

TO: Consensus Standards Approval Committee (CSAC)

FR: NQF Staff

RE: Health and Well-Being Member Voting Results

DA: August 29, 2014

The CSAC will review recommendations from the *Health and Well-Being* project at its September 3, 2014, in-person meeting.

This memo includes a summary of the project, recommended measures, and identified themes and responses to the public and Member comments.

This project followed the National Quality Forum's (NQF) version 1.9 of the Consensus Development Process (CDP). Member voting on these recommended measures ended on August 29, 2014.

Accompanying this memo are the following documents:

- Health and Well-Being Report. The draft report has been updated to reflect the changes made following the Health and Well-Being Standing Committee's discussion of public and Member comments on August 6, 2014. The complete draft report and supplemental materials are available on the project page.
- Comment table. Staff identified themes within the comments received during the 30-day postevaluation comment period. The lists 54 comments received and the NQF, measure developer, and Standing Committee responses. Also included in this table are the 19 comments that were received prior to the evaluation of the measures.

CSAC ACTION REQUIRED

Pursuant to the CDP, the CSAC may consider approval of 14 candidate consensus standards.

Health and Well-Being Measures Recommended for Endorsement:

- 0272: Diabetes Short-Term Complications Admission Rate (PQI 1)
- 0274: Diabetes Long-Term Complications Admission Rate (PQI 3)
- 0281: Urinary Tract Infection Admission Rate (PQI 12)
- 0285: Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16)
- 0638: Uncontrolled Diabetes Admission Rate (PQI 14)
- 0727: Gastroenteritis Admission Rate (PDI 16)
- 0728: Asthma Admission Rate (PDI 14)
- 2372: Breast Cancer Screening
- 2508: Prevention Dental Sealants for 6 9 Year Old Children at Elevated Caries Risk
- 2509: Prevention Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk
- <u>2511: Utilization of Services, Dental Services</u>



- 2517: Oral Evaluation Dental Services
- 2518: Care Continuity, Dental Services
- 2528: Prevention Topical Fluoride for Children at Elevated Caries Risk, Dental Services

Health and Well-Being Measure Deferred

• 0280: Dehydration Admission Rate (PQI 10)

BACKGROUND

Population health includes a focus on health and well-being, along with disease and illness, prevention and health promotion, and disparities in outcomes and improvement activities within a group and/or between groups. In 2011, as part of an HHS-funded project on population health measures, NQF commissioned a white paper that presented an environmental scan of existing measures and community health improvement priorities; proposed analytical frameworks for assessing and measuring population health; identified areas of alignment between the clinical care system and public health system; and outlined methodological issues related to population health measure development. This foundational paper, and the National Quality Strategy (NQS) three-tiered approach to working with communities to promote healthy living and well-being, helped to inform this most recent project on health and well-being.

This project evaluates measures that assess health-related behaviors (e.g., smoking, diet, exercise, substance use); community-level indicators of health and disease (e.g., disease incidence and prevalence); primary prevention and screening (e.g., influenza immunization); practices to promote healthy living; community interventions (e.g., mass screening); and modifiable social, economic, environmental determinants of health with demonstrable relationship to health and well-being. The scope also includes measures that address community-level indicators, such as preventable admissions related to diabetes and social and environmental determinants of child health, as well as individual-level measures of health and well-being.

NQF convened a <u>Standing Committee</u> comprised of 24 individuals to evaluate the measures in this project. The Standing Committee consists of consumers, purchasers, providers, healthcare professionals, health plans, suppliers, community and public health professionals, and healthcare quality experts. During this project, the Committee reviewed 15 measures, 14 of which were recommended for endorsement; one measure was deferred.

DRAFT REPORT

The Health and Well-Being Draft Report presents the results of the evaluation of 15 measures considered under the CDP. Fourteen measures are recommended for endorsement as voluntary consensus standards suitable for accountability and quality improvement. The measures were evaluated against the 2013 version of the <u>measure evaluation criteria</u>.

	MAINTENANCE	NEW	TOTAL
Measures considered	8	7	15
Measure deferred	1	0	1
Recommended	7	7	14



Not recommended	0	0	0
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COMMENTS AND THEIR DISPOSITION

NQF received 74 comments from 19 organizations (including six member organizations) and individuals pertaining to the general draft report and to the measures under consideration.

A <u>table of comments</u> submitted during the comment period, with responses to each comment and the actions taken by the Standing Committee and measure developers, is posted to the Health and Well-Being project page under the Public and Member Comment section.

Comment Themes and Committee Responses

Comments raised concerns about socio-demographic factors influencing measure outcomes, level of analysis and the use of certain measures at the clinician and health plan levels, age range for pediatric dental measures, and specific measure specifications and rationale and were forwarded to the developers, who were invited to respond.

The Standing Committee considered developer responses during its review of submitted comments. Committee members focused their discussion on measures or topic areas with the most significant and recurring issues.

Theme 1 - Socio-Demographic Status

Commenters raised concerns about the influence factors outside of care delivery, such as social determinants of health, can have on continual and comprehensive care. There were specific concerns about the reliability of evaluated Prevention Quality Indicators (PQI) measures: 0272: Diabetes Short-Term Complications Admission Rate (PQI 01); 0274: Diabetes Long-Term Complications Admission Rate (PQI 03); 0281: Urinary Tract Infection Admission Rate (PQI 12); 0285: Rate of Lower-Extremity Amputation among Patients with Diabetes (PQI 16), and 0638: Uncontrolled Diabetes Admission Rate (PQI 14). An additional commenter indicated that factors such as social determinants of health make it difficult assess whether measures are truly reflective of the quality of care provided.

Regarding Measure 0727: *Gastroenteritis Admission Rate (PDI 16)* and Measure 0728: *Asthma Admission Rate (PDI 14)*, a commenter noted that socioeconomic factors that are unrelated to delivery of care have the potential to affect admissions rates.

While assessing Measure 2528: *Prevention: Topical Fluoride for Children at Elevated Caries Risk, Dental Services*, a commenter highlighted that socio-demographic factors can affect access to comprehensive and continuous dental services, both of which are essential for effective and preventative dental care. The commenter explained that effective and preventative dental care is vital because it has the potential to prevent unfavorable physical, behavioral, and social health outcomes related to oral health conditions.

Committee Response: The Committee agrees that social determinants of health, including socio-demographic factors, make it difficult to assess whether measures are



truly reflective of the quality of care provided. The Committee urges implementers of these measures to report in a manner that promotes transparency and to stratify for socio-demographic factors, as exemplified in the National Healthcare Disparities Report (NHDR) issued by Agency for Healthcare Research and Quality (AHRQ).

Theme 2 – Level of Analysis

Overall, the comments received were supportive of the Committee's recommendations for endorsement. There were, however, comments about specific measure specification, as well as several comments related to level of analysis for the following PQI indicators:

- 0272: Diabetes Short-Term Complications Admission Rate (PQI 01)
- 0274: Diabetes Long-Term Complications Admission Rate (PQI 03)
- 0281: Urinary Tract Infection Admission Rate (PQI 12)
- 0285: Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16)
- 0638: Uncontrolled Diabetes Admission Rate (PQI 14)

Commenters expressed concern about reporting each measure at the clinician and/or health plan levels, indicating that implementation of the measures may pose problems and thereby affect the reliability of the measures.

Committee Response: The Committee evaluated the measures as specified by AHRQ, with the level of analysis specified at the county, city, or state level. The Committee notes that if used at a different level of analysis the measure results may not accurately portray a true quality signal.

Theme 3 – Age Range for Pediatric Dental Measures

Comments received for the pediatric dental measures were generally supportive of the Committee's endorsement recommendations. Commenters noted that the measures captured important elements of continuous and comprehensive dental care. For measures 2508: *Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk*, 2509: *Prevention: Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk*, 2528: *Prevention: Topical Fluoride for Children at Elevated Caries Risk, Dental Services*, 2511: *Utilization of Services*, and *Dental Services*, and 2518: *Care Continuity, Dental Services*, some commenters suggested that these measure assess all children because "risk" associated with the varying age groups is not clearly defined. Another commenter was concerned that by including only children classified as high risk, children in middle class/middle income homes, without consistent access to dental care, will be excluded. A commenter also noted the importance and cost-effectiveness of monitoring sealant utilization trends in children who are classified as moderate to high risk.

Developer Response: Thank you for your support. These measures are a subset of starter pediatric measures that the DQA has developed and approved. The DQA is concurrently working to continually develop additional measures in both pediatric and adult populations. If you would like more information on these, please visit the American Dental Association's website.



Committee Response: The developer can consider these suggestions for future iterations of the measures. The Committee encourages the developer to look at measures across broader populations and age ranges in the future.

Measure Specific Comments

2518: Care Continuity, Dental Services

During review of this measure at the in-person meeting, the Committee questioned whether the measure is truly an assessment of the continuum of care without evidence that clearly substantiates the link. In response, the developer presented two clinical practice guidelines as evidence to support the measure, one from the United Kingdom's National Institute for Health and Care Excellence and one from the American Academy of Pediatric Dentistry; these guidelines suggest that increased visitation increases the chance for better outcomes. The developer also reiterated that this measure assesses the continuity of care, not the specific services received. Ultimately the Committee failed to reach consensus on Evidence under the *Importance* criterion and unanimously agreed not to vote on Overall Suitability for Endorsement until after the 30-day Member and Public Comment.

