

Should Screening Techniques for Colorectal Cancer All Have an 'A' Recommendation?

No: When It Comes to Colorectal Cancer Screening, Test Choice Matters

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The use of colorectal cancer screening tests in the United States has increased significantly since 2000. However, in 2015, less than two-thirds of non-Hispanic white adults 50 to 75 years of age were up-to-date on U.S. Preventive Services Task Force (USPSTF)–recommended tests (fecal occult blood testing [FOBT], flexible sigmoidoscopy, or colonoscopy), with lower percentages for ethnic and racial minorities.¹ Some evidence suggests that offering patients noninvasive test options increases the likelihood that they will be screened; a randomized controlled trial



This is one in a series of pro/con editorials discussing controversial issues in family medicine.

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► See related USPSTF recommendation statement at <http://www.aafp.org/afp/2017/0215/od1.html> and Putting Prevention into Practice at <http://www.aafp.org/afp/2017/0515/p653.html>.

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found that adults who were offered a choice of FOBT or colonoscopy were more likely to have completed screening within 12 months than those offered only colonoscopy.² In June 2016, the USPSTF updated its 2008 recommendation statement on colorectal cancer screening.³ Notable changes included increasing the number of recommended tests to five (adding computed tomographic [CT] colonography and fecal DNA testing) and dropping the previous D recommendation for colorectal cancer screening in persons 86 years and older.

The American Academy of Family Physicians' (AAFP's) clinical preventive services recommendations usually mirror those of the USPSTF. Our updated recommendations on colorectal cancer screening (*Table 1*)⁴ reflect some disagreements with the task force's interpretation of the body of evidence.⁵ First, we continue to discourage adults older than 85 years who have been previously screened from undergoing further colorectal cancer screening. We believe that the harms outweigh any potential benefits in these patients because the long lead time required to prevent a death from colorectal cancer is likely to exceed remaining life expectancy. Many older adults are at ►

Table 1. AAFP Recommendations on Screening for Colorectal Cancer in Adults

Grade B recommendation

The AAFP recommends screening for colorectal cancer with fecal immunochemical tests, flexible sigmoidoscopy, or colonoscopy starting at 50 years of age and continuing until 75 years of age. The risks, benefits, and strength of supporting evidence of different screening methods vary.

Grade C recommendation

The AAFP recommends that the decision to screen for colorectal cancer in adults 76 to 85 years of age be an individual one, taking into account the patient's overall health and prior screening history.

Grade D recommendation

The AAFP recommends against screening for colorectal cancer in adults older than 85 years.

AAFP = American Academy of Family Physicians.

Information from reference 4.

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high mortality risk,⁶ limiting the benefits of colorectal cancer screening. Considering the test lead time, life expectancy, and comorbidity, the AAFP felt that it was important to reaffirm our D recommendation against this inappropriate practice.

Second, the AAFP found insufficient evidence to assess the balance of benefits and harms of screening CT colonography, and the combination of fecal immunochemical testing (FIT) and fecal DNA testing (FIT-DNA). Although CT colonography is comparable to optical colonoscopy in detecting colorectal adenomas, it exposes patients to radiation and commonly detects extracolonic findings (incidentalomas), both of which have a high potential to cause clinical harm.⁷ A study comparing a single round of FIT with FIT-DNA found that FIT-DNA detected more colorectal cancer and high-grade dysplasias than FIT, but was associated with more false positives and unsatisfactory samples.⁸ Although a decision analysis commissioned by the USPSTF suggested that screening strategies employing these tests were comparable to FIT and colonoscopy in life-years gained,⁹ the uncertainty surrounding these estimates precluded the AAFP from recommending them for routine screening.

Finally, after considering the quality and quantity of evidence supporting FIT, flexible sigmoidoscopy, and colonoscopy, the AAFP gave a B recommendation for these tests in adults 50 to 75 years of age. Like the USPSTF, the AAFP defines an A grade as high certainty that the net benefit of the preventive service is substantial.¹⁰ There are no randomized controlled trials demonstrating that screening colonoscopy reduces colorectal cancer mortality,^{5,11} which led the Canadian Task Force on Preventive Health Care to recommend against colonoscopy as a screening test in 2016,¹² echoing most European Union guidelines.¹³ The AAFP judged that observational studies suggesting a net benefit from screening colonoscopy, and questions about adherence to annual FIT testing over time,¹⁴ warranted a B recommendation (i.e., moderate certainty that the net benefit is at least moderate).

The AAFP recommends colorectal cancer screening for adults 50 to 75 years of age and supports providing patients with screening options. The AAFP will continue to evaluate different screening tests as more research becomes available, but currently can endorse only those options that have the strongest evidence that benefits exceed harms.

EDITOR'S NOTE: Dr. Lin and Dr. Ebell, the author of the accompanying editorial, have both been affiliated with the U.S. Preventive Services Task Force—Dr. Ebell as a member for four years, and Dr. Lin as a medical officer for the USPSTF program at the Agency for Healthcare Research and

Quality for four years. They have also been longtime *AFP* medical editors. Dr. Lin is a member of the AAFP Commission on Health of the Public and Science, which decided to assign a B level rating to colorectal cancer screening, differing from the USPSTF. Thus, we have two knowledgeable evidence experts who have looked at the same evidence and reached somewhat different conclusions. We present their views in this pro/con format so that readers can see their arguments and decide for themselves.

AFP editorials do not represent the views of the AAFP unless specifically stated.

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