



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 subcriterion 1b).

Brief Measure Information

NQF #: 2518

De.2. Measure Title: Care Continuity, 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 aged 2-21 years enrolled in two consecutive years who received a comprehensive or periodic oral evaluation in both years.

1b.1. Developer Rationale: The IOM has identified continuity of care as a core element of primary care. Care continuity refers to an "ongoing relationship with clinicians who know their patients and their patients' health histories" (Institute of Medicine, 1996, p. 56). Clinical oral evaluations are the cornerstone for forming this relationship in dentistry. They include evaluating and recording the patient's dental and medical history and a general health assessment. Clinical oral evaluations are central to oral disease identification and risk assessment and to developing with the patient preventive oral health regimens and treatment plans tailored to individual patient needs. Thus, the proposed measure captures the concept of care continuity by examining whether the patient had a comprehensive or periodic oral evaluation in each of two consecutive years.

Comprehensive and periodic oral evaluations are essential components of promoting oral and overall health among children. 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 dental caries early is important to reverse the disease process, prevent progression of caries, and reduce incidence of future lesions. Comprehensive and periodic clinical oral evaluations are diagnostic services that are critical to evaluating oral disease and dentition development.* Clinical oral evaluations also are essential to develop an appropriate preventive oral health regimen and treatment plan. Thus, clinical oral evaluations play an essential role in caries identification, prevention and treatment, thereby promoting improved oral health, overall health, and quality of life.

National guidelines from the American Academy of Pediatric Dentistry (AAPD) and the American Academy of Pediatrics (AAP) recommend that children receive oral health services by 1 year of age and have regular visits thereafter. The most common recall interval is six months. However, evidence-based guidelines indicate that the recall schedule for routine oral evaluations should be tailored to individual needs based on assessments of existing disease and risk of disease (e.g., caries risk) with a recommended recall frequency ranging from 3 months to no more than 12 months for individuals younger than 18 years of age (National Institute for Health and Care Excellence (NICE), Clinical Guideline 19, 2004).

However, there are significant performance gaps and disparities in care. Approximately 75% of children younger than age 6 years did not have at least one visit to a dentist in the previous year (Edelstein and Chinn 2009) despite the recommendation that every child have a visit by 12 months of age. Although comprehensive dental benefits are covered under Medicaid and the Children's Health Insurance Program (CHIP), 23% to 63% of children enrolled in Medicaid/CHIP for at least 90 continuous days receive an oral evaluation (referred to as "Dental Diagnostic Services") (CMS EPSDT Data, FY 2011). Even among the highest performing states, more than one-third of publicly-insured children do not receive an oral evaluation as a dental service during the year. Thus, a significant percentage of children are not receiving oral evaluations to assess their oral health status and disease risk and develop an

appropriate preventive oral health regimen and treatment plan tailored to individual needs. In addition, we currently have no measures to assess to what extent children are receiving these services over time, which is essential to forming the sustained provider-patient relationship that the IOM has identified as a cornerstone of primary care.

The proposed measure, Care Continuity – Dental Services, captures whether a child received a comprehensive or periodic oral evaluation in each of two consecutive years. This measure also includes important stratifications by the children's age. Care Continuity allows plans and programs to identify the effectiveness of efforts to promote an ongoing relationship with their primary dental care provider, improving their receipt of diagnostic services essential to promoting oral and overall health.

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.

* A Comprehensive Oral Evaluation may be performed on new or established patients and is "a thorough evaluation and recording of the extraoral and intraoral hard and soft tissues" and includes "an evaluation for oral cancer where indicated, the evaluation and recording of the patient's dental and medical history and a general health assessment. It may include the evaluation and recording of dental caries, missing or unerupted teeth, restorations, existing prostheses, occlusal relationships, periodontal conditions (including periodontal screening and/or charting), hard and soft tissue anomalies, etc." A Periodic Oral Evaluation is performed "on a patient of record to determine any changes in the patient's dental and medical health status since a previous comprehensive or periodic evaluation." In addition, there is a code for Oral Evaluation for a Patient under Three Years of Age and Counseling with Primary Caregiver, which includes "[d]iagnostic services performed for a child under the age of three, preferably within the first six months of the eruption of the first primary tooth, including recording of the oral and physical health history, evaluation of caries susceptibility, development of an appropriate preventive oral health regimen and communication with and counseling of the child's parent, legal guardian and/or primary caregiver." American Dental Association. 2012. "CDT 2013: Dental Procedure Codes." Chicago, IL: American Dental Association.