Although in support of this measure, some commenters requested that the developer provide more evidence that the measure assessed continuous care. One commenter noted that patients should not go two consecutive years without a follow-up evaluation because undetected oral health conditions could lead to negative health outcomes. Another commenter suggested that the measure be renamed "Two-Year Retention In Care," and went on to explain that retention of patients in care over the span of a two-year period facilitates preventative care, which should result in improved health outcomes and lower treatment costs.

Developer Response: Thank you for your support and comment. Measure 2518: Care Continuity seeks to address retention in care over two years and captures whether a child received a comprehensive or periodic oral evaluation in each of two consecutive years. Evidence-based guidelines recommend clinical oral evaluations with a regular recall schedule that is tailored to individual needs based on assessments of existing disease and risk of disease (e.g., caries risk) with the recommended recall frequency ranging from 3 months to no more than 12 months for individuals younger than 18 years of age (National Institute for Health and Care Excellence (NICE), Clinical Guideline 19, 2004). Comprehensive and periodic clinical oral evaluations are diagnostic services that are critical to evaluating oral disease and dentition development. Clinical oral evaluations also are essential to developing an appropriate preventive oral health regimen and treatment plan. Thus, clinical oral evaluations play an essential role in caries identification, prevention and treatment, thereby promoting improved oral health, overall health, and quality of life. Measure 2518: Care Continuity allows plans and programs to identify the effectiveness of efforts to promote an ongoing relationship with their primary dental care provider, improving their receipt of diagnostic services essential to promoting oral and overall health. This measure allows the policy makers to assess the variations in continuity of dental care and disparities amongst different age groups in the pediatric population.



References: National Institute for Health and Care Excellence (NICE). 2004. Clinical Guidelines. "CG19: Dental Recall – Recall Interval between Routine Dental Examinations." Available at: http://guidance.nice.org.uk/CG19.

Committee Response: The Committee discussed this measure during the Post-Comment Call on August 6. Committee members again discussed the issue of evidence, which they noted was based mostly on expert opinion and not empirical studies. The Committee also had concerns that the look back period was only two years and was not necessarily at the same site. The Committee agreed that care continuity would be hard to track if the provider changed over the two-year period. The Committee rendered a vote on this measure, and the results were as follows: On Overall Suitability for Endorsement, Yes-10; No-7. Some Committee members acknowledged that while this is an important and challenging area to measure, the measure should be modified such that it reflects continuity of care with the same provider. The measure advanced to Member voting as Consensus not Reached, where the percentage of the Committee's approval was 59%.

NQF MEMBER VOTING RESULTS

All of the recommended measures were approved with 50% approval or higher. Representatives of 9 member organizations voted; no votes were received from Consumer, Provider Organizations, Public/Community Health Agency, or Supplier/Industry Council. Results for each measure are provided below. (Links are provided to the full measure summary evaluation tables.)

NQF Member Council	Voting Organizations	Eligible to Vote	Rate
Consumer	1	28	4%
Health Plan	4	15	27%
Health Professional	1	87	1%
Provider Organizations	0	134	0%
Public/Community Health Agency	0	33	0%
Purchaser	2	24	8%
QMRI	1	69	1%
Supplier/Industry	0	29	0%
All Councils	9	419	5%

Measure 0272 Diabetes Short-Term Complications Admission Rate (PQI 01)

Measure Council	Yes	No	Abstain	Total Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	



Public/Community Health					
Agency	0	0	0	0	
Purchaser	1	1	0	2	50%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	6	1	2	9	86%
Percentage of councils approving (>50%)			67%		
Average council percentage approval			83%		

^{*}equation: Yes/ (Total -Abstain)

Voting Comments: AmeriHealth Caritas: One concern we hold relates to the potential of up coding "increasing apparent clinical improvement. This could be a "side-effect" of greater use of APR-DRG. While we support the measure we think it important to monitor the trends for these external impacts."

Measure 0274 Diabetes Long-Term Complications Admission Rate (PQI 03)

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0		100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	1	1	0	2	50%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	6	1	2	9	86%
Percentage of councils approving (>50%)			67%		
Average council percentage approval			83%		

^{*}equation: Yes/ (Total - Abstain)

Measure 0281 Urinary Tract Infection Admission Rate (PQI 12)

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	2	0	0	2	100%



QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	7	0	2	9	100%
Percentage of councils approving (>50%)				100%	
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Voting Comments: AmeriHealth Caritas: Current claims-based reporting may not be as specific as when ICD-10 becomes widely used.

Measure 0285 Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16)

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	1	1	0	2	50%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	6	1	2	9	86%
Percentage of councils approving (>50%)			67%		
Average council percentage approval					83%

^{*}equation: Yes/ (Total - Abstain)

Measure 0638 Uncontrolled Diabetes Admission Rate (PQI 14)

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	0	0	1	1	
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	1	1	0	2	50%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	5	1	3	9	83%
Percentage of councils approving (>50%)			50%		
Average council percentage approval					75%

^{*}equation: Yes/ (Total - Abstain)



Measure 0727 Gastroenteritis Admission Rate (PDI 16)

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	2	0	0	2	100%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	7	0	2	9	100%
Percentage of councils approving (>50%)			100%		
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Measure 0728 Asthma Admission Rate (PDI 14)

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	2	0	0	2	100%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	7	0	2	9	100%
Percentage of councils approving (>50%)			100%		
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Voting Comments: AmeriHealth Caritas: This measure is one that truly would benefit from having socioeconomic risk adjustment.



Measure 2372 Breast Cancer Screening

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	2	0	0	2	100%
QMRI	1	0	0	1	100%
Supplier/Industry	0	0	0	0	
All Councils	8	0	1	9	100%
Percentage of councils approving (>50%)					100%
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Measure 2508 Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	2	0	0	2	100%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	7	0	2	9	100%
Percentage of councils approving (>50%)					100%
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)



Measure 2511 Utilization of Services, Dental Services

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	1	0	0	2	100%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	6	0	3	9	100%
Percentage of councils approving (>50%)					100%
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Voting Comments: AmeriHealth Caritas: We are strongly supportive of these dental measures.

Measure 2509 Prevention: Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	2	0	0	2	100%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	7	0	2	9	100%
Percentage of councils approving (>50%)					100%
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Voting Comments: AmeriHealth Caritas: Having a dental service is not necessarily an indicator of quality care but is a marker of access.



Measure 2528 Prevention: Topical Fluoride for Children at Elevated Caries Risk, Dental Services

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	2	0	0	2	100%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	7	0	2	9	100%
Percentage of councils approving (>50%)					100%
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Voting Comments: AmeriHealth Caritas: We are strongly supportive of these dental measures.

Measure 2517 Oral Evaluation, Dental Services

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	1	0	0	1	100%
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	1	0	1	2	100%
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	6	0	3	9	100%
Percentage of councils approving (>50%)					100%
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Voting Comments: AmeriHealth Caritas: We are strongly supportive of these dental measures.



Measure 2518 Care Continuity, Dental Services

				Total	
Measure Council	Yes	No	Abstain	Votes	% Approval*
Consumer	0	0	1	1	
Health Plan	4	0	0	4	100%
Health Professional	0	0	1	1	
Provider Organizations	0	0	0	0	
Public/Community Health Agency	0	0	0	0	
Purchaser	0	0	2	2	
QMRI	0	0	1	1	
Supplier/Industry	0	0	0	0	
All Councils	4	0	5	9	100%
Percentage of councils approving (>50%)					100%
Average council percentage approval					100%

^{*}equation: Yes/ (Total - Abstain)

Voting Comments: AmeriHealth Caritas: We are strongly supportive of these dental measures as a marker of continuity of care.

Two measures previously endorsed by NQF have been withdrawn from maintenance of endorsement.

Measure	Description	Reason for removal of endorsement
0573: HIV Screening- Members at High Risk of HIV STEWARD: Health Benchmarks- IMS Health	To ensure that members diagnosed or seeking treatment for sexually transmitted diseases be screened for HIV.	The measure's steward indicated that it does not have the resources to continue with the endorsement process
1381: Asthma Emergency Department Visits STEWARD: Alabama Medicaid Agency	Percentage of patients with asthma who have greater than or equal to one visit to the emergency room for asthma during the measurement period.	The measure's steward indicated that It no longer has the resources or expertise to support this measure.



Measure Evaluation Summary Tables

LEGEND: Y = Yes; N = No; H = High; M = Moderate; L = Low; I = Insufficient

0272 Diabetes Short-Term Complications Admission Rate (PQI 01)

Submission |

Description: Admissions for a principal diagnosis of diabetes with short-term complications (ketoacidosis, hyperosmolarity, or coma) per 100,000 population, ages 18 years and older. Excludes obstetric admissions and transfers from other institutions.

Numerator Statement: Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for diabetes short-term complications (ketoacidosis, hyperosmolarity, or coma).

[NOTE: By definition, discharges with a principal diagnosis of diabetes with short-term complications cannot have an assignment of MDC 14 (pregnancy, childbirth and the puerperium). Thus, obstetric discharges are not considered in the PQI rate.]

See Prevention Quality Indicators technical specifications for additional details (available at

http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec.aspx) and in the supporting information.

Denominator Statement: Population ages 18 years and older in the metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

May be combined with uncontrolled diabetes as a single indicator as a simple sum of the rates to form the Healthy People 2010 indicator (note that the AHRQ QI excludes transfers to avoid double-counting cases).

