

DQA Measure Specifications: Administrative Claims-Based Measures

Adults with Diabetes – Oral Evaluation

Description: Percentage of adults with diabetes who received a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation within the reporting year
Numerator: Unduplicated number of adults with diabetes who received a comprehensive or periodic oral evaluation or a comprehensive periodontal evaluation
Denominator: Unduplicated number of adults with diabetes
Rate: NUM/DEN

Rationale: The 2021 Standards of Medical Care in Diabetes call for initial care management to include a referral to a dentist.¹ This recommendation recognizes the established bi-directional relationship between diabetes mellitus and periodontal disease.^{2,3} Specifically, diabetes is associated with increased prevalence and severity of periodontal disease, while severe periodontal disease is associated with poor glycemic control. Oral evaluations represent an important entry point into the dental care system. Diagnosis and treatment planning for the prevention and treatment of periodontal disease at these visits offer patients appropriate dental care with the potential to improve diabetes outcomes.

References:

1. American Diabetes Association. Comprehensive Medical Evaluation and Assessment of Comorbidities: Standards of Medical Care in Diabetes – 2021. *Diabetes Care* 2021;44(S1):S40-S52.
2. Casanova L, Hughes FJ, Preshaw PM. Diabetes and periodontal disease: a two-way relationship. *British Dental Journal* 2014;217(8):433-7.
3. Chapple ILC, Genco R, working group 2 of the joint EFP/AAP workshop. Diabetes and periodontal diseases: consensus report of the Joint EFP/APP Workshop on Periodontitis and Systemic Diseases. *Journal of Clinical Periodontology* 2013;40(14):S106-12.

AHRQ Domain: Process¹

IOM Aim: Equity, Effectiveness

Level of Aggregation: Program (NOTE: This measure uses claims data from medical encounters and pharmacy records to identify people with diabetes. Consequently, this measure applies to programs, such as Medicaid, that provide both medical and dental benefits. Use of this measure 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 may be considered after assessment of data element feasibility within the plans' databases).

Improvement Noted As: A higher score indicates better quality.

Data Required: Dental, medical and pharmacy administrative enrollment and claims data; single year (prior year needed for diabetes identification). When using claims data to determine service receipt, include both paid and unpaid claims (including pending, suspended, and denied claims).

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 July 27, 2023.

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

1. What is the percentage of adults with diabetes who received a comprehensive, periodic, or periodontal oral evaluation during the reporting period?
2. Does the percentage of adults with diabetes who received a comprehensive, periodic, or periodontal oral evaluation vary by any of the stratification variables?
3. Are there disparities in receipt of comprehensive, periodic, or periodontal oral evaluations based on stratification variables?
4. Over time, does the percentage of adults with diabetes who receive a comprehensive, periodic, or periodontal oral evaluation stay stable, increase or decrease?

Applicable Stratification Variables

1. Age: (e.g., 18, 19-20, 21-24, 25-34, 35-44, 45-54, 55-64, 65-75, 75-84, 85+)
2. Geographic Location (e.g., rural; suburban; urban)
3. Race
4. Ethnicity
4. Socioeconomic Status (e.g., premium or income category)

GUIDANCE FOR IMPLEMENTERS: Diabetes identification for inclusion in the denominator follows the approach used for the [NCQA/HEDIS® measure Comprehensive Diabetes Care](#) to achieve alignment with existing diabetes measures as part of the CMS Core Set of Adult Quality Measures for Medicaid (Adult Core Set). Measure implementers should obtain all necessary licenses from [NCQA](#) to access the complete value set for the measure for any reporting purpose. NCQA's Medication List Directory (MLD) of NDC codes for Dementia Medications and Diabetes Medications can be found at <https://store.ncqa.org/hedis-my-2022-medication-list-directory.html>. For more information on the 2023 Adult Core Set, please access the CMS Core Set link: [Adult Core Set Reporting Resources](#)

