NATIONAL QUALITY FORUM

TO: Consensus Standards Approval Committee

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RE: Maintenance review of NQF-endorsed measures for diabetes population-level measures

DA: December 28, 2010

CSAC ACTION REQUIRED

Four NQF-endorsed measures for assessment of diabetes care at the population level are now presented to the CSAC for decision regarding continued endorsement under the maintenance process in effect in 2009.

2009 MAINTENANCE PROCESS

In May, 2010, the NQF Board of Directors approved a new process that standardized reviews of existing measures in a regular cycle of topic-based measure evaluation. Prior to implementation of the new Endorsement Maintenance Process, NQF had begun reviews for measures under the topic areas of diabetes, mental health, and musculoskeletal. Existing Steering Committees and Technical Advisory Panels (TAPs) from the Patient Outcomes project were used to complete these reviews. The 2009 maintenance process for these measures is described below:

Three-Year Maintenance Reviews

1. *Email Measure Steward up to 2 months prior to the beginning of the review quarter with a list of measures requiring maintenance review*
    a. *Include table with NQF #, Title, Description, Specifications & Endorsement Date*
    b. *Include Maintenance Review Form*
    c. *Include links to Maintenance webpage for Policies and Criteria*
2. *Measure Steward has 30 calendar days to provide updates*
3. *Measures posted for Public Comment for 30 days*
4. ***Maintenance Committee reviews Measures & makes recommendations to CSAC***
5. ***CSAC reviews Measures and makes decision regarding continued endorsement***

6. *Update database and formal notification sent to Measure Steward of CSAC decision; Public notification of CSAC decision posted to website*
7. *30-day Appeals Period*

REVIEW OF DIABETES MEASURES

The Diabetes TAP from the Patient Outcomes project reviewed the measures described below. In this process, the TAP was asked to review the information submitted by the developers and determine whether the measures still meet the NQF measure evaluation criteria. NQF staff advised the TAP endorses all types of measures including population-level measures that can be used at the community and state levels, including measures that might be used by accountable care organizations (ACOs) and health systems. These measures include outcome measures and measures of health behaviors for the populations that are being served.

The Diabetes TAP from the Patient Outcomes project reviewed four population-level measures from the Agency for Healthcare Research and Quality **(**AHRQ). The AHRQ PQIs measure potentially avoidable hospitalizations for ambulatory care-sensitive conditions. The indicators rely on hospital discharge data and are intended to reflect issues of access to high-quality ambulatory care in the system of care. The PQIs encourage healthcare providers to use community-level measures to assess the health of the areas in which they practice and obtain regional health information from where their patients reside. These measures were originally endorsed within the Ambulatory Care project and focused on identification of disparities. These measures provide a regional overview of performance and guide further measurement, particularly stratification for disparities.

The measure developer advised the TAP that they receive positive feedback on these measures from states, Medicaid agencies, and health plans that find them useful.

The summary of the TAP evaluation and recommendations are included in the tables below. The TAP evaluated the measures on all criteria and sub-criteria and recommended all four measures maintain endorsement; two of the measures are to be paired.

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0272: Diabetes short-term complications admission rate (PQI 1)

This measure is used to assess the number of admissions for diabetes short-term complications per 100,000 persons.

Data Source: electronic administrative data/claims

Level of Analysis: population: national, regional/network, state, counties/cities

Measure Developer/Steward: AHRQ

IMPORTANCE TO MEASURE AND REPORT					
	Completely	Partially	Minimally	Not At All	NA
1a Impact	5		1		
1b Gap	4	1	1		
1c Relation to outcomes	4	2			

Comments: Current performance: 61.51 (overall rate); 59.72 (risk-adjusted rate). The admission rate is a useful parameter to have to determine how well diabetes patients are managing their diabetes as well as how often health care systems are being used. Important to determine for future cost implications. Indicates a possible reflection of provider-care and self-care practices. Admissions may not be diabetes related. Well validated importance of hospitalizations in this population for acute complications. The problem with this measure it is really a dysglycemia measure, since it does not capture admissions for cardiovascular or renal conditions associated with diabetes, but it is an important one that should be measured. Other short-term adverse complications that should be studied in other measures in the future.

