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.*

TABLE OF CONTENTS

Department of Clinical Effectiveness V11
Approved by the Executive Committee of the Medical Staff on 04/16/2024

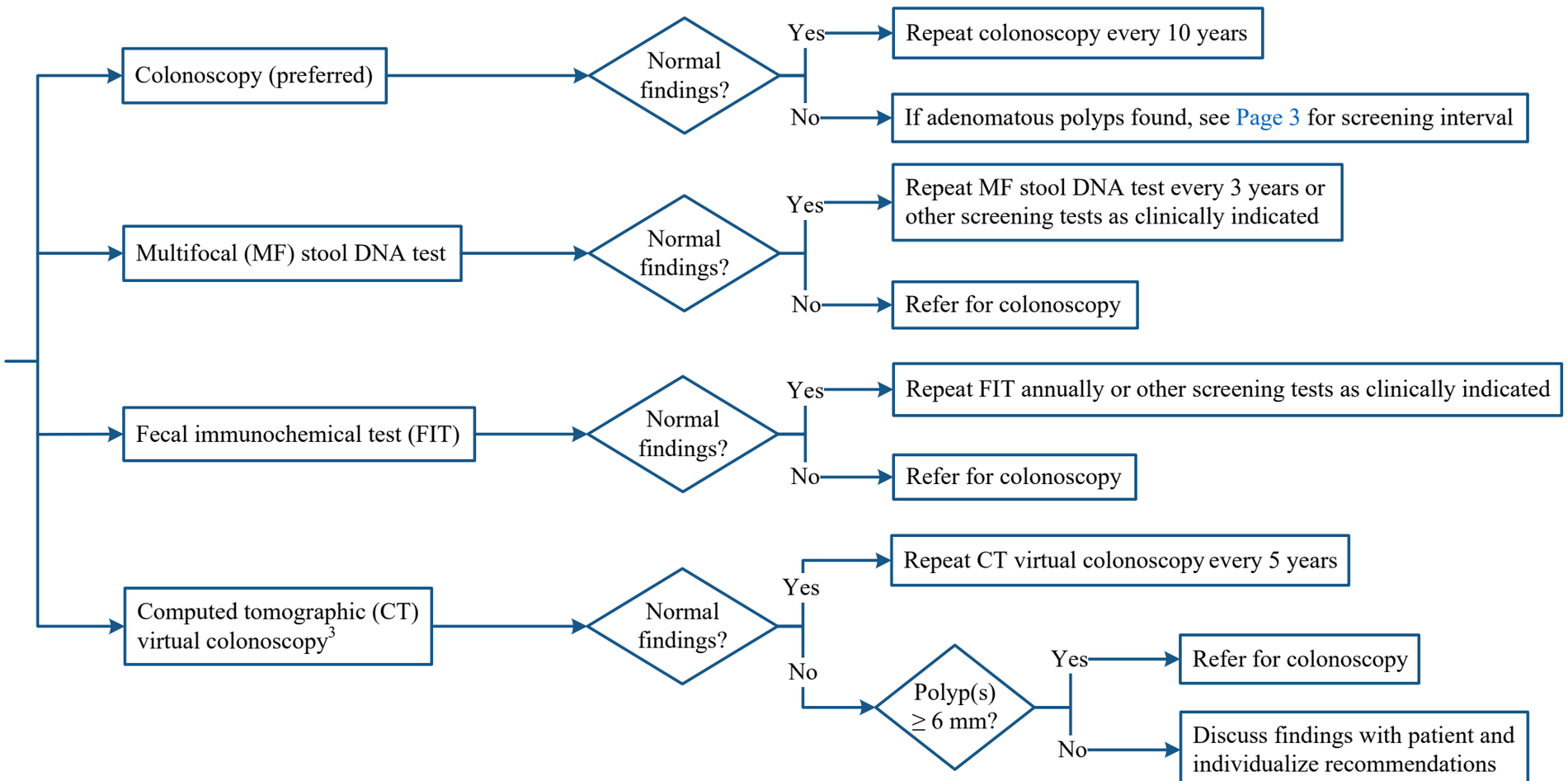
Colorectal Cancer Screening – Average Risk

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.*

Note: This algorithm is not intended for individuals with a personal history of colorectal cancer[1].
Screening for adults ages 76-85 years old should be evaluated on an individual basis to assess the risks and benefits of screening. Colorectal cancer screening is not recommended over age 85 years.