Adults with Diabetes: Oral Evaluation Calculation

1. Check if the subject meets age criterion at the last day of the reporting year:²
 - a. If subject is ≥ 18 years, 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 subject is not counted in the denominator.
2. Check if subject is continuously enrolled for the reporting year (12 months) with a single gap of no more than 45 days (one-month gap for programs that determine eligibility on a monthly basis):³
 - a. If subject meets continuous enrollment criterion, then proceed to next step.
 - b. If subject does not meet enrollment criterion, then STOP processing. This subject is not counted in the denominator.
3. Exclude subject if dually eligible for Medicaid and Medicare during the reporting year:
 - a. If subject is a dual eligible; STOP processing. This subject is **excluded from the denominator**.
 - b. If subject is NOT a dual eligible, then proceed to next step.
4. Exclude subject if care received at a Hospice facility:
 - a. If subject used hospice services (NCQA Hospice Encounter Value Set; NCQA Hospice Intervention Value Set) in the reporting year, then STOP processing. This subject is **excluded from the denominator**.
 - a. If subject did not have any Hospice services in the reporting year or the year prior, then proceed to next step.
5. Exclude subject if received palliative care:
 - a. If subject received palliative care (NCQA Palliative Care Assessment Value Set; NCQA Palliative Care Encounter Value Set; NCQA Palliative Care Intervention Value Set) in the reporting year, then STOP processing. This subject is **excluded from the denominator**.
 - a. If subject did not receive any palliative care in the reporting year, then proceed to next step.
6. **OPTIONAL EXCLUSION:** Exclude subjects age 66 and older as of December 31 of the reporting year with frailty and advanced illness:
 - a. If subject meets both of the following frailty and advanced illness criteria to be excluded:
 - (1) At least one claim/encounter for frailty (NCQA Frailty Device Value Set; NCQA Frailty Diagnosis Value Set; NCQA Frailty Encounter Value Set; NCQA Frailty Symptom Value Set) during the reporting year

AND

- (2) Any of the following during the reporting year or the year prior to the reporting year (count services that occur over both years):
 - At least two outpatient visits (NCQA Outpatient Value Set), observation visits (NCQA Observation Value Set), ED visits (NCQA ED Value Set), telephone visits (NCQA Telephone Visits Value Set), e-visits or virtual check-ins (NCQA Online Assessments

² Medicaid programs exclude those enrollees who do not qualify for dental benefits. The exclusions criterion should be reported along with the number and percentage of members excluded.

³ **Enrollment in "same" plan vs. "any" plan:** At the **state** program level (e.g., Medicaid) 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.

Value Set), nonacute inpatient encounters (NCQA Nonacute Inpatient Value Set), or nonacute inpatient discharges (see identification below; diagnosis must be on the discharge claim) on different dates of service, with an advanced illness diagnosis (NCQA Advanced Illness Value Set). Visit type need not be the same for the two encounters.

- To identify a nonacute inpatient discharge: (i) identify all acute and nonacute inpatient stays (NCQA Inpatient Stay Value Set); (ii) confirm the stay was for nonacute care based on the presence of a nonacute code (NCQA Nonacute Inpatient Stay Value Set) on the claim; (3) Identify the discharge date for the stay.
- At least one acute inpatient encounter (NCQA Acute Inpatient Value Set) with an advanced illness diagnosis (NCQA Advanced Illness Value Set)
- At least one acute inpatient discharge with an advanced illness diagnosis (NCQA Advanced Illness Value Set) on the discharge claim.
 - To identify an acute inpatient discharge: (i) identify all acute and nonacute inpatient stays (NCQA Inpatient Stay Value Set); (ii) exclude nonacute inpatient stays (NCQA Nonacute Inpatient Stay Value Set); (3) Identify the discharge date for the stay.
- A dispensed dementia medication (NCQA Dementia Medications List, see link to Medication List Directory in Guidance for Reporting above)

b. If subject does not meet the frailty and advanced illness criteria, then proceed to next step.

YOU NOW HAVE A COUNT OF SUBJECTS WHO MEET THE AGE AND ENROLLMENT REQUIREMENT (AFTER EXCLUSIONS)

7. Check if subject has diabetes:

- a. Adults with diabetes (type I or type II) can be identified by either claims/encounter data that include a diagnosis of diabetes or by pharmacy data. Both claims/encounter data and pharmacy data must be checked, but a patient needs to be identified by only one method for inclusion in the denominator.

