Note: Screening for adults age 76 to 85 years old should be evaluated on an individual basis by their health care provider to assess the risks and benefits of screening. Colorectal cancer screening is not recommended over age 85 years.

TABLE OF CONTENTS

- Average Risk .................................................. Page 2
- Increased Risk ............................................... Page 3
- High Risk ....................................................... Page 4
- Suggested Readings ................................. Page 5
- Development Credits .............................. Page 6

1 See the Colon or Rectal Cancer Treatment or Survivorship algorithms for the management of individuals with a personal history of colorectal cancer.
**PRESENTATION**

Screening and prevention of colorectal cancer (preferred)^{3, 4}

- Patients with average risk^{2}:
  - Age 50 years or older
  - No history of adenoma
  - No history of inflammatory bowel disease
  - Negative family history

Screening of colorectal cancer only

**RECOMMENDED SCREENING**

- Colposcopy or computed tomographic colonography
  - Normal findings?
    - Yes: Repeat colonoscopy recommended every 10 years
    - No: If adenomatous polyps found, see Page 3 for management
  - Computed tomographic colonography
    - Normal findings?
      - Yes: Repeat computed tomographic colonography recommended every 5 years
      - No: Polyp(s) greater than or equal to 6 mm?
        - Yes: Refer for colonoscopy
        - No: Discuss findings with patient and individualize recommendations
  - Fecal occult blood test
    - Normal findings?
      - Yes: Repeat recommended annually
      - No: Refer for colonoscopy
  - Fecal immunochemical test
    - Normal findings?
      - Yes: Screening interval not defined
      - No: Refer for colonoscopy
  - Multifocal stool DNA test
    - Normal findings?
      - Yes: Refer for colonoscopy
      - No: Refer for colonoscopy

---

^{1} See the [Colon or Rectal Cancer Treatment](#) or [Survivorship](#) algorithms for the management of individuals with a personal history of colorectal cancer.

^{2} African Americans have a higher risk of large polyps and tumors from ages 50-65 years; thus it is important to start screening this population at 50 years of age. Follow-up frequency would be based on colonoscopy findings.

^{3} While there is good evidence to support fecal occult blood test, tests that both screen for and prevent colon cancer are the preferred screening modality. Annual fecal occult blood tests should not be performed if colonoscopy or CT colonography is used as the screening measure in an average-risk patient.

^{4} Flexible sigmoidoscopy is an alternate option, but is not the preferred endoscopic modality as the entire colon is not visualized.

^{5} Preauthorization with patient's insurance carrier is always advised.

^{6} High sensitivity fecal occult blood test (guaiac-based or immunochemical).

**Disclaimer:** This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care. This algorithm should not be used to treat pregnant women. This algorithm is not intended for individual with a personal history of colorectal cancer. ^{3}

Note: Screening for adults age 76 to 85 years old should be evaluated on an individual basis by their health care provider to assess the risks and benefits of screening. Colorectal cancer screening is not recommended over age 85 years.
**PRESENTATION**

- Patients with 1 or 2 tubular adenomas less than 1 cm with low-grade dysplasia
  - 5 years after most recent polypectomy or normal exam

- Patients with 3 to 10 adenomas or 1 adenoma greater than 1 cm or any adenoma with villous features or high grade dysplasia
  - 3 years after most recent polypectomy

- Patients with greater than 10 adenomas on a single examination
  - Less than 3 years after most recent polypectomy

- Patients with sessile adenomas that are removed piecemeal
  - 2 to 6 months to verify complete removal

- Colorectal cancer or adenomatous polyps in a first-degree relative before age 60 years or in 2 or more first-degree relatives at any age
  - Age 40 or 10 years before the youngest case in the immediate family

- Either colorectal cancer or adenomatous polyps in a first-degree relative 60 years or older or in 2 second-degree relatives with colorectal cancer
  - Begin screening at age 40 years

**RECOMMENDED SCREENING**

- Coloscopy

---

1. See the [Colon or Rectal Cancer Treatment] or [Survivorship] algorithms for the management of individuals with a personal history of colorectal cancer.
2. Precise timing based on clinical factors, patient and physician preference.
3. Genetic evaluation for familial cancer syndromes is recommended.
4. Subsequent follow-up is based on the number and size of polyps at the time of colonoscopy as well as the degree of dysplasia. If the follow-up colonoscopy is negative for adenomatous polyps, follow-up in 5 years is recommended.
5. Surveillance individualized based on Endoscopist’s judgment.
6. Consider [Familial Syndrome].
7. Screening should begin at an earlier age, but individuals may be screened with any recommended form of testing.

