



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

Brief Measure Information

NQF #: 2508

Corresponding Measures:

De.2. Measure Title: Prevention: Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk, Dental Services

Co.1.1. Measure Steward: American Dental Association on behalf of the Dental Quality Alliance

De.3. Brief Description of Measure: 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.

1b.1. Developer Rationale: Inequalities in oral health status and inadequate use of oral health care services are well documented. Dental caries is the most common chronic disease in children in the United States (NCHS 2012). In 2009–2010, 14% of children aged 3–5 years had untreated dental caries. Among children aged 6–9 years, 17% had untreated dental caries, and among adolescents aged 13–15, 11% had untreated dental caries (Dye, Li, and Thornton-Evans 2012). Dental decay among children has significant short- and long-term adverse consequences (Tinanoff and Reisine 2009). Childhood caries is associated with increased risk of future caries (Gray, Marchment, and Anderson 1991; O'Sullivan and Tinanoff 1996; Reisine, Litt, and Tinanoff 1994), missed school days (Gift, Reisine, and Larach 1992; Hollister and Weintraub 1993), hospitalization and emergency room visits (Griffin et al. 2000; Sheller, Williams, and Lombardi 1997) and, in rare cases, death (Casamassimo et al. 2009). Identifying caries early is important to reverse the disease process, prevent progression of caries, and reduce incidence of future lesions.

Evidence-based clinical recommendations recommend that sealants be placed on pits and fissures of children's primary and permanent teeth when it is determined that the tooth, or the patient, is at risk of experiencing caries (Beauchamp et al. 2008). The evidence for sealant effectiveness in permanent molars is stronger than evidence for primary molars (Beauchamp et al. 2008). Sealants benefit children across a wide age range; however, for greatest effectiveness in caries prevention, it is recommended that sealants be placed on teeth soon after they erupt (US DHHS 2010; CDC 2013).

The proposed measure, Prevention: Sealants for 6-9 Year-Old Children at Elevated Caries Risk, captures whether children at moderate or high caries risk received a sealant on a permanent first molar tooth. Permanent first molars usually erupt between ages 6 and 7 years. Thus, this measure addresses both the tooth type on which sealants are placed and the timeliness of care provision. The measure Sealants for 6-9 Year-Old Children allows plans and programs to assess whether children at risk for caries are receiving evidence-based prevention and target performance improvement initiatives accordingly.

This measure is a program/plan specific measure that contributes to the Healthy People 2020 Objective OH 12.2 that calls for increasing the percent children aged 6 to 9 years who received dental sealants on one or more of their first permanent molars.

Note: Procedure codes contained within claims data are the most feasible and reliable data elements for quality metrics in dentistry, particularly for developing programmatic process measures to assess the quality of care provided by programs (e.g., Medicaid, CHIP) and health/dental plans. In dentistry, diagnostic codes are not commonly reported and collected, precluding direct outcomes assessments. Although some programs are starting to implement policies to capture diagnostic information, evidence-based process measures are the most feasible and reliable quality measures at programmatic and plan levels at this point in time.

[Complete citations provided in 1c4 and in Evidence Submission Form.]

S.4. 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.

S.6. Denominator Statement: Unduplicated number of enrolled children age 6-9 years who are at “elevated” risk (i.e., “moderate” or “high”)
S.8. Denominator Exclusions: Medicaid/ CHIP programs should exclude those individuals who do not qualify for dental benefits. The exclusion criteria should be reported along with the number and percentage of members excluded.

There are no other exclusions.

De.1. Measure Type: Process

S.17. Data Source: Claims

S.20. Level of Analysis: Health Plan, Integrated Delivery System

IF Endorsement Maintenance – Original Endorsement Date: Sep 18, 2014 **Most Recent Endorsement Date:** Sep 18, 2014

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? Not applicable.

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. ***Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.***

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form

4_NQF_Evidence_6-9.docx

1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

No

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.

Inequalities in oral health status and inadequate use of oral health care services are well documented. Dental caries is the most common chronic disease in children in the United States (NCHS 2012). In 2009–2010, 14% of children aged 3–5 years had untreated dental caries. Among children aged 6–9 years, 17% had untreated dental caries, and among adolescents aged 13–15, 11% had untreated dental caries (Dye, Li, and Thornton-Evans 2012). Dental decay among children has significant short- and long-term adverse consequences (Tinanoff and Reisine 2009). Childhood caries is associated with increased risk of future caries (Gray, Marchment, and Anderson 1991; O’Sullivan and Tinanoff 1996; Reisine, Litt, and Tinanoff 1994), missed school days (Gift, Reisine, and Larach 1992; Hollister and Weintraub 1993), hospitalization and emergency room visits (Griffin et al. 2000; Sheller, Williams, and Lombardi 1997) and, in rare cases, death (Casamassimo et al. 2009). Identifying caries early is important to reverse the disease process, prevent progression of caries, and reduce incidence of future lesions.

Evidence-based clinical recommendations recommend that sealants be placed on pits and fissures of children’s primary and permanent teeth when it is determined that the tooth, or the patient, is at risk of experiencing caries (Beauchamp et al. 2008). The evidence for sealant effectiveness in permanent molars is stronger than evidence for primary molars (Beauchamp et al. 2008).

Sealants benefit children across a wide age range; however, for greatest effectiveness in caries prevention, it is recommended that sealants be placed on teeth soon after they erupt (US DHHS 2010; CDC 2013).

The proposed measure, Prevention: Sealants for 6-9 Year-Old Children at Elevated Caries Risk, captures whether children at moderate or high caries risk received a sealant on a permanent first molar tooth. Permanent first molars usually erupt between ages 6 and 7 years. Thus, this measure addresses both the tooth type on which sealants are placed and the timeliness of care provision. The measure Sealants for 6-9 Year-Old Children allows plans and programs to assess whether children at risk for caries are receiving evidence-based prevention and target performance improvement initiatives accordingly.