Exclusions: Not applicable **Adjustment/Stratification:**

Level of Analysis: Population: County or City, Population: National, Population: State

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality

STANDING COMMITTEE MEETING [04/30/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: Y-17; N-1; 1b. Performance Gap: H-17; M- 2; L- 0; I-0; 1c. Impact: H-19; M-0; L-0; I-0

Rationale:

- The Committee agreed that this was important to measure and report, given the rapid increase of the
 number of the adult populations with diabetes and pre-diabetes. The Committee also noted that acute
 diabetes-related complications are the seventh leading cause of death, accounting for 36 percent of all
 diabetes hospitalizations, and that more than \$174 billion annually has been spent on diabetes-related
 hospitalizations.
- The Committee acknowledged the dramatic increase in diabetes-related hospitalizations and questioned the connection between this increase and outpatient care. While the Committee debated the reasons why ketoacidosis is not part of the measure, Committee members also acknowledged that ketoacidosis is a recognized short-term complication. The Committee also noted hypoglycemia and hypoglycemic seizures account for the majority of diabetes short-term complications admissions. The developer explained that hypoglycemia is captured in Measure 0638: Uncontrolled Diabetes Admission Rate (PQI 14).
- The Committee supported the rationale for this measure, stating that ketoacidosis, hyperosmolarity, and comas are all almost completely preventable if recognized.



0272 Diabetes Short-Term Complications Admission Rate (PQI 01)

• The Committee raised concerns about the increase in rates of short-term complications admission rates and questioned whether this measure is still useful as admission rates continue to rise. The developers explained that, while they have structures in place to assess use and uptake of the measure, they cannot confirm why rates are increasing. The Committee emphasized the need to dispel the notion that type-2 diabetes is caused mainly by personal behavior. Committee members explained that they do not know exactly why there is a rise in type-2 diabetes and that social determinants and genetics are also factors at play.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-14**; **M-5**; **L-0**; **I-0** 2b. Validity: **H-11**; **M-6**; **L-1**; **I-1** Rationale:

- The Committee agreed that the measure is well-defined specified.
- The developer noted that all of the ICD-9 codes are currently mapped to ICD-10 codes. The Committee cautioned that with implementation of ICD-10, there may be a shift in trends due to the specificity of ICD-10, which offer greater categorization of secondary diabetes versus other diabetes types.
- The developers used construct validity to test this measure, by examining the association between the risk-adjusted rate and characteristics potentially associated with quality of care, including physician density and poverty status. The results concluded that differences in county-level risk-adjusted rates were statistically significant where there was less access to high quality outpatient care (low physician density and increased poverty status). The reliability testing was completed using Healthcare Cost and Utilization Project data (HCUP), and reliability was tested using the signal to noise method; results were moderate for reliability of the risk-adjusted rate.
- The Committee recommended that the developer provide additional information on disparities.

3. Feasibility: H-18; M-1; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

• The Committee raised questions about the measure currently specified with ICD-9 codes, since ICD-10 codes offer more specificity for some diabetes-related complications and greater categorization of secondary diabetes. Committee members noted that these changes have the potential to impact how cases are sorted across the four AHRQ diabetes measures: 0272: Diabetes Short-Term Complications Admission Rate (PQI 01), 0274: Diabetes Long-Term Complications Admission Rate (PQI 03), 0285: Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16), and 0638: Uncontrolled Diabetes Admission Rate (PQI 14). The Committee agreed that data collection for this measure is feasible since the data source, discharge and diagnostic claims, is easily available on paper, as well as electronically.

4. Use and Usability: H-13; M-4; L-2; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

• While the Committee acknowledged the utility of this measure for quality improvement measure, public reporting by AHRQ in multiple states, and Medicaid programs by CMS, members questioned how it is



0272 Diabetes Short-Term Complications Admission Rate (PQI 01)

being used to address diabetes-related hospitalizations. AHRQ outlined several mechanisms to monitor use, implementation and net results.

The Committee recommended that the four diabetes measures—0272: Diabetes Short-Term
 Complications Admission Rate (PQI 01), 0274: Diabetes Long-Term Complications Admission Rate (PQI 03),
 0285: Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16), and 0638:
 Uncontrolled Diabetes Admission Rate (PQI 14) —be presented as a composite measure. The developer indicated a willingness to combine the measures in a future iteration of the measure.

5. Standing Committee Recommendation for Endorsement: Y-19; N-0

6. Member and Public Comment [June 10-July 9, 2014]

- Generally Comments were in support of using this measure at the population or community level, but not for use at the clinician or health plan levels.
- One Commenter suggested that PQI 01 Diabetes Short-Term Complications Admission Rate should remain as an separate measure, and not be included as part of a diabetes composite measure as recommended by the Committee.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals

0274 Diabetes Long-Term Complications Admission Rate (PQI 03)

Submission

Description: Admissions for a principal diagnosis of diabetes with long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified) per 100,000 population, ages 18 years and older. Excludes obstetric admissions and transfers from other institutions.

Numerator Statement: Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for diabetes with long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified).

[NOTE: By definition, discharges with a principal diagnosis of diabetes with long-term complications cannot have an assignment of MDC 14 (pregnancy, childbirth and the puerperium). Thus, obstetric discharges are not considered in the PQI rate.]

See Prevention Quality Indicators technical specifications for additional details (available at

http://www.qualityindicators.ahrq.gov/Modules/PQI TechSpec.aspx) and in the supporting information.

Denominator Statement: Population ages 18 years and older in metropolitan area† or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county where the hospital discharge occurred.

Exclusions: Not applicable **Adjustment/Stratification:**

Level of Analysis: Population: County or City, Population: National, Population: Regional, Population: State

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality

STANDING COMMITTEE MEETING [04/30/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: Y-18; N-1; 1b. Performance Gap: H-15; M-4; L-0; I-0; 1c. Impact: H-18; M-1; L-0; I-0

Rationale:

The Committee agreed that the measure is a high priority, given the numbers of adults with diabetes and



0274 Diabetes Long-Term Complications Admission Rate (PQI 03)

pre-diabetes. The Committee also noted that acute diabetes-related complications were the seventh leading cause of death and accounted for 36 percent of all diabetes-related hospitalizations.

- The developer presented data from the United Kingdom Prospective Diabetes Study and a number of
 evidence-based guidelines to demonstrate a strong pathway between diabetes and long-term
 complications associated with microvascular damage.
- The Committee expressed concerns about the composition of the metropolitan statistical areas in which specific areas (i.e. cities, towns) within close proximity were "blended". Members of the committee were particularly uncomfortable about the variability between areas including possible differences in sociodemographic factors, disease burden and health outcomes

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: H-17; M-2; L-0; I-0 2b. Validity: H-4; M-10; L-4; I-1 Rationale:

- Committee members were concerned that if a patient with diabetes was discharged from the hospital, but the principal diagnosis was not diabetes (e.g., cardiovascular complication); the patient would not be capture in the measure population. The developer acknowledged that this measure does not account for all diabetes-related hospitalizations, and reiterated that the discharge must be coded as a complication of diabetes to be counted in the measure. The Committee cautioned that diabetes is not always captured as the primary etiology behind admissions and that deaths as a result of myocardial infraction related to macrovascular disease, for example, would not be captured as diabetes-related. The Committee's concern was that the measure may not represent a full picture of diabetes-related long-term complication admissions.
- The Committee raised concerns about the use of the measure for quality improvement, since vascular damage progresses over several years.
- The developer applied construct validity to test their measure, examining the association between the risk-adjusted rate and characteristics potentially associated with quality of care, including physician density and poverty status. The results concluded that differences in county-level risk-adjusted rates were statistically significant where there was less access to high quality outpatient care (low physician density and increased poverty status).
- The Committee questioned why rates for ethnic and minority populations were not provided in the performance gap information, since the developer cited many studies highlighting existing ethnic and racial minority disparities. The Committee suggested that adding race and ethnicity data and other sociodemographic variables would strengthen the measure.

3. Feasibility: H-19; M-0; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee agreed that the measure is feasible at multiple levels, including public health departments, accountable care organizations (ACOs), and managed care organizations.
- All data elements are routinely generated and used during care delivery and can be found in defined fields in electronic claims.



0274 Diabetes Long-Term Complications Admission Rate (PQI 03)

4. Use and Usability: H-10; M-7; L-2; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- This measure is used for quality improvement measure, public reporting by AHRQ in multiple states, and is approved for voluntary use for Medicare FFS Physician Feedback Program.
- The Committee recommended that the four diabetes measures—0272: Diabetes Short-Term Complications Admission Rate (PQI 01), 0274: Diabetes Long-Term Complications Admission Rate (PQI 03), 0285: Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16), and 0638: Uncontrolled Diabetes Admission Rate (PQI 14) —be presented as a composite measure. The developer indicated a willingness to combine the measures in a future iteration of the measure.

5. Standing Committee Recommendation for Endorsement: Y-18; N-1

6. Member and Public Comment [June 10-July 9, 2014]

- Comments were generally supportive of the measure for use at the population or community level, but not for use for clinician or health plan levels.
- One Commenter suggested that PQI 03- Diabetes Long-Term Complications Admission Rate should be part of a comprehensive diabetes composite measure.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals

0281 Urinary Tract Infection Admission Rate (PQI 12)

Submission

Description: Admissions with a principal diagnosis of urinary tract infection per 100,000 population, ages 18 years and older. Excludes kidney or urinary tract disorder admissions, other indications of immunocompromised state admissions, obstetric admissions, and transfers from other institutions.

Numerator Statement: Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for urinary tract infection.

