and needle/core biopsy (National Consortium of Breast Cancer Centers)
OT2-011-09 Surgical timeliness of care—time between needle biopsy and initial breast cancer surgery (National Consortium of Breast Cancer Centers)

The Steering Committee agreed with the Cancer TAP that these are process measures and out of scope for this outcomes project.

Discussion of Gaps/Recommendations:
The Committee members identified the gaps in outcome measures and any issues that must be addressed:

- **Broad, patient-centered measures**—Measures should look broadly across populations and settings rather than narrowly at small populations, conditions, or settings of care. More emphasis is needed on getting the voice of the patient involved through patient reported outcomes (PROs).

  Additional patient-centered measures are needed that look at broad system issues such as care coordination, appropriate use of services, and communication. Outcome measures should address episodes of care that encompass all of a patient's conditions and comorbidities rather than a single condition and should include all procedures or diagnostic studies and use of services. Measuring the appropriateness of procedures and treatments are as equally important as measuring the outcomes. Methods must be developed to follow longer timeframes to track longitudinal outcomes. In addition, inclusion of community characteristics that impact health is challenging but would be a critical advance in understanding outcomes more globally.

- **Attribution and accountability**—The majority of measures submitted are centered on an individual or entity. Measures that address shared accountability across the health system, the patient, and the community are needed. Patient-reported measures should be developed to capture the patient's experience. Population-based measures are required in order to view the community's role.

- **Process-outcome link and challenging measures**—Outcomes are important to evaluate the effectiveness of process measures, and measuring outcomes should encourage the development of better or more innovative process measures. NQF should focus on the most challenging measures such as "all or none" composites to continually push for greater quality improvement.

- **Crosswalk existing measures to reduce overlap**—For some conditions there are many measures that evaluate the same patients. It would be helpful to cross-walk the current measures to identify areas of overlap and focus on the group of measures that covers the broadest population to reduce the burden of measurement. Alternative uses of specific measures should be considered with a goal toward measures that assess those components of care that matter the most and provide the greatest discrimination rather than simply adding more measures.

- **Data systems and ownership**—Improved data systems are essential to bringing together the information needed to look at important outcomes. Systems should be designed with the capability of measuring outcomes. Combining existing datasets—clinical and administrative—and incorporating electronic health record data will create robust datasets with the potential for better measures. Greater collaboration among measure developers and data owners is needed so that critical information is available for patients and stakeholders. At a minimum, measures and datasets supported by any public funds should be accessible.

- **Risk-adjustment and stratification for disparities**—More thought should be given to methods of risk-adjustment to measure outcomes that include the patient's perspective and involvement in care. Risk-adjustment should not obscure or explain away important aspects of care that affect outcomes. Measure specifications should include the capability to stratify for disparities.

- **Standardization of outcome measures**—More uniformity is needed for outcome measures. Outcome measures should be developed by skilled and experienced developers and should be appropriately specified and risk-adjusted, address the broadest population possible (including age, multiple conditions, and insurance type), and include disparities in outcomes.

- **Public reporting**—Additional research is needed to understand what reporting method(s) are meaningful to patients.

ADDENDUM— May 24, 2010
The Steering Committee requested additional information and responses from the developers on several measures and re-voted via survey monkey based on the information provided:

OT1-009-09 Optimal diabetes care (MN Community Measurement)
The Steering Committee recommendation for this measure was conditional, with a request to the developer that the blood pressure targets be reconsidered in light of the ACCORD trial results. The measure developer responded as follows:

"Our plan is to convene an expert workgroup to review the Blood Pressure component of our measure when the ICSI guideline group completes their Diabetes guideline update in August, 2010. Making this change will be relatively easy to do as we collect the actual systolic and diastolic blood pressure values and could re-calculate the numerator as needed.
Our process for development of a new measure or maintenance of an existing measure has always been to rely on accepted guidelines as the basis for development or change. As new evidence emerges and studies accumulate, new knowledge is obtained and the guidelines are revised based on this evidence. We review the guidelines associated with each of our measures every year to assure that the measures remain aligned with any changes. For the diabetes composite measure we have relied on the Institute for Clinical Systems Improvement (ICSI) and the American Diabetes Association (ADA) guidelines and recommendations. ICSI's guideline

process typically pulls in all relevant literature and studies and they have an evidence grading system that we described in our materials sent to NQF for measure endorsement. Our measure update process kicks in when ICSI completes their guideline update. We convene an expert workgroup to review evidence, literature and guidelines and recommend a change to the existing measure.
Currently, the ICSI guideline group is in the midst of revising the Diabetes guideline, and changing the blood pressure target in light of the ACCORD study results is one of the areas that they are working on. The ICSI Diabetes Guideline revisions will not be released until August 2010."

Final Recommendation for Endorsement: Yes: 7, No: 9

OT2-008-09 Bariatric surgery and complications during the hospitalization or within 180 days of discharge (Ingenix)
OT2-012-09 Bariatric surgery and complications during the hospitalization or within 30 days of discharge (Ingenix)
The Committee recommended the measures, conditional on revisions that addressed patient risk. The measure developer response is as follows:

"*The committee has asked us to modify the Ingenix bariatric surgery measures. The specific request is for us to stratify results based on body mass index (BMI) and bariatric procedure type and risk adjust for patient comorbidities. In response to this request, we are prepared to modify our specification as summarized below.*

1. We could stratify results based on BMI using on the following categories:
Class I Obesity BMI 30.0 to 34.9
Class II Obesity BMI 35.0 to 39.9
Class III Obesity BMI 40 and over

Specific ICD-9 code definitions for these categories are provided on the attachment. It is important to note that administrative claims data will provide limited access to this data. We have just reviewed the claims of 87 patients in our current dataset that had bariatric surgery; only 48 (55 percent) had a BMI listed with a V85.XX code.

2. We could stratify results based on type of procedure using on the following categories:
Bypass, gastric restrictive (no banding), laparoscopy
Bypass, gastric restrictive (no banding), open
Banding, laparoscopy, no bypass
Banding, open, no bypass

This classification is similar to the approach used by Encinosa, et. al., in his study of healthcare utilization and outcomes after bariatric surgery (Encinosa WE, Bernard DM, Chen CC, Steiner CA. Healthcare Utilization and Outcomes After Bariatric Surgery. Med Care 2006;44: 706–712). The procedure code definitions for these categories are provided on the attachment.

3. Although we were asked to risk adjust for comorbidities, we would propose the stratification methodology proposed by Encinosa in his 2006 study. Specifically, we would stratify results based on the number of comorbidities: none, one, two or more. Our comorbidity list would include the following: sleep apnea, ischemic vascular disease, heart failure, hypertension, COPD, diabetes mellitus, chronic kidney disease, and depression."

Final Recommendation for Endorsement:
OT2-008-09 Bariatric surgery complications—180 days: Yes: 6, No: 10, Abstain: 1
OT2-012-09 Bariatric surgery complications—30 days: Yes: 7, No: 10, Abstain: 0