This measure is a program/plan specific measure that contributes to the Healthy People 2020 Objective OH 12.2 that calls for increasing the percent children aged 6 to 9 years who received dental sealants on one or more of their first permanent molars.

Note: Procedure codes contained within claims data are the most feasible and reliable data elements for quality metrics in dentistry, particularly for developing programmatic process measures to assess the quality of care provided by programs (e.g., Medicaid, CHIP) and health/dental plans. In dentistry, diagnostic codes are not commonly reported and collected, precluding direct outcomes assessments. Although some programs are starting to implement policies to capture diagnostic information, evidence-based process measures are the most feasible and reliable quality measures at programmatic and plan levels at this point in time.

[Complete citations provided in 1c4 and in Evidence Submission Form.]

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. *(This is required for maintenance of endorsement. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

Below are the testing data and results that met scientific acceptability criteria for endorsement. Because there were no changes in the data source, level of analysis or setting, additional testing has not been conducted.

Data Sources:

We used data from five sources and refer to “program” level information and “plan” level information. We included data for publicly insured children in the Texas Medicaid, Texas CHIP, Florida CHIP, and Florida Medicaid programs as well as national commercial data from Dental Service of Massachusetts, Inc. Florida and Texas represent two of the largest and most diverse states. The two states also represent the upper and lower bounds of dental utilization based on dental utilization data available from the Centers for Medicare and Medicaid Services. The five programs collectively represent different delivery system models. The Texas Medicaid data represented dental fee-for-service, and Texas CHIP data reflected a single dental managed care organization (MCO). The Florida CHIP data included data from two dental MCOs. The Florida Medicaid data include dental fee-for-service and prepaid dental data. The commercial data included members in indemnity and preferred provider organization (PPO) product lines. Data from calendar years 2010 and 2011 were used for all programs except Florida Medicaid. Full-year data for CY 2011 were not available for Florida Medicaid. Therefore, we report only CY 2010 data for Florida Medicaid.

In the data summaries, “Programs” refer to population data from (1) Texas Medicaid, (2) Texas CHIP, (3) Florida CHIP, (4) Commercial Data, and (5) Florida Medicaid. “Plans” refer to data from the two dental plans that served Florida CHIP members in both 2010 and 2011. [Technically, there were three plans represented in the data because Texas CHIP was served by a single dental plan. Since the program=plan in that case, we included it in the “program” level data.]

Below we provide summary data for each of the five programs and two plans individually.

Programs

Our source data for the testing prior to applying the denominator age criteria of 6-9 years old included children 0-20 years in each program. The number of children ages 0-20 years enrolled at least one month in each program were as follows:

Texas Medicaid, 2011: 3,544,247

Texas Medicaid, 2010: 3,393,963

Texas CHIP, 2011: 842,454
 Texas CHIP, 2010: 786,070
 Florida CHIP, 2011: 317,146
 Florida CHIP, 2010: 315,975
 Commercial, 2011: 184,152
 Commercial, 2010: 189,968
 Florida Medicaid, 2010: 2,068,670

Within these programs, we had claims data available in both years for two dental managed care plans in Florida CHIP. We also report rates for those two plans separately.

Plan 1, 2010: 77,255
 Plan 2, 2010: 116,388
 Plan 1, 2011: 140,986
 Plan 2, 2011: 168,191

The number of children in the age range of 6-9 years specifically were:

Texas Medicaid, 2011: 746,535
 Texas Medicaid, 2010: 706,596
 Texas CHIP, 2011: 224,908
 Texas CHIP, 2010: 210,624
 Florida CHIP, 2011: 88,943
 Florida CHIP, 2010: 89,897
 Commercial, 2011: 36,905
 Commercial, 2010: 38,390
 Florida Medicaid, 2010: 406,698
 Plan 1, 2010: 25,240
 Plan 2, 2010: 31,126
 Plan 1, 2011: 41,537
 Plan 2, 2011: 45,348

Data 1b.2. Performance Scores for Dental Sealants for 6-9 Year-Olds at Elevated Risk

Program/Plan, Year, Measure Score as % (Measure Score, SD, Lower 95% CI, Upper 95% CI)

Program 1, CY 2011:	23.69%	(	0.2369	,	0.0006	,	0.2357	,	0.2381)
Program 2, CY 2011:	23.01%	(	0.2301	,	0.0017	,	0.2267	,	0.2335)
Program 3, CY 2011:	31.33%	(	0.3133	,	0.0036	,	0.3062	,	0.3204)
Program 4, CY 2011:	22.59%	(	0.2259	,	0.0042	,	0.2176	,	0.2342)
Program 1, CY 2010:	23.38%	(	0.2338	,	0.0007	,	0.2325	,	0.2351)
Program 2, CY 2010:	19.82%	(	0.1982	,	0.0017	,	0.1949	,	0.2015)
Program 3, CY 2010:	30.04%	(	0.3004	,	0.0036	,	0.2933	,	0.3075)
Program 4, CY 2010:	26.68%	(	0.2668	,	0.0043	,	0.2583	,	0.2753)
Program 5, CY 2010:	21.04%	(	0.2104	,	0.0015	,	0.2074	,	0.2134)
Plan 1, CY 2011:	31.43%	(	0.3143	,	0.0054	,	0.3037	,	0.3249)
Plan 2, CY 2011:	30.91%	(	0.3091	,	0.0050	,	0.2993	,	0.3189)
Plan 1, CY 2010:	31.38%	(	0.3138	,	0.0078	,	0.2985	,	0.3291)
Plan 2, CY 2010 :	29.97%	(	0.2997	,	0.0067	,	0.2866	,	0.3128)

The measure rate range of 20% to 30% in CY 2010 (year in which data were available for all five programs) indicates variations in sealant prevalence across programs.

