



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

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 Thorton-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.5. 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

[NQF_SubmissionForm_6.5_MeasureEvidenceForm_Subcriterion1a_DQA_Sealants69_Submit_021014.docx](#)

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

Please update any changes in the evidence attachment in red. Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. If there is no new evidence, no updating of the evidence information is needed.

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 PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)

IF a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and provide rationale for composite in question 1c.3 on the composite tab.

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 (4b) under Usability and Use.*

This is a new measure. Comprehensive testing was done with multiple data sources.

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 (4b) 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 Thorton-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, Thorton-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.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.

[Yes](#)

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.

[Measure specification website update](#)

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. Run records for one reporting year for paid and unpaid 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,
 - 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”
 - a. If subject meets any of the following criteria then include in denominator.
 - i. the subject has a visit with a CDT code = (D0602 or D0603) in the reporting year, OR
 - ii. the subject has a SERVICE Code among those in Table 1 in the reporting year, OR
 - iii. the subject has a SERVICE 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.)
 - 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 [SERVICE 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 SERVICE-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 a 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.)

IF a PRO-PM, 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 is collected.)

IF a PRO-PM, identify the specific PROM(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

8_NQF_SubmissionForm_6.5_MeasureTestingForm_Subcriteria2a2_2b2-2b6_DQA_Sealants69_021014_SUBMIT_Rev1.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. (Do not remove prior testing information – include date of new information in red.)

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. (Do not remove prior testing information – include date of new information in red.)

2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes SDS factors is no longer prohibited during the SDS Trial Period (2015-2016). Please update sections 1.8, 2a2, 2b2, 2b4, and 2b6 in the Testing attachment and S.14 and S.15 in the online submission form in accordance with the requirements for the SDS Trial Period. NOTE: These sections must be updated even if SDS factors are not included in the risk-adjustment strategy. If yes, and your testing attachment does not have the additional questions for the SDS Trial please add these questions to your testing attachment:

What were the patient-level sociodemographic (SDS) variables that were available and analyzed in the data or sample used? For example, patient-reported data (e.g., income, education, language), proxy variables when SDS data are not collected from each patient (e.g. census tract), or patient community characteristics (e.g. percent vacant housing, crime rate).

Describe the conceptual/clinical and statistical methods and criteria used to select patient factors (clinical factors or sociodemographic factors) used in the statistical risk model or for stratification by risk (e.g., potential factors identified in the literature and/or expert panel; regression analysis; statistical significance of $p < 0.10$; correlation of x or higher; patient factors should be present at the start of care)

What were the statistical results of the analyses used to select risk factors?

Describe the analyses and interpretation resulting in the decision to select SDS factors (e.g. prevalence of the factor across measured entities, empirical association with the outcome, contribution of unique variation in the outcome, assessment of between-unit effects and within-unit effects)

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).

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 a PRO-PM, consider implications for both individuals providing PRO 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%

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, will be accessible through a website and can be used free of charge for non-commercial purposes. The main requirements of users will be 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 will be 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)
Public Reporting	Quality Improvement (Internal to the specific organization) Texas Health and Human Services Commission, CHIP and Medicaid Uniform Managed Care Manuals, Dental Services Performance Indicator Dashboards for Quality Measures: http://www.hhsc.state.tx.us/medicaid/umcm/Chp10/10-1-9.pdf Texas Health and Human Services Commission, CHIP and Medicaid Uniform Managed Care Manuals, Dental Services Performance Indicator Dashboards for Quality Measures: http://www.hhsc.state.tx.us/medicaid/umcm/Chp10/10-1-10.pdf

4a.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

Program and Sponsor: 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. [Texas HHSC Uniform Managed Care Manual, Chapters 10.2.9 and 10.1.10, Effective Date 01-01-2014, Version 2.2. Available at: <http://www.hhsc.state.tx.us/medicaid/umcm/Chp10/10-1-9.pdf> and <http://www.hhsc.state.tx.us/medicaid/umcm/Chp10/10-1-10.pdf>.]

Purpose: Quality improvement

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. There are approximately 2.8 million children enrolled in Texas Medicaid and 581,672 children enrolled in Texas CHIP (<http://www.hhsc.state.tx.us/research/index.shtml>).

