NATIONAL QUALITY FORUM

National Voluntary Consensus Standards for Patient Outcomes
Summary of the Infectious Disease Technical Advisory Panel Conference Call
March 23, 2010

TAP Members: E. Patchen Dellinger, MD (chair); Curtis D. Collins, PharmD, MS, BCPS; Thomas M. File, MD; Eric Mortensen, MD, MSc; Amy Ray, MD, MPH

NQF Staff: Reva Winkler, MD, MPH; Hawa Camara, MPH

Measure Steward Representatives: Francois deBrantes (Bridges to Excellence); Christopher Tompkins (Brandeis University/CMS)

Dr. Dellinger began the call with welcome and introductions by the Technical Advisory Panel (TAP) members. TAP members were asked to disclose any conflict with the measures being discussed.

Dr. Reva Winkler, NQF project consultant, provided an introductory slide presentation that described

- NQF and its activities;
- The HHS-funded patient outcomes project;
- The role of the TAP;
- NQF's standard measure evaluation criteria; and
- Identifying gaps in outcomes measures.

Dr. Dellinger led TAP members through discussion of the sub-criteria for the five submitted measures. Measure developers were present and responded to questions from TAP members. The rating and issues discussed are summarized in the tables that follow.

As an introduction, Francois deBrantes described the history and philosophy behind the development of the "Potentially Avoidable Complication" 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) (Bridges to Excellence)

IMPORTANCE TO MEASURE AND REPORT		
1a Impact	Complete	Why exclude Medicare patients? – no access to data Rates of PACs vary two to three times within providers, states; No evidence on ability to change outcomes; Though the measures are in use, there is not much data yet; How were the PACs defined? Some PACs don't seem as avoidable as others - some are conditions on admission, though sepsis "present on admission" is difficult to determine; question the inclusion of some "PACs" (e.g., thoracentesis for a pleural effusion is expected care; hypoglycemia in pneumonia is a result of physiologic failure not a care failure) AMI is a well-recognized outcome of inflammatory processes such as pneumonia; it was noted that "hospital acquired infections begin after 48 hours – when do PACs begin?
1b Gap; Opportunity for Improvement	Complete	
1c Relation to Outcomes	Minimal	

SCIENTIFIC ACCEPTABILTY OF THE MEASURE PROPERTIES		
2a Specs	Complete	Uses claims data; Testing and use in large numbers, applied consistently; good ICC; small sample of "face to face" review of record – early results good; face validity only; no data for age > 65 years; Exclusions – are other severely immunocompromised patients such as on high dose steroids or methotrexate excluded? *Measure developer answer: Immuno-compromised patients such as those with HIV and cancer are excluded but we are not excluding the entire patient just based on the pharmacy claims. Patients with severe pneumonia may in fact require steroids for "typical" care. Most patients receiving methotrexate are cancer patients, they will be excluded, but if they are on methotrexate for other diagnoses such as auto-immune diseases etc., then those patients will not be excluded. Pharmacy claims do not carry diagnosis codes so we are only excluding the pharmacy claims that are not relevant for the treatment of pneumonia but not the entire patient. However patients with other claims confirming they have an immuno-compromising condition would be excluded.* Risk adjustment: standard inclusion of co-morbidities but other severity issues such as the requirement for mechanical ventilation, shock or hypoxia on presentation; ICU admission are not included; No disparities data included in claims
2b Reliability	Partial	
2c Validity	Minimal	
2d Exclusions	Partial	
2e Risk Adjustment	Not at All	
2f Meaningful Differences	No Information	
2g Comparability	Not Applicable	
2h Disparities	Not at All	
USEABILITY		
3a Distinctive	Partial/Minimal	No studies to support interventions for PACs; uncertain how to interpret results; How does it compare to CMS's 30-day mortality and 30-day readmission for pneumonia measures? How are antibiotics handled? *Measure developer response: Antibiotics are part of "typical" care – see Pharmacy tab line 13 in the all codes (enclosed). Antibiotics are part of typical management of pneumonia.*
3b Harmonization	Not Applicable	
3c Added Value	Minimal	
FEASIBILITY		
4a Data a by Product of Care	Complete	Claims data; Usual coding issues with claims data; in use but roll out continues
4b Electronic	Complete	
4c Exclusions	Complete	
4d Inaccuracies/ Errors	Partial	
4e Implementation	Complete/Partial	

Dr. Christopher Tompkins of Brandeis University introduced three related candidate measures to assess care coordination and post-hospital discharge transitional care for pneumonia. The new measures use the same methodology as the NQF-endorsed readmission measure and the same cohort definition. The measures assume that improved results are from improved care coordination. Dr. Tompkins noted that

ED visits and follow-up clinician visits are commonly used metrics in managed care that have been brought to Medicare.