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the

literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

The measure testing findings are consistent with other data indicating that there are significant variations in the percentage of children who received sealants. Data from the Centers for Medicare and Medicaid Services indicate significant variation among state Medicaid programs, ranging from 6% to 31% of children 6-9 years old, who received a sealant on a permanent molar tooth (Norris 2013; CMS-416 data, FY 2011).

[Complete citations provided in 1c4 and in Evidence Submission Form Template.]

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. *(This is required for maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.) For measures that show high levels of performance, i.e., "topped out", disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

The same data sources were used as described in 1b.2. The data below summarizes performance data by geographic location and race/ethnicity for CY 2011 (CY 2010 for one program) with the p-values from chi-square tests used to detect whether there were statistically significant differences in performance between groups. Disparities by geographic location were detected for two programs. Statistically significant difference in performance by race and ethnicity also were detected in the two programs for which there were race/ethnicity data. In addition, we also evaluated whether the measure could detect disparities by income (within program), children's health status (based on their medical diagnoses), Medicaid program type, CHIP dental plan, commercial product line, and preferred language for program communications. We additionally detected disparities by health status, dental plan and Medicaid program type, but data on all of these characteristics were not consistently available for all programs so we are presenting disparities data on those characteristics that were most consistently available and had the greatest standardization

Data1b.4. Disparities in Performance by Geographic Location and Race/Ethnicity

PROGRAM 1

Overall performance score: 23.69%

Scores by Geographic Location

Urban: 23.95%

Rural: 21.89%

p-value from Chi-square test: <.0001

Scores by Race

Non-Hispanic White: 22.07%

Non-Hispanic Black: 23.08%

Hispanic: 24.31%

p-value from Chi-square test <.0001

PROGRAM 2

Overall performance score: 23.01%

Scores by Geographic Location

Urban: 23.00%

Rural: 23.23%

p-value from Chi-square test: 0.6649

Scores by Race

Non-Hispanic White: n/a

Non-Hispanic Black: n/a

Hispanic: n/a

p-value from Chi-square test n/a

PROGRAM 3

Overall performance score: 31.33%

Scores by Geographic Location

Urban: 31.29%
Rural: 31.82%
p-value from Chi-square test: 0.7252
Scores by Race
Non-Hispanic White: n/a
Non-Hispanic Black: n/a
Hispanic: n/a
p-value from Chi-square test n/a

PROGRAM 4
Overall performance score: 22.59%
Scores by Geographic Location
Urban: 22.70%
Rural: 20.60%
p-value from Chi-square test: 0.3436
Scores by Race
Non-Hispanic White: n/a
Non-Hispanic Black: n/a
Hispanic: n/a
p-value from Chi-square test n/a

PROGRAM 5
Overall performance score: 21.04%
Scores by Geographic Location
Urban: 21.07%
Rural: 19.33%
p-value from Chi-square test: 0.0087
Scores by Race
Non-Hispanic White: 21.24%
Non-Hispanic Black: 19.63%
Hispanic: 21.87%
p-value from Chi-square test <.0001

Note: N/A for race/ethnicity indicates that those programs did not collect race/ethnicity data or had high rates of missing data .

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4

There is extensive literature documenting disparities in dental service use among children by age, race/ethnicity, and geographic region, including within vulnerable populations, much of which is summarized in three major national reports on oral health: the Surgeon General's report on Oral Health in America in 2000, the IOM report, Improving Access to Oral Health Care for Vulnerable and Underserved Populations, and the IOM report, Advancing Oral Health in America.

With respect to preventive dental services in general, there are documented disparities. Using data from the National Survey of Children's Health, Edelstein and Chinn (2009) noted disparities in access to preventive dental services by race and income: "Stepwise disparities in access to preventive dental services are evident by race and income in ways that parallel Medical Expenditure Panel Survey findings. White parents report higher use of preventive dental services than do black or Hispanic parents (77%, 66%, and 61%, respectively). Poor parents report less use of services than do low income, middle class, and higher-income parents (58%, 66%, 77%, and 82%, respectively)" (Edelstein & Chinn, 2009, p.418). A recent analysis by Bouchery (2013) of the Medicaid Analytic eXtract files for nine states found variations in the percentage of children receiving a preventive dental visit by age, race and ethnicity, and geographic area. Specifically, relative to the reference group of 9 year olds, the percentage point change in the probability of having a dental preventive services was -27.6 for 3 years old; -8.6 for 6 years, -2.2 for 12 years and -15.4 for 15 years (all significant at $p < 0.0001$); relative to the reference group of white, non-Hispanic, the percentage point change was -1.8 for black non-Hispanic and 7.8 for Hispanic ($p < 0.0001$ for both); relative to the reference group of small metro area, the percentage point change was 5.9 for

large metro area ($p < 0.0001$).

In addition, there are documented disparities in dental sealant receipt specifically. For example, using data from the National Health and Nutrition Examination Survey, researchers at the National Center for Health Statistics identified variations in dental sealant prevalence among children by age, race, ethnicity, and poverty level (Dye, Li, and Thornton-Evans 2012). Specifically: “Dental sealant prevalence was lower among children [6-9 years] living at or below 100% of the federal poverty level (26%) compared with children living above the poverty level (34%). A similar pattern was found among adolescents aged 13–15, but the difference was not statistically significant. Dental sealant prevalence was significantly lower for non-Hispanic black adolescents (32%) compared with non-Hispanic white adolescents (56%), among those aged 13–15” (Dye, Li, and Thornton-Evans 2012, p. 2).