PRESENTATION

RECOMMENDED SCREENING INTERVAL[2]



[1] See the Colon Cancer, Rectal Cancer, Survivorship - Colon Cancer, or Survivorship - Rectal Cancer algorithms

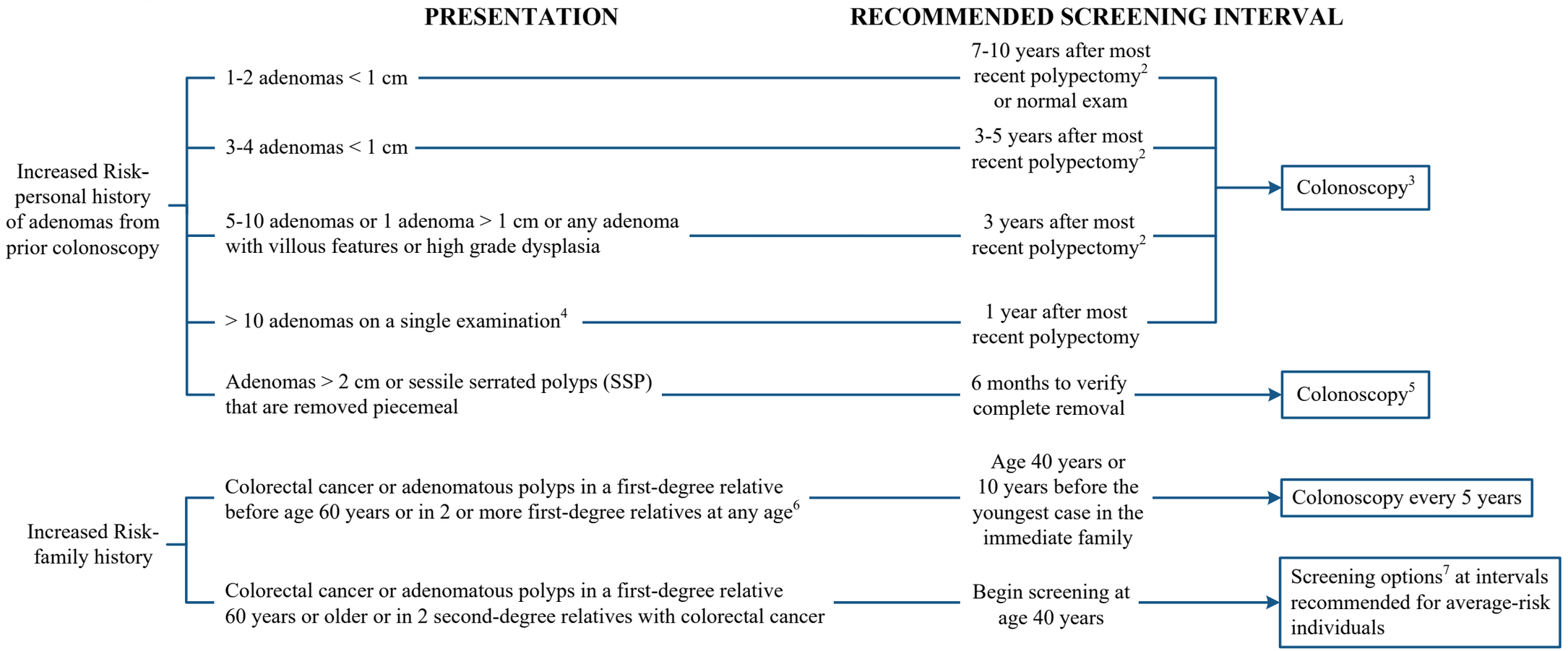
[2] Because there are multiple options for screening, the choice of a particular screening modality should include a conversation with the patient concerning their preference and availability. Colonoscopy and CT virtual colonoscopy are utilized in identification and removal of precancerous polyps. FIT and MF stool DNA are utilized in early detection of colon cancer.

