Colorectal Cancer Screening (NQF 0034)

EMeasure Name	Colorectal Cancer Screening	EMeasure Id	Pending
Version Number	1	Set Id	Pending
Available Date	No information	Measurement Period	January 1, 20xx through December 31, 20xx
Measure Steward	National Committee for Quality Assurance		
Endorsed by	National Quality Forum		
Description	The percentage of adults 50–75 years of age who had appropriate screening for colorectal cancer.		
Measure scoring	Proportion		
Measure type	Process		
Rationale	This measure assesses the percentage of patients in a specific age demographic who receive appropriate screening for colorectal cancer. Colorectal cancer is the third leading cause of cancer-related deaths in the United States for both men and women, and was expected to be the primary cause of 49,920 deaths in 2009. In 2009, there were 106,100 new cases of colon cancer and 40,870 new cases of rectal cancer. Screening decreases mortality rates by detecting cancerous formations in the early and most curable stage; as a result, the mortality rate has been dropping for more than 20 years because of early identification of polyps for removal prior to disease onset, as well as other colorectal cancers. Screening is also fiscally responsible, with studies showing cost-savings of $40,000 per life-year gained. This measure facilitates efforts toward early detection of colorectal cancer and acceleration of treatment upon diagnosis.		
Clinical Recommendation Statement	The United States Preventive Services Task Force : • The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years (A recommendation). • The USPSTF concludes that the evidence is insufficient to assess the benefits and harms of computed tomographic (CT) colonography and fecal DNA testing as screening modalities for colorectal cancer (I statement). The American Cancer Society, The American College of Radiology, and the U.S. Multi-Society Task Force on Colorectal Cancer: Tests that Detect Adenomatous Polyps and Cancer • Colonoscopy (every 10 yrs) • Flexible sigmoidoscopy (every 5 yrs) • fecal occult blood tests (FOBT) (A) • Double contrast barium enema (DCBE) (every 5 yrs) • Computed tomographic colonography (CTC) (every 5 years) Tests that Primarily Detect Cancer: • gFOBT with high sensitivity for cancer (annually) • FIT with high sensitivity for cancer (annually) • sDNA with high sensitivity for cancer (interval uncertain) Modalities not approved:		

	• Single digital rectal examination FOBT has a poor sensitivity for CRC and should not be performed as a primary screening method (A) • Studies evaluating virtual colonoscopy and fecal DNA testing for CRC screening have yielded conflicting results and therefore cannot be recommended (A)
References	*Screening for Colorectal Cancer*, Topic Page. October 2008. U.S. Preventive Services Task Force. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/clinic/uspstf/uspscolo.htm Levin, B. MD, et al. Screening and Surveillance for the Early Detection of Colorectal Cancer and Adenomatous Polyps, 2008: A Joint Guideline from the American Cancer Society, the US Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology. CA Cancer J Clin 2008;58:00–00
Definitions	

Table of Contents

Please refer to the spreadsheet for this measure for detail regarding data criteria and code lists.

Population criteria

- **Initial Patient Population =**

  - AND: "Patient characteristic: birth date" >= 50 and <= 74 years to expect screening for patients within one year after reaching 50 years until 75 years;

- **Denominator** =

  - AND: All patients in the initial patient population;
  - AND: "Encounter: encounter outpatient" <=2 years before or simultaneously to "measurement end date";
  - AND NOT:
    - OR: "Procedure performed: total colectomy";

- **Numerator =**

  - OR: "Procedure performed: colonoscopy" <=10 years before or simultaneously to "measurement end date";
  - OR: "Procedure performed: flexible sigmoidoscopy" <=5 years before or simultaneously to "measurement end date";
  - OR: "Laboratory test performed: fecal occult blood testing (FOBT)";

- **Exclusions** =

- o OR: "Diagnosis active: colorectal cancer";
- o OR: "Diagnosis inactive: colorectal cancer";
- o OR: "Diagnosis resolved: colorectal cancer";

Data criteria (QDS Data Elements)

- **Initial Patient Population =**
  - o "Patient characteristic: birth date" using "birth date code list" before the beginning of the "measurement period";

- **Denominator =**
  - o "Encounter: Encounter outpatient" using "encounter outpatient code list grouping" before or simultaneously to the "measurement end date";
  - o "Procedure performed: total colectomy" using "total colectomy code list grouping" before or simultaneously to the "measurement period";

- **Numerator =**
  - o "Procedure performed: colonoscopy" using "colonoscopy code list grouping" before or simultaneously to the "measurement end date";
  - o "Procedure performed: flexible sigmoidoscopy" using "flexible sigmoidoscopy code list grouping" before or simultaneous to the "measurement end date";
  - o "Laboratory test performed: fecal occult blood test (FOBT)" using "fecal occult blood test (FOBT) code list grouping" during the "measurement period";

- **Exclusions =**
  - o "Diagnosis active: colorectal cancer" using "colorectal cancer code list grouping" before or simultaneously to the "measurement period";
  - o "Diagnosis inactive: colorectal cancer" using "colorectal cancer code list grouping" before or simultaneously to the "measurement period";
  - o "Diagnosis resolved: colorectal cancer" using "colorectal cancer code list grouping" before or simultaneously to the "measurement period";

Summary calculation

Calculation is generic to all measures:
- Calculate the final denominator by adding all that meet denominator criteria.
- Subtract from the final denominator all that do not meet numerator criteria yet also meet exclusion criteria. Note some measures do not have exclusion criteria.
- The performance calculation is the number meeting numerator criteria divided by the final denominator.
- For measures with multiple patient populations, repeat this process for each patient population and report each result separately.
- For measures with multiple numerators, calculate each numerator separately within each population using the paired exclusion.