Sources

Bouchery, E. 2013. “Utilization of Dental Services among Medicaid-Enrolled Children.” Medicare & Medicaid Research Review. 3(3) E1-16. Available at: https://www.cms.gov/mmrr/Downloads/MMRR2013_003_03_b04.pdf.

Dietrich, T., C. Culler, R. Garcia, and M. M. Henshaw. 2008. Racial and ethnic disparities in children’s oral health: The National Survey of Children’s Health. *Journal of the American Dental Association* 139(11):1507-1517.

Dye BA, Li X, Thornton-Evans G. Oral health disparities as determined by selected healthy people 2020 oral health objectives for the United States, 2009-2010. *NCHS Data Brief* 2012(104):1-8. U.S. Dept. of Health and Human Services, National Institute of Dental and Craniofacial Research.

Edelstein, B. L. and C. H. Chinn. 2009. “Update on Disparities in Oral Health and Access to Dental Care for America’s Children.” *Acad Pediatr* 9(6): 415-9.

Institute of Medicine (U.S.). Committee on an Oral Health Initiative. *Advancing oral health in America*. Washington, D.C.: National Academies Press; 2011.

Institute of Medicine and National Research Council. *Improving access to oral health care for vulnerable and underserved populations*. Washington, D.C.: National Academies Press; 2011.

Kenney, G. M., J. R. McFeeters, and J. Y. Yee. 2005. Preventive dental care and unmet dental needs among low-income children. *American Journal of Public Health* 95(8):1360-1366.

Lewis, C., W. Mouradian, R. Slayton, and A. Williams. 2007. Dental insurance and its impact on preventative dental care visits for U.S. children. *Journal of the American Dental Association* 138(3):369-380.

Oral Health in America: a report of the Surgeon General. Rockville, Md.: U.S. Public Health Service, Dept. of Health and Human Services; 2000.

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. ***Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.***

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):

Dental

De.6. Non-Condition Specific(check all the areas that apply):

Access to Care, Disparities Sensitive, Health and Functional Status : Change, Health and Functional Status : Total Health, Primary

Prevention

De.7. Target Population Category (Check all the populations for which the measure is specified and tested if any):
[Children, Populations at Risk](#)

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)
http://www.ada.org/~media/ADA/Science%20and%20Research/Files/DQA_2018_Dental_Services_Sealants_6-9_Years.pdf?la=en

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

[This is not an eMeasure](#) **Attachment:**

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

[No data dictionary](#) **Attachment:**

S.2c. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

[No, this is not an instrument-based measure](#) **Attachment:**

S.2d. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

[Not an instrument-based measure](#)

S.3.1. For maintenance of endorsement: Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

[No](#)

S.3.2. For maintenance of endorsement, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

[1. No changes to the measure specifications](#)

[2. Measure specification website updated to be more user friendly](#)

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) **DO NOT** include the rationale for the measure.

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

[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.](#)

S.5. Numerator Details (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

[Please see section S14](#)

S.6. Denominator Statement *(Brief, narrative description of the target population being measured)*

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

S.7. Denominator Details *(All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*

IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Please see section S14

S.8. Denominator Exclusions *(Brief narrative description of exclusions from the target population)*

Medicaid/ CHIP programs should exclude those individuals who do not qualify for dental benefits. The exclusion criteria should be reported along with the number and percentage of members excluded.

There are no other exclusions.

S.9. Denominator Exclusion Details *(All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*

There are no other exclusions than those described above.

S.10. Stratification Information *(Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)*

There are no stratifications for this measure.

S.11. Risk Adjustment Type (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

S.12. Type of score:

Rate/proportion

If other:

S.13. Interpretation of Score *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)*

Better quality = Higher score

S.14. Calculation Algorithm/Measure Logic *(Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)*

Sealants for 6 – 9 year olds - Calculation for Children at Elevated Caries Risk

1. Use administrative enrollment and claims data for a single year. When using claims data to determine service receipt, include both paid and unpaid claims (including pending, suspended, and denied claims).
2. Check if the enrollee meets age criteria at the last day of the reporting year:
 - a. If child is ≥ 6 and ≤ 9 , then proceed to next step.
 - b. If age criterion is not met or there are missing or invalid field codes (e.g., date of birth), then STOP processing. This enrollee does not get counted.
3. Check if subject is continuously enrolled for at least 180 days during the reporting year:
 - a. If subject meets continuous enrollment criterion, then proceed to next step.

- b. If subject does not meet enrollment criterion, then STOP processing. This enrollee does not get counted.

YOU NOW HAVE THE COUNT OF THOSE WHO MEET THE AGE AND ENROLLMENT CRITERIA

4. Check if subject is at “elevated risk”:

i. the subject has a CDT Code among those in Table 1 in the reporting year,

OR

ii. the subject has a CDT Code among those in Table 1 in any of the three years prior to the reporting year, (NOTE: The subject does not need to be enrolled in any of the prior three years for the denominator enrollment criteria; this is a “look back” for enrollees who do have claims experience in any of the prior three years.)

OR

iii. the subject has a visit with a CDT code = (D0602 or D0603) in the reporting year.

- b. If the subject does not meet any of the above criteria for elevated risk, then STOP processing. This enrollee will not be included in the measure denominator.

YOU NOW HAVE THE DENOMINATOR (DEN): Enrollees who are at “elevated risk”

5. Check if subject received a sealant as a dental service:

a. If [CDT CODE] = D1351 and;

b. If [RENDERING PROVIDER TAXONOMY] code = any of the NUCC maintained Provider Taxonomy Codes in Table 2 below, then proceed to next step.

c. If both a AND b are not met, then the service was not a “dental service”; STOP processing. This enrollee is already included in the denominator but will not be included in the numerator.