[3] Preauthorization with patient's insurance carrier is advised

Department of Clinical Effectiveness V11
Approved by the Executive Committee of the Medical Staff on 04/16/2024

Colorectal Cancer Screening – Increased Risk

Note: This algorithm is not intended for individuals with a personal history of colorectal cancer[1].
Screening for adults ages 76-85 years old should be evaluated on an individual basis to assess the risks and benefits of screening. Colorectal cancer screening is not recommended over age 85 years.

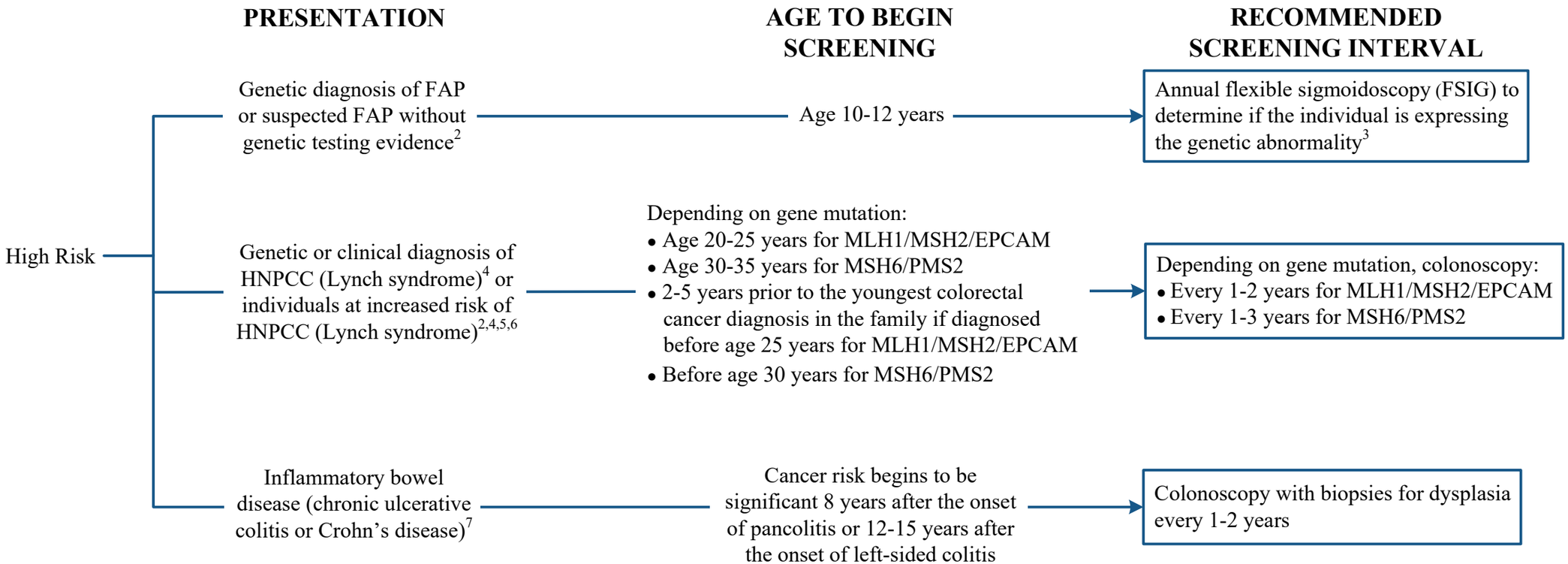


[1] See the Colon Cancer, Rectal Cancer, Survivorship - Colon Cancer, or Survivorship - Rectal Cancer algorithms
[2] Precise timing based on clinical factors, patient and physician preference
[3] Subsequent follow-up is based on the number and size of polyps at the time of colonoscopy as well as the degree of dysplasia. If negative for adenomatous polyps, follow-up in 5 years is recommended.
[4] Genetic testing for a polyposis syndrome is recommended for patients with > 10 adenomas
[5] Surveillance individualized based on Endoscopist's judgment
[6] Counseling to consider genetic testing. See the Genetic Counseling algorithm for additional information.
[7] Individuals may be screened with any recommended form of testing

Department of Clinical Effectiveness V11
Approved by the Executive Committee of the Medical Staff on 04/16/2024

Colorectal Cancer Screening – High Risk

Note: This algorithm is not intended for individuals with a personal history of colorectal cancer[1].
Screening for adults ages 76-85 years old should be evaluated on an individual basis to assess the risks and benefits of screening. Colorectal cancer screening is not recommended over age 85 years.



FAP = familial adenomatous polyposis
HNPCC = hereditary nonpolyposis colorectal cancer

[1] See the Colon Cancer, Rectal Cancer, Survivorship - Colon Cancer, or Survivorship - Rectal Cancer algorithms
[2] Counseling to consider genetic testing. See the Genetic Counseling algorithm for additional information.
[3] If the genetic test is positive, colectomy should be considered