[NOTE: By definition, discharges with a principal diagnosis of urinary tract infection cannot have an assignment of MDC 14 (pregnancy, childbirth and the puerperium). Thus, obstetric discharges are not considered in the PQI rate.] See Prevention Quality Indicators technical specifications for additional details (available at

http://www.qualityindicators.ahrq.gov/Modules/PQI TechSpec.aspx) and in the supporting information.

Denominator Statement: Population ages 18 years and older in metropolitan area† or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

Exclusions: Not applicable **Adjustment/Stratification:**

Level of Analysis: Population : County or City, Population : National, Population : Regional, Population : State

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality

STANDING COMMITTEE MEETING [04/30/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: Y-13; N-7; 1b. Performance Gap: H-4; M-14; L-2; I-1; 1c. Impact: H-3; M-12; L-5; I-0



0281 Urinary Tract Infection Admission Rate (PQI 12)

Rationale:

- Committee members debated the merits of the evidence to support the measure's construct, particularly data that suggest a diagnosis of UTI at admission reflects inadequate or delayed outpatient treatment for the condition. The developer cited only one guideline, which the Committee had difficulty interpreting, especially the evidence UTI management for the elderly.
 - During the workgroup discussions, Committee members also discussed whether the performance on this measure would be affected significantly if there was improved access to primary care; however, there was no evidence presented by the developer to indicate how access would affect the rate of hospitalizations.
- Committee members noted the variation in performance; the majority of admissions are in the over 65
 age range. Committee members suggested that the developer focus on this age group for future
 iterations of the measure.
- The Committee and developer acknowledged the increasing rates of UTI admissions but did not have data to explain the increase.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-7; M-12; L-1; I-0** 2b. Validity: **H-4; M-14; L-2; I-0**

Rationale:

- The developers applied construct validity to test their measure, examining the association between the
 risk-adjusted rate and characteristics potentially associated with quality of care, including physician
 density and poverty status. The results concluded that differences in county-level risk-adjusted rates were
 statistically significant where there was less access to high-quality outpatient care (low physician density
 and increased poverty status).
- Committee members noted that counties with large populations were more likely to be identified as 'better' or 'worse' than the reference population because of the small numbers associated with smaller populations and uncertainty in the performance score.

3. Feasibility: H-16; M-4; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

- The data elements are routinely generated and used during care delivery and can be found in defined fields in electronic claims.
- The Committee agreed that since the indicator is based on readily available administrative data and U.S. Census data, feasibility is not an issue.

4. Use and Usability: H-8; M-11; L-1; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

• This measure is used for quality improvement measure, is used for public reporting by AHRQ in multiple states, and is approved for voluntary use for Medicare FFS Physician Feedback Program.

5. Standing Committee Recommendation for Endorsement: Y-15; N-5



0281 Urinary Tract Infection Admission Rate (PQI 12)

6. Member and Public Comment[June 10-July 9, 2014]

- Comments were generally in support of using this measure at the population or community level, but not for use in reporting at the clinician or health plan levels.
- One Commenter expressed concerns about false positives, particularly in elderly population.
- 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X
- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals

0285 Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16)

Submission

Description: Admissions for any-listed diagnosis of diabetes and any-listed procedure of lower-extremity amputation per 100,000 population, ages 18 years and older. Excludes any-listed diagnosis of traumatic lower-extremity amputation admissions, toe amputation admission (likely to be traumatic), obstetric admissions, and transfers from other institutions.

Numerator Statement: Discharges, for patients ages 18 years and older, with any-listed ICD-9-CM procedure codes for lower-extremity amputation and any-listed ICD-9-CM diagnosis codes for diabetes.

See Prevention Quality Indicators technical specifications for additional details (available at

http://www.qualityindicators.ahrq.gov/Modules/PQI_TechSpec.aspx) and in the supporting information.

Denominator Statement: Population ages 18 years and older in metropolitan area† or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

Exclusions: Not applicable **Adjustment/Stratification:**

Level of Analysis: Population: County or City, Population: National, Population: Regional, Population: State

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality

STANDING COMMITTEE MEETING [04/30/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: Y-18; N-0; 1b. Performance Gap: H-13; M-5; L-0; I-0; 1c. Impact: H-15; M-2; L-1; I-0

Rationale:

- The Committee agreed that the evidence which suggests adequate diabetes management screening will prevent lower extremity amputation linked to diabetes is strong.
- The measure allows for comparison across regions to assess preventive education, outpatient care and management of diabetes, and access to care and where these resources are lacking. (High-quality education, care management and early intervention have been shown to result in lower rates of amputation linked to diabetes.)
- The Committee noted that, over the last 10 years, rates of lower limb amputations have decreased. Committee members also recognized that while prevalence of diabetes has increased, lower limb amputations related to diabetes have decreased as a result of better vascular care maintenance.



0285 Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16)

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-6; M-12; L-0; I-0 2b. Validity: H-5; M-11; L-2; I-0

Rationale:

- The developer applied construct validity to test the measure, examining the association between the risk-adjusted rate and characteristics potentially associated with quality of care, including physician density and poverty status. The results concluded that differences in county-level risk-adjusted rates were statistically significant where there was less access to high-quality outpatient care (low physician density and increased poverty status).
- The Committee raised concerns about the inclusion of toe amputation in the specifications, since people
 with multiple toes amputations can potentially skew performance on the measure. The developer
 recognized the Committee's concerns and agreed that the inclusion of toe amputation in the target
 population may cause unintended negative consequences for public reporting. (Following the April 30,
 2014 in-person meeting, the developer updated the Measure Submission Form and removed toe
 amputations from the numerator.)
- The Committee raised concerns about the exclusion criteria, specifically transfers from other facilities. The developer explained that transfers were excluded to avoid counting transfers as two hospitalizations. The Committee disagreed and noted that the measure focuses on amputation, not hospitalization, and that a foot amputated at one hospital cannot be counted again if that same person is transferred to another hospital. The Committee further explained that since the measure is assessing amputation, the facility should not be an issue.
- The Committee also questioned the exclusion of people in skilled nursing facilities. The developers agreed to reevaluate excluding transfers, but countered that patients of long-term care facilities generally are not receiving ambulatory care through the same healthcare structures as patients who are in the same community, but not in long-term care institutions.
- The Committee reiterated that the four diabetes measures—0272: Diabetes Short-Term Complications Admission Rate (PQI 01), 0274: Diabetes Long-Term Complications Admission Rate (PQI 03), 0285: Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16), and 0638: Uncontrolled Diabetes Admission Rate (PQI 14) should be presented as a composite measure. The developer indicated a willingness to combine the measures in a future iteration of the measure.

3. Feasibility: H-13; M-5; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The required data elements are routinely generated, used during care delivery and are in defined fields in electronic claims.
- The Committee agreed that since the indicator is based on readily available administrative data and U.S. Census data, feasibility is not an issue.



0285 Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16)

4. Use and Usability: H-14; M-4; L-0; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

• The measure is used by CMS for the Medicare FFS Physician Feedback Program and Quality and Resource Use Reports (QRUR).

5. Standing Committee Recommendation for Endorsement: Y-15; N-3

6. Member and Public Comment [June 10-July 9, 2014]

- Comments were generally supportive of use for this measure at the population or community level, but not for use in reporting at the clinician or health plan levels.
- One Commenter suggested that PQI 16 –Rate of Lower-Extremity Amputation Among Patients With Diabetes should be part of a comprehensive diabetes composite measure.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

0638 Uncontrolled Diabetes Admission Rate (PQI 14)

Submission |

Description: Admissions for a principal diagnosis of diabetes without mention of short-term (ketoacidosis, hyperosmolarity, or coma) or long-term (renal, eye, neurological, circulatory, or other unspecified) complications per 100,000 population, ages 18 years and older. Excludes obstetric admissions and transfers from other institutions.

Numerator Statement: Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for uncontrolled diabetes without mention of a short-term or long-term complication.

[NOTE: By definition, discharges with a principal diagnosis of uncontrolled diabetes without mention of short-term or long-term complications cannot have an assignment of MDC 14 (pregnancy, childbirth and the puerperium). Thus, obstetric discharges are not considered in the PQI rate.]

See Prevention Quality Indicators technical specifications for additional details (available at

http://www.qualityindicators.ahrq.gov/Modules/PQI TechSpec.aspx) and in the supporting information.

Denominator Statement: Population ages 18 years and older in metropolitan area[†] or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

May be combined with diabetes short-term complications as a single indicator as a simple sum of the rates to form the Health People 2010 indicator (note that the AHRQ QI excludes transfers to avoid double counting cases).

Exclusions: Not Applicable **Adjustment/Stratification:**

Level of Analysis: Population: County or City, Population: National, Population: Regional, Population: State

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality



0638 Uncontrolled Diabetes Admission Rate (PQI 14)

STANDING COMMITTEE MEETING [04/30/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: Y-19; N-0; 1b. Performance Gap: H-18; M-2; L-0; I-0; 1c. Impact: H-18; M-1; L-1; I-0 Rationale:

- The Committee agreed that the measure is a high priority and is well specified.
- The Committee agreed that uncontrolled diabetes is more likely to occur in the elderly and patients with other co-morbidities (e.g., physiologic causes, cessation of treatment, lack of access to quality care, medication costs, and or other adherence related issues).