**Note:** Screening for adults age 76 to 85 years old should be evaluated on an individual basis by their health care provider to assess the risks and benefits of screening. Colorectal cancer screening is not recommended over age 85 years.

---

Department of Clinical Effectiveness V6
Approved by The Executive Committee of Medical Staff 01/29/2019
**Colorectal Cancer Screening – High Risk**

**PRESENTATION**

- Genetic diagnosis of FAP or suspected FAP without genetic testing evidence
- Genetic or clinical diagnosis of HNPCC or individuals at increased risk of HNPCC
- Inflammatory bowel disease (chronic ulcerative colitis or Crohn’s disease)

**RECOMMENDED SCREENING**

- Age 10 to 12 years: Annual FSIG to determine if the individual is expressing the genetic abnormality and counseling to consider genetic testing
- Age 20 to 25 years or 10 years before the youngest case in the immediate family: Colonoscopy every 1 to 2 years and counseling to consider genetic testing
- Cancer risk begins to be significant 8 years after the onset of pancolitis or 12 to 15 years after the onset of left-sided colitis: Colonoscopy with biopsies for dysplasia every 1-2 years

---

FSIG = flexible sigmoidoscopy  
HNPCC = hereditary nonpolyposis colorectal cancer  
FAP = familial adenomatous polyposis

1. See the Colon or Rectal Cancer Treatment or Survivorship algorithms for the management of individuals with a personal history of colorectal cancer
2. If the genetic test is positive, colectomy should be considered.
3. Genetic testing for HNPCC should be offered to first-degree relatives of persons with a known inherited MMR gene mutation. It should also be offered when the family mutation is not known, but 1 of the first 3 of the modified Bethesda Criteria is present.
4. These patients are best referred to a center with experience in the surveillance and management of inflammatory bowel disease
SUGGESTED READINGS


Colorectal Cancer Screening

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care. This algorithm should not be used to treat pregnant women. This algorithm is not intended for individual with a personal history of colorectal cancer.¹

DEVELOPMENT CREDITS

This practice consensus algorithm is based on majority expert opinion of the Colorectal Screening work group at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

- Therese Bevers, MD (Cancer Prevention)
- Robert Bresalier, MD (Gastroenterology, Hepatology & Nutrition)
- Powel Brown, MD (Cancer Prevention)
- Elise Cook, MD (Cancer Prevention)
- Robin Coyne, FNP, RN (Cancer Prevention)
- Joyce Dains, MD, PH, JD, RN, FNP-BC (Cancer Prevention)
- Ernest Hawk, MD MPH (Cancer Prevention)
- Marita Lazzaro, RN, MS, ANP (Cancer Prevention)
- Patrick Lynch, MD, JD (Gastroenterology, Hepatology & Nutrition)
- Ana Nelson, FNP, RN (Cancer Prevention)
- Lonzetta Newman, MD (Cancer Prevention)
- Tilu Ninan, ANP, RN (Cancer Prevention)
- Gottumukkala Raju, MD (Gastroenterology, Hepatology & Nutrition)
- Eduardo Vilar Sanchez, MD (Cancer Prevention)
- David Vining, MD (Diagnostic Radiology)
- Brian Weston, MD (Gastroenterology, Hepatology & Nutrition)
- Tonya Whitlow, MSPA (Gastroenterology, Hepatology & Nutrition)
- Anita M. Williams
- Sonal Yang, PharmD

¹ Core Development Team
* Clinical Effectiveness Development Team

Department of Clinical Effectiveness V6
Approved by The Executive Committee of Medical Staff 01/29/2019