Please note that this measure was approved by the membership of the steward, the Dental Quality Alliance, in July 2013. 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)

This measure was one of ten performance measures focused on Dental Caries Prevention and Disease Management among children that were approved by the DQA. Already, these measures have been well received by the dental community with current or planned adoption by a range of users. The Texas Health and Human Services Commission has already incorporated these measures into its Uniform Managed Care Manual for performance measurement dashboard reporting. In addition, the President and CEO of the Connecticut Health Foundation has specifically recommended that the DQA measures be considered for incorporation into Connecticut’s State Innovation Model Health Care Innovation Plan “especially those aimed at increasing services for high risk patients.”

(http://healthreform.ct.gov/ohri/lib/ohri/SIM_Public_Comment_CT_Health_Foundation.pdf).

Included in the Appendix as attachments to this application are letters from key stakeholders, indicating their current or planned use of these measures for performance and quality improvement:

- Cindy Mann, J.D., Director, Center for Medicaid and CHIP Services, Centers for Medicare & Medicaid Services
- John Roberts, DDS, State Dental Director, Texas Medicaid and CHIP, Texas Health and Human Services Commission

4a.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.

4a.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.

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.

4b. 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.

Not applicable – new measure.

4c. 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).

4c.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.

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

4d1.1. 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.

Per the annual survey conducted by the Medicare-Medicaid and Children's Health Insurance Program State Dental Association (MSDA), 17 Medicaid agencies are implementing this measure.

In addition this measure is part of the CMS CHIPRA core set for reporting by all state CHIP programs. The measure scores and the results for 2017 have been reported by the CMS. (<https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2016-child-chart-pack.pdf>)

In an effort to facilitate implementation of the DQA measures, the DQA provides technical assistance to users of DQA measures through webinars, resource document development and one-on-one staff support.

4d1.2. 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 six subject matter experts. This annual review process includes: (1) call for public comments, (2) evaluation of the comments, and (4) code set reviews.

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

4d2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.

Describe how feedback was obtained.

There have been no feedback received that indicated any significant issues related to the clarity or feasibility of implementing the measure specifications.

4d2.2. Summarize the feedback obtained from those being measured.

There have been no significant issues related to the clarity or feasibility of implementing the measure specifications.

4d2.3. Summarize the feedback obtained from other users

There have been no significant issues related to the clarity or feasibility of implementing the measure specifications.

4d.3. Describe how the feedback described in 4d.2 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

N/A

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: NQF_Submission_DQA_Sealants_6-9__Appendix.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.](#)

- [James J. Crall, D.D.S., M.S., Sc.D., American Academy of Pediatric Dentistry, Professor, Section of Pediatric Dentistry and Director, National Oral Health Policy Center at UCLA. Dr. Crall serves as chair for the Committee.](#)
- [Craig W. Amundson, D.D.S., General Dentist, HealthPartners, National Association of Dental Plans](#)
- [Rob D. Compton, D.D.S., Vice President, DentaQuest](#)
- [Christine Farrell, R.D.H., B.S.D.H., M.P.A., Oral Health Program Director, Michigan Department of Community Health](#)
- [Jed J. Jacobson, D.D.S., M.S., M.P.H., Chief Science Officer and Sr. Vice President, Delta Dental of Michigan, Ohio, Indiana, North Carolina](#)

[This group oversaw the development and validation 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 30 stakeholder organizations. This Committee partnered with the University of Florida (Jill Herndon, PhD, Principal Investigator) to validate the measures. Data for measure testing were provided by the Florida Agency for Health Care Administration (Florida Medicaid), Florida Healthy Kids Corporation (Florida's CHIP program), Texas Health and Human Services Commission (HHSC) and Dental Service of Massachusetts, Inc.

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: 02, 2014

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? 08, 2015

Ad.6 Copyright statement: 2014 American Dental Association on behalf of the Dental Quality Alliance (DQA)©. All rights reserved. Use by individuals or other entities for purposes consistent with the DQA's mission and that is not for commercial or other direct revenue generating purposes is permitted without charge.

Ad.7 Disclaimers: Dental Quality Alliance Measures (Measures) and related data specifications, developed by the Dental Quality Alliance (DQA), are intended to facilitate quality improvement activities.

These Measures are intended to assist stakeholders in enhancing quality of care. These performance Measures are not clinical guidelines and do not establish a standard of care. The DQA has not tested its Measures for all potential applications.

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. Measures developed by the DQA, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and DQA. Neither the DQA nor its members shall be responsible for any use of these Measures.

THE MEASURES ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND

Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The DQA, American Dental Association (ADA), and its members disclaim all liability for use or accuracy of any terminologies or other coding contained in the specifications.

THE SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

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 approximately 30 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.