Note: In this step, all claims with missing or invalid CDT CODE, missing or invalid NUCC maintained Provider Taxonomy Codes, or NUCC maintained Provider Taxonomy Codes that do not appear in Table 2 should not be included in the numerator.

6. Check if sealant was placed on a permanent first molar:

a. If [TOOTH-NUMBER] = 3, 14, 19 or 30 then include in numerator; STOP processing.

b. If not, then service was not provided for the first permanent molar; STOP processing. This enrollee is already included in the denominator but will not be included in the numerator.

YOU NOW HAVE NUMERATOR (NUM) COUNT: Enrollees at “elevated risk” who received sealants on a permanent first molar as a dental service

7. Report

a. Unduplicated number of enrollees in numerator

b. Unduplicated number of enrollees in denominator

c. Measure rate (NUM/DEN)

Table 1: CDT Codes to identify “elevated risk”

D2140	D2394	D2630	D2720	D2791	D3120
D2150	D2410	D2642	D2721	D2792	D3220
D2160	D2420	D2643	D2722	D2794	D3221
D2161	D2430	D2644	D2740	D2799	D3222
D2330	D2510	D2650	D2750	D2930	D3230
D2331	D2520	D2651	D2751	D2931	D3240
D2332	D2530	D2652	D2752	D2932	D3310
D2335	D2542	D2662	D2780	D2933	D3320
D2390	D2543	D2663	D2781	D2934	D3330
D2391	D2544	D2664	D2782	D2940	D2941
D2392	D2610	D2710	D2783	D2950	D1354
D2393	D2620	D2712	D2790	D3110	

Table 2: NUCC maintained Provider Taxonomy Codes classified as “Dental Service”*

122300000X	1223P0106X	1223X0008X	261QF0400X
1223D0001X	1223P0221X	1223X0400X	261QR1300X
1223D0004X	1223P0300X	124Q00000X+	125Q00000X
1223E0200X	1223P0700X	125J00000X	
1223G0001X	1223S0112X	125K00000X	

*Services provided by County Health Department dental clinics may also be included as “dental” services.

+Only dental hygienists who provide services under the supervision of a dentist should be classified as “dental” services. Services provided by independently practicing dental hygienists should be classified as “oral health” services and are not applicable for this measure.

S.15. Sampling (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

Not applicable.

S.16. Survey/Patient-reported data (If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)

Specify calculation of response rates to be reported with performance measure results.

Not applicable.

S.17. Data Source (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.18.

Claims

S.18. Data Source or Collection Instrument (Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)

IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

Not applicable.

S.19. Data Source or Collection Instrument (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

No data collection instrument provided

S.20. Level of Analysis (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Health Plan, Integrated Delivery System

S.21. Care Setting (Check ONLY the settings for which the measure is SPECIFIED AND TESTED)

Outpatient Services

If other:

S.22. COMPOSITE Performance Measure - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

Not applicable.

2. Validity – See attached Measure Testing Submission Form

5_Testing_6-9.docx

2.1 For maintenance of endorsement

Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

No

2.2 For maintenance of endorsement

Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

No

2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1,2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.

No - This measure is not risk-adjusted

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

Generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score), Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields) Update this field for maintenance of endorsement.

ALL data elements are in defined fields in electronic claims

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources. For maintenance of endorsement, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

This measure is specified for reporting at the program and plan level and there are currently no efforts to develop an eMeasure (eCQM) at the same reporting level.

Our understanding is that the Feasibility Score Card is only for eMeasures; consequently, we have not submitted this. Feasibility criteria were met during the initial endorsement review.

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Required for maintenance of endorsement. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

This 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). These data are readily available and can be easily retrieved because they are routinely used for billing and reporting purposes. A key advantage of using administrative claims data is that the time and cost of data collection for performance measurement purposes are relatively low because these data are already collected for other purposes.

Initial feasibility assessments were conducted using the RAND-UCLA modified Delphi process to rate the measure concepts with feasibility as one component of the assessment. On a 1-9 point scale, this measure concept was rated as an 8 or “definitely feasible” by the expert panel. During the empirical testing phase, our testing found that all of the critical data elements except one had missing/invalid data of <1% (Data 3c.1.), meeting or exceeding the guidance from the Centers for Medicare and Medicaid Services regarding acceptable error rates. The exception was tooth number associated with sealant procedure codes. Missing/invalid data rates ranged from 0.15% to 15%, with most programs having missing/invalid rates <5%. We do not view the higher rates among a subset of the programs as a threat to feasibility, however. The high compliance by the majority of programs indicates that it is feasible to obtain missing and invalid rates of <1%. The Centers for Medicare and Medicaid Services already requires state Medicaid programs to report sealants placed on permanent molars among enrolled children, which requires data on tooth number, and tooth number also is typically required for reimbursement. During measure development and testing, the measure specifications were made available through a publicly accessible website for public comment with additional broad email dissemination to a wide range of stakeholders. No concerns regarding feasibility of collecting any of the data elements were raised during this process.

Citation: Centers for Medicare & Medicaid Services. Medicaid and CHIP Statistical Information System (MSIS) File Specifications and Data Dictionary. 2010; <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MSIS/downloads/msisdd2010.pdf>. Accessed August 10, 2013.

