

**\*\*Please read the DQA Measures User Guide prior to implementing this measure.\*\***

## DQA Measure Specifications: Administrative Claims-Based Measures

### Usual Source of Services, Dental Services

**Description:** Percentage of all children enrolled in two consecutive years who visited the same practice or clinical entity in both years

**Numerator:** Unduplicated number of children who visited the same practice or clinical entity in both years

**Denominator:** Unduplicated number of all children enrolled in two consecutive years

**Rate:** NUM/DEN

**Rationale:** Dental caries is the most common chronic disease in children in the United States (1). For 2015–2016, prevalence of total caries (untreated and treated) was 45.8% and untreated caries was 13.0% among youth aged 2–19 years. (2) Identifying caries early is important to reverse the disease process, prevent progression of caries, and reduce incidence of future lesions. Approximately three quarters of children younger than age 6 years did not have at least one visit to a dentist in the previous year (3).

(1) Centers for Disease Control and Prevention. Hygiene-related diseases: dental caries. Available at: [http://www.cdc.gov/healthywater/hygiene/disease/dental\\_caries.html](http://www.cdc.gov/healthywater/hygiene/disease/dental_caries.html). Accessed July 28, 2015.

(2) Fleming E, Afful J. Prevalence of total and untreated dental caries among youth: United States, 2015–2016. NCHS Data Brief, no 307. Hyattsville, MD: National Center for Health Statistics. 2018.

(3) Edelstein BL, Chinn CH. Update on disparities in oral health and access to dental care for America's children. *Acad Pediatr*. 2009;9(6):415-9. PMID: 19945076

**NQMC Domain:** Access;<sup>1</sup> Process<sup>2</sup>

**IOM Aim:** Equity, Effectiveness

**Level of Aggregation:** Health Plan/Program

**Improvement Noted As:** A higher score indicates better quality.

**Data Required:** Administrative enrollment and claims data; two consecutive years. When using claims data to determine service receipt, include both paid and unpaid claims (including pending, suspended, and denied claims).

<sup>1</sup> **Access (Clinical Quality Measure):** "Access to care is the attainment of timely and appropriate health care by patients or enrollees of a health care organization or clinician. Access measures are supported by evidence that an association exists between the measure and the outcomes of or satisfaction with care." National Quality Measures Clearinghouse. Available at: <http://www.qualitymeasures.ahrq.gov/about/domain-definitions.aspx>. Accessed August 10, 2015.

<sup>2</sup> **Process (Clinical Quality Measure):** "A process of care is a health care-related activity performed for, on behalf of, or by a patient. Process measures are supported by evidence that the clinical process—that is the focus of the measure—has led to improved outcomes." National Quality Measures Clearinghouse. Available at: <http://www.qualitymeasures.ahrq.gov/about/domain-definitions.aspx>. Accessed August 10, 2015.

**Measure purpose:** Examples of questions that can be answered through this measure at each level of aggregation:

1. What is the percentage of children with a usual source of care?
2. Does the percentage of children with usual source of care vary by any of the stratification variables?
3. Are there disparities in the percentage of children with usual source of care among different groups based on the stratification variables?
4. Over time, does the percentage of children with a usual source of care stay stable, increase or decrease?

**Applicable Stratification Variables (Optional: Contact Program Official to determine reporting requirement)**

1. Age (e.g., 1-2; 3-5; 6-7; 8-9; 10-11; 12-14; 15-18; 19-20)
2. Payer Type (e.g., Medicaid; CHIP; private commercial benefit programs)
3. Program/Plan Type (e.g., traditional FFS; PPO; prepaid dental/DHMO)
4. Geographic Location (e.g., rural; suburban; urban)
5. Race
6. Ethnicity
7. Socioeconomic Status (e.g., premium or income category)

**Usual Source of Services (Dental Services) Calculation**

1. Check if the subject meets age criteria at the last day of the reporting year:<sup>3</sup>
  - a. If child is  $\geq 1$  and  $< 21$ , then proceed to next step.
  - b. If age criteria are not met or there are missing or invalid field codes (e.g., date of birth), then STOP processing. This subject does not get counted.
2. Check if subject is continuously enrolled for at least 180 days in each year (i.e., 180 days in the reporting year AND 180 days in the prior year):<sup>4</sup>
  - a. If subject meets continuous enrollment criteria, then include in **denominator**; proceed to next step.
  - b. If subject does not meet enrollment criteria, then STOP processing. This subject does not get counted in the denominator.

