

## **BARRIERS TO CRC SCREENING**

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Many of the barriers to screening for colorectal cancer may be overcome through evidence-based strategies that have been demonstrated to be effective. The rise in screening rates over the last decade is an illustration of how useful these strategies can be to address barriers. There are several categories of barriers: patient barriers, clinician barriers, and system-wide barriers that may confront patients and/or providers.

### **Patient Barriers and Remedies**

One of the first barriers for patients is lack of awareness. Some individuals remain unaware that they are susceptible to colorectal cancer and that, even though they may feel well, they are personally at risk based on their age category, significant family history (if there should be one), or high risk medical condition. This barrier may be magnified by the absence of a specific recommendation to screen from a physician or other provider. It has been documented that some patients experience the absence of a recommendation from a clinician as barrier.<sup>1</sup> When asked why they have not obtained screening, a common response is that ‘my doctor did not tell me to do it.’<sup>2</sup> Some people do not have a regular place where they obtain medical care. This status is correlated with receipt of fewer preventive services including CRC screening.<sup>3,4</sup>

For individuals who are aware of their susceptibility, there may be other barriers. Cost, convenience, and strained personal resources may interfere. While the State of Maryland mandates health insurance coverage for colorectal cancer screening, some plans require co-pays or deductibles that reduce the likelihood that some individuals will obtain screening.<sup>5</sup> Busy individuals may shy away from visiting their doctor or other provider as long as they feel well. Obtaining medical care may seem inconvenient and difficult to fit into a busy schedule. This factor can take on added significance if a job comes with few benefits and little or no paid time off. If a colonoscopy is recommended, the procedure itself requires a day off from work and time to prepare during the evening and night before. The patient will need transportation and a companion following the colonoscopy. These requirements also may be barriers. While forgetfulness may also play a role, there is an easy remedy for that.

There are workable and effective remedies for these patient barriers. Education and awareness efforts do make a difference. People may become aware of their personal

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susceptibility to colorectal cancer through a variety of effective methods.<sup>6</sup> A recommendation from a physician or other provider will alter both awareness and behavior.

Where cost and convenience are barriers, new approaches have been developed to put screening tools directly into the hands of individuals who make fewer visits to their doctor. Stool blood tests may be distributed in various ways outside a medical practice, including doctors' offices, pharmacies, and through the mail.<sup>7,8</sup> These take home tests are easy to do and inexpensive. They require no special equipment and no lengthy bowel prep. While more people choose colonoscopy as their screening method, stool blood tests are preferred by some individuals. Of course, if the stool blood test is positive, it will require a colonoscopy. But the individuals who have positive stool tests become a priority for the medical care system and are more likely to get the attention and assistance they need to complete screening. For the common barrier of patient forgetfulness, whether it is forgetting to follow through on an instruction to get colonoscopy or to return a stool test kit, mailed reminders are an effective way to boost response rates. The evidence on patient reminders is quite strong.<sup>9,10</sup>

### **Physician Barriers and Remedies**

A recommendation from a physician for CRC screening is one of the most important facilitators of adherence to screening.<sup>2,11,12</sup> Every eligible patient should receive a recommendation from their clinician to undergo screening. This requires a conscious policy for each clinician or practice to include this major preventive screening recommendation at every visit where the patient is eligible. A clear intent to make sure this happens globally at every visit is needed.

However, physicians may feel that the demands of practice present too many barriers to providing the needed recommendation. While based on real world experience, the demands of a busy practice can be managed with office systems that better utilize other staff of the practice. Many clinicians provide a screening recommendation in just a minute or two. Physician reminder systems are increasingly included in electronic medical record systems.<sup>13,14,15</sup> However, other reminders on the chart or within the exam room will also serve as cues to action. An office system, whether it is a sign in the exam room or on the chart, or a question from the

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medical assistant that takes vital signs, can trigger this recommendation. This system can also provide the patient with additional written information and/or opportunities for questions, discussion, or problem solving carried out by a nurse, a medical assistant, or even a clerical staff person. Such routines can be reproducible. They may involve only minor tweaks to patient flow and staff responsibilities but they can be building blocks of office systems that generate the needed recommendations on a reliable basis.<sup>16,17</sup>

