What can Gastroenterologists & Endoscopists Do to Advance 80% by 2018?

Identifying high risk patients and families is another key step you can take to ensure your patients and their families receive timely and appropriate screening.

This guide is meant to aid you in these efforts.
How many lives can we touch? If we can achieve the 80% by 2018 goal, we would prevent 277,000 new cases and 203,000 deaths by 2030.

Here are five things you can do to improve your ability to identify high risk patients and families in your practice:

1. Take a focused family history annually for every patient in your practice.
   - Use a tailored family history screener such as the validated three question instrument below, developed by Kastrinos et al and endorsed by the US Multi-Society Task Force on Colorectal Cancer. This tool was shown to identify about 77% of high risk individuals among a group of patients referred for colonoscopy and 95% of Lynch Syndrome mutation carriers.

   - Do you have a first-degree relative (mother, father, brother, sister, or child) with any of the following conditions diagnosed before age 50?
     - Colon or rectal cancer
     - Cancer of the uterus, ovary, stomach, small intestine, urinary tract (kidney, ureter, bladder), bile ducts, pancreas or brain

   - Have you had any of the following conditions diagnosed before age 50:
     - Colon or rectal cancer
     - Colon or rectal polyps

   - Do you have three or more relatives with a history of colon or rectal cancer? (This includes parents, brothers, sisters, children, grandparents, aunts, uncles, and cousins.)

   Yes to any question
   - Refer for additional assessment or genetic evaluation

   No to all questions

- If patient answers “no” to all three questions, consider using the following questions to distinguish average and intermediate to high-risk families.

1. Do you have any first-degree relatives (mother, father, brother, sister, or child) that have had cancer of the colon or rectum?

   - **No**
     - **Average risk family** – Provide average risk screening guidelines to patient and their family members (start screening with any acceptable test at age 50)

   - **Yes**
     - **Intermediate or high risk family** – Provide risk-based screening guidelines to patient and their family members (individualize since guidelines vary, see the table under 2 below).

- Use a prediction model such as the PREMM\textsubscript{1,2,6} Model,\textsuperscript{4} MMRPro\textsuperscript{5} or MMRPredict\textsuperscript{6} for patients with a family history of colorectal, endometrial or other Lynch-associated cancers (ovary, stomach, small intestine, urinary tract/kidney, bile ducts, glioblastoma multiforme (brain), sebaceous gland tumors, and pancreas) to assess the presence of an estimated ≥5% risk for gene mutations associated with Lynch Syndrome. These patients meet the National Comprehensive Cancer Network (NCCN) guidelines for consideration of genetic counseling/testing.
2. Keep abreast of the colorectal cancer screening guidelines for patients with a family history of colorectal cancer or colonic adenomas.

- **Hereditary colorectal cancer syndromes** - Colorectal cancer screening recommendations typically include colonoscopy screening starting at or before age 25 at intervals of 1-5 years depending on the syndrome. See Syngal et al\(^7\) for a recent review.

- **Non-hereditary increased risk and high-risk families** - Colorectal cancer screening recommendations vary among organizations depending on the number of family members with colorectal cancer and the age at which colorectal cancer or adenomas were diagnosed (see following table).

### Summary of U.S. screening recommendations for patients with a family history of colorectal cancer or colonic adenomas*

<table>
<thead>
<tr>
<th>Definition</th>
<th>Modality</th>
<th>Starting age/interval**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increased Risk</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACS/MSTF/ACR</td>
<td>Any</td>
<td>40/average-risk intervals</td>
</tr>
<tr>
<td>ASGE</td>
<td>Colonoscopy</td>
<td>40/10 year intervals</td>
</tr>
<tr>
<td>ACG</td>
<td>Colonoscopy</td>
<td>50/5-10 year intervals</td>
</tr>
<tr>
<td>NCCN</td>
<td>Colonoscopy</td>
<td>50 or at age of Adv Aden/5-10 year intervals</td>
</tr>
<tr>
<td><strong>High Risk</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACS/MSTF/ACR</td>
<td>Colonoscopy</td>
<td>40 or 10 years younger than earliest CRC/5 year intervals</td>
</tr>
<tr>
<td>ASGE</td>
<td>Colonoscopy</td>
<td>40 or 10 years younger than earliest CRC/3-5 year intervals for CRC or 5 year intervals for Aden</td>
</tr>
<tr>
<td>ACG</td>
<td>Colonoscopy</td>
<td>40 or 10 years younger than earliest CRC/5 year intervals</td>
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<td>Colonoscopy</td>
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</tr>
</tbody>
</table>

* Recommendations are subject to change; these are current as of December 1, 2016.

** A shorter interval may be needed if polyps are found during screening or surveillance colonoscopy.

American Cancer Society (ACS), U.S. Multi-Society Task Force (MSTF), American College of Radiology (ACR), American Society of Gastrointestinal Endoscopy (ASGE), American College of Gastroenterology (ACG), National Comprehensive Cancer Network (NCCN), first-degree relative (FDR), colorectal cancer (CRC), Aden (adenoma), Adv Aden (advanced adenoma), second-degree relative (SDR).
3. **Establish a process for referral or care for patients who meet high-risk family history criteria.**
   - Refer patients to a genetic counselor, if available, an expert provider within your practice, or establish a referral protocol for local genetic counselors with expertise in adult cancer genetics.
   - Use the National Society of Genetic Counselors [Find a Genetic Counselor directory](#) to locate genetic counseling services if needed.
   - Many genetic counselors and several commercial companies provide telephone-based genetic counseling. To locate these services, visit the [Find a Genetic Counselor directory](#) and filter by telephone counseling services.

4. **Identify intermediate/high risk families through the endoscopy suite.**
   - For patients diagnosed with colorectal cancer or an advanced adenoma, counsel them on their appropriate colonoscopy surveillance intervals and the importance of notifying their first-degree relatives that they may be at increased risk for colorectal cancer.

5. **Use or develop tools to provide screening recommendations to first degree relatives of patients identified to be at intermediate or high colorectal cancer risk.**
   - Provide patients with action steps to share with their first-degree relatives, including a message to notify their primary care provider about their increased risk and appropriate screening recommendations based on pathology results.
   - Use a standard message for your written and verbal communications to patients with colorectal cancer or advanced adenomas to inform them that their first-degree relatives should discuss colorectal cancer screening with their primary care professional by age 40; here is an example:
     
     “I would also recommend colon cancer screening for all of your first-degree relatives (brothers, sisters, children, and parents) beginning at age 40. Make your family members aware of these results so they can discuss screening with their respective physicians.”
   - Adapt a program like the [educational program for patients with adenomatous polyps](#) endorsed by the National Cancer Institute to increase knowledge, risk perception and risk communication.
   - Provide information to at-risk relatives that they can use or give to their providers describing their increased risk and screening recommendations.
   - Support efforts of your patients’ genetic counselors to provide high risk families with information and resources about hereditary cancer in the family.
You have the power to have a huge impact on screening rates in your community!

Visit nccrt.org/about/provider-education or cancer.org/colonmd to learn more about how to act on the preceding recommendations and be part of 80% by 2018.

Sources
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10. rtips.cancer.gov/rtips/programDetails.do?programid=1472737