SCIENTIFIC ACCEPTABILITY					
	Completely	Partially	Minimally	Not At All	NA
2a Specifications	3	2	1		
2b Reliability	3	2	1		
2c Validity	3	2	1		
2d Exclusions	1	2			
2e Risk adjustment	1	2		1	
2f Meaningful differences	3	2	1		
2g Comparability	4	1		1	
2h Disparities	4	1	1		

Comments: CMS-database and coding errors occur so there is possibility for error. Measurement parameters may vary but information is still useful. Poor attribution. Well established definitions, proven track record. Reliance on claims data/ICD 9 codes always potentially confounded. This overlaps with measure 0638 and problems with coding- that is, some providers will code the same problem in two very different ways diminishes the specificity of the data noted here.

USABILITY					
	Completely	Partially	Minimally	Not At All	NA
3a Understandable	5		1		
3b Harmonization	5			1	

3c Added value	5		1			
Comments: Current use: Publicly reported by a variety of states. Provides useful information for providers and consumers to determine future actions within specific population groups. If this is paired with 0638, it enhances its value. Developer states that measures 0272 and 0638 are mutually exclusive. Measure is widely implemented and accepted.						
FEASIBILITY						
	Completely	Partially	Minimally	Not At All	NA	
4a Data as by-product of care	2	3	1			
4b Electronic	4	1	1			
4c Exclusions	4	2	1			
4d Inaccuracies	2	3	1			
4e Implementation	2	3				
Comments: Coding errors occur and are many times limited by education of both the reviewer and provider. Many users do not have this type of information marketed to them or have difficulty accessing the information. Strictly speaking the outcome is not a patient outcome but is related to an outcome. There are other unrelated issues, such as the density of hospital beds in the region and transportation that may affect the numbers. Data elements are available electronically.						
RECOMMENDATION						
	Yes	No				
Recommendation for continued endorsement and pair with measure 0638	5	1				
Comments: Attribution problems, case mix, low numbers. Overall information is valuable and has implications for practice. It is important information to assist in developing plans. The TAP recommended that this measure be paired with measure #0638. The two measures are mutually exclusive. The developers note that in the early years of reporting on these measures more patients were captured in measure 0638, however, in recent years, a change has occurred where 0272 is more prevalent. This likely reflects greater adherence to diagnostic criteria and better coding practices.						

0638: Uncontrolled diabetes admission rate (PQI 14)

This measure is used to assess the number of admissions for uncontrolled diabetes per 100,000 persons.

Data Source: electronic administrative data/claims

Level of Analysis: population: national, regional/network, state, counties/cities