Data 3c.1 Percentage of Missing and Invalid Values for Critical Data Elements

PROGRAM 1

Member ID:	0.00%
Date of Birth:	0.00%
Monthly enrollment indicator:	0.00%
Dental Procedure Codes - CDT:	0.00%
Tooth number:	6.18%
Date of Service:	0.01%
Rendering Provider ID:	0.28%

PROGRAM 2

Member ID:	0.00%
Date of Birth:	0.00%
Monthly enrollment indicator:	0.00%
Dental Procedure Codes - CDT:	0.00%
Tooth number:	15.31%
Date of Service:	0.00%
Rendering Provider ID:	0.00%

PROGRAM 3

Member ID:	0.27%
Date of Birth:	0.00%
Monthly enrollment indicator:	0.00%
Dental Procedure Codes - CDT:	0.28%
Tooth number:	0.18%

Date of Service: 0.00%
 Rendering Provider ID: 0.18%

PROGRAM 4

Member ID: 0.00%
 Date of Birth: 0.00%
 Monthly enrollment indicator: 0.00%
 Dental Procedure Codes - CDT: 0.01%
 Tooth number: 2.47%
 Date of Service: 0.00%
 Rendering Provider ID: 0.61%

PROGRAM 5

Member ID: 0.43%
 Date of Birth: 0.02%
 Monthly enrollment indicator: 0.00%
 Dental Procedure Codes - CDT: 0.00%
 Tooth number: 0.15%
 Date of Service: 0.00%
 Rendering Provider ID: 0.67%

Endorsement Maintenance Update:

This measure is included in the CHIPRA Core Measures Program. Some Medicaid programs noted that they do not receive complete data on tooth number from their contracted plans, which is a required data element for this measure. As a result, the affected programs must get these data from their contracted plans. Because tooth number is required for reimbursement, these data are readily accessible for plan level reporting. Despite initial concerns about this data element, 25 states reported this measure in FFY 2015, and 34 reported in FFY 2016.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

This measure is intended to be transparent and available for widespread adoption. As such, it was purposefully designed to avoid using software or other proprietary materials that would require licensing fees. The measure specifications, including a companion User Guide, are accessible through a website and can be used free of charge for non-commercial purposes. The main requirement of users is to ensure the quality of their source data and expertise to program the measures within their information systems, following the clear and detailed specifications. Technical assistance is available to users.

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Specific Plan for Use	Current Use (for current use provide URL)
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4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

1. Program and Sponsor: Texas Health and Human Services Commission - Texas Medicaid and CHIP

<https://hhs.texas.gov/sites/default/files/documents/laws-regulations/handbooks/umcm/6-2-15.pdf>

Purpose: Payment Program/Public Reporting

This measure has been adopted by the Texas Health and Human Services Commission as part of the Texas CHIP and Medicaid Dental Services Pay-for-Quality (P4Q) program. [Texas HHSC Uniform Managed Care Manual, Chapters 6.2.15. Effective Date 09/01/2017, Version 2.0].

This measure was also present in earlier iterations of the Texas Medicaid and CHIP quality programs since initial endorsement. We are referencing current use for this update.

Geographic Area and Number/Percentage of Accountable Entities and Patients:

This applies to the state of Texas CHIP and Medicaid programs (statewide application). There are two dental plans (i.e., the accountable entities) that serve Texas CHIP and Medicaid. In June 2017, there were 3,359,770 children enrolled in Texas Medicaid and CHIP (<https://hhs.texas.gov/about-hhs/records-statistics/data-statistics/healthcare-statistics>).

Level of Measurement and Setting: The measure is implemented at the plan and program levels within the Texas Medicaid and CHIP programs.

2. Covered California, the California Health Benefit Exchange

<http://hbex.coveredca.com/insurance-companies/PDFs/2017-2019-Individual-Model-Contract.pdf>
<http://hbex.coveredca.com/insurance-companies/PDFs/2017-2019-QDP-Issuer-Contract-and-Attachments.pdf>

Purpose: Quality Improvement

This measure is included in the Covered California Qualified Health Plan Issuer Contract for 2017-019 For the Individual Market and the Covered California Qualified Dental Plan Issuer Contract for 2017-2019. The measure is to be reported annually.

Geographic Area and Number/Percentage of Accountable Entities and Patients:

This applies statewide. In March 2017 there were 85,000 enrollees 0-18 years old in CC health plans (which may offer dental benefits and would therefore report on the dental quality measures). There were 5,100 children enrolled specifically in Qualified Dental Plans. (<http://hbex.coveredca.com/data-research/>)

Level of Measurement and Setting. The measure is implemented at the plan level with the Covered California program.

3. Centers for Medicare and Medicaid Services, Core Set of Children's Health Care Quality Measures for Medicaid and CHIP (CMS CHIPRA Core Set)

<https://www.medicaid.gov/medicaid/quality-of-care/downloads/2017-child-core-set.pdf>

Purpose: Quality Improvement/Public Reporting

This measure was included in the CHIPRA Core Set, with reporting starting in FFY 2015. In the first year of reporting, 25 states reported this measure (<https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2016-child-chart-pack.pdf>). In the second year of reporting (FFY 2016), 34 states reported this measure (<https://data.medicaid.gov/Quality/2016-Child-Health-Care-Quality-Measures/wnw8-atzy>).

Geographic Area and Number/Percentage of Accountable Entities and Patients:

34 states are currently reporting this measure. Information is not provided on the number of accountable entities and patients.

4. State Medicaid Agencies

<http://www.msdanationalprofile.com/2015-profile/management-reporting-and-quality-measurement/quality-measurement/>

(Note: To access the data, a public user account must be created. We can help facilitate access to the data if needed.)

Purpose: Quality Improvement

The Medicaid|Medicare|CHIP Services Dental Association conducts an annual survey of state Medicaid programs and collects data specifically on which programs report Dental Quality Alliance measures.

In its 2015 profile (the most recent available), 13 states reported that they currently use this measure in their Medicaid and/or CHIP programs.

Geographic Area and Number/Percentage of Accountable Entities and Patients:

The 13 states are: Alabama, Colorado, Connecticut, Florida, Idaho, Illinois, Nevada, Oklahoma, Rhode Island, South Carolina, Tennessee, Virginia, and West Virginia. Data are not provided on the number of accountable entities included.

