DENTAL QUALITY ALLIANCE™
Improving Oral Health Through Measurement

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

DQA Measure Specifications: Administrative Claims-Based Measures

Oral Evaluation During Pregnancy

Description: Percentage of enrolled persons aged 15 through 44 years with live-birth deliveries in the reporting year who received a comprehensive or periodic oral evaluation during pregnancy
Numerator: Unduplicated number of enrolled persons with live-birth deliveries in the reporting year who received a comprehensive or periodic oral evaluation during pregnancy
Denominator: Unduplicated number of enrolled persons aged 15 through 44 years with live-birth deliveries in the reporting year
Rates: NUM/DEN

Rationale:
Oral health may be considered an important part of prenatal care, given that poor oral health during pregnancy can lead to poor health outcomes for the mother and baby.[1] Both the American College of Obstetricians and Gynecologists and the American Dental Association recommend individuals visit a dentist during pregnancy to have their oral health assessed, obtain preventive services, receive any necessary treatment, and receive guidance about good eating and oral hygiene practices.[2,3] Promoting oral health during pregnancy supports the parent's oral and overall health and lays the foundation for optimal oral and overall health of the child. The measure intent is to assess the extent to which pregnant persons are accessing routine care with risk assessment, diagnosis, and treatment planning.

1. Centers for Disease Control and Prevention. 2022. Pregnancy and Oral Health. Available at: https://www.cdc.gov/oralhealth/publications/features/pregnancy-and-oral-health.html
2. Oral Health Care During Pregnancy Expert Workgroup. 2012. *Oral Health Care During Pregnancy: A National Consensus.* Washington, DC: National Maternal and Child Oral Health Resource Center. www.mchoralhealth.org/PDFs/OralHealthPregnancyConsensus.pdf
3. American College of Obstetricians and Gynecologists, Committee on Health Care for Underserved Women. 2013. Committee Opinion No. 569: Oral health care during pregnancy and through the lifespan. *Obstetrics and Gynecology* 122(2 Pt 1):417–422. Available at: https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2013/08/oral-health-care-during-pregnancy-and-through-the-lifespan

AHRQ Domain: Process[1]

IOM Aim: Equity, Effectiveness

Level of Aggregation: Program (*NOTE: This measure requires claims data from medical encounters. Consequently, this measure only applies to programs, such as Medicaid, or plans that provide both medical and dental benefits. Use of this measure as a requirement for stand-alone dental benefit plans may result in feasibility issues due to lack of access to necessary data. Use by health plans that provide both medical and dental benefits to a population may be considered after assessment of data element feasibility within the plans' databases.)*

Improvement Noted As: A higher score indicates better quality

[1] **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: https://www.ahrq.gov/gam/summaries/domain-definitions/index.html Accessed January 18, 2022.

Data Required: Administrative enrollment and claims data (medical and dental); reporting year and prior year. When using claims data to determine service receipt, include both paid and unpaid claims (including pending, suspended, and denied claims).

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

1. What is the percentage of enrolled persons with a delivery in the reporting year who received a comprehensive or periodic oral evaluation during pregnancy?
2. Does the percentage of enrolled persons who received a comprehensive or periodic oral evaluation during pregnancy vary by any of the stratification variables?
3. Over time, does the percentage of enrolled persons who received a comprehensive or periodic oral evaluation during pregnancy stay stable, increase or decrease?

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

1. Age (15-18; 19-20; 21-24; 25-29; 30-34; 35-39; 40-44)
2. Payer Type (e.g., Medicaid; private commercial benefit programs)
3. Program/Plan Type (e.g., Traditional FFS; PPO; prepaid dental/DHMO)
4. Geographic Location (e.g., rural; urban)
5. Race/Ethnicity
6. Socioeconomic Status (e.g., premium or income category)

Oral Evaluation During Pregnancy Measure Calculation

Reporting period for identification of delivery dates: January 1 – December 31 of the calendar year.

Anchor date: Date of delivery

1. Check if the subject meets age criteria:
    a. If person is >=15 and <=44 as of December 31st of the reporting year, then proceed to next step.
    b. If the age criteria are not met or there are missing or invalid field codes (e.g., date of birth), then STOP processing. This subject is not counted in the denominator
2. Check for **unduplicated** persons with live-birth deliveries during the reporting period:
    a. Check for procedure codes signifying delivery AND diagnosis codes signifying live birth:
        i. If [ICD-10-PCS PROCEDURE CODE]=any code in Table 1 OR if [CPT PROCEDURE CODE]=any code in Table 2

    AND

ii. If [ICD-10-CM DIAGNOSIS CODE] = any code in Table 3, then proceed to next step. **Note:** Check all diagnosis code fields, including admitting diagnosis, principal diagnosis, and additional-listed diagnoses.

OR

b. Check for diagnosis codes that signify both delivery and live birth:
If [ICD-10-CM DIAGNOSIS CODE] = O80 or O82, then proceed to next step.

c. If a OR b is met, then proceed to next step.

d. If neither a nor b are met, then STOP processing. This subject is not counted in the denominator.

Note 1: The denominator is an unduplicated count of persons with a live-birth delivery during the year. If a person has more than one delivery in the reporting year, use the **first delivery date** as the anchor date.

Note 2: Delivery dates should be identified using the procedure code dates where possible. If procedure code dates are unavailable, then the admission date may be used.

