Review professional society guidelines of interest (see Table 2). Select a guideline to apply to patients with a family or personal history of cancer and polyps. 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.

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.

**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.

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

**WHAT YOU’LL NEED**
Professional Society Guidelines

**BARRIERS**
Conflicting guidelines

**LEARN MORE**
NCCRT Steps for Increasing CRC Screening Rates
ACS CRC Screening Algorithm
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. 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. 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.

### 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.

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>YEAR OF PUBLICATION</th>
<th>Family history of CRC or polyps (Increased risk)</th>
<th>Cancer predisposition syndrome (High risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Academy of Family Physicians</td>
<td>201817</td>
<td>201817</td>
<td></td>
</tr>
<tr>
<td>American College of Gastroenterology</td>
<td>200918</td>
<td>201524</td>
<td></td>
</tr>
<tr>
<td>American College of Obstetricians and Gynecologists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American College of Physicians</td>
<td>201219</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Gastroenterological Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Society for Gastrointestinal Endoscopy</td>
<td>200620</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Society of Clinical Oncology</td>
<td></td>
<td></td>
<td>201527</td>
</tr>
<tr>
<td>Institute for Clinical Systems Improvement</td>
<td>201421</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-Society Task Force (American College of Gastroenterology, American Gastroenterological Association, American Society for Gastrointestinal Endoscopy)</td>
<td>201722</td>
<td>LS 201428 BMMRD 201729</td>
<td></td>
</tr>
<tr>
<td>National Comprehensive Cancer Network</td>
<td>201823</td>
<td>201821</td>
<td></td>
</tr>
</tbody>
</table>
Figure 5. Sample navigated process for colorectal screening: For increased risk patients as identified through guidelines-based risk assessment

**RECORD REVIEW & PRE-ASSESSMENT**
- Patient asked to provide family history prior to initial visit through online portal
- PN reviews records to identify candidates for screening, including those at increased risk for CRC.*
- Patient asked to update family history prior to each visit.

**PROCEDURE DAY**
- Does the patient arrive?
- Procedure is performed. Patient is discharged home.
- PN ensures patient receives follow-up care and instructions, including any recommendations to share relevant findings with family members.
- Next clinical steps established via results of procedure by clinician. Make recommendation for next colonoscopy and/or genetic counseling based on findings and baseline risk level.*
- GI Clinic notifies referring clinician of no-show or canceled appointment.
- PN calls patient day before procedure to ensure prep is being followed, transportation and companion are secured, answers any questions.

**SAMPLE NAVIGATED PROCESS FOR COLORECTAL SCREENING PROCESS: FOR INCREASED RISK PATIENTS AS IDENTIFIED THROUGH GUIDELINES-BASED RISK ASSESSMENT**
- Clinician meets with patient. Verifies recommendation for colonoscopy for patients at increased risk. Recommends genetic counseling if indicated.*
- PN contacts patient to discuss the recommended colonoscopy.
- Does patient agree to meet with PN?
- PN contacts GI Clinic to establish time and date for colonoscopy. Appointment is established within 5 weeks.
- PN ensures pathology report is received and entered into EMR.
- PN confirms appointment with patient, reviews colonoscopy screening steps, include prep instructions and transportation needs.
- PN contacts patient 5-7 days prior to procedure. Reconfirms appointment and reviews procedure, prep pick-up and prep process. Asks who is assisting with transportation and who will accompany patient.
- Was contact made?
- NO
- YES
- Appointment canceled and referring clinician notified
- Does patient agree to meet with PN?
- NO
- YES
- Is patient interested in colonoscopy?
- YES
- NO
- PN contacts patient to discuss the recommended colonoscopy.
- PN meets patient by phone or in person. Provides education on CRC, patient’s risk status, and colonoscopy
- PN ensures patient receives follow-up care and instructions, including any recommendations to share relevant findings with family members.
- Results are provided via Electronic Health Record (EHR) to referring clinician and PN.
- PN ensures pathology report is received and entered into EMR.
- Pathway complete

**LEGEND**
- Administrative
- Patient dependent tasks & responsibilities
- Interactions of Patient Navigator (PN) and Patient
- Clinician interactions

*See ACS Screening Algorithm for more information