[4] Lynch syndrome represents a heterogeneous group depending on the specific genetic alteration. Screening and surveillance should be individualized based on expert consultation, including review by a Genetic Counselor.
[5] First degree relative of known mutation carriers, obligate carriers of a family history concerning for HNPCC (Lynch syndrome)
[6] Genetic testing for HNPCC (Lynch syndrome) 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.
[7] These patients are best referred to a center with experience in the surveillance and management of inflammatory bowel disease

Department of Clinical Effectiveness V11
Approved by the Executive Committee of the Medical Staff on 04/16/2024

SUGGESTED READINGS

Corley, D. A., & Peek, R. M. (2018). When should guidelines change? A clarion call for evidence regarding the benefits and risks of screening for colorectal cancer at earlier ages. *Gastroenterology*, *155*(4), 947-949. https://doi.org/10.1053/j.gastro.2018.08.040

Gupta, S., Lieberman, D., Anderson, J. C., Burke, C. A., Dominitz, J. A., Kaltenbach, T., . . . Rex, D. K. (2020). Recommendations for follow-up after colonoscopy and polypectomy: A consensus update by the US Multi-Society Task Force on colorectal cancer. *Gastrointestinal Endoscopy, 91*(3), 463-485. https://doi.org/10.1016/j.gie.2020.01.014

Gupta, S., Lieberman, D., Anderson, J. C., Burke, C. A., Dominitz, J. A., Kaltenbach, T., . . . Rex, D. K. (2020). Spotlight: US Multi-Society Task Force on colorectal cancer recommendations for follow-up after colonoscopy and polypectomy. *Gastroenterology, 158*(4), 1154. https://doi.org/10.1053/j.gastro.2020.02.014

Hassan, C., Antonelli, G., Dumonceau, J.-M., Regula, J., Bretthauer, M., Chaussade, S., . . . Quintero, E. (2020). Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) guideline – update 2020. *Endoscopy, 52*(08), 687-700. https://doi.org/10.1055/a-1185-3109

Imperiale, T. F., Ransohoff, D. F., Itzkowitz, S. H., Levin, T. R., Lavin, P., Lidgard, G. P., . . . Berger, B. M. (2014). Multitarget stool DNA testing for colorectal-cancer screening. *The New England Journal of Medicine*, *370*(14), 1287-1297. https://doi.org/10.1056/NEJMoa1311194