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria
(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: H-9; M-11; L-X; I-X 2b. Validity: H-4; M-15; L-1; I-0
Rationale:

- For reliability testing, the developer used HCUP data and a signal to noise analysis; testing results were moderate for the risk-adjusted rate.
- For validity, the measure was also tested using construct validity, a similar approach as the previous AHRQ PQI's. The developer used construct validity to test their measure, examining the association between the risk-adjusted rate and characteristics potentially associated with quality of care, including physician density and poverty status. The results concluded that differences in county-level risk-adjusted rates were statistically significant where there was less access to high-quality outpatient care (low physician density and increased poverty status). Committee members also questioned whether some admissions that should have been coded as a principal diagnosis of diabetes with a short-term complication will instead end up being counted in this measure. While the developer acknowledged that miscoding can occur and undermine the validity of the short-term complications measure, the developer but having this measure for "uncontrolled" diabetes admissions provides a more complete picture. Over time, gaming or coding drift could occur with only the short-term complications measure, which would provide a false picture that admissions for short-term diabetes-related complications were declining. Tracking this measure, however, can illuminate whether there is a real decline or whether coding drift/gaming is occurring.
- The Committee recommended that the four diabetes measures—0272: Diabetes Short-Term
 Complications Admission Rate (PQI 01), 0274: Diabetes Long-Term Complications Admission Rate (PQI 03),
 Rate of Lower-Extremity Amputation Among Patients With Diabetes (PQI 16), and 0638 Uncontrolled
 Diabetes Admission Rate (PQI 14)— be presented as a composite measure. The developer indicated a
 willingness to combine the measures in a future iteration of the measure.

3. Feasibility: H-19; M-1; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

- The required data elements are routinely generated, used during care delivery, and are in defined fields in electronic claims.
- The Committee agreed that since the indicator is based on readily available administrative data and U.S. Census data, feasibility is not an issue.



0638 Uncontrolled Diabetes Admission Rate (PQI 14)

4. Use and Usability: H-13; M-6; L-1; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- While the Committee suggested that this measure be utilized as part of a family of measures since it helps capture misclassification across categories and helps address coding drifting overtime, Committee members agreed that as a standalone measure, it captures admissions that might not otherwise be captured.
- The Committee also suggested that the developer assess reliability over time in small communities.
- Some Committee members suggested combing this measure with the 0272: Diabetes Short-Term Complications Admission Rate (PQI 01) measure.
- This measure is used for quality improvement, public reporting by AHRQ in multiple states, and is approved for voluntary use for CMS' Medicare FFS Physician Feedback Program.

5. Standing Committee Recommendation for Endorsement: Y-19; N-1

6. Member and Public Comment [June 10-July 9, 2014]

- Comments were generally supportive of use of this measure at the population or community level, but not for use in reporting at the clinician or health plan levels.
- One Commenter suggested that PQI 14 –Uncontrolled Diabetes Admissions Rate should be part of a comprehensive diabetes composite measure.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

0727 Gastroenteritis Admission Rate (PDI 16)

Suhmission

Description: Admissions for a principal diagnosis of gastroenteritis, or for a principal diagnosis of dehydration with a secondary diagnosis of gastroenteritis per 100,000 population, ages 3 months to 17 years. Excludes cases transferred from another facility, cases with gastrointestinal abnormalities or bacterial gastroenteritis, and obstetric admissions.

Numerator Statement: Discharges ages 3 months to 17 years with ICD-9-CM principal diagnosis code of gastroenteritis, OR with secondary diagnosis code of gastroenteritis and a principal diagnosis code of dehydration. Exclude cases:

- MDC 14 (pregnancy, childbirth, and puerperium)
- transfer from other institution
- age less than or equal to 90 days (or neonates if age in days is missing)
- with any diagnosis code of gastrointestinal abnormalities or bacterial gastroenteritis

Denominator Statement: Population ages 3 months through 17 years in metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

Exclusions: Not applicable. **Adjustment/Stratification:**

Level of Analysis: Population: County or City, Population: National, Population: Regional, Population: State

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality



0727 Gastroenteritis Admission Rate (PDI 16)

STANDING COMMITTEE MEETING [04/29/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: **Y-21; N-1;** 1b. Performance Gap: **H-13; M-8; L-1; I-0;** 1c. Impact: **H-15; M-7; L-0; I-0** Rationale:

- The Committee agreed this measure assesses a high priority area because 1 in 50 people have some type of an acute admission related to GI complications.
- The Committee noted that disparities by income and geographic region are narrowing.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-17; M-5; L-0; I-0** 2b. Validity: **H-13; M-8; L-1; I-0** Rationale:

- Committee members were concerned about the validity of the measure and how changes in treatment
 through the administration of a vaccine are affecting admission rates. Specifically, Committee members
 questioned how to distinguish decreased admissions due to efficacy and delivery of the rotavirus
 vaccination from decreased rates due to increased primary care access, versus administration of oral
 rehydration solution.
 - The developer noted that despite community variation of vaccine delivery, variation among the people accepting the vaccine, the validity of the measure remains strong.
- Committee members acknowledged that short-stay units within hospitals are increasing and could be a
 confounding factor. While many insurers do not consider patients who stay less than 24 hours as
 admissions, some insurers do count these stays as admissions.

3. Feasibility: H-20; M-2; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

• The data elements are routinely generated, used during care delivery, and can be found in defined fields in electronic claims.

4. Use and Usability: H-17; M-5; L-0; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- Committee members noted that the measure has the potential to reveal higher resource use in hospital settings versus outpatient care.
- The Committee acknowledged that demonstration of significant improvement over time is highlighted in the data collected in the three states where the measure is currently in use (Connecticut, California and New York).

5. Standing Committee Recommendation for Endorsement: Y-22; N-0

6. Member and Public Comment [June 10-July 9, 2014]

- Comments were generally supportive of this measure and recommend that the measure developer examine whether admission rates for this measure vary based on socio-demographic factors unrelated to the delivery of healthcare.
- One Commenter requested more information on the effects of immunization practices on this measure.



0727 Gastroenteritis Admission Rate (PDI 16)

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

0728 Asthma Admission Rate (PDI 14)

Submission |

Description: Admissions with a principal diagnosis of asthma per 100,000 population, ages 2 through 17 years. Excludes cases with a diagnosis code for cystic fibrosis and anomalies of the respiratory system, obstetric admissions, and transfers from other institutions.

Numerator Statement: Discharges, for patients ages 2 through 17 years, with a principal ICD-9-CM diagnosis code for asthma.

Denominator Statement: Population ages 2 through 17 years in metropolitan area or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

Exclusions: Not applicable **Adjustment/Stratification:**

Level of Analysis: Population: County or City, Population: National, Population: Regional, Population: State

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

Measure Steward: Agency for Healthcare Research and Quality

STANDING COMMITTEE MEETING [04/29/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: Y-20-; N-0; 1b. Performance Gap: H-17; M-3; L-0; I-0; 1c. Impact: H-20; M-0; L-0; I-0 Rationale:

- The Committee acknowledged that this measure is a high priority; the admission rates for low-income and minority children highlight significant disparities.
- Committee members noted a strong link between socio-demographic factors, improvement activities, outcomes, asthma admissions, and the care processes. The Committee noted a significant opportunity to improve asthma care and prevention because admissions rates have not declined. Committee members also noted an age-sensitive performance gap, where the highest prevalence of asthma is among young children. High performance was also noted in the western region of the country. While the developer did not present data to explain the differences between regions, the Committee debated whether these differences were due to environmental factors.
- The Committee reiterated that the PQI's are specified at the community level only and that it is appropriate to consider social determinants of health, as well as, health system and clinical factors in these measures. The Committee suggested that each community can use the measure for improvement purposes as it sees fit.

2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: **H-18**; **M-2**; **L-0**; **I-0** 2b. Validity: **H-10**; **M-10**; **L-0**; **I-0**

Rationale:

• The Committee agreed that the measure is well-defined and precisely specified using ICD-9 asthma



0728 Asthma Admission Rate (PDI 14)

diagnosis codes for inclusions and exclusions. .

- The Committee agreed that the data elements are repeatable and produce the same results a high proportion of the time.
- The Committee questioned how the measure accounts for compliance—or failure of compliance by parents, in particular—to administer inhaled corticosteroids and other preventative measures. During the workgroup discussions, workgroup members noted other confounders like exposure to second-hand smoke and poor living conditions. The developer agreed that second-hand smoke and other factors could be confounders, however, since individual providers are not assessed on their performance, those confounding factors are less concerning.
- The Committee noted that observed differences in the measure may be due to factors other than improvements in control and management of asthma (e.g., differences in underlying burden of disease).
- The measure used construct validity to demonstrate the relationship of asthma admission to primary care resources available in the community.

3. Feasibility: H-19; M-1; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

• The data elements are routinely generated, used during care delivery, and can be found in defined fields in electronic claims.

4. Use and Usability: H-12; M-7; L-1; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The Committee acknowledge the measure is currently used for public reporting by the AHRQ Healthcare
 Cost and Utilization Project, AHRQ National Healthcare Quality & Disparities Reports, as well as state level
 reports (e.g., California, Connecticut, New York)
- The Committee identified underlying disease burden as a potential confounder that could lead to an unintended consequence of this measure.

5. Standing Committee Recommendation for Endorsement: Y-19; N-1

6. Member and Public Comment [June 10-July 9, 2014]

• Commenters suggested that the measure developer examine whether admission rates for this measure vary based on socio-demographic factors unrelated to the delivery of healthcare.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals



2372 Breast Cancer Screening

Submission

Description: The percentage of women 50-74 years of age who had a mammogram to screen for breast cancer.