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

S.4. Numerator Statement: Unduplicated number of children who received a comprehensive or periodic oral evaluation as a dental service in both years

S.7. Denominator Statement: Unduplicated number of children aged 2-21 years enrolled in two consecutive years

S.10. Denominator Exclusions: Medicaid/ CHIP programs should apply the following overall exclusions before determining the denominator:

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

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

There are no other exclusions.

De.1. Measure Type: Process

S.23. Data Source: Administrative claims

S.26. Level of Analysis: Health Plan, Integrated Delivery System

IF Endorsement Maintenance – Original Endorsement Date: Most Recent Endorsement Date:

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 subcriteria 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_CareCont_Submit_021014.docx](#)

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., the benefits or improvements in quality envisioned by use of this measure)

The IOM has identified continuity of care as a core element of primary care. Care continuity refers to an “ongoing relationship with clinicians who know their patients and their patients’ health histories” (Institute of Medicine, 1996, p. 56). Clinical oral evaluations are the cornerstone for forming this relationship in dentistry. They include evaluating and recording the patient’s dental and medical history and a general health assessment. Clinical oral evaluations are central to oral disease identification and risk assessment and to developing with the patient preventive oral health regimens and treatment plans tailored to individual patient needs. Thus, the proposed measure captures the concept of care continuity by examining whether the patient had a comprehensive or periodic oral evaluation in each of two consecutive years.

Comprehensive and periodic oral evaluations are essential components of promoting oral and overall health among children. 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 dental caries early is important to reverse the disease process, prevent progression of caries, and reduce incidence of future lesions. Comprehensive and periodic clinical oral evaluations are diagnostic services that are critical to evaluating oral disease and dentition development.* Clinical oral evaluations also are essential to develop an appropriate preventive oral health regimen and treatment plan. Thus, clinical oral evaluations play an essential role in caries identification, prevention and treatment, thereby promoting improved oral health, overall health, and quality of life.

National guidelines from the American Academy of Pediatric Dentistry (AAPD) and the American Academy of Pediatrics (AAP) recommend that children receive oral health services by 1 year of age and have regular visits thereafter. The most common recall interval is six months. However, evidence-based guidelines indicate that the recall schedule for routine oral evaluations should be tailored to individual needs based on assessments of existing disease and risk of disease (e.g., caries risk) with a recommended recall frequency ranging from 3 months to no more than 12 months for individuals younger than 18 years of age (National Institute for Health and Care Excellence (NICE), Clinical Guideline 19, 2004).

However, there are significant performance gaps and disparities in care. Approximately 75% of children younger than age 6 years did not have at least one visit to a dentist in the previous year (Edelstein and Chinn 2009) despite the recommendation that every child have a visit by 12 months of age. Although comprehensive dental benefits are covered under Medicaid and the Children’s Health Insurance Program (CHIP), 23% to 63% of children enrolled in Medicaid/CHIP for at least 90 continuous days receive an oral evaluation (referred to as “Dental Diagnostic Services”) (CMS EPSDT Data, FY 2011). Even among the highest performing states, more than one-third of publicly-insured children do not receive an oral evaluation as a dental service during the year. Thus, a significant percentage of children are not receiving oral evaluations to assess their oral health status and disease risk and develop an appropriate preventive oral health regimen and treatment plan tailored to individual needs. In addition, we currently have no measures to assess to what extent children are receiving these services over time, which is essential to forming the sustained

provider-patient relationship that the IOM has identified as a cornerstone of primary care.

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[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 endorsement maintenance. 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 included). This information also will be used to address the subcriterion on improvement (4b.1) 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 included children 0-20 years in each program. The numbers 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

