

Basic

Advanced

Topics

Publications

My Research

0 marked items

Interface language:

English

[Databases selected:](#) Research Library**Document View**

Document 1

[Publisher Information](#)[Print](#)[Email](#) Mark Document[Abstract](#), [Full Text](#)**Overcoming the barriers to change: Screening for colorectal cancer**[Steven H Woolf](#). [American Family Physician](#). Kansas City: [Mar 15, 2000](#). Vol.61, Iss. 6; pg. 1621[» Jump to full text](#) [» Translate document into:](#) [» More Like This](#) - Find similar documentsSubjects: [Colorectal cancer](#), [Medical screening](#), [Physicians](#), [Patients](#)Author(s): [Steven H Woolf](#)

Document types: Editorial

Publication title: [American Family Physician](#). Kansas City: [Mar 15, 2000](#). Vol. 61, Iss. 6; pg. 1621

Source type: Periodical

ProQuest document ID: 51977563

Text Word Count 1547

Document URL: <http://proquest.umi.com/pqdweb?did=51977563&Fmt=3&clientId=30203&RQT=309&VName=PQD>**Abstract** (Document Summary)

Woolf explains why doctors and patients often don't pursue colorectal cancer screening, which has proved to be effective in saving lives. The first barrier is lack of knowledge.

Full Text (1547 words)*Copyright American Academy of Family Physicians Mar 15, 2000*

Overcoming the Barriers to Change: Screening for Colorectal Cancer

In this issue of American Family Physician, Rudy and Zdon¹ review the benefits of early detection of colorectal cancer. Citing a previously published model,² they estimate that screening 100,000 persons with fecal occult blood testing, sigmoidoscopy, barium enema or colonoscopy could prevent from 958 to 1,843 deaths, depending on the tests that are used. Given these benefits, most guidelines now recommend routine screening for colorectal cancer in all persons 50 years of age and older.

Patients, however, are less than enthusiastic about colorectal cancer screening. According to a 1997 survey,³ only 20 percent of Americans 50 years of age or older are up-to-date on fecal occult blood testing, and only 30 percent are current on sigmoidoscopy screening. In contrast, 69 percent of women 40 years of age and older have had a recent mammogram.⁴

Even for physicians, colorectal cancer screening is not high on the list of clinical priorities. The fact that physicians might not always offer an intervention known to save lives is nothing new. The same is true for use of beta blockers and aspirin after an acute myocardial infarction, warfarin for atrial fibrillation, angiotensin-converting enzyme inhibitors for congestive heart failure and other evidence-based measures for various conditions.⁵

Why would physicians and patients not pursue treatments that are known to improve health? The answer is obvious: knowledge alone is not enough to change behavior. Behavioral change evolves from four steps: (1) knowledge, (2) acceptance, (3) ability and (4) reinforcement. Knowledge is the awareness of new evidence or practice guidelines, and acceptance is agreement that the proposed polity represents good care. Ability involves having the time and resources to implement change, and reinforcement entails the use of reminder systems and other measures that maintain the practice over times. By itself, providing knowledge (e.g., publishing a review article or guideline) does little to change practice patterns.⁶

This framework helps to explain clinicians' disaffection with colorectal cancer screening. The first barrier is lack of knowledge. Many physicians are unfamiliar with the evidence that screening reduces mortality. Until recent trials demonstrated otherwise,⁷ the conventional wisdom was that colorectal cancer screening had no proven benefit. Furthermore, physicians may not know the current protocols for screening. Many assume that guaiac testing in the office, performed on the glove used in a rectal examination, constitutes fecal occult blood testing. (What lowered mortality in clinical trials was the collection of six specimens at home—two samples from three consecutive stools.)⁷ Physicians also may know little about the effects of rehydrating fecal occult blood test cards (better sensitivity but decreased specificity, and, thus, an increase in the probability of false-positive results and work-ups). Finally, physicians may not know which types of polyps are premalignant or, having detected polyps on endoscopy or barium enema, which sizes require biopsy.

The next barrier is attitudinal. Physicians can know the facts about colorectal cancer screening but remain uneager to act. For many years, colorectal cancer screening was the focus of conflicting guidelines and controversy. Not until 1996 did the U.S. Preventive Services Task Force abandon the position that evidence was insufficient to make a recommendation. It is not well known that this group (and most others) now enthusiastically recommends colorectal cancer screening.⁸ Given this ambiguity and the dismal compliance rates of patients with regard to colorectal screening, many physicians give priority to other preventive services (e.g., tobacco counseling, blood pressure and lipid control). Some physicians who know the data are not impressed by the magnitude of benefit.⁹ For example, by one calculation, 1,374 patients must undergo fecal occult blood testing for five years to prevent one death from colorectal cancer.¹⁰

There can also be barriers to the ability to perform effective colorectal cancer screening. Even enthusiastic physicians cannot screen patients if they lack time, patient cooperation, office help, ease of referral to gastroenterologists or insurance coverage. They cannot perform endoscopy skillfully without training and volume. Finally, reinforcement is critical. Screening cannot be effective if measures are not in place to remind physicians when patients are due for screening or if physicians forget to act on abnormal results.

The same framework explains patient behavior. Knowledge is the first problem. Some Americans have never heard of colorectal cancer, let alone the screening measures for this malignancy. Although breast cancer claims 11,000 fewer lives each year,¹¹ it is perceived as being more deadly than colorectal cancer. Attitudes pose an even bigger barrier for patients. They find fecal occult blood testing distasteful, and they anticipate discomfort and embarrassment with endoscopy or barium enema. Those who want to be screened may lack ability. Reading and language barriers can make instructions useless. Older patients with poor vision or manual dexterity cannot collect stool specimens. Limited insurance and lack of access to physicians can create further impediments. Finally, patients need reinforcement. Few patients remember, five years hence, that it is time for another sigmoidoscopy. Reminders from the physician who performed the test help little if the patient has moved or, as occurs frequently in managed care, has acquired a new physician.