Measure Developer/Steward: AHRQ

IMPORTANCE TO MEASURE AND REPORT						
	Completely	Partially	Minimally	Not At All	NA	
1a Impact	4	1	1			
1b Gap	3	2	1			
1c Relation to outcomes	4	1	1			
Comments: Current performance: 23.02 (overall rate); 22.46 (risk-adjusted rate). This should be strongly endorsed because it ties in team effort, patient empowerment, and group accountability and allows us to develop better systems of care around best demonstrated practices. Relatively rare in type 2. Evidence provided is excellent. Weakness: May reflect poor self-care practices, not always a reflection of suboptimal provider care. This should be paired with the measure 0272 because there is likely to be overlap between the measures and both are key in evaluating dysglycemia in the diabetic population.						
SCIENTIFIC ACCEPTABILITY						
	Completely	Partially	Minimally	Not At All	NA	
2a Specifications	4	1	1			
2b Reliability	3	3				
2c Validity	4	2				
2d Exclusions	4	2				
2e Risk adjustment	4	2				
2f Meaningful differences	3	2		1		
2g Comparability	4	2				
2h Disparities	4	2				
Comments: Main problem is meaningful differences because numbers are small and dependent on the health system ability to avoid admissions. Strengths: has merit for tracking and determining trends in certain population groups (providers...). Validity is proven. Weaknesses: requires access to equipment that may not always be available to certain patient groups such that "control" is related to access and access related to income/insurance. Varying parameters to determine outcome could be a problem. Weakness is dependence on ICD-9 code and less than precise definition of what uncontrolled really is. Again, the weakness is that some would not use this category for many patients, and use 272, but there are patients that are not in measure 272, which should be counted, and this measure is useful for those patients.						
USABILITY						
	Completely	Partially	Minimally	Not At All	NA	
3a Understandable	3	2	1			
3b Harmonization	4	1	1			
3c Added value	4	1	1			
Comments: Current use: Publicly reported by a variety of states. Main problem is meaningful differences because numbers are small and dependent on the health system ability to avoid admissions. Strength: useful for determining trends in care (geographic considerations). Aligns with other diabetes utilization and quality measures. Weakness: potential for causing undue negative reflection on providers in certain geographic or poorer communities.						
FEASIBILITY						
	Completely	Partially	Minimally	Not At All	NA	
4a Data as by-product of care	5	1				

4b Electronic	4	2				
4c Exclusions	3	3				
4d Inaccuracies	4	2				
4e Implementation	5	1				
Comments: May be a secondary category of admission—not necessarily primary admission diagnosis.						
RECOMMENDATION						
	Yes	No				
Recommendation for continued endorsement and pair with measure 0272	5	1				
Comments: Too uncommon in type 2. Overall has merit to determine trends in care for certain population groups. Despite weakness in definition, this is an important area of patient morbidity. Unclear why this duplicative measure is a separate one from 0272. As a paired measure with 0272, this would be most useful.						

0274: Diabetes long-term complications admission rate (PQI 3)

This measure is used to assess the number of admissions for diabetes long-term complications per 100,000 persons.

Data Source: electronic administrative data/claims

Level of Analysis: population: national, regional/network, state, counties/cities

Measure Developer/Steward: AHRQ

IMPORTANCE TO MEASURE AND REPORT						
	Completely	Partially	Minimally	Not At All	NA	
1a Impact	5		1			
1b Gap	5	1	1			
1c Relation to outcomes	5		1			
Comments: Current performance: 128.21 (overall rate); 123.66 (risk-adjusted rate). This measures teamwork, patient empowerment, and outpatient service. Attribution to prior care, maybe ok as a public health measure applied to the VA or a state. Useful in such that coding and retrospective review is accurate; always at risk for error. This type of information is much needed and useful to develop plans for health care facilities and health care providers. This is again a hospital admission measure, related to the patient outcomes, but not entirely. Local admission practices affect results.						
SCIENTIFIC ACCEPTABILITY						
	Completely	Partially	Minimally	Not At All	NA	
2a Specifications	3	2	1			
2b Reliability	2	3	1			
2c Validity	2	3				
2d Exclusions	3	2				

2e Risk adjustment	3	2		1		
2f Meaningful differences	3	2	1			
2g Comparability	2	3	1			
2h Disparities	3	2	1			
Comments: This is well documented as this has been an ongoing measure. Quality of data is subject to reviewer interpretation and knowledge base. All are useful for trending adequacy of care. The strengths is it relies on data that is unequivocal, the weakness is the interpretation is complex.						
USABILITY						
	Completely	Partially	Minimally	Not At All	NA	
3a Understandable	4	1	1			
3b Harmonization	4	1	1			
3c Added value	5		1			
Comments: Current use: Publicly reported by a variety of states. The value of this measure is that involvement is at many levels. Overall worthwhile. Provides information for future policy initiatives.						
FEASIBILITY						
	Completely	Partially	Minimally	Not At All	NA	
4a Data as by-product of care	5	1				
4b Electronic	3	3				
4c Exclusions	2	4				
4d Inaccuracies	1	4	1			
4e Implementation	2	4				
Comments: Long term hospital care can result from a complication of a well-intentioned and proactively planned procedure. This can complicate the interpretation. Strengths are limited by reviewer knowledge base. Information is useful but different parameters may make it a bit difficult to compare one setting to another.						
RECOMMENDATION						
	Yes	No				
Recommendation for continued endorsement	5	1				
Comments: This measure will provide useful information for re-admission rates in long-term complications that may justify more intensive outpatient management and possibly policy initiatives. Very important data, clear-cut but the interpretation is complex.						