Data 1b.2. Performance Scores for Care Continuity, Dental Services

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

Program 1, CY 2011:	56.14%	(0.5614 , 0.0003 , 0.5607 , 0.5621)
Program 2, CY 2011:	43.15%	(0.4315 , 0.0010 , 0.4296 , 0.4334)
Program 3, CY 2011:	30.90%	(0.3090 , 0.0013 , 0.3065 , 0.3115)
Program 4, CY 2011:	58.50%	(0.5850 , 0.0016 , 0.5819 , 0.5881)
Program 1, CY 2010:	49.17%	(0.4917 , 0.0004 , 0.4910 , 0.4924)
Program 2, CY 2010:	39.83%	(0.3983 , 0.0010 , 0.3964 , 0.4002)
Program 3, CY 2010:	29.54%	(0.2954 , 0.0013 , 0.2928 , 0.2980)
Program 4, CY 2010:	58.68%	(0.5868 , 0.0015 , 0.5838 , 0.5898)
Program 5, CY2010:	15.93%	(0.1593 , 0.0003 , 0.1587 , 0.1599)
Plan 1, CY 2011:	30.69%	(0.3069 , 0.0020 , 0.3030 , 0.3108)
Plan 2, CY 2011:	30.89%	(0.3089 , 0.0017 , 0.3055 , 0.3123)
Plan 1, CY 2010:	28.11%	(0.2811 , 0.0031 , 0.2750 , 0.2872)
Plan 2, CY 2010 :	26.98%	(0.2698 , 0.0021 , 0.2656 , 0.2740)

The measure rate range of 16% to 59% in CY 2010 (year in which data were available for all four programs) indicates a significant performance gap overall. Even in the highest performing program, 41% of children who were enrolled for at least six months in each of two consecutive years did not receive a comprehensive or periodic oral evaluation in both years. In addition, these results demonstrate the ability of the measure to identify variations in performance between 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 children have sub-optimal utilization of dental services in general and oral evaluations in particular. Untreated dental caries occurs among 25% of children living in poverty compared with 10.5% of children living above poverty (Dye, Li, and Thornton-Evans 2012). Although comprehensive dental benefits are covered under Medicaid and the Children's Health Insurance Program (CHIP), there are significant variations in use of dental services overall across states, ranging from approximately 25% to 69% (CMS EPSDT Data, FY 2011). Similar variation between states is observed among children 0-20 years of age enrolled in commercial dental plans (ADA 2013). With respect to oral evaluations specifically, 23% to 63% of children enrolled in Medicaid/CHIP for at least 90 continuous days receive an oral evaluation in a single year (referred to

as “Dental Diagnostic Services”) (CMS EPSDT Data, FY 2011). Even among the highest performing states, more than one-third of publicly-insured children do not receive an oral evaluation as a dental service in one reporting year.

[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 endorsement maintenance. 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 subcriterion on improvement (4b.1) under Usability and Use.*

The same data sources were used as described in 1b.2. The data below summarizes performance data by age, 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. The results demonstrate that there are disparities by age, geographic location, and race/ethnicity. In addition, we also evaluated whether the measure could detect disparities by income (within program), children’s health status (based on their medical diagnoses), CHIP dental plan, Medicaid program type, commercial product line, and preferred language for program communications. We detected disparities based on each of these various factors except commercial product line, 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 Child Age, Geographic Location and Race/Ethnicity

PROGRAM 1

Overall performance score: 56.14%

Scores by Age

Age <1 years: n/a
 Age 1-2 years: 33.59%
 Age 3-5 years: 60.98%
 Age 6-7 years: 64.83%
 Age 8-9 years: 65.18%
 Age 10-11 years: 63.99%
 Age 12-14 years: 59.80%
 Age 15-18 years: 49.48%
 Age 19-20 years: 28.30%

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

Scores by Geographic Location

Urban: 57.47%

Rural: 48.35%

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

Scores by Race

Non-Hispanic White: 43.48%

Non-Hispanic Black: 47.85%

Hispanic: 62.39%

p-value from Chi-square test <.0001

PROGRAM 2

Overall performance score: 43.15%

Scores by Age

Age <1 years: n/a
 Age 1-2 years: 27.66%
 Age 3-5 years: 43.72%
 Age 6-7 years: 50.63%
 Age 8-9 years: 50.89%
 Age 10-11 years: 49.19%
 Age 12-14 years: 42.71%
 Age 15-18 years: 33.70%
 Age 19-20 years: n/a

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

Scores by Geographic Location

Urban: 44.33%

Rural: 35.42%

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

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 30.90%

Overall performance score:

Scores by Age

Age <1 years: n/a

Age 1-2 years: n/a

Age 3-5 years: 0.00%

Age 6-7 years: 33.99%

Age 8-9 years: 38.78%

Age 10-11 years: 36.84%

Age 12-14 years: 31.11%

Age 15-18 years: 23.67%

Age 19-20 years: n/a

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

Scores by Geographic Location

Urban: 30.90%

Rural: 31.90%

p-value from Chi-square test: 0.091

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: 58.50%

Scores by Age

Age <1 years: 0.00%

Age 1-2 years: 2.90%

Age 3-5 years: 45.71%

Age 6-7 years: 70.58%

Age 8-9 years: 72.60%

Age 10-11 years: 70.81%

Age 12-14 years: 66.10%

Age 15-18 years: 57.17%

Age 19-20 years: 44.47%

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

Scores by Geographic Location

Urban: 58.76%

Rural: 51.03%

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

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: 15.93%

Scores by Age

Age <1 years: n/a
 Age 1-2 years: 0.94%
 Age 3-5 years: 13.01%
 Age 6-7 years: 23.20%
 Age 8-9 years: 26.04%
 Age 10-11 years: 23.56%
 Age 12-14 years: 19.61%
 Age 15-18 years: 15.17%
 Age 19-20 years: 8.06%

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

Scores by Geographic Location

Urban: 15.27%

Rural: 23.77%

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

Scores by Race

Non-Hispanic White: 16.69%

Non-Hispanic Black: 13.27%

Hispanic: 18.36%

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

Note: N/A for age indicates that those ages are not within the program's age eligibility. 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 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.

There is extensive literature documenting disparities in dental service use among children by age, race/ethnicity, and geographic region, including within vulnerable populations. For example, using data from the National Health and Nutrition Examination Survey, researchers at the National Center for Health Statistics identified variations in untreated dental caries among children by race and ethnicity and poverty level (Dye, Li, and Thorton-Evans 2012). Specifically, they found: "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. Among children aged 3–5 years, the prevalence of untreated caries was significantly higher for non-Hispanic black children (19%) compared with non-Hispanic white children (11%). Untreated caries was nearly twice as high for Hispanic children (26%) compared with non-Hispanic white children (14%) aged 6–9 years, and was more than twice as high for non-Hispanic black adolescents (25%) compared with non-Hispanic white adolescents (9%) aged 13–15. For children aged 3–5 and 6–9 years living at or below 100% of the federal poverty level, untreated dental caries was significantly higher compared with children living above the poverty level" (Dye, Li, and Thorton-Evans 2012, pp. 1-2).

Using data from the Medical Expenditure Panel Survey, Edelstein and Chinn (2009, p. 417) noted disparities in dental utilization (any dental visit) by age, family income, race and ethnicity, and education: "Stepwise disparities in dental utilization by income remained as strong in 2004 as in 1996, with 30.8% of poor children, 33.9% of low-income children, 46.5% of middle income children, and 61.8% of high income children having at least 1 dental visit in 2004. One third of minority children (34.1% black and 32.9% of Hispanic children) obtain dental care in a year compared with half (52.5%) of white children. Children whose parents attained less than high school education were less than half as likely to obtain a dental visit in 2004 as children whose parents are college graduates (25% vs 54%)." A recent analysis by Bouchery (2013) of the Medicaid Analytic eXtract files for nine states, examined dental utilization for preventive services and found variations in dental service use by age, race, 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 ($p < 0.0001$). Disparities in the use of dental services have also been noted in other literature and 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.

Sources

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1c. High Priority (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

1c.1. Demonstrated high priority aspect of healthcare

Affects large numbers, Patient/societal consequences of poor quality

1c.2. If Other:

1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare.

List citations in 1c.4.

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). Identifying caries early is important to reverse the disease process, prevent progression of caries, and reduce incidence of future lesions. Comprehensive and periodic clinical oral evaluations are diagnostic services that are critical to evaluating oral disease and dentition development. Clinical oral evaluations also are essential to developing an appropriate preventive oral health regimen and treatment plan. Thus, clinical oral evaluations play an essential role in caries identification, prevention and treatment, thereby promoting improved oral health, overall health, and quality of life. Moreover, disease identification, risk assessment, prevention regimens, and treatment planning are ongoing processes; therefore, evaluating continuity of care over time is an important quality metric.

Although comprehensive dental benefits are covered under Medicaid and the Children's Health Insurance Program (CHIP), there are

significant variations in receipt of oral evaluations across states, ranging from 23% to 63% of children enrolled in Medicaid/CHIP for at least 90 continuous days (CMS EPSDT Data, FY 2011). Even among the highest performing states, more than one-third of publicly-insured children do not receive an oral evaluation during the year.

Direct and indirect costs associated with inadequate caries prevention are significant. 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).

