

Calculating the Colorectal Cancer Screening Measure in the 2023 Adult and Health Home Core Sets

Introduction

Colorectal cancer is the second leading cause of cancer-related deaths in the United States and there are known disparities by race and ethnicity.¹ Colorectal cancer screening is effective at identifying precancerous lesions or early cancers and studies have shown that screening decreases colorectal cancer incidence and mortality.² Nevertheless, more than a third of adults do not receive recommended cancer screenings, with lower rates among Medicaid beneficiaries compared to those who are privately insured.³ To that end, increasing colorectal cancer screening rates among Medicaid beneficiaries is a high priority for the Centers for Medicare & Medicaid Services (CMS).

In light of these priorities and in response to stakeholder feedback, CMS added the Colorectal Cancer Screening (COL) measure to the 2022 Adult⁴ and Health Home⁵ Core Sets. This measure assesses appropriate screening for colorectal cancer among adults enrolled in Medicaid and health home programs (Table 1). This technical assistance (TA) resource provides a step-by-step guide to calculating the COL measure for Core Set reporting.

¹ <https://seer.cancer.gov/statfacts/html/colorect.html>.

² Lin JS, Piper MA, Perdue LA, et al. Screening for Colorectal Cancer: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA. 2016;315(23):2576. doi:10.1001/jama.2016.3332.

³ <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf>.

⁴ <https://www.medicaid.gov/federal-policy-guidance/downloads/cib121021.pdf>.

⁵ <https://www.medicaid.gov/federal-policy-guidance/downloads/cib02162022.pdf>.

Table 1. Overview of the COL Measure for Adult and Health Home Core Set Reporting

Measure Steward	National Committee for Quality Assurance (NCQA)
Description	Percentage of adult beneficiaries ^a ages 45 to 75 who had appropriate screening for colorectal cancer.
Denominator	Adult beneficiaries ages 46 to 75 as of December 31 of the measurement year. ^b
Numerator	Adult beneficiaries who had one or more screenings for colorectal cancer.
Exclusions	Required exclusions <ul style="list-style-type: none"> Beneficiaries receiving hospice services or palliative care. Beneficiaries who died. Optional exclusions <ul style="list-style-type: none"> Beneficiaries age 66 and older with frailty and advanced illness. Beneficiaries with colorectal cancer or a total colectomy.
Data Source	Administrative or Electronic Health Record (EHR) ^{c,d}
Continuous Enrollment	The measurement year and the year prior to the measurement year.
Allowable Gap	No more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment.
Anchor Date	The beneficiary must be enrolled on December 31st of the measurement year.
Required Benefits	Medical.

^a The term "beneficiaries" also includes enrollees in health home programs.

^b The age criteria for the denominator (ages 46 to 75) are different from the measure description (ages 45 to 75) to account for the lookback period.

^c The electronic specification for FFY 2023 is located on the eCQI resource center at <https://ecqi.healthit.gov/ecqm/ec/2022/cms130v10>.

^d The HEDIS® Colorectal Cancer Screening measure is also specified for Electronic Clinical Data System (ECDS) reporting for HEDIS®. ECDS specifications are not currently available for Core Set reporting. HEDIS® is a registered trademark of the National Committee for Quality Assurance.

FFY 2023 Reporting Cycle Changes

Key changes for the FFY 2023 reporting cycle include:

- Revised the age range from ages 50 to 75 to ages 45 to 75. For Core Set reporting, states should calculate and report this measure for three age groups (as applicable): ages 46 to 49, ages 50 to 64, and ages 65 to 75.
- Changed references of “FIT-DNA test” to “stool DNA (sDNA) with FIT test” in the numerator.
- Clarified that beneficiaries in hospice or using hospice services anytime during the measurement year are a required exclusion.
- Updated the Hybrid specification to indicate that sample size reduction is not allowed.

Step-by-Step Guide to Calculating the COL Measure

The COL measure is calculated using administrative claims data or electronic health records. For FFY 2023 reporting, states should use claims data from calendar year (CY) 2022. States should also look back 10 years from the end of the measurement period, if feasible, to identify colorectal cancer screenings that meet the numerator criteria (Table 2).

States that do not have 10 years of lookback data for a beneficiary should use the data available to them, regardless of whether the data covers all of the years specified in Table 2. Note that the beneficiary does not need to be continuously enrolled during the lookback period (see continuous enrollment section below). Additionally, states may choose to use medical records and results in medical history as a supplemental data source when calculating the numerator.

This step-by-step guide is intended to complement the more detailed Core Set technical specifications for the COL measure. Refer to the technical specifications for more details on the value sets used in the measure.⁶

⁶ The FFY 2023 Adult Core Set technical specifications are available at: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/medicaid-adult-core-set-manual.pdf>. The FFY 2023 Health Home Core Set technical specifications are available at:

Calculating the Denominator

The denominator for the measure is defined as the number of adult beneficiaries ages 46 to 75 as of December 31 of the measurement period. The calculation of the denominator involves selecting Medicaid beneficiaries with medical benefits who meet criteria based on age and continuous enrollment.

Step 1: Identify Beneficiaries Ages 46 to 75⁷

Calculate the age for each beneficiary based on the end date of the measurement year and the beneficiary’s date of birth. For FFY 2023 Core Set reporting, include beneficiaries if they are 46 to 75 years old as of December 31, 2022. For example, if a beneficiary is 74 years and 360 days on December 31, 2022, he or she would be included. If the date of birth for a beneficiary is missing, do not include the beneficiary in the measure calculation.