If subject meets at least one of the following criteria (among i, ii, iii, and iv) in either the reporting year or the preceding year, then include in **denominator**:

Claims/Encounter Data

- i. The subject has at least one acute inpatient encounter (NCQA Acute Inpatient Value Set) with a diagnosis of diabetes (NCQA Diabetes Value Set) without telehealth (NCQA Telehealth Modifier Value Set; NCQA Telehealth POS Value Set)

OR

- ii. The subject has at least one acute inpatient discharge with a diagnosis of diabetes (NCQA Diabetes Value Set) on the discharge claim. To identify an acute inpatient discharge:
- Identify all acute and nonacute inpatient stays (NCQA Inpatient Stay Value Set).
 - Exclude nonacute inpatient stays (NCQA Nonacute Inpatient Stay Value Set).
 - Identify the discharge date for the stay

OR

- iii. The subject has at least two outpatient visits (NCQA Outpatient Value Set), observation visits (NCQA Observation Value Set), telephone visits (NCQA Telephone Visits Value Set), e-visits or virtual check-ins (NCQA Online Assessments Value Set), ED visits (NCQA ED Value Set), nonacute inpatient encounters (NCQA Nonacute Inpatient Value Set) or nonacute inpatient discharges (instructions below; the diagnosis must be on the discharge claim), on different dates of service, with a diagnosis of diabetes (NCQA Diabetes Value Set). Visit type need not be the same for the two visits. To identify a nonacute inpatient discharge:
 - o Identify all acute and nonacute inpatient stays (NCQA Inpatient Stay Value Set).
 - o Confirm the stay was for nonacute care based on the presence of a nonacute code (NCQA Nonacute Inpatient Stay Value Set) on the claim.
 - o Identify the discharge date for the stay.

Note 1: Only include nonacute inpatient encounters (NCQA Nonacute Inpatient Value Set) without telehealth (NCQA Telehealth Modifier Value Set; NCQA Telehealth POS Value Set).

OR

Pharmacy Claims Data

- iv. The subject was dispensed insulin or hypoglycemics/antihyperglycemics during the reporting year or year prior to the reporting year on an ambulatory basis. (NCQA Diabetes Medications List, see link to Medication List Directory in Guidance for Reporting above)
- b. Exclude subjects who do not have a diagnosis from the NCQA Diabetes Value Set (type I or type II Diabetes), in any setting, and are in the NCQA Diabetes Exclusion Value Set (e.g., have a diagnosis of polycystic ovarian syndrome, gestational diabetes, or steroid/drug induced diabetes) in the reporting year or the year prior to the reporting year:
 - i. If subject has any diagnoses within the NCQA Diabetes Exclusion Value Set in the reporting year or the year prior and was not identified in 7a(i) or 7a(ii) or 7a(iii) above, then STOP processing. This subject is not counted in the denominator. (NOTE: If subject was identified in step 7a(i) or 7a(ii) or 7a (iii) as having diabetes, this subject should remain in the denominator and not be excluded.)
 - ii. If subject does not have any encounter claims from the Diabetes Exclusion Value Set in the reporting year or the year prior, then proceed to next step.

YOU NOW HAVE DENOMINATOR (DEN) COUNT: Subjects with diabetes who meet the age and enrollment criteria

