

Quality ID #343: Screening Colonoscopy Adenoma Detection Rate – National Quality Strategy Domain: Effective Clinical Care

**2018 OPTIONS FOR INDIVIDUAL MEASURES:**

**REGISTRY ONLY**

**MEASURE TYPE:**

Outcome

**DESCRIPTION:**

The percentage of patients age 50 years or older with at least one conventional adenoma or colorectal cancer detected during screening colonoscopy

**INSTRUCTIONS:**

This measure is to be submitted **each time** a screening colonoscopy for colorectal cancer is performed during the performance period. This measure may be submitted by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

**Measure Submission**

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry submissions; however, these codes may be submitted for those registries that utilize claims data.

**DENOMINATOR:**

Patients age 50 years or older undergoing a screening colonoscopy

***DENOMINATOR NOTE:** The intention of the measure is to identify patients with an adenoma(s) or colorectal cancer detected during a screening colonoscopy. A patient with a family history of colon neoplasia, but no personal history of colon neoplasm would be eligible for the denominator criteria population for this measure. Patients with a personal history of colon neoplasia, colonic polyps, colon cancer, or other malignant neoplasm of the rectum, rectosigmoid junction or anus would not be eligible for denominator and would qualify for the Denominator Exclusion code G9936. In order to submit the Denominator Exclusion code G9937, the primary indication for the colonoscopy exam would be a diagnostic indication (i.e., a colonoscopy performed on a patient who has past and/or present gastrointestinal symptoms, polyps, GI disease, iron-deficiency anemia, and/or any other abnormal tests).*

**Definition:**

**Colorectal Cancer Precursor Lesions-** Based on pathologic diagnosis, colorectal cancer precursor lesions include: adenomatous polyps [high-grade dysplasia, tubular, tubulovillous, villous] and traditional serrated adenomas, sessile serrated polyps and sessile serrated adenomas.

**Screening Colonoscopy Exams –** For purposes of this measure, the primary indication of a colonoscopy is screening when the procedure is performed to detect polyps/lesions in the absence of signs, symptoms, or personal history of colon neoplasia, even if during the screening colonoscopy polyps are found, removed or biopsied. If the primary indication for performing the colonoscopy is diagnostic or surveillance then the patient would not meet the intent of the measure.

**Diagnostic Colonoscopy Exams-** For purposes of this measure, the primary indication of a colonoscopy is diagnostic if the procedure is performed on a patient for the purpose of evaluating *past and/or present gastrointestinal symptoms, polyps, GI disease, iron-deficiency anemia, and/or any other abnormal tests (e.g., positive fecal occult blood, abnormal radiographic/imaging studies, or abnormal genetic material).*

**Surveillance Colonoscopy Exams (i.e., Patients with Personal History of Colonic Polyps, Colon Cancer, or Other Malignant Neoplasm of Rectum, Rectosigmoid Junction, and Anus) -** A surveillance colonoscopy can be performed at varying ages and intervals based on the patient's personal history of colon

cancer, polyps, and/or gastrointestinal disease. Colonoscopy for patients with a history of colon polyp(s) is identified as a surveillance colonoscopy rather than a screening colonoscopy. The following codes are included in the Denominator Exclusion (**G9936**) to assist with identifying a personal polyp history: Z85.038, Z85.048, Z86.010

**Denominator Criteria (Eligible Cases):**

Patients 50 years of age or older on date of encounter

**AND**

Risk factors for colorectal cancer (ICD-10-CM): Z80.0, Z83.71, Z12.11

**AND**

Patient procedure during performance period (CPT or HCPCS): 45378, 45380, 45381, 45384, 45385, G0121

**WITHOUT**

Modifiers: 52, 53, 73, or 74

**AND NOT**

**DENOMINATOR EXCLUSION:**

Surveillance colonoscopy --- Personal history of colonic polyps, colon cancer, or other malignant neoplasm of rectum, rectosigmoid junction, and anus: G9936

**AND NOT**

**DENOMINATOR EXCLUSION:**

Diagnostic colonoscopy: G9937

**NUMERATOR:**

Number of patients age 50 years or older with at least one conventional adenoma or colorectal cancer detected during screening colonoscopy

**Numerator Options:**

***Performance Met:***

Adenoma(s) or colorectal cancer detected during screening colonoscopy (**G9933**)

**OR**

***Denominator Exception:***

Documentation that neoplasm detected is only diagnosed as traditional serrated adenoma, sessile serrated polyp, or sessile serrated adenoma (**G9934**)

**OR**

***Performance Not Met:***

Adenoma(s) or colorectal cancer not detected during screening colonoscopy (**G9935**)

**RATIONALE:**

The removal of adenomatous polyps during a screening colonoscopy is associated with a lower risk of subsequent colorectal cancer incidence and mortality. Higher adenoma detection rates (> 25% in a mixed gender population) are associated with significant protection against incident colorectal cancer in the five years following screening colonoscopy.

**CLINICAL RECOMMENDATION STATEMENTS:**

The United States Preventive Services Task Force has recommended screening colonoscopy for adults, beginning at age 50 and continuing until age 75 (Grade A recommendation) Screening exams are those performed to detect lesions in the absence of signs, symptoms, or personal history of colon neoplasia. The adenoma detection rate is an independent predictor of risk of developing colorectal cancer between screening colonoscopies. However, studies have documented wide variation in adenoma detection rates, illustrating the need for measuring and monitoring this metric for endoscopists. Some studies have identified variation due to the location of adenomas. Procedure length has also been

found in some, but not all, studies to correlate with adenoma detection rate. The adenoma detection rate varies between genders, with a lower rate demonstrated in women. Multi-specialty and stakeholder guidelines support the importance of measuring the adenoma detection rate in the prevention of colorectal cancer. Guidelines and the supporting literature support performance targets for adenoma detection rate of 25% for a mixed gender population (20% in women and 30% in men). The performance targets for adenoma detection rate were established by using studies reporting detection of conventional adenomas. Serrated lesions are a separate class from conventional adenomas. Sessile serrated polyp/adenoma differentiation from hyperplastic polyp (i.e., the only class of colorectal polyps not considered to have a risk of becoming cancer) is subject to marked interobserver variation in pathologic interpretation. Thus, serrated lesions should not be counted toward the ADR. Hyperplastic polyps should also not be counted toward the ADR as they are not considered to have a risk of becoming cancer.