5. Michigan Healthy Kids Dental

<https://www.buy4michigan.com/bs0/external/bidDetail.sdo?bidId=007117B0011386&parentUrl=activeBids>

Note: Select Schedule A Work Statement link under File Attachments

Purpose: Quality Improvement

The Michigan Healthy Kids Dental Program has included this measure in the set of measures included in its Performance Monitoring Standards, which is currently included in the Request for Proposals and will be included in the contracts between the contracted dental plans and the State of Michigan.

Geographic Area and Number/Percentage of Accountable Entities and Patients:

The Healthy Kids Dental Program covers children enrolled in Michigan's Medicaid program statewide. The state intends to award two contracts. There are approximately 955,000 enrollees served by the Healthy Kids Dental Program.

Additional Information:

This measure was one of ten performance measures approved by the Dental Quality Alliance (DQA) that focused on Dental Caries Prevention and Disease Management among children. The Dental Quality Alliance (DQA) was formed at the request of the Centers of Medicare and Medicaid Services (CMS) specifically for the purpose of bringing together recognized expertise in oral health to develop quality measures through consensus processes. As noted in the letter from Cindy Mann, JD, Director of the Center for Medicaid & CHIP Services within CMS: "The dearth of tested quality measures in oral health has been a concern to CMS and other payers of oral health services for quite some time." (See Appendix)

4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict

access to performance results or impede implementation?)

Not applicable.

4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (*Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.*)

Not applicable.

4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.

This measure is part of the CMS CHIPRA core set for public reporting by all state CHIP programs. In FFY 2016, 34 states reported on this measure. States also report using this measure in the annual survey conducted by the Medicaid|Medicare|CHIP Services Dental Association. The measure is part of measure set included in the Request for Proposals (RFP) released by the Michigan Healthy Kids Dental Program. This measure is included in the Pay-For-Quality program and public reporting in the Texas Medicaid and CHIP programs. Additionally, this measure is a requirement for the Qualified Dental Plans to report to the Covered California, the state-based marketplace in California.

The DQA provides technical assistance to these and other users of DQA measures through webinars, resource document development, and one-on-one staff support. The DQA has an Implementation Committee dedicated to developing implementation and improvement resources.

In order to ensure transparency, incorporate learnings from implementation, establish proper protocols for timely assessment of the evidence and measure properties, and to comply with the NQF's endorsement agreement, the DQA has established an annual measure review and maintenance process. This measure review process is overseen by the DQA's Measures Development and Maintenance Committee (MDMC) which is comprised of subject matter experts. This annual review process includes: (1) call for public comments, (2) evaluation of the comments, (3) user group feedback, and (4) code set reviews.

In 2016, the DQA expanded its scope of review of its measures by convening conference calls for two user groups – one comprised of representatives from 6 state Medicaid programs (Alabama, Florida, Kentucky, Oregon, Nevada, and Pennsylvania) and the other comprised of representatives from 8 dental plans. Participants shared their experiences implementing DQA measures in their respective programs, including any challenges related to the DQA measures specifications and use of these measures in their quality improvement programs. Participants did not have any significant issues related to the clarity or feasibility of implementing the measure specifications.

This is the first 3-year maintenance endorsement review for this measure. As indicated above, the measure is being implemented in multiple programs. Because measure implementation requires a start-up phase for integration of the measures into contracts and for programs and plans to prepare for reporting, in combination with a lag period for reporting measures calculated using administrative claims data, most of the entities that have adopted the measures are just getting underway and there is limited data reporting. Implementation assistance has mostly focused on addressing questions related to how to use the measures in the context of broader quality improvement and clarifying questions related to the specifications.

4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

In order to ensure transparency, establish proper protocols for timely assessment of the evidence and measure properties, and to comply with the NQF's endorsement agreement, the DQA has established an annual measure review and maintenance process. This measure review process is overseen by the DQA's Measures Development and Maintenance Committee (MDMC) which is comprised of subject matter experts. This annual review process includes: (1) call for public comments, (2) evaluation of the comments, (3) user group feedback, and (4) code set reviews.

The DQA provides technical assistance on an ongoing basis to users of DQA measures through webinars, resource document

development and one-on-one staff support.

In 2016, the DQA expanded its scope of review of its measures by convening conference calls for two user groups – one comprised of representatives from 6 state Medicaid programs (Alabama, Florida, Kentucky, Oregon, Nevada, and Pennsylvania) and the other comprised of representatives from 8 dental plans. Participants shared their experiences implementing DQA measures in their respective programs, including any challenges related to the DQA measures specifications and use of these measures in their quality improvement programs. Participants did not have any significant issues related to the clarity or feasibility of implementing the measure specifications.

4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.

Describe how feedback was obtained.

In order to ensure transparency, establish proper protocols for timely assessment of the evidence and measure properties, and to comply with the NQF's endorsement agreement, the DQA has established an annual measure review and maintenance process. This measure review process is overseen by the DQA's Measures Development and Maintenance Committee (MDMC) which is comprised of subject matter experts. This annual review process includes: (1) call for public comments, (2) evaluation of the comments, (3) user group feedback, and (4) code set reviews.

DQA provides technical assistance on an ongoing basis to users of DQA measures through webinars, resource document development and one-on-one staff support.

In 2016, the DQA expanded its scope of review of its measures by convening conference calls for two user groups – one comprised of representatives from 6 state Medicaid programs (Alabama, Florida, Kentucky, Oregon, Nevada, and Pennsylvania) and the other comprised of representatives from 8 dental plans. Participants shared their experiences implementing DQA measures in their respective programs, including any challenges related to the DQA measures specifications and use of these measures in their quality improvement programs. Participants did not have any significant issues related to the clarity or feasibility of implementing the measure specifications.

4a2.2.2. Summarize the feedback obtained from those being measured.