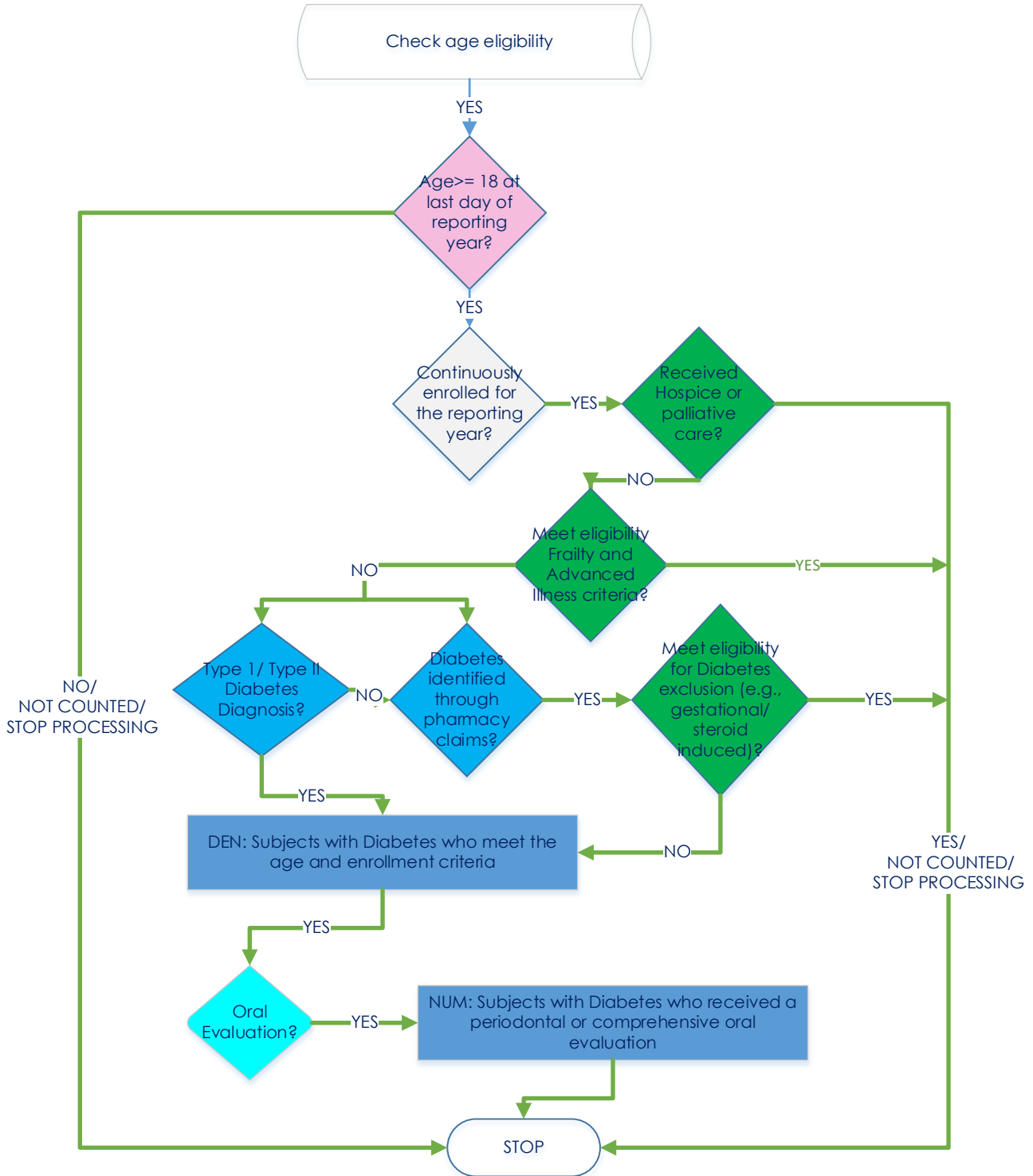
- 8. Check if subject received a comprehensive, periodic, or periodontal oral evaluation during the reporting year:
 - a. If [CDT CODE] = D0120 or D0150 or D0180, then include in **numerator**, STOP processing.
 - b. If not, then service was not provided, STOP processing. This subject is already included in the denominator but is not included in the numerator.

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

9. Report:

- a. Unduplicated count of subjects in numerator
- b. Unduplicated count of subjects in denominator before exclusions
- c. Unduplicated count of subjects in denominator after exclusions
- d. Measure rate (NUM/DEN after exclusions)

Reliability of the measure score depends on the quality of the data elements that are used to calculate the measure. The percentages 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, subjects who have 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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For NCQA value set to identify individual with diabetes:

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