These adverse outcomes can be reduced through disease identification, risk assessment, prevention regimens, and treatment planning that begins early in life and is ongoing.

1c.4. Citations for data demonstrating high priority provided in 1a.3

American Dental Association, Health Policy Resources Center. "Dental Care Use among Children Varies Widely across States and between Medicaid and Commercial Plans within a State." October 2013. Available at:
<http://www.ada.org/sections/professionalResources/pdfs/hprc-research-brief-dental-care-use-among-children.pdf>.

Blackwell, D. L. 2010. Family structure and children's health in the United States: Findings from the National Health Interview Survey, 2001–2007. Hyattsville, MD: National Center for Health Statistics.

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.

Casamassimo, P. S., S. Thikkurissy, B. L. Edelstein, and E. Maiorini. 2009. "Beyond the Dmft: The Human and Economic Cost of Early Childhood Caries." J Am Dent Assoc 140(6): 650-7.

Centers for Medicare & Medicaid Services. 2012. "Early and Periodic Screening, Diagnosis, & Treatment: 2011 National Data." [accessed on April 29, 2013]. Available at:

<http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Early-and-Periodic-Screening-Diagnostic-and-Treatment.html>

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.

Gift, H. C., S. T. Reisine, and D. C. Larach. 1992. "The Social Impact of Dental Problems and Visits." Am J Public Health 82(12): 1663-8.

Gray, M. M., M. D. Marchment, and R. J. Anderson. 1991. "The Relationship between Caries Experience in the Deciduous Molars at 5 Years and in First Permanent Molars of the Same Child at 7 Years." Community Dent Health 8(1): 3-7.

Griffin, S. O., B. F. Gooch, E. Beltran, J. N. Sutherland, and R. Barsley. 2000. "Dental Services, Costs, and Factors Associated with Hospitalization for Medicaid-Eligible Children, Louisiana 1996-97." J Public Health Dent 60(1): 21-7.

Hollister, M. C. and J. A. Weintraub. 1993. "The Association of Oral Status with Systemic Health, Quality of Life, and Economic Productivity." J Dent Educ 57(12): 901-12.

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.

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

O'Sullivan, D. M. and N. Tinanoff. 1996. "The Association of Early Dental Caries Patterns with Caries Incidence in Preschool Children." J Public Health Dent 56(2): 81-3.

Reisine, S., M. Litt, and N. Tinanoff. 1994. "A Biopsychosocial Model to Predict Caries in Preschool Children." Pediatr Dent 16(6): 413-8.

Sheller, B., B. J. Williams, and S. M. Lombardi. 1997. "Diagnosis and Treatment of Dental Caries-Related Emergencies in a Children's Hospital." Pediatr Dent 19(8): 470-5.

Tinanoff, N. and S. Reisine. 2009. "Update on Early Childhood Caries since the Surgeon General's Report." Acad Pediatr 9(6): 396-403.

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

1c.5. 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.)

Not applicable.

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 subcriteria 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):

Head, Eyes, Ears, Nose, Throat (HEENT) : Dental, Prevention, Prevention : Development/Wellness, Prevention : Screening

De.6. Cross Cutting Areas (check all the areas that apply):

Access, Disparities, Functional Status, Health and Functional Status, Health and Functional Status : Development/Wellness, Health and Functional Status : Functional Status, Prevention, Prevention : Screening

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.)

Not yet posted online. Detailed specifications provided as attachment. (Please see Appendix).

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the 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)

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. For endorsement maintenance, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.

Not applicable – new measure submission

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)

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

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

S.5. Time Period for Data (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)

24 months for both numerator and denominator

S.6. 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, 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.

Please see Section S18.

S.7. Denominator Statement (Brief, narrative description of the target population being measured)

Unduplicated number of children aged 2-21 years enrolled in two consecutive years

S.8. Target Population Category (Check all the populations for which the measure is specified and tested if any):

Children's Health, Populations at Risk

S.9. Denominator Details (All information required to identify and calculate the target population/denominator such as definitions, 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)

Please see Section S18.

S.10. Denominator Exclusions (Brief narrative description of exclusions from the target population)

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

- Undocumented aliens who are eligible only for emergency Medicaid services;

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

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

There are no other exclusions.

S.11. Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, 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.12. Stratification Details/Variables (All information required to stratify the measure results including the stratification variables, definitions, 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 with at S.2b)

This measure will be stratified by age using the following categories:

2-5; 6-7; 8-9; 10-11; 12-14; 15-18; 19-20

No new data are needed for this stratification. Please see attached specifications for complete measure details.

S.13. Risk Adjustment Type (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

No risk adjustment or risk stratification

If other:

S.14. Identify the statistical risk model method and variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)

Not applicable.

S.15. Detailed risk model specifications (must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

Provided in response box S.15a

S.15a. Detailed risk model specifications (if not provided in excel or csv file at S.2b)

Not applicable.

S.16. Type of score:

Rate/proportion

If other:

S.17. 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.18. Calculation Algorithm/Measure Logic (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; aggregating data; risk adjustment; etc.)

Care Continuity Calculation

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 age criterion is met, 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 in the denominator.
3. Check if subject is continuously enrolled for at least 180 days in each year (i.e., 180 days in reporting year AND 180 days in prior year)
 - a. If subject meets continuous enrollment criterion, then include in denominator; proceed to next step.
 - b. If subject does not meet enrollment criterion, then STOP processing. This enrollee does not get counted in the denominator.

YOU NOW HAVE THE DENOMINATOR (DEN) COUNT: All enrollees who meet age and enrollment criteria in each year

4. Check if subject received oral evaluation as a dental service in each year.
 - a. If [SERVICE CODE] = D0120 or D0150 or D0145 in the reporting year AND in the prior year, and;
 - b. If [RENDERING PROVIDER TAXONOMY] code = any of the NUCC maintained Provider Taxonomy Codes in Table 1 below, then include in numerator; 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 1 should not be included in the numerator.

YOU NOW HAVE NUMERATOR (NUM) COUNT: Enrollees who received oral evaluation as a dental service in each year

5. Report
 - a. Unduplicated number of enrollees in numerator
 - b. Unduplicated number of enrollees in denominator
 - c. Measure rate (NUM/DEN)
 - d. Rate stratified by age

Table 1: NUCC maintained Provider Taxonomy Codes classified as “Dental Service”*

122300000X	1223P0106X	1223X0008X	261QF0400X
1223D0001X	1223P0221X	1223X0400X	261QR1300X
1223D0004X	1223P0300X	124Q00000X+	
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.19. Calculation Algorithm/Measure Logic Diagram URL or Attachment (You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1) Available in attached appendix at A.1

S.20. 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.21. Survey/Patient-reported data (If measure is based on a survey, provide instructions for conducting the survey 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.22. Missing data (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

As described in 3c1 (Importance), missing and invalid data are not expected to be an issue for this Process measure. Please also see attached specifications for guidance regarding missing data should that be an issue for a particular plan or program.

S.23. Data Source (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.24.

Administrative claims

S.24. Data Source or Collection Instrument (Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

Not applicable.

S.25. 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.26. Level of Analysis (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Health Plan, Integrated Delivery System

S.27. Care Setting (Check *ONLY* the settings for which the measure is SPECIFIED AND TESTED)

[Ambulatory Care : Clinician Office/Clinic](#)

If other:

S.28. 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.](#)

2a. Reliability – See attached Measure Testing Submission Form

2b. Validity – See attached Measure Testing Submission Form

[4_NQF_SubmissionForm_6.5_MeasureTestingForm_Subcriteria2a2_2b2-2b6_DQA_CareCont_Submit_021014_Rev1.docx](#)

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)

[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.

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.

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. Describe what you have learned/modified 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 PROM 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, the measure concept of “periodic or comprehensive examination” was rated as an 8 or “definitely feasible” by the expert panel. During the empirical testing phase, our testing found that the critical data elements 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. 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 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%
 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%
 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%
 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%
 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%

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.

Planned	Current Use (for current use provide URL)
Public Reporting	Quality Improvement (Internal to the specific organization)
Quality Improvement with Benchmarking (external benchmarking to multiple organizations)	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, provide:

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

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. This measure was one of ten performance measures that focused on Dental Caries Prevention and Disease Management among children approved by the DQA. 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)

Already, the DQA 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 recommended that the DQA measures be considered for incorporation into Connecticut's State Innovation Model Health Care Innovation Plan. (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., Deputy Administrator 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.

4b. 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.1. Progress on Improvement. (Not required for initial endorsement unless available.)

Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- Progress (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

Not applicable – new measure.

4b.2. 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. Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative

unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.
[No unintended or negative consequences have been identified.](#)

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

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 completely harmonized?

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: NQF_Submission_DQA_Care_Continuity_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.