Numerator Statement: Women who received a mammogram to screen for breast cancer. **Denominator Statement:** Women 52-74 years as of December 31 of the measurement year

Note: this denominator statement captures women age 50-74 years; it is structured to account for the look-back period for mammograms.

Exclusions: Bilateral mastectomy any time during the member's history through December 31 of the measurement year. Any of the following meet criteria for bilateral mastectomy: 1) Bilateral mastectomy 2) Unilateral mastectomy with a bilateral modifier 3) Two unilateral mastectomies on different dates of service and 4) Both of the following (on the same date of service): Unilateral mastectomy with a right-side modifier and unilateral mastectomy with a left-side modifier.

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System **Setting of Care:** Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data **Measure Steward:** National Committee for Quality Assurance

STANDING COMMITTEE MEETING [04/30/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: H-5; M-12; L-2; I-1; 1b. Performance Gap: H-13; M-7; L-0; 1c. Impact: H-9; M-9; L-2; I-0 Rationale:

- The Committee acknowledged that the measure is aligned with the updated United States Preventive Services Task Force (USPSTF) guidelines that recommend biennial mammogram screening for women aged 50-74 years.
- The Committee noted that the quality of the evidence for the USPSTF guideline was rated "moderate" (Grade B: The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial) and remarked that, with few exceptions, most cancer screening tests have been assigned USPSTF evidence of Grade B.
- Committee members noted the USPSTF guidelines are currently under review and questioned whether
 providers would be penalized if they did not perform screenings per the current guidelines. The
 developers clarified that the measure does not penalize physicians when a screening is not performed.
 - During the workgroup discussion, the workgroup members agreed that the measure is a high priority—specifically for communities where there is an opportunity to improve outcomes, i.e., in communities where there are disparities between populations, particularly among lower income or Black or Hispanic women.

2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u> (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-12**; **M-8**; **L-0**; **I-0** 2b. Validity: **H-9**; **M-10**; **L-1**; **I-0**

Rationale:

- The Committee agreed that the measure was well specified and was reliable. The developer provided result of beta-binomial reliability testing. The results indicated the measure has sufficient signal strength to discriminate performance among health plans.
- The developer provided results from construct validity testing. The developer assessed the correlation between colorectal screening and cervical cancer screening at the health plan level. The results concluded



2372 Breast Cancer Screening

that breast cancer screening was strongly positively correlated to the colorectal cancer screening (0.73) and cervical cancer screening (0.70) measures in commercial plans. Breast cancer screening was moderately positively correlated to the cervical cancer screening measure (0.56) in Medicaid plans. Breast cancer screening was strongly positively correlated to the colorectal cancer screening measure (0.81) in Medicare plans. All correlations were significant (p< 0.05).

o The Committee expressed a desire to document patient preference for declining a mammogram as an exclusion. The developer noted that because this is a health plan measure, the measure cannot be specified to include patient refusal as an exclusion because this data element is difficult to collect at the plan level. The developer noted that there is an *a priori* assumption that these entities will have comparable rates of patients' refusal. Furthermore, the developer reported that patient refusal is occurring less than five percent of the time.

3. Feasibility: H-19; M-1; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

• The required data elements are routinely generated, used during care delivery, and are in defined fields in electronic claims.

4. Use and Usability: H-14; M-5; L-1; I-0

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- The developer noted that while the specifications are clearly defined for HEDIS measures, data collection
 and calculation methods may vary and other errors may taint the results, diminishing the usefulness of
 HEDIS data for managed care organization (MCO) comparisons. For HEDIS to reach its full potential, NCQA
 conducts an independent audit of all HEDIS data collection and reporting processes, as well a data audit,
 in order to verify that HEDIS specifications are met.
- The measure is currently in use in a number of programs, including: Health Plan Rankings/Report Cards, Annual State of Health Care Report, Medicaid Adult Core Set, NCQA Health Plan Accreditation, and NCQA'S Quality Compass.
- The Committee cautioned screening overuse (i.e. increased frequency) as a potential unintended consequence of the measure.

5. Standing Committee Recommendation for Endorsement: Y-18; N-2

6. Member and Public Comment [June 10-July 9, 2014]

- Commenters were generally supportive of this measure, noting that it is in alignment with current United States Preventive Services Task Force (USPSTF) guidelines and addresses a performance gap in known disparities in care.
- Commenters questioned why patient refusal was not listed as an exclusion and suggested exclusions for both patient refusal and patients with a terminal diagnosis.
- One commenter noted recent evidence that suggests that an annual mammography for women 40 to 59 years of age reduces breast cancer deaths, by a small degree. The commenter suggests that a policy of



2372 Breast Cancer Screening

screening women aged 60 to 69 years every two years may provide the best tradeoff between benefits and harm

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

2508 Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk

Submission

Description: Percentage of enrolled children in the age category of 6-9 years at "elevated" risk (i.e., "moderate" or "high") who received a sealant on a permanent first molar tooth within the reporting year.

Numerator Statement: Unduplicated number of enrolled children age 6-9 years at "elevated" risk (i.e., "moderate" or "high") who received a sealant on a permanent first molar tooth as a dental service.

Denominator Statement: Unduplicated number of enrolled children age 6-9 years who are at "elevated" risk (i.e., "moderate" or "high")

Exclusions: Medicaid/ CHIP programs should apply the following overall exclusions before determining the denominator:

- Undocumented aliens who are eligible only for emergency Medicaid services;
- Other groups of individuals under age 21 who are eligible only for limited services as part of their Medicaid eligibility (e.g., pregnancy-related services) and would not be eligible for routine dental care

Programs should report the exclusion criteria along with the number and percentage of members excluded.

There are no other exclusions.

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System **Setting of Care:** Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: American Dental Association on behalf of the Dental Quality Alliance

STANDING COMMITTEE MEETING [04/29/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: H-15; M-5; L-1; I-0; 1b. Performance Gap: H-12; M-8; L-1; I-0; 1c. Impact: H-21; M-0; L-0; I-0 Rationale:

- The Committee agreed that the measure was important to report as part of comprehensive oral healthcare, an area that is often overlooked.
- There are known disparities in dental care and sealant placement, and the Committee believed there is room for improvement in this area. The developer provided data indicating that higher disease rates exist in certain populations, including minority and low income populations, and that dental caries (cavities) are the most common chronic disease for children.
- The Committee acknowledged the connection between the process and the health outcome; timely placement of dental sealants on permanent first molars have demonstrated effectiveness in reducing caries among children, thereby improving oral health, overall health, and overall well-being.
 - A clinical practice guideline from the ADA and a Cochrane review was presented as evidence to support the measure. The Committee noted that the ADA guideline did not give an age or a



2508 Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk

specific molar for sealant placement, but stated "sealants should be placed on pits and fissures of children's and adolescents' permanent teeth when it is determined that the tooth or the patient is at risk for developing caries." The developers provided clarification that this age range was chosen based on typical eruption patterns of the first molars.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-3; M-12; L-1; I-5** 2b. Validity: **H-1; M-14; L-4; I-2**

Rationale:

- The Committee noted that it was not clear how the risk status of the patient was captured by the measure, as the measure uses a large number of CDT codes (Current Dental Terminology Dental Code Set) to determine risk. Committee members were also unsure what the CDT codes represented, which made it difficult for them to assess whether they were accurate and usable for quality improvement. The developer noted that, with respect to risk, the measure uses CDT codes and additional service codes. The measure logic, uses an 'or' clause, meaning CDT codes are reported from the providers. If CDT codes are not available, past history can be examined. The developer explained that risk is assessed using data from three years. The three-year time span is based on evidence and all the risk assessment tools also use that same time span with respect to asking the provider to determine whether, in the past three years, the child was treated for caries.
- The developer provided more clarity on the three CDT codes for low, medium, and high caries risk. The designation of caries risk is made by the clinician—i.e., there is a descriptor for "risk assessment performed and finding of low/moderate/or high risk."
- The developer acknowledged that, currently, no validation data exist on the consistency of coding among providers. The developers suggest this is because the codes are new to the field and these data are not currently available.
- The measure is specified to capture services provided by a dental hygienist, as long as it was under the
 direct or remote supervision of a dentist. Services provided by an independent hygienist would not be
 captured.
- The Committee expressed concern about the requirement for continuous enrollment for 180 days. The Committee inquired about the size of the population that falls into the risk category, but may not be captured because of fluctuating Medicaid or insurance coverage. The developer stated that 180 days was the balance needed to ensure enough children were captured in the measure.
- The developers provided data element validity testing focused on assessing the accuracy of the dental procedure codes reported in the claims data against the clinical record; separate reliability testing is not required when this method of validity testing is used.
- The Committee noted that it was not clear how many first permanent molars are sealed and whether the measure was capturing a child at risk or a tooth being at risk.



2508 Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk

3. Feasibility: H-14; M-6; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

- The required data elements are routinely generated, used during care, and can be easily retrieved because they are routinely generated for billing and reporting purposes.
- Initial feasibility assessments were conducted using the RAND-UCLA modified Delphi process to rate the measure feasibility. No questions were raised regarding feasibility of collecting the data elements, and the measure was rated, on a scale of 1-9, as 8, or "definitely feasible" by the expert panel.

4. Use and Usability: H-9; M-11; L-0; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- This measure has been adopted by the Texas Health and Human Services Commission as part of the Texas CHIP and Medicaid Dental Services Performance Indicator Dashboard for Quality Measures.
- No negative or unintended consequences have been identified.

