

Title of Intervention: A Patient and Provider Intervention to Promote Colorectal Cancer Screening among Older Adults

Intervention Strategies: Provider Education, Individual Education, Supportive Relationships, Environments and Policies

Purpose of the Intervention: To increase colorectal cancer screening rates among older primary care patients

Population: Health care providers and their older adult patients, ages 50 to 80 years, who were overdue for colorectal cancer screening

Setting: Eleven health care centers in eastern Massachusetts within the Harvard Vanguard Medical Association; health care facility-based, home-based

Partners: Harvard Medical School, Harvard Vanguard Medical Association

Intervention Description: There were three intervention groups and one control group. Each group received a different combination of mailed materials and electronic reminders.

- **Provider Education:** Health care providers in the reminder intervention group received electronic reminders during office visits indicating that their patients were overdue for colorectal cancer screening. Providers had the opportunity to view passive alerts at any point during a patient visit within the electronic visit summary screen, while the active alert required acknowledgment from providers attempting to place electronic orders. Alerts provided details regarding the most recent screening tests and facilitated "one-click" electronic ordering of screening examinations.
- **Individual Education:** Patients in the mailed materials intervention group received a mailing that included a cover letter from their health care provider identifying the patient as overdue for screening and indicating the dates of their most recent screening examinations. An educational pamphlet detailing screening options was also provided.
- **Supportive Relationships:** Patients received information about a dedicated telephone line that they could use to schedule screenings and ask questions about the screening procedure.
- **Environments and Policies:** All patients received a home screening kit with instructions and a stamped return envelope.

Theory: Not mentioned

Resources Required:

- **Staff/Volunteers:** Staff to assemble mailings, schedule patient appointments and answer patient questions
- **Training:** Training to introduce providers to electronic reminder system
- **Technology:** Electronic medical record system, computers, telephones
- **Space:** Space to assemble mailings
- **Budget:** Not mentioned
- **Intervention:** Cover letter, educational pamphlet, home screening kit with instructions, stamped returned envelope, dedicated telephone number for scheduling, electronic reminder system
- **Evaluation:** Access to patient records, surveys, statistical software

Evaluation:

- **Design:