3. Check if subject is enrolled in coverage inclusive of dental benefits
   a. If subject is enrolled on the delivery date, AND
   b. If subject is continuously enrolled for 180 days prior to the delivery date. (**Note:** For programs/plans that verify enrollment on a monthly basis, the continuous enrollment criteria should include the month in which the delivery occurred AND 6 months prior to the month in which the delivery occurred.)
   c. If both a AND b are met, then include in **denominator**; proceed to next step.
   d. If either a OR b is NOT met, then STOP processing. This subject will not be included in the denominator.

YOU NOW HAVE DENOMINATOR (DEN) COUNT: Subjects with live-birth deliveries who meet the age and enrollment criteria

4. Check if subject received a comprehensive or periodic oral evaluation as a **dental service** during the 270 days prior to the delivery date:
   a. If [CDT CODE] = (D0120 OR D0150 or D0180) AND
   b. If [RENDERING PROVIDER TAXONOMY CODE] = any of the NUCC maintained Provider Taxonomy Codes in Table 4 below.[2]

[2] **Identifying "dental" services**: Programs and plans that do not use standard NUCC maintained provider taxonomy codes should use a valid mapping to identify providers whose services would be categorized as "dental" services. Stand-alone dental plans that reimburse ONLY for services rendered by or under the supervision of the dentist can consider all claims as "dental" services.

c. If both a AND b are met, then include in **numerator**; proceed to next step.
d. If either a OR b is NOT met, then a dental service was not provided; STOP processing. This subject is already included in the denominator but will not be included in the numerator.

Note: In this step, all **claims** with missing or invalid CDT CODE, missing or invalid NUCC maintained Provider Taxonomy Codes, or NUCC maintained Provider Taxonomy Codes that do not appear in Table 4 should be excluded.

YOU NOW HAVE NUMERATOR (NUM) COUNT: Subjects who received a comprehensive or periodic oral evaluation

5. Report
   a. Unduplicated number of subjects in numerator (NUM)
   b. Unduplicated number of subjects in denominator (DEN)
   c. Measure score (NUM/DEN)
   d. Score stratified by age

Table 1: ICD-10-PCS Codes to Identify Deliveries

ICD10PCS	10D00Z0	Extraction of Products of Conception, Classical, Open Approach
ICD10PCS	10D00Z1	Extraction of Products of Conception, Low Cervical, Open Approach
ICD10PCS	10D00Z2	Extraction of Products of Conception, Extraperitoneal, Open Approach
ICD10PCS	10D07Z3	Extraction of Products of Conception, Low Forceps, Via Natural or Artificial Opening
ICD10PCS	10D07Z4	Extraction of Products of Conception, Mid Forceps, Via Natural or Artificial Opening
ICD10PCS	10D07Z5	Extraction of Products of Conception, High Forceps, Via Natural or Artificial Opening
ICD10PCS	10D07Z6	Extraction of Products of Conception, Vacuum, Via Natural or Artificial Opening
ICD10PCS	10D07Z7	Extraction of Products of Conception, Internal Version, Via Natural or Artificial Opening
ICD10PCS	10D07Z8	Extraction of Products of Conception, Other, Via Natural or Artificial Opening
ICD10PCS	10E0XZZ	Delivery of Products of Conception, External Approach

Table 2: CPT Codes to Identify Deliveries

CPT	59400	Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy, and/or forceps) and postpartum care
CPT	59409	Vaginal delivery only (with or without episiotomy and/or forceps)
CPT	59410	Vaginal delivery only (with or without episiotomy and/or forceps) including postpartum care
CPT	59510	Routine obstetric care including antepartum care, cesarean delivery and postpartum care
CPT	59514	Cesarean delivery only
CPT	59515	Cesarean delivery only including postpartum care
CPT	59610	Routine obstetric care including antepartum care, vaginal delivery (with or without episiotomy and/or forceps) and postpartum care, after previous cesarean delivery
CPT	59612	Vaginal delivery only, after previous cesarean delivery (with or without episiotomy and/or forceps)
CPT	59614	Vaginal delivery only, after previous cesarean delivery (without or without episiotomy and/or forceps) including postpartum care
CPT	59618	Routine obstetric care including antepartum care, cesarean delivery and postpartum care, following attempted vaginal delivery after previous cesarean delivery
CPT	59620	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery
CPT	59622	Cesarean delivery only, following attempted vaginal delivery after previous cesarean delivery including postpartum care

Table 3: ICD-10-CM Codes to Identify Live Births

ICD10CM	Z37.0	Single live birth
ICD10CM	Z37.2	Twins, both liveborn
ICD10CM	Z37.3	Twins, one liveborn and one stillborn
ICD10CM	Z37.50	Multiple births, unspecified, all liveborn
ICD10CM	Z37.51	Triplets, all liveborn
ICD10CM	Z37.52	Quadruplets, all liveborn
ICD10CM	Z37.53	Quintuplets, all liveborn
ICD10CM	Z37.54	Sextuplets, all liveborn
ICD10CM	Z37.59	Other multiple births, all liveborn
ICD10CM	Z37.60	Multiple births, unspecified, some liveborn
ICD10CM	Z37.61	Triplets, some liveborn
ICD10CM	Z37.62	Quadruplets, some liveborn

ICD10CM	Z37.63	Quintuplets, some liveborn
ICD10CM	Z37.64	Sextuplets, some liveborn
ICD10CM	Z37.69	Other multiple births, some liveborn

Table 4: 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.

*** Note: Reliability of the measure score depends on the quality of the data that are used to calculate the measures. The percentage of missing or invalid data for each data element used to calculate the measure 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 dental visit. In this case, a low quality data set will result in a low measure score and will not be reliable.***