5. Standing Committee Recommendation for Endorsement: Y-18; N-3

6. Member and Public Comment [June 10-July 9, 2014]

- Commenters were generally supportive of this measure.
- One commenter suggested the developer provide a clearer definition of "risk".

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

2509 Prevention: Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk

Submission

Description: Percentage of enrolled children in the age category of 10-14 years at "elevated" risk (i.e., "moderate" or "high") who received a sealant on a permanent second molar tooth within the reporting year.

Numerator Statement: Unduplicated number of enrolled children age 10-14 years at "elevated" risk (i.e., "moderate" or "high") who received a sealant on a permanent second molar tooth as a dental service.

Denominator Statement: Unduplicated number of enrolled children age 10-14 years who are at "elevated" risk (i.e., "moderate" or "high")

Exclusions: Medicaid/ CHIP programs should apply the following overall exclusions before determining the denominator:

- Undocumented aliens who are eligible only for emergency Medicaid services;
- Other groups of individuals under age 21 who are eligible only for limited services as part of their Medicaid eligibility (e.g., pregnancy-related services) and would not be eligible for routine dental care

Programs should report the exclusion criteria along with the number and percentage of members excluded.

There are no other exclusions.

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System **Setting of Care:** Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: American Dental Association on behalf of the Dental Quality Alliance



2509 Prevention: Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk

STANDING COMMITTEE MEETING [04/29/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: H-7; M-14; L-0; I-0; 1b. Performance Gap: H-13; M-8; L-0; I-0; 1c. Impact: H-16; M-4; L-1; I-0 Rationale:

- The Committee agreed that the measure was important to report as part of comprehensive oral healthcare, an area that is often overlooked.
- There are known disparities in dental care and sealant placement, and the Committee believed there is room for improvement in this area, especially with minorities and low income patients.
- The Committee acknowledged the connection between the process and the health outcome; timely placement of dental sealants on permanent first molars have demonstrated effectiveness in reducing caries among children, thereby improving oral health, overall health, and overall well-being.
- A clinical practice guideline from the ADA and a Cochrane review were presented as evidence to support the measure.
 - The Committee noted that ADA guideline did not give an age or a specific molar for sealant placement, but stated "sealants should be placed on pits and fissures of children's and adolescents' permanent teeth when it is determined that the tooth or the patient is at risk for developing caries." The developers provided clarification that this age range was chosen based on typical eruption patterns.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: H-5; M-15; L-0; I-1 2b. Validity: H-4; M-16; L-1; I-0 Rationale:

- The Committee raised similar concerns with this measure as with Measure 2508. These include:
 - The developer noted that, with respect to risk, the measure uses CDT codes and additional service codes. The measure logic uses an 'or' clause, meaning CDT codes are reported from the providers. If CDT codes are not available, past history can be examined. Past history of caries is the most important and valid predictor for future caries risk. All the other codes in the measure are markers for caries (e.g., treated caries from the past).
 - o Risk is assessed using data from three years. The three-year time span is based on evidence and all the risk assessment tools also use that same time span with respect to asking the provider to determine whether, in the past three years, the child was treated for caries.
 - The developer also noted that the risk codes are relatively new (two years) and are not broadly used among this provider population, which is why the measure allows risk to be captured in multiple ways.
- The developer reiterated that the purpose of these measures is to measure performance for the health plans and Medicaid programs, not to assess individual providers.



2509 Prevention: Dental Sealants for 10-14 Year-Old Children at Elevated Caries Risk

3. Feasibility: H-13; M-8; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

- The required data elements are routinely generated, used during care, and can be easily retrieved because they are routinely generated for billing and reporting purposes.
- Initial feasibility assessments were conducted using RAND-UCLA modified Delphi Process to rate the measure feasibility. No questions were raised regarding feasibility of collecting the data elements, and the measure was rated, on a scale of 1-9, as 8, or "definitely feasible" by the expert panel.

4. Use and Usability: H-10; M-9; L-1; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- This measure has been adopted by the Texas Health and Human Services Commission as part of the Texas CHIP and Medicaid Dental Services Performance Indicator Dashboard for Quality Measures.
- No negative or unintended consequences have been identified.

5. Standing Committee Recommendation for Endorsement: Y-18; N-3

6. Member and Public Comment [June 10-July 9, 2014]

- Commenters were generally supportive of this measure; one commenter suggested the developer provide a clearer definition of "risk".
- 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X
- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals

2511 Utilization of Services, Dental Services

Submission

Description: Percentage of enrolled children under age 21 years who received at least one dental service within the reporting year.

Numerator Statement: Unduplicated number of children under age 21 years who received at least one dental service

Denominator Statement: Unduplicated number of enrolled children under age 21 years

Exclusions: Medicaid/ CHIP programs should apply the following overall exclusions before determining the denominator:

- Undocumented aliens who are eligible only for emergency Medicaid services;
- Other groups of individuals under age 21 who are eligible only for limited services as part of their Medicaid eligibility (e.g., pregnancy-related services) and would not be eligible for routine dental care

Programs should report the exclusion criteria along with the number and percentage of members excluded. There are no other exclusions.

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System **Setting of Care:** Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: American Dental Association on behalf of the Dental Quality Alliance



2511 Utilization of Services, Dental Services

STANDING COMMITTEE MEETING [04/29/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: H-9; M-9; L-1; I-1; 1b. Performance Gap: H-18; M-2; L-0; I-0; 1c. Impact: H-16; M-4; L-0; I-0 Rationale:

• The Committee indicated agreement with evidence provided by the developer, noting that the measure is a gateway to assessing the quality of care and understanding whether children receive services and program performance.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-12; M-7; L-1; I-1** 2b. Validity: **H-6; M-12; L-2; I-0** Rationale:

- The Committee raised concerns about the focus of the measure's exclusions on individual characteristics of the individual receiving the service, rather than inclusion into a particular plan.
 - A question was raised about splitting off of use of oral health or dental services, which focused on who the provider was rather than whether the child or children in the program received services
- The Committee also noted that, in the future, the measure should include preventative services data.

3. Feasibility: H-16; M-4; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

- The required data elements are routinely generated, used during care, and can be easily retrieved because they are routinely generated for billing and reporting purposes.
- Initial feasibility assessments were conducted using RAND-UCLA modified Delphi process to rate the measure feasibility. No questions were raised regarding feasibility of collecting the data elements, and the measure was rated, on a scale of 1-9, as 8, or "definitely feasible" by the expert panel.

4. Use and Usability: H-14; M-6; L-1; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- This measure has been adopted by the Texas Health and Human Services Commission as part of the Texas CHIP and Medicaid Dental Services Performance Indicator Dashboard for Quality Measures.
- No negative or unintended consequences have been identified.

5. Standing Committee Recommendation for Endorsement: Y-19; N-1

6. Member and Public Comment [June 10-July 9, 2014]

• Commenters were generally supportive of this measure; one commenter suggested that the measure be limited to children under 21 because dental health is an important aspect of dietary and nutritional health, both of which have far greater impact on overall medical health.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals



2517 Oral Evaluation, Dental Services

Submission

Description: Percentage of enrolled children under age 21 years who received a comprehensive or periodic oral evaluation within the reporting year.

Numerator Statement: Unduplicated number of enrolled children under age 21 years who received a comprehensive or periodic oral evaluation as a dental service

Denominator Statement: Unduplicated number of enrolled children under age 21 years

Exclusions: Medicaid/ CHIP programs should apply the following overall exclusions before determining the denominator:

- Undocumented aliens who are eligible only for emergency Medicaid services;
- Other groups of individuals under age 21 who are eligible only for limited services as part of their Medicaid eligibility (e.g., pregnancy-related services) and would not be eligible for routine dental care

Programs should report the exclusion criteria along with the number and percentage of members excluded.

There are no other exclusions. Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System **Setting of Care:** Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: American Dental Association on behalf of the Dental Quality Alliance

STANDING COMMITTEE MEETING [04/29/2014]

- 1. Importance to Measure and Report: <u>The measure failed to reach consensus on the Importance criteria</u> (1a. Evidence, 1b. Performance Gap, 1c. High Impact)
- 1a. Evidence: H-0; M-10; L-6; I-4; IE-1; 1b. Performance Gap: H-8; M-10; L-1; I-2; 1c. Impact: H-5; M-11; L-4; I-1 Rationale:
 - The Committee noted that the measure's evidence is based more on expert opinion rather than science, but due to the limited data on annual dental visits, the evidence presented was sufficient.
 - The measure developer acknowledged the limitations of the data which are based on currently available oral evaluations data and what the dental community deems acceptable to establish a Dental Home.
 - The Committee noted that the measure assesses both a comprehensive and a periodic oral examination and, as such, should be reflected in the measure title.
 - The Committee debated the value of the measure as a stand-alone measure since oral evaluation is also addressed in Measure 2511.
- 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: **H-6; M-12; L-3; I-0** 2b. Validity: **H-1; M-12; L-8; I-0**

Rationale:

- The Committee noted that this measure should ensure that all of the components of a standard oral evaluation are assessed as it relates to the children who receive services.
- Regarding validity, the Committee raised concerns about whether this measure should be viewed as a component of Measure 2511 and the value of this measure as a standalone measure.



2517 Oral Evaluation, Dental Services

3. Feasibility: H-17; M-4; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)
Rationale:

• The Committee noted that the data source is accessible and therefore the measure would be feasible to implement.

4. Use and Usability: H-7; M-8; L-5; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

 The Committee noted that the measure is in use in the Texas Health and Human Services CHIP and the Medicaid Dental Services Performance Indicator Dashboard for Quality Measures. The measure is reported publicly. Additionally, this measure can be used at a plan and programmatic level to show improvement over time.

