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

DQA Measure Technical Specifications: Administrative Claims-Based Measures

Per Member Per Month Cost of Clinical Services, Dental Services

**Description:** Total amount that is paid on direct provision of care (reimbursed for clinical services) per member per month for all enrolled children during the reporting year

**Numerator:** Total amount paid for dental services

**Denominator:** Total dental member months for all members enrolled in dental coverage for at least one month

**Rate:** NUM/DEN;

**Rationale:** Dental caries is the most common chronic disease in children in the United States (1). 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 (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).


**AHRQ Domain:** Related health care delivery - cost

**IOM Aim:** Efficiency

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

**Data Required:** Administrative enrollment and claims data; single year. When using claims data to determine service receipt, include only paid claims.

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

1. What is the cost of dental services per member per month?
2. Are there disparities in the cost per member per month between different groups based on the stratification variables?
3. The numerator of this measure provides part of the information to calculate the **dental insurance loss ratio**. The loss ratio is the ratio of total amount paid for dental care services and quality improvement activities divided by the total earned premiums less federal/state taxes and license/regulatory fees.

1 Cost (related Healthcare Delivery Measure): “Costs of care are the monetary or resource units expended by a health care organization or clinician to deliver health care to individuals or populations. Cost measures are computed from data in monetary or resource units. Costs may be reported directly (i.e., actual costs) or estimated based on the volume of resource units provided and the charges for those units.” National Quality Measures Clearinghouse. Available at: http://www.qualitymeasures.ahrq.gov/about/domain-definitions.aspx. Accessed August 10, 2015.

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

1. Age (e.g., <1; 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)
PMPM Cost (Dental Services) Calculation

1. Check if the enrollee meets age criterion\(^3\) at the last day of the reporting year:\(^4\)
   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.

2. Check if subject is enrolled in dental coverage at least one month during the reporting year:
   a. If subject meets enrollment criterion then proceed to next step.
   b. If subject does not meet enrollment criterion, then STOP processing.

3. Calculate total number of member months by summing the number of months enrolled in dental coverage for all members enrolled at least one month in dental coverage during the reporting year; include as denominator.

YOU NOW HAVE THE DENOMINATOR COUNT: total number of dental member months

4. Calculate total dental costs by summing paid amounts for all services with [CDT CODE] = D0100 – D9999 that were provided by a provider whose [RENDERING PROVIDER TAXONOMY] code = any of the NUCC codes in Table 1. Include as numerator.

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

YOU NOW HAVE NUMERATOR (NUM) COUNT: Total paid amount for dental services

5. Report
   a. Total dental costs (NUM)
   b. Total dental member months (DEN)
   c. Measure rate (NUM/DEN)

---

\(^3\) **Age:** Medicaid/CHIP programs use under age 21 (< 21); Exchange quality reporting use under age 19 (<19); other programs check with program officials. This criterion should be reported with the measurement score.

\(^4\) **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.
Table 1: NUCC Codes classified as “Dental Service”*

<table>
<thead>
<tr>
<th>Code</th>
<th>Code</th>
<th>Code</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>122300000X</td>
<td>1223P0106X</td>
<td>1223X0008X</td>
<td>125Q00000X</td>
</tr>
<tr>
<td>1223D0001X</td>
<td>1223P0221X</td>
<td>1223X0400X</td>
<td>261QF0400X</td>
</tr>
<tr>
<td>1223D0004X</td>
<td>1223P0300X</td>
<td>124Q00000X</td>
<td>261QR1300X</td>
</tr>
<tr>
<td>1223E0200X</td>
<td>1223P0700X</td>
<td>125J00000X</td>
<td></td>
</tr>
<tr>
<td>1223G0001X</td>
<td>1223S0112X</td>
<td>125K00000X</td>
<td></td>
</tr>
</tbody>
</table>

*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.

*** Note: 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 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.***
DQA Measure CCS-CH-A, Dental/Oral Health Services
Effective January 1, 2018

Check age eligibility

No/Missing/Invalid field codes

Qualifying age at last day of reporting year?

Yes

No/Missing/Invalid field codes

Continuously enrolled for at least 1 month?

Yes

Add number of months for each enrollee

DEN: total number of member months

Add dental costs

NUM: total dental costs

STOP

NC Not Counted

Medicaid/CHIP use < 21; Exchange plans use < 19; others consult program officials.

Use NUCC codes. Exclude records with missing or invalid codes. Some States may use different file types or custom codes to classify dental and oral health services.
DQA Measure CCS-CH-A, Dental/Oral Health Services

Effective January 1, 2018

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. The DQA shall be acknowledged as the measure steward in any and all references to the measure. 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.

For Proprietary Codes:

Dental Procedures and Nomenclature: Published in Current Dental Terminology (CDT), Copyright © 2017 American Dental Association (ADA). All rights reserved.

This material contains National Uniform Claim Committee (NUCC) Health Care Provider Taxonomy codes (http://www.nucc.org/index.php?option=com_content&view=article&id=14&Itemid=125). Copyright © 2017 American Medical Association. All rights reserved.

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