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**2018 Registry Flow for Quality ID #343:  
Screening Colonoscopy Adenoma Detection Rate**

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=50 procedures)} + \text{Denominator Exception (b=50 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=130 procedures)}} = \frac{120 \text{ procedures}}{130 \text{ procedures}} = 92.31\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=50 procedures)}}{\text{Data Completeness Numerator (120 procedures) - Denominator Exception (b=50 procedures)}} = \frac{50 \text{ procedures}}{70 \text{ procedures}} = 71.43\%$$

\*See the posted Measure Specification for specific coding and instructions to submit this measure.

NOTE : Submission Frequency: Procedure

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The measure diagrams were developed by CMS as a supplemental resource to be used  
in conjunction with the measure specifications. They should not be used alone or as a  
substitution for the measure specification.

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**2018 Registry Flow for Quality ID**  
**#343: Screening Colonoscopy Adenoma Detection Rate**

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in submitting this Individual Specification. This flow is for registry data submission.

1. Start with Denominator
2. Check Patient Age:
  - a. If Patient Age is greater than or equal to 50 Years of age on Date of Service during Performance Period equals No, do not include in Eligible Population. Stop Processing.
  - b. If Patient Age is greater than or equal to 50 Years of age on Date of Service during Performance Period equals Yes, proceed to check Patient Diagnosis.
3. Check Patient Diagnosis:
  - a. If Diagnosis for Risk Factors for Colorectal Cancer as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Diagnosis for Risk Factors for Colorectal Cancer as Listed in the Denominator equals Yes, proceed to check Procedure Performed.
4. Check Procedure Performed:
  - a. If Procedure as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Procedure as Listed in the Denominator equals Yes, proceed to check Modifiers: 52, 53, 73 or 74.
5. Check Modifiers: 52, 53, 73 or 74:
  - a. If Modifiers: 52, 53, 73 or 74 equals Yes, do not include in Eligible Population. Stop Processing.
  - b. If Modifiers: 52, 53, 73 or 74 equals No, proceed to check Diagnostic Colonoscopy Exclusion.
6. Check Diagnostic Colonoscopy:
  - a. If Diagnostic Colonoscopy equals Yes, do not include in Eligible Population. Stop Processing.
  - b. If Diagnostic Colonoscopy equals No, proceed to check Surveillance Colonoscopy Exclusion.
7. Check Surveillance Colonoscopy:
  - a. If Surveillance Colonoscopy equals Yes, do not include in Eligible Population. Stop Processing.
  - b. If Surveillance Colonoscopy equals No, proceed to check Denominator Population.
8. Denominator Population

- a. Denominator population is all Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 130 procedures in the Sample Calculation.
9. Start Numerator
  10. Check Adenoma(s) or Colorectal Cancer Detected During Screening Colonoscopy:
    - a. If Adenoma(s) or Colorectal Cancer Detected During Screening Colonoscopy equals Yes, include in Data Completeness Met and Performance Met.
    - b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 50 procedures in the Sample Calculation.
    - c. If Adenoma(s) or Colorectal Cancer Detected During Screening Colonoscopy equals No, proceed to check Documentation that Neoplasm Detected is Only Diagnosed as Traditional Serrated Adenoma, Sessile Serrated Polyp, or Sessile Serrated Adenoma.
  11. Check Documentation that Neoplasm Detected is Only Diagnosed as Traditional Serrated Adenoma, Sessile Serrated Polyp, or Sessile Serrated Adenoma:
    - a. If Documentation that Neoplasm Detected is Only Diagnosed as Traditional Serrated Adenoma, Sessile Serrated Polyp, or Sessile Serrated Adenoma equals Yes, include in Data Completeness Met and Denominator Exception.
    - b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter b equals 50 procedures in the Sample Calculation.
    - c. If Documentation that Neoplasm Detected is Only Diagnosed as Traditional Serrated Adenoma, Sessile Serrated Polyp, or Sessile Serrated Adenoma equals No, proceed to check Adenoma(s) or Colorectal Cancer not Detected During Screening Colonoscopy
  12. Check Adenoma(s) or Colorectal Cancer not Detected During Screening Colonoscopy:
    - a. If Adenoma(s) or Colorectal Cancer not Detected During Screening Colonoscopy equals Yes, include in Data Completeness Met and Performance Not Met.
    - b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 20 procedures in the Sample Calculation.
    - c. If Adenoma(s) or Colorectal Cancer not Detected During Screening Colonoscopy equals No, proceed to Data Completeness Not Met.
  13. Check Data Completeness Not Met
    - a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=50 procedures)} + \text{Denominator Exception (b=50 procedures)} + \text{Performance Not Met (c=20 procedures)}}{\text{Eligible Population / Denominator (d=130 procedures)}} = \frac{120 \text{ procedures}}{130 \text{ procedures}} = 92.31\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=50 procedures)}}{\text{Data Completeness Numerator (120 procedures) - Denominator Exception (b=50 procedures)}} = \frac{50 \text{ procedures}}{70 \text{ procedures}} = 71.43\%$$