5. Standing Committee Recommendation for Endorsement: Y-11; N-6

- The Committee discussed this measure at length during the Post-Comment Call on August 6 and raised earlier concerns about the evidence based mostly on expert opinion and not empirical studies. After significant discussion the Committee agreed that this was an important measure that assessed best practice in dental care.
- The Committee acknowledged that while there was disagreement on the quality of the evidence, the measure was important for community and public health.
- The Committee recommended this measure for endorsement. The Measure will go out for Member voting as Recommended.

6. Member and Public Comment [June 10-July 9, 2014]

- NQF received seven post-evaluation comments in strong support of this measure for NQF-endorsement consideration. The commenters indicated the fundamental importance of an oral evaluation for thorough, quality care, citing it as the building block to a plan of care for children's oral health.
- Other comments highlighted the necessity for this measure to help promote early detection and
 prevention and the enhancement of the doctor-patient relationship, thereby resulting in better outcomes
 for not only children, but populations of all ages.
- Two post-evaluation comments cautioned against combining this measure with Measure 2511: Utilization of Services, Dental Services.
- The majority of commenters acknowledged that Measure 2511 is a better assessment of overall access to
 dental care, but cautioned that many individuals access care only episodically, when they are in pain or
 have some other dental problem. They noted that measure 2517 provides a more accurate assessment of
 access to care because it reflects access to more comprehensive care.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals



2518 Care Continuity, Dental Services

Submission |

Description: Percentage of enrolled children aged 2-21 years enrolled in two consecutive years who received a comprehensive or periodic oral evaluation in both years.

Numerator Statement: Unduplicated number of children who received a comprehensive or periodic oral evaluation as a dental service in both years

Denominator Statement: Unduplicated number of children aged 2-21 years enrolled in two consecutive years **Exclusions:** Medicaid/ CHIP programs should apply the following overall exclusions before determining the denominator:

- Undocumented aliens who are eligible only for emergency Medicaid services;
- Other groups of individuals under age 21 who are eligible only for limited services as part of their Medicaid eligibility (e.g., pregnancy-related services) and would not be eligible for routine dental care

Programs should report the exclusion criteria along with the number and percentage of members excluded.

There are no other exclusions.

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System **Setting of Care:** Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: American Dental Association on behalf of the Dental Quality Alliance

STANDING COMMITTEE MEETING [04/29/2014]

1. Importance to Measure and Report: The measure failed to reach consensus on the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: H-0; M-11; L-5; I-4; IE-2; 1b. Performance Gap: H-4; M-13; L-3; I-2; 1c. Impact: H-7; M-10; L-3; I-2 Rationale:

- Committee members inquired about the evidence supporting two oral evaluations two years in a row
 representing continuity of care. Two clinical practice guidelines, one from the United Kingdom's National
 Institute for Health and Care Excellence and one from the American Academy of Pediatric Dentistry, were
 presented by the developers as evidence to support the measure; these guidelines note that increased
 visitation increase the chance for better outcomes.
- The Committee rated this measure lower on the criterion of supporting evidence and questioned whether
 the evidence was strong enough to support that the process being measured contributes to a health
 outcome.



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2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-4; M-16; L-2; I-0 2b. Validity: H-0; M-16; L-5; I-1

Rationale:

- The Committee questioned whether the measure addressed the concept of continuity of care because it did not require the same provider for both visits. The developer explained that there is no evidence that demonstrates that visiting the same provider improves health outcomes in dentistry.
- The developer explained that this measure only looks at the continuity aspect, as opposed to the usual source of services.

3. Feasibility: H-11; M-10; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The Committee had no questions or comments on the feasibility of this measure.
- The measure relies on standard data elements in administrative claims data (e.g., patient ID, patient birthdate, enrollment information, CDT codes, date of service, and provider taxonomy), which is readily available and can be easily retrieved because they are routinely used for billing and reporting purposes.

4. Use and Usability: H-4; M-13; L-3; I-2

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

• The Committee noted that this measure is currently used in Texas for their Medicaid and CHIP programs and is also being suggested for use in Connecticut.

5. Standing Committee Recommendation for Endorsement: Y-10; N-7

- The Committee discussed this measure during the Post-Comment Call on August 6 and the earlier concerns about evidence based mostly on expert opinion and not empirical studies were raised, and only two year look-back period (with potentially different providers) were raised. The Committee agreed that care continuity would be hard to track if the provider is not consistent.
- The Committee rendered a vote on this measure. The results were as follows: On overall suitability for endorsement, Yes-10, No-7.
- The measure will go out for Member voting as Consensus not Reached.



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6. Member and Public Comment [June 10-July 9, 2014]

- Although in support of this measure, some commenters requested that developer provide more evidence that the measure assessed continuous care.
- One commenter noted that patients should not go two consecutive years without a follow-up evaluation because undetected oral health conditions could lead to negative health outcomes.
- Another commenter suggested that the measure be renamed "Two-Year Retention In Care," and went on to explain that retention of patients in care over the span of a two-year period facilitates preventative care, which should result in improved health outcomes and lower treatment costs.
- 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X
- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals

2528 Prevention: Topical Fluoride for Children at Elevated Caries Risk, Dental Services

Submission

Description: Percentage of enrolled children aged 1-21 years who are at "elevated" risk (i.e., "moderate" or "high") who received at least 2 topical fluoride applications within the reporting year.

Numerator Statement: Unduplicated number of enrolled children aged 1-21 years who are at "elevated" risk (i.e., "moderate" or "high") who received at least 2 topical fluoride applications as a dental service.

Denominator Statement: Unduplicated number of enrolled children aged 1-21 years who are at "elevated" risk (i.e., "moderate" or "high")

Exclusions: Medicaid/ CHIP programs should apply the following overall exclusions before determining the denominator:

- Undocumented aliens who are eligible only for emergency Medicaid services;
- Other groups of individuals under age 21 who are eligible only for limited services as part of their Medicaid eligibility (e.g., pregnancy-related services) and would not be eligible for routine dental care Programs should report the exclusion criteria along with the number and percentage of members excluded.

There are no other exclusions.

Adjustment/Stratification:

Level of Analysis: Health Plan, Integrated Delivery System **Setting of Care:** Ambulatory Care: Clinician Office/Clinic

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: American Dental Association on behalf of the Dental Quality Alliance

STANDING COMMITTEE MEETING [04/29/2014]

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap, 1c. High Impact)

1a. Evidence: **H-2; M-15; L-1; I-1**; **IE-1** 1b. Performance Gap: **H-6; M-14; L-0; I-0;** 1c. Impact: **H-13; M-7; L-0; I-0** Rationale:

- The Committee agreed that this measure was well supported by Cochrane Reviews and evidence-based guidelines, noting that evidence shows that at least two topical fluoride applications are needed.
- The Committee noted that while the evidence to support this measure has been known for over a decade, it still sees a performance gap.



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2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-15; M-13; L-3; I-1 2b. Validity: H-1; M-11; L-7; I-1

Rationale:

- The measure is focused on a specific age group, risk status, and tooth. The Committee noted that the guidelines provided by the developer recommend that sealants should be placed on pits and fissures of children's and adolescents' permanent teeth when it's determined that the tooth or the patient is at risk for developing caries. The Committee also noted that risk correlates with socio-demographic factors, the presence of caries, prior cavities or potential lesions, and family history; these risk factors are taken into account to determine risk by the healthcare provider and dentist. The Committee noted that moderate risk and high risk should be treated the same because the same protocol is applicable to both risk levels.
- The Committee questioned accuracy of CDT codes in discerning elevated risk vs. moderate risk. The developer noted that, in terms of the risk, the measure uses CDT codes and additional service codes. The measure logic, uses an 'or' clause, meaning if the CDT codes are reported from the providers, those can be used. If the CDT codes are not present, then past history can be used; past history of caries is the best/most important and, most valid predictor for future caries risk. All the other codes in the measure are markers for caries treated caries from the past.
- The Committee questioned the rationale for the age group (ages 1 to 21) and believed that this might be influenced by insurance coverage. The developer explained that the age range is used by CMS and the Medicaid Program to define a "child". The Committee reiterated that it was more important to identify high-risk, rather than creating separate measures for more specific age groups.

3. Feasibility: H-14; M-6; L-1; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- The required data elements are routinely generated used during care, and can be easily retrieved because they are routinely generated for billing and reporting purposes.
- Initial feasibility assessments were conducted using RAND-UCLA modified Delphi process to rate the measure feasibility. No questions were raised regarding feasibility of collecting the data elements, and the measure was rated, on a scale of 1-9, as 8, or "definitely feasible" by the expert panel.

4. Use and Usability: H-9; M-11; L-0; I-1

(Meaningful, understandable, and useful to the intended audiences for 4a. Public Reporting/Accountability and 4b. Quality Improvement)

Rationale:

- This measure has been adopted by the Texas Health and Human Services Commission as part of the Texas CHIP and Medicaid Dental Services Performance Indicator Dashboard for Quality Measures.
- No negative or unintended consequences have been identified.

5. Standing Committee Recommendation for Endorsement: Y-18; N-3

6. Member and Public Comment [June 10-July 9, 2014]

• Commenters were generally supportive of this measure; one commenter did not agree that only children with elevated risk should be included in the measure.

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X; A-X

8. Board of Directors Vote: Y-X; N-X



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9. Appeals