0285: Rate of lower-extremity amputation among patients with diabetes (PQI 16)

This measure is used to assess the number of lower-extremity amputations among patients with diabetes per 100,000 persons.

Data Source: electronic administrative data/claims

Level of Analysis: population: national, regional/network, state, counties/cities

Measure Developer/Steward: AHRQ

IMPORTANCE TO MEASURE AND REPORT					
	Completely	Partially	Minimally	Not At All	NA
1a Impact	6				
1b Gap	6				
1c Relation to outcomes	6				
Comments: Results of years and years of care, so attribution problems. Good measure—specific outcome that can be relatively easily tracked. Most often this measure is specific to diabetes. Very useful information. The clearest of the measures. Important for assessing disease progression.					
SCIENTIFIC ACCEPTABILITY					
	Completely	Partially	Minimally	Not At All	NA
2a Specifications	5	1			
2b Reliability	5	1			
2c Validity	5	1			
2d Exclusions	5	2			
2e Risk adjustment	3	3			
2f Meaningful differences	3	3			
2g Comparability	4	3			
2h Disparities	5	1			
Comments: It enables the use of proactive screening, early management and lifestyle change (patient empowerment). Sadly, by the time we detect progressive vascular disease even with our best efforts, the disease has advanced. Also, atherosclerotic progression is a function of many factors that we are sometimes limited in controlling. Good measure of quality for a health system or a state or federal, not good at doctor level. Strengths: good outcome measure, specific and generates good usable data. Weaknesses: Not sure that providers can reduce occurrence with just “improvements in care.” The best provider may have high rate of amputations; not always a reflection of poor care. There are problems in interpreting this data, such as whether an amputation takes place may reflect what the resources that are available at the site, and amputations can be wise or unwise, depending upon the clinical situation. Nevertheless, the data is clear, and the result is always less than what we would have wanted at the start, and this measure is scientifically sound. Risk adjustment is open to algorithmic interpretation, which is a limitation.					
USABILITY					
	Completely	Partially	Minimally	Not At All	NA
3a Understandable	4	1	1		
3b Harmonization	5		1		
3c Added value	5		1		
Comments: Good measure of quality for a health system or a state or federal, not good at doctor level. Strength: good outcome measure. Weakness: not sure that this measure can be directly correlated with provision of inadequate or suboptimal care. Information would be very useful to see trends in care.					
FEASIBILITY					
	Completely	Partially	Minimally	Not At All	NA
4a Data as by-product of care	6				
4b Electronic	4	2			
4c Exclusions	3	3			
4d Inaccuracies	3	3			

4e Implementation	4	4				
Comments: There are many factors that accelerate amputations—trauma, accidents notwithstanding. The benefit of this measure is to draw attention to the need for early detection and management of peripheral vascular disease, and in patients who have advanced disease, good hygiene, and clinical practices to delay or avoid amputation. In some instances attempts at revascularization may be futile, and an amputation is the preferred option. The indications and ultimate success of revascularization will complicate the outcome. Good outcomes measure for tracking purposes. Provides useful data for study and future policy initiatives.						
RECOMMENDATION						
	Yes	No				
Recommendation for continued endorsement	6					
Comments: Good as a public health measure. Good outcomes measure for tracking purposes. Use of this measure may not always correlate with need for changes in practice. A key measure.						