Step 2: Calculate Continuous Enrollment

To be eligible for the measure, beneficiaries must be continuously enrolled in Medicaid during the measurement year and the year prior to the measurement year. A beneficiary can have no more than one gap in continuous enrollment of up to 45 days during each year of continuous enrollment and must be enrolled on the last day of the measurement year (the “anchor date” for the measure). When reporting at the Medicaid program level, beneficiaries should be assessed for continuous enrollment in “any plan.” A beneficiary who switched health plans (or who moved between fee-for-service and managed care) during the measurement period is still considered continuously enrolled as long as there is at most one gap in Medicaid enrollment up to 45 days.⁸ To

(continued)

<https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/downloads/FFY-2023-HH-Core-Set-Manual.pdf>. Please note that use of the Core Set technical specifications is subject to a license agreement solely for the purpose of Core Set reporting.

⁷ The age criteria for the denominator (ages 46 to 75) are different from the measure description (ages 45 to 75) to account for the lookback period.

⁸ In some states, rates are calculated at the health plan level. States should create a state-level rate by combining rates across multiple reporting units. For additional guidance on calculating state-level rates, refer to the Technical Assistance Reassurance, “Calculating State-Level Rates Using Data from Multiple Reporting Units,” available at <https://www.medicaid.gov/medicaid/quality-of-care/downloads/state-level-rates-brief.pdf>.

Table 2. Colorectal Cancer Screenings that Meet Numerator Criteria

Screening	Timeframe	Example for FFY 2023 Core Set Reporting
Fecal occult blood test (FOBT) ^a	Measurement year	January 1, 2022–December 31, 2022
Flexible sigmoidoscopy	Measurement year or the four years prior to the measurement year	January 1, 2018–December 31, 2022
Colonoscopy	Measurement year or the nine years prior to the measurement year	January 1, 2013–December 31, 2022
CT colonography	Measurement year or the four years prior to the measurement year	January 1, 2018–December 31, 2022
Stool DNA with FIT test	Measurement year or the two years prior to the measurement year	January 1, 2020 – December 31, 2022

^a For administrative data, assume the required number of samples was returned, regardless of FOBT type.

managed care) during the measurement period is still considered continuously enrolled as long as there is at most one gap in Medicaid enrollment up to 45 days.⁹ To be eligible for the measure, each beneficiary must have medical benefits during the continuous enrollment period.

Step 3: Exclude Beneficiaries in Hospice, Using Hospice Services, or Receiving Palliative Care (Required Exclusion)

For each beneficiary that meets the criteria defined in Steps 1 and 2, identify beneficiaries in hospice, using hospice services, or receiving palliative care during the measurement year and exclude them from the denominator.

Step 4: Exclude Beneficiaries with Frailty and Advanced Illness (Optional Exclusion)

For each beneficiary remaining in the denominator after applying the required exclusion in Step 3, identify beneficiaries age 66 and older as of December 31 of the measurement year with frailty and advanced illness and exclude them from the denominator. Supplemental and

⁹ In some states, rates are calculated at the health plan level. States should create a state-level rate by combining rates across multiple reporting units. For additional guidance on calculating state-level rates, refer to the Technical Assistance Reassure, “Calculating State-Level Rates Using Data from Multiple Reporting Units,” available at <https://www.medicaid.gov/medicaid/quality-of-care/downloads/state-level-rates-brief.pdf>.

medical record data may not be used for these exclusions. Beneficiaries must meet both the frailty and advanced illness criteria to be excluded.

Calculating the Numerator

The numerator is defined as the number of beneficiaries who received one or more screenings for colorectal cancer. All beneficiaries in the numerator must also be included in the denominator and meet the denominator criteria mentioned earlier.

Step 1: Identify Beneficiaries Who Received Screening for Colorectal Cancer

For each beneficiary in the denominator, identify whether they have had one or more screenings for colorectal cancer during the specified timeframes (Table 2).

Step 2: Exclude Beneficiaries with Colorectal Cancer or Total Colectomy (Optional Exclusion)

For each beneficiary in the denominator for whom data do not show a positive numerator event, exclude from the denominator if they had either colorectal cancer or a total colectomy any time during their history through December 31 of the measurement year.

Technical Assistance Resources for Calculating the COL Measure

Several resources are available to help states calculate the COL measure for reporting of the Adult and Health Home Core Sets:

- The FFY 2023 technical specifications for the COL measure are in the Resource Manuals for the Adult and Health Home Core Sets.
- The FFY 2023 Core Set Measurement Period Tables include the date ranges that should be used for the denominators and numerators for the COL measure.
- The FFY 2023 Data Quality Checklist for reporting of the Child, Adult and Health Home Core Sets contains additional guidance to help states improve the completeness, accuracy, consistency, and documentation of the data reported.

Adult Core Set resources are available at:
<https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-core-set-reporting-resources/index.html>.

Health Home Core Set resources are available at:
<https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-home-information-resource-center/quality-reporting/index.html>.

For More Information

For technical assistance related to calculating and reporting the COL measure, as well as other Core Set measures, contact the TA mailbox at MACQualityTA@cms.hhs.gov.