Issaka, R. B., Chan, A. T., & Gupta, S. (2023). AGA Clinical Practice update on risk stratification for colorectal cancer screening and post-polypectomy surveillance: Expert review. *Gastroenterology, 165*(5), 1280-1291. https://doi.org/10.1053/j.gastro.2023.06.033

Liang, P. S., Allison, J., Ladabaum, U., Martinez, M. E., Murphy, C. C., Schoen, R. E., . . . Gupta, S. (2018). Potential intended and unintended consequences of recommending initiation of colorectal cancer screening at age 45 years. *Gastroenterology*, *155*(4), 950-954. https://doi.org/10.1053/j.gastro.2018.08.019

Lieberman, D. A., Williams, J. L., Holub, J. L., Morris, C. D., Logan, J. R., Eisen, G. M., & Carney, P. (2014). Race, ethnicity, and sex affect risk for polyps >9 mm in average-risk individuals. *Gastroenterology*, *147*(2), 351-358. https://doi.org/10.1053/j.gastro.2014.04.037

National Comprehensive Cancer Network. (2023). *Colorectal Cancer Screening* (NCCN Guideline Version 1.2023). Retrieved from https://www.nccn.org/professionals/physician_gls/pdf colorectal_screening.pdf

Rex, D. K., Boland, C. R., Dominitz, J. A., Giardiello, F. M., Johnson, D. A., Kaltenbach, T., . . . Robertson, D. J. (2017). Colorectal cancer screening: Recommendations for physicians and patients from the U.S. Multi-Society Task Force on colorectal cancer. *Gastroenterology*, *153*(1), 307-323. https://doi.org/10.1053/j.gastro.2017.05.013

Umar, A., Boland, C. R., Terdiman, J. P., Syngal, S., de la Chapelle, A., Ruschoff, J., . . . Srivastava, S. (2004). Revised Bethesda guidelines for hereditary nonpolyposis colorectal cancer (Lynch Syndrome) and microsatellite instability. *Journal of the National Cancer Institute, 96*(4), 261-268. https://doi.org/10.1093/jnci/djh034

US Preventive Services Task Force. (2021). Screening for colorectal cancer: US Preventive Services Task Force recommendation statement. *JAMA, 325*(19), 1965-1977. https://doi.org/10.1001/jama.2021.6238

Wolf, A. M. D., Fontham, E. T. H., Church, T. R., Flowers, C. R., Guerra, C. E., Lamonte, S. J., . . . Smith, R. A. (2018). Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society. *CA: A Cancer Journal for Clinicians*, *68*(4), 250-281. https://doi.org/10.3322/caac.21457

DEVELOPMENT CREDITS

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

Core Development Team Leads

Therese Bevers, MD (Cancer Prevention)
Robert Bresalier, MD (Gastroenterology, Hepatology & Nutrition)
Gottumukkala Raju, MD (Gastroenterology, Hepatology & Nutrition)
Mehnaz Shafi, MD (Gastroenterology, Hepatology & Nutrition)
David Vining, MD (Abdominal Imaging)

Workgroup Members

Heather Alexander Dahl, PgDip, BA (Community Alliances)
Joyce Dains, DrPH, JD, DNur, FNP-BCNAP (Nursing)
Wendy Garcia, BS♦
Ernest Hawk, MD, MPH (Cancer Prevention)
Thoa Kazantsev, MSN, RN, OCN♦
Scott Kopetz, MD, PhD (Gastrointestinal Medical Oncology)
Brittnee Macintyre, MSN, APRN, FNP-C♦
Maureen Mork, MS (Cancer Genetics)
Ana Nelson, DNP, RN, FNP (Cancer Prevention)
Eduardo Vilar Sanchez, MD, PhD (Cancer Prevention)
Brian Weston, MD (Gastroenterology, Hepatology & Nutrition)
Tonya Whitlow, MSPA (Gastroenterology, Hepatology & Nutrition)

♦Clinical Effectiveness Development Team