A dental benefits administrator (DBA) has suggested that the DQA consider adding patient exclusions to the measure. The DQA considered exclusions previously during initial measure development and during annual reviews. Exclusions were not incorporated due to concerns about the introduction of biased measurement, increasing measurement complexity, and adversely affecting implementation feasibility. However, the DQA continues to monitor this issue and will revisit it during the 2018 annual review. The DQA has invited the DBA to present its suggestion with supporting data to the DQA. The DQA has also invited other DBAs and Medicaid program administrators to provide input. All of this stakeholder feedback will be incorporated into the next annual review.

4a2.2.3. Summarize the feedback obtained from other users

No other significant issues have been raised by other users.

4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

The DQA considered exclusions during initial measure development and during annual reviews. Exclusions were not incorporated due to concerns about the introduction of biased measurement, increasing measurement complexity, and adversely affecting implementation feasibility. However, the DQA continues to monitor this issue and will revisit it during the 2018 annual review. The DQA has invited the DBA to present its suggestion with supporting data to the DQA. The DQA has also invited other DBAs and Medicaid program administrators to provide input. All of this stakeholder feedback will be incorporated into the next annual review.

Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results,

number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included.)

If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

This is the first 3-year maintenance endorsement review for this measure. As indicated above, the measure is being implemented in multiple programs. Because measure implementation requires a start-up phase for integration of the measures into contracts and for programs and plans to prepare for reporting, in combination with a lag period for reporting measures calculated using administrative claims data, most of the entities that have adopted the measures either have only limited baseline scores or will start reporting measures within the next year.

Repeat measurements for two years are available from the CMS CHIPRA Child Health Care Quality Measures reporting. CMS has not released its formal report evaluating trends and changes. However, the data released indicate that in both FFY 2015 and FFY 2016 the median performance was 23.4% in both years across all states reporting the measure. As noted above, 9 additional states reported the measure in FFY 2016 (34 in 2016 versus 25 in 2015). CMS has not reported on improvement among the states who reported the measure in both years.

There also are initial reporting data available from the Texas Medicaid/CHIP programs (<https://thlcportal.com/qoc/dental>), which started implementing this measure after approval by the Dental Quality Alliance and before NQF endorsement, as follows:

Texas Medicaid

Year, Program Denominator, Program Overall Score, DentaQuest(Plan) Score, MCNA(Plan) Score

2014, 461207, 25.41, 25.59, 25.53

2015, 503515, 24.99, 25.18, 24.91

Texas CHIP

Year, Program Overall, DentaQuest(Plan), MCNA(Plan)

2014, 76415, 20.17, 22.30, 21.69

2015, 58833, 20.20, 23.14, 22.43

These data also suggest fairly stable rates over the two-year period. However, as noted above, these are initial performance data; additional time may be needed to see improvement within this program. Most measure users are just now getting their quality measurement programs underway.

4b2. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.

No unintended or negative consequences have been identified.

4b2.2. Please explain any unexpected benefits from implementation of this measure.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.
No

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization of Related Measures

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications harmonized to the extent possible?

5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

Not applicable.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

Not applicable.

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

[Attachment](#) **Attachment:** [Appendix_Sealants69.pdf](#)

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): [American Dental Association on behalf of the Dental Quality Alliance](#)

Co.2 Point of Contact: [Krishna, Aravamudhan, aravamudhank@ada.org, 312-440-2772-](#)

Co.3 Measure Developer if different from Measure Steward: [American Dental Association on behalf of the Dental Quality Alliance](#)

Co.4 Point of Contact: [Krishna, Aravamudhan, aravamudhank@ada.org, 312-440-2772-](#)

Additional Information

Ad.1 Workgroup/Expert Panel involved in measure development

Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role

in measure development.

This project is headed by the DQA through its Measure Development and Maintenance Committee (formerly Research and Development Committee). The following individuals were responsible for executing and overseeing all scientific aspects of this project.

- Craig W. Amundson, DDS, General Dentist, HealthPartners, National Association of Dental Plans. Dr. Amundson serves as chair for the Committee.
- Mark Casey, DDS, MPH, Dental Director, North Carolina Department of Health and Human Services Division of Medical Assistance
- Natalia Chalmers, DDS, PhD, Diplomate, American Board of Pediatric Dentistry, Director, Analytics and Publication, DentaQuest Institute
- Frederick Eichmiller, DDS, Vice President & Science Officer, Delta Dental of Wisconsin
- Chris Farrell, RDH, BSDH, MPA, Oral Health Program Director, Michigan Department of Health and Human Services

This group oversees the maintenance process of the measures. All work of this Committee was distributed for review and formal vote and approval by the entire Dental Quality Alliance. (<http://ada.org/dqa>) The DQA is made up of representatives from 38 stakeholder organizations.

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2013

Ad.3 Month and Year of most recent revision: 01, 2017

Ad.4 What is your frequency for review/update of this measure? Annual

Ad.5 When is the next scheduled review/update for this measure? 01, 2018

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Measures are subject to review and may be revised or rescinded at any time by the DQA. The Measures may not be altered without the prior written approval of the DQA. The DQA shall be acknowledged as the measure steward in any and all references to the measure.

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Ad.8 Additional Information/Comments: In 2008, the Centers for Medicare and Medicaid Services (CMS) asked the ADA to lead the development of a broad coalition of organizations that would lead dentistry to improve the oral health of Americans through quality measurement and quality improvement. The ADA subsequently established the DQA. The DQA is a multi-stakeholder alliance

comprised of 38 stakeholders (with organizations as members) from across the oral health community, including federal agencies, third-party payers, professional associations, and an individual member from the general public. The DQA's mission is to advance the field of performance measurement to improve oral health, patient care, and safety through a consensus building process.