An effective communication strategy can maximize the benefit of the minutes spent with the patient. Some clinicians and nurses find stage-based communication to be helpful. This type of communication is based on the theory that individuals may go through stages in their thinking. If the provider can identify the stage of the individual's thinking, they can direct their comments more appropriately and efficiently. Awareness is the first stage. For patients who are 'unaware' of colorectal cancer and the need for screening, this is the topic that should be addressed. 'Aware but unready' to be screened is another stage that requires instead a bit of probing to identify barriers the patient has conceptualized that will need to be overcome. 'Willing to undergo screened but not yet completed screening' is another stage that requires a bit of probing to reveal barriers which may be easily amenable to solution. Various health staff may be responsible for such conversations.<sup>16,17</sup>

### **System Barriers**

System barriers may make it difficult for individuals to obtain screening. Access to care is a major factor. Individuals who lack health insurance or a usual place of care are screened at lower than average rates. Meta-analyses have documented that removal of these access barriers has a significant and beneficial effect on screening behavior.<sup>18</sup>

These barriers can also make it difficult for individuals to complete diagnostic work-up and obtain care for adenomatous polyps or cancer. Medicaid coverage is not accepted by many specialty practices. This makes it difficult for individuals who may have been screened by easily accessible, inexpensive, and convenient home stool blood test kits. If they have a positive stool test, the complete diagnostic examination, or colonoscopy, that should follow may be difficult to

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arrange. Many state and local health departments now have CDC funded or state supported programs to provide this additional work-up.

Capacity is an issue. For those who live in medical shortage areas, lengthy travel may be required to get to sources of screening and/or diagnostic work-up. For those who live in busy heavily-subscribed areas where medical resources are under strain, there may be scheduling delays or waiting lists that create obstacles that become a disincentive to complete care or a barrier to timely care. A study of capacity to provide colonoscopy was completed several years ago.<sup>19</sup> It concluded that there was sufficient capacity for nationwide screening within a couple of years if stool blood testing was the starter method and colonoscopy was used for follow-up diagnosis. This study is being repeated.

### **Physician knowledge barriers**

*The digital rectal exam.*

The digital rectal exam (DRE) is no longer recommended for CRC screening. It is not a recommended strategy in the major guidelines: from the 2008 American Cancer Society/US Multi-Society Task Force on Colorectal Cancer/American College of Radiology, or the US Preventive Services Task Force (USPSTF).<sup>20,21</sup> Only 10 percent of CRCs arise within reach of the examining finger. A study reported in the *Annals of Internal Medicine* demonstrated that the sensitivity of the digital gFOBT is 4.9 percent for advanced neoplasia, compared to 23.9 percent for the six-sample home gFOBT.<sup>22</sup> The digital rectal exam is not an effective screening exam for colorectal cancer. More than a decade ago, the DRE was recommended as part of the screening exam for CRC people at average-risk by the American Cancer Society, the National Cancer Institute, national professional associations, and the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American Society of Colon and Rectal Surgeons. This approach has been abandoned. Recent evidence demonstrates that this is ineffective for colorectal cancer screening. It should be noted, however, that since the prostate is within the range of the examining finger, the DRE remains an accepted strategy for prostate cancer.

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*A single stool blood test sample taken in the office.*

A single stool blood test that is performed in the office is not sound practice. In one study, cited by the USPSTF, the first test card would have missed 42 percent of cancers that were detected by screening.<sup>22</sup> Also of note is that when more than 2,600 patients underwent colonoscopy after stool blood testing, 95 percent of cancers and significant adenomas went undetected by the single sample stool blood test. No guideline or group recommends a “single stool blood test in the office” as part of the screening regimen. In fact, insurance will no longer reimburse for a single stool blood test if it is performed for CRC screening. In the past, it was common practice to do a stool blood test in the office during the complete physical as an opportunity to complete one stool blood test. The studies cited above put this view to rest.

*The “False- Positive” stool blood test*

One positive stool blood test window is always an indication for a colonoscopy. There is no justification for repeating a positive stool blood test with another stool blood test. The suspicion that the positive is false because the patient failed to adhere to dietary instructions or medication restrictions is not a relevant concern. The effectiveness of the stool blood test as a screening strategy rests on complete examination of the large bowel following the finding of any positive stool blood test. In addition, the complete diagnostic examination should be done by colonoscopy – not double-contrast barium enema (DCBE) – because it is more sensitive and more specific than DCBE. In one study cited earlier, only 50 percent of patients with a positive stool blood test went on to receive a complete examination of the colon.<sup>23,24</sup>

### **Lack of Confidence in Efficacy and Acceptability**

Despite strong new evidence that supports the efficacy of screening, some physicians may lack confidence in the efficacy of CRC screening tests. Stool blood test are still recommended, but many primary care physicians do not believe that stool blood tests are “very effective” in reducing mortality, despite evidence from randomized controlled studies.<sup>26, 27</sup>

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