OT2-003-09: 30-day post-hospital PNA discharge ED measure (Brandeis/CMS)

IMPORTANCE TO MEASURE AND REPORT		
1a Impact	Complete	Large patient population –significant for Medicare. No data provided on opportunity for improvement or relationship to longer term patient outcomes.
1b Gap	Minimal	
1c Relation to Outcomes	Minimal	
SCIENTIFIC ACCEPTABILTY		
2a Specs	Complete	Uses administrative data; Pearson/Spearman not great – Kappa not too high; predicted vs. expected (predicted is a true estimation based on hospital specific values and expected is based on overall data in the population.) predicted vs. expected is more conservative and does not spread the hospital results out as much; Uses "reason for admission" to capture patient cohort – does not include hospital acquired pneumonias. Risk adjustment – low R^2 and c-statistic; stratification for disparities introduces a small numbers concern – no data presented
2b Reliability	Partial	
2c Validity	Partial	
2d Exclusions	Complete	
2e Risk Adjustment	Partial	
2f Meaningful Differences	Complete	
2g Comparability	Not applicable	
2h Disparities	Not addressed	
USEABILITY		
3a Distinctive	Not addressed	Not tested yet; harmonized with other pneumonia measures
3b Harmonization	Complete	
3c Added Value	Complete	
FEASIBILITY		
4a Data a by Product of Care	Complete	Typical claims data inaccuracies; not implemented yet
4b Electronic	Complete	
4c Exclusions	Complete	
4d Inaccuracies/ Errors	Partial	
4e Implementation	Partial	

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

IMPORTANCE TO MEASURE AND REPORT		
1a Impact	Complete	Jenks article found that 50 percent of patient readmitted did not have a follow-up outpatient appointment; should have looked at those not readmitted also; disagrees with statement "Patients should be discharged on antibiotics"
1b Gap	Minimal	
1c Relation to Outcomes	Minimal	
SCIENTIFIC ACCEPTABILTY		

2a Specs	Complete	Very similar to ED visit measure.
2b Reliability	Partial	
2c Validity	Partial	
2d Exclusions	Complete	
2e Risk Adjustment	Partial	
2f Meaningful Differences	Complete	
2g Comparability	Not Applicable	
2h Disparities	Not Addressed	
USEABILITY		
3a Distinctive	Not addressed	Same as ED visit.
3b Harmonization	Complete	
3c Added Value	Complete	
FEASIBILITY		
4a Data a by Product of Care	Partial	A limitation on feasibility is merging of two claims dataset for outpatient and inpatient – payers can do this but hospitals can't
4b Electronic	Complete	
4c Exclusions	Complete	
4d Inaccuracies/ Errors	Partial	
4e Implementation	Partial	

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

IMPORTANCE TO MEASURE AND REPORT		
1a Impact	Complete	No data to support the combination reflects care transitions.
1b Gap	Minimal	
1c Relation to Outcomes	Minimal	
SCIENTIFIC ACCEPTABILTY		
2a Specs	Complete	Same as component measures; Weightings are arbitrary – chosen by the design team – no factor analysis or data-driven analyses; developer acknowledges the weightings are a qualitative assessment; Developer notes that the weightings may need adjustment on further use
2b Reliability	Partial	
2c Validity	Partial	
2d Exclusions	Complete	
2e Risk Adjustment	Partial	
2f Meaningful Differences	Complete	
2g Comparability	Not applicable	
2h Disparities	Not addressed	
USEABILITY		
3a Distinctive	Partial	Composite distinctive if a valid reflection of care coordination -- uncertain
3b Harmonization	Complete	

3c Added Value	Complete	
FEASIBILITY		
4a Data a by Product of Care	Partial	
4b Electronic	Complete	
4c Exclusions	Complete	
4d Inaccuracies/ Errors	Partial	
4e Implementation	Partial	

Public Comment

Several participants listened to the call but did not offer any comments.