Targeted messages may encourage some patients to get colorectal cancer screenings
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Personalized electronic messages to patients overdue for screenings, or mailings targeted to patients with expired orders for colonoscopies, may each increase colorectal cancer screening rates over the short term, according to two reports posted online today that will be published in the April 11 print issue of Archives of Internal Medicine.

Colorectal cancer is the second most common cause of cancer deaths in the United States, according to background information in the articles. "Colorectal cancer screening detects cancers at more curable early stages and reduces colorectal cancer mortality," the authors write. "As a result, national guidelines strongly recommend screening with colonoscopy, flexible sigmoidoscopy or fecal occult blood testing for average-risk adults older than 50 years." However, these methods remain underused—as many as half of the 90 million Americans who would benefit have not been screened.

In one article, Thomas D. Sequist, M.D., M.P.H., of Brigham and Women's Hospital, Harvard Medical School and Harvard Vanguard Medical Associates, Boston, and colleagues conducted a randomized controlled trial of an electronic patient messaging system involving 1,103 patients age 50 to 75 at one group practice. All patients had an electronic personal health record, which indicated they were overdue for colorectal cancer screening. Half of the patients were randomly assigned to receive a single electronic message from their physician highlighting their overdue status, along with a link to a Web-based tool to assess their risk for colorectal cancer. The control group did not receive any electronic messages.

One month after the electronic messages were sent, screening rates were higher among patients who received them than those who did not (8.3 percent vs. 0.2 percent). However, this difference was no longer significant after four months (15.8 percent vs. 13.1 percent).

Among patients who received the electronic message, 296 of 552 (54 percent) viewed it and 47 (9 percent) used the Web-based assessment tool; among those who did, one-fifth (19 percent) were estimated to have a higher-than-average risk for colorectal cancer. Among the patients who viewed the message, those who used the risk tool were more likely to request screening examinations than those who did not (17 percent vs. 4 percent) and to be screened (30 percent vs. 15 percent).

The lack of a long-term effect may be due to other screening promotion activities conducted throughout the health system studied, including annual paper mailings to adults overdue for screening, the authors note. In addition, initial screening rates in this practice were higher than average—82 percent—meaning that those who had not yet been screened may have been more resistant to do so.

"Patients have expressed interest in interacting with their medical record using electronic portals similar to the one used in our intervention," the authors write. "Further research is needed to understand the most effective ways for patients to use interactive health information technology to improve their care and to reduce the morbidity and mortality of colorectal cancer."

In the second report, Kenzie A. Cameron, Ph.D., M.P.H., and colleagues at Feinberg School of Medicine and Robert H. Lurie Comprehensive Cancer Center, Northwestern University, Chicago, conducted a randomized controlled trial involving 628 patients age 50 to 79 who had an expired order for a screening colonoscopy. Half of the participants were randomly assigned to receive a mailing containing a reminder letter from their primary care physician, a brochure and a DVD about colorectal cancer and the screening process, along with a follow-up telephone call. The other
half, the usual care control group, did not receive any of these materials until after the study period.

Three months after the mailing, screening rates were 9.9 percent (31 of 314) among patients in the intervention group and 3.2 percent (10 of 314) among patients in the control group. After six months, 18.2 percent of those in the intervention group were screened, compared with 12.1 percent in the control group.

Researchers reached 109 (34.7 percent) of the patients who received the mailings by telephone. Of those, 95 percent reported receiving the information, 98 percent reported that they read the enclosed letter and brochure and 30 percent reported watching the DVD. Those who did not watch the DVD most commonly said they were too busy (32.4 percent), perceived they already had enough information about screening (20.7 percent), were not interested in screening (12.9 percent) or did not have or were unable to operate a DVD player (10.4 percent). "This result suggests that it might not be worthwhile to include educational videos as part of mailed multicomponent patient outreach interventions," the authors write.

"Because the screening rate remained low, additional research is needed to determine how to best promote screening in this patient group," they conclude. "At present, health systems could reasonably choose to begin screening promotion with low-cost interventions like simple mailings followed by more expensive, but potentially more effective interventions such as one-on-one patient navigation or interventions aimed at eliminating structural barriers for patients who remain unscreened."

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