IDENTIFYING SCREENING PROTOCOLS FOR INCREASED AND HIGH RISK PATIENTS

Pick the set of guidelines your practice will use to determine screening recommendations for patients with a positive family history of cancer or polyps.

There are at least eight organizations that provide guidelines for CRC screening for individuals with a family history of cancer or polyps. There is a consensus across guidelines regarding recommended screening in certain scenarios. Individuals with a first-degree relative with CRC at any age should start CRC screening at age 40. Guidelines also recommend colonoscopy at age 40, or 10 years younger than the earliest diagnosis in the immediate family, when the first-degree relative had CRC under 60 years, or when two or more first-degree relatives have CRC at any age. However, the guidelines vary in their recommendations for individuals with other patterns of family history, such as a first degree relative with history of large or advanced adenomatous colon polyps.

To develop a standardized system for CRC risk assessment and screening, providers should decide how they will consistently recommend cancer screening for patients with certain family and personal history patterns across the practice population. The evaluation of guidelines and selection of a single set of recommendations for the practice may depend on the organization(s) publishing the guidelines (e.g., single vs. multi-society, primary care vs. specialty organizations), publication year, the organizations' guideline development process, availability of evidence to support recommendations, and other factors.

PARTICIPANTS
Implementation lead, providers, specialists who may be receiving referrals or performing screening

WHAT YOU'LL NEED
Professional Society Guideliness

BARRIERS
Conflicting guidelines

LEARN MORE
NCCRT Steps for Increasing CRC Screening Rates

ACS CRC Screening Algorithm

STEPS

1. Review professional society guidelines of interest (see Table 2).
2. Select a guideline to apply to patients with a family or personal history of cancer and polyps.
3. Be aware that patients with a genetic diagnosis that significantly increases cancer risk, such as Lynch syndrome, should undergo high risk screening and surveillance per specialty guidelines (see Table 2). Management plans for such patients are often developed in coordination with cancer genetic and gastroenterology experts.

METHOD IN ACTION

Identify Screening Protocols for Increased Risk Patients

Greenville Family Medicine is a private family medicine practice in a suburban community outside of a large city. Greenville recently went through a process to establish a standardized system for CRC screening across its three locations. In addition to targeting the general population for screening, Greenville also wanted to include specific screening schedules for individuals with a positive family history of CRC or polyps according to guidelines.

The clinical champion physician and office manager started by looking for guidelines from primary care societies, and reviewed the American College of Physicians (ACP) 2012 Guidance Statement on Screening for Colorectal Cancer and American Academy of Family Physicians (AAFP) 2018 guidelines on Colorectal Cancer Screening and Surveillance in Individuals at Increased Risk.[17,19] They evaluated the guidelines focusing on the recommendations for those with a family history. ACP recommends screening with colonoscopy at 40 or 10 years prior to the youngest cancer diagnosis in the family for "high risk" patients, but does not define what family history scenarios meet criteria for high risk. AAFP also recommends colonoscopy at 40 or 10 years prior to the youngest cancer diagnosis in the family, specifying this should be for individuals with a first-degree relative* with CRC or advanced adenoma prior to 60 years of age, with repeat every 5 years. AAFP also recommends specific screening plans for additional family history scenarios, including a single first-degree relative over age 60 (colonoscopy starting at 40), multiple first-degree relatives at any age, and two second degree relatives at any age.

To confirm the population of patients who should be offered earlier screening, the practice team then expanded their review to include additional organizations. They reviewed guidelines from the National Comprehensive Cancer Network (NCCN), updated in 2018, and the Colorectal Cancer Screening Multi-Society Task Force (MSTF; includes the American College of Gastroenterology, American Gastroenterological Association, American Society for Gastrointestinal Endoscopy), published in 2017.[22,23] These guidelines were consistent with AAFP in recommending CRC screening at 40 for individuals with a first-degree relative with CRC or advanced adenoma at any age, although the recommended screening modalities vary when CRC occurs > 60 years. For those with a first-degree relative with CRC < 60, all guidelines agree that colonoscopy should begin at 40 or 10 years prior to the youngest cancer diagnosis in the family, whichever is earlier. However, while AAFP and NCCN recommend colonoscopy as the screening test for all patients with a first-degree relative with CRC regardless of age of onset, the MSTF states that individuals with a first-degree relative > 60 could be offered any of CRC screening tests used for average risk patients. The repeat screening intervals were also somewhat discordant between AAFP, NCCN and MSTF for the different risk categories (5-10 years).

After reviewing ACP, AAFP, NCCN, and MSTF, the practice ultimately adopted the AAFP guidelines, which are aligned with the others but with more detailed criteria for at-risk individuals.

*First-degree relatives (FDR): Parents, siblings, children. Second-degree relatives (SDR): Grandparents, aunts, uncles, nieces, nephews, half-siblings, grandchildren.

PROFESSIONAL SOCIETY SCREENING GUIDELINES

Table 2. Select professional society guidelines that address screening for individuals with a family history of CRC or polyps or a high-risk cancer predisposition syndrome. See the Appendix for more detail. LS = Lynch syndrome, BMMRD = biallelic mismatch repair deficiency syndrome.

ORGANIZATION	YEAR OF PUBLICATION	
	Family history of CRC or polyps (Increased risk)	Cancer predisposition syndrome (High risk)
American Academy of Family Physicians	2018[17]	2018[17]
American College of Gastroenterology	2009[18]	2015[24]
American College of Obstetricians and Gynecologists		2014[25]
American College of Physicians	2012[19]	
American Gastroenterological Association		2015[26]
American Society for Gastrointestinal Endoscopy	2006[20]	
American Society of Clinical Oncology		2015[27]
Institute for Clinical Systems Improvement	2014[21]	
Multi-Society Task Force (American College of Gastroenterology, American Gastroenterological Association, American Society for Gastrointestinal Endoscopy)	2017[22]	LS 2014[28] BMMRD 2017[29]
National Comprehensive Cancer Network	2018[23]	2018[23]

Figure 5. Sample navigated process for colorectal screening: For increased risk patients as identified through guidelines-based risk assessment