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

3. Check if subject received any dental service in the reporting year AND the prior year:
  - a. If [SERVICE CODE] = D0100 – D9999 in the reporting year AND the prior year, AND

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<sup>3</sup> **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.

<sup>4</sup> **Enrollment in "same" plan vs. "any" plan:** At the **state** program level (e.g., Medicaid/CHIP) a criterion of "**any**" plan applies versus at the **health plan** (e.g., MCO) level a criterion of "**same**" plan applies. The criterion used should be reported with the measure score. While this prevents direct aggregation of results from plan to program, each entity is given due credit for the population it serves. Thus, states with multiple MCOs should not merely "add up" the plan level scores but should calculate the state score from their database to allow inclusion of individuals who may be continuously enrolled but might have switched plans in the interim.

- b. If [RENDERING PROVIDER TAXONOMY] code = any of the NUCC maintained Provider Taxonomy Codes in Table 1 below<sup>5</sup> in the reporting year AND the prior year, then proceed to next step.
- c. If both a AND b are not met, then STOP processing. This subject is already included in the denominator but will not be included in the subsequent counts

**Note:** In this step, all **claims** with missing or invalid CDT CODE, missing or invalid NUCC maintained Provider Taxonomy Codes, or NUCC maintained Provider Taxonomy Codes that do not appear in Table 1 should not be included.

- 4. Among the dental services identified in Step 3, check if subject visited the same practice or clinical entity in the reporting year and in the prior year:
  - a. If the same **BILLING** [PROVIDER ID] (TIN or NPI or PROGRAM ID) appeared in the reporting year AND the prior year, then include in **numerator**; STOP processing. (**NOTE:** Use the same ID type – TIN/NPI/PROGRAM ID in both years; not \*all\* services need to be from the same practice.)
  - b. If not, then subject did not visit the same practice/clinical entity in both years; STOP processing. This subject is already included in the denominator but will not be included in the numerator.

**YOU NOW HAVE NUMERATOR (NUM) COUNT: Subjects who received dental services from same practice or clinical entity in the reporting year and the prior year**

- 5. Report
  - a. Unduplicated count of subjects in numerator
  - b. Unduplicated count of subjects in denominator
  - c. Measure rate (NUM/DEN)

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

122300000X	1223P0106X	1223X0008X	125Q00000X	126800000X
1223D0001X	1223P0221X	1223X0400X	261QF0400X	261QD0000X
1223D0004X	1223P0300X	124Q00000X+	261QR1300X	204E00000X
1223E0200X	1223P0700X	125J00000X	1223X2210X	261QS0112X
1223G0001X	1223S0112X	125K00000X	122400000X	