The secret to changing behavior lies in recognizing the barriers that apply and crafting smart solutions to address them.^{5,6} In promoting colorectal cancer screening, it is worth remembering that no single test is ideal. The data cited by Rudy and Zdon,¹ which suggest that colonoscopy and barium enema save more lives than fecal occult blood testing or sigmoidoscopy, was derived from mathematical models.² The only direct trial evidence that screening reduces mortality involves fecal occult blood testing.⁷ The evidence for sigmoidoscopy comes from case-control studies.¹² Given the prevalence of premalignant polyps and cancers in the proximal colon, it seems logical that whole-bowel examinations would save more lives, but this has not been proved. Furthermore, each screening test has a different mix of potential harms, discomforts and costs that influence its acceptability.

The "best" choice depends on patient preference. One group of investigators¹³ found different patient preferences for colonoscopy (38 percent), fecal occult blood testing (31 percent), barium enema (14 percent) and sigmoidoscopy (13 percent). Other investigators¹⁴ found that preferences for fecal occult blood testing and sigmoidoscopy changed as patients received more information. When patients were given general descriptions of the disease and screening tests, their order of preferences was fecal occult blood testing (45 percent), both tests (38 percent) and sigmoidoscopy alone (13 percent). However, when they learned about test accuracies, more patients preferred both tests (47 percent), and fewer wanted fecal occult blood testing alone (36 percent). When patients were told about out-of-pocket costs, preferences for fecal occult blood testing alone rose to 53 percent, and requests for both tests fell to 31 percent.

Given these variations, most guidelines urge physicians to discuss the options with patients before settling on the ideal screening protocol.¹⁵ Offering such counseling in busy practices is not easy, as noted in a previous AFP editorial,¹⁶ and deserves greater research attention.

[Reference]

REFERENCES

[Reference]

1. Rudy DR, Zdon MJ. Update on colon cancer. *Am Fam Physician* 2000;61:1759-68.
2. Winawer SJ, Fletcher RH, Miller L, Godlee F, Stolar MH, Mulrow CD, et al. Colorectal cancer screening: clinical guidelines and rationale. *Gastroenterology* 1997;112:594-642 [Published errata appear in *Gastroenterology* 1997;112:1060 and 1998;114: 635].

3. Screening for colorectal cancer-United States, 1997. MMWR Morb Mortal Wkly Rep 1999; 48:116-21.
4. Self-reported use of mammography and insurance status among women aged \geq 40 years-United States, 1991-1992 and 1996-1997. MMWR Morb Mortal Wkly Rep 1998;47:825-30.
5. Woolf SH. Changing physician practice behavior: the merits of a diagnostic approach. J Fam Pract 2000;49:126-9.
6. Bero LA, Grilli R, Grimshaw JM, Harvey E, Oxman AD, Thomson MA, et al. Closing the gap between research and practice: an overview of systematic reviews of interventions to promote the implementation of research findings. BMJ 1998;317:465-8.
7. Towler B, Irwig L, Glasziou P, Kewenter J, Weller D, Silagy C. A systematic review of the effects of screening for colorectal cancer using the faecal occult blood test, hemoccult. BMJ 1998;317:559-65.
8. U.S. Preventive Services Task Force. Guide to clinical preventive services. 2d ed. Baltimore: Williams & Wilkins, 1996:89-103.
9. Budenholzer B. Benefits of screening for colorectal cancer. Am Fam Physician 1998;57:947-8,950.
10. Rembold CM. Number needed to screen: development of a statistic for disease screening. BMJ 1998; 317:307-12.
11. Landis SH, Murray T, Bolden S, Wingo PA. Cancer statistics, 1998. CA Cancer J Clin 1998;48:6-29 [Published errata appear in CA Cancer J Clin 1998;48:192 and 1998;48:329].
12. Selby JV, Friedman GD, Quesenberry CP Jr, Weiss NS. A case-control study of screening sigmoidoscopy and mortality from colorectal cancer. N Engl J Med 1992;326:653-7.

[Reference]

13. Leard LE, Savides TJ, Ganiats TG. Patient preferences for colorectal cancer screening. J Fam Pract 1997;45:211-8.
14. Pignone M, Bucholtz D, Harris R. Patient preferences for colon cancer screening. J Gen Intern Med 1999;14:432-7.
15. Woolf SH. Shared decision-making: the case for letting patients decide which choice is best [Editorial]. J Fam Pract 1997;45:205-8.
16. Ganiats TG, Young HF. Screening options for colorectal cancer [Editorial]. Am Fam Physician 1999; 59:2979-80.

[Author Affiliation]

Steven H. Woolf, M. D., M.P.H., is professor of family medicine in the Department of Family Practice at the Medical College of Virginia-[Virginia Commonwealth University](http://www.vcu.edu), Fairfax, Va.

Address correspondence to Steven H. Woolf, M. D., M.P.H., Department of Family Practice, Medical College of Virginia-[Virginia Commonwealth University](http://www.vcu.edu), 3772 Charles Stewart Dr, Fairfax, VA 22033.

More Like This - Find similar documents

Subjects: Colorectal cancer Medical screening Physicians Patients

Author(s): Steven H Woolf

Document types: Editorial

Language: English

Publication title: American Family Physician

[^ Back to Top](#)

Document 1

[Publisher Information](#)

Mark Document

,

Copyright © 2006 ProQuest Information and Learning Company. All rights reserved. [Terms and Conditions](#)

[Text-only interface](#)

ProQuest
COMPANY