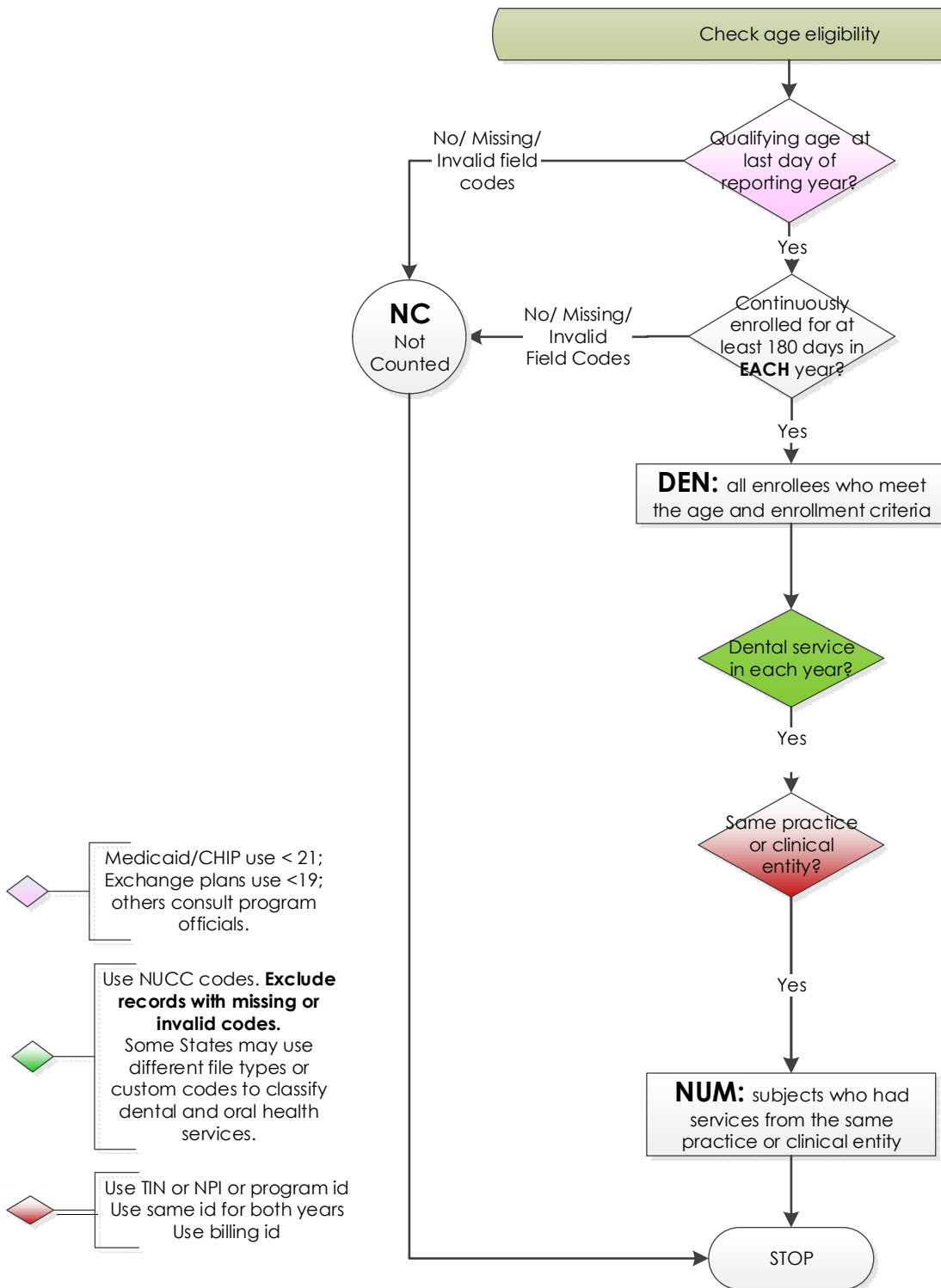
\*Services provided by County Health Department dental clinics may also be included as “dental” services.

+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 to this measure.

\*\*\* Reliability of the measure score depends on the quality of the data that are used to calculate the measure. The percentages of missing and invalid data for these data elements must be investigated prior to

<sup>5</sup> **Provider taxonomy:** Some States may use different file types or custom codes to classify dental and oral health services.

measurement. Data elements with high rates of missing or invalid data will adversely affect the subsequent counts that are recorded. For example, records with missing or invalid CDT CODE may be counted in the denominator but not in the numerator. These records are assumed to not have had a qualifying service. In this case, a low quality data set will result in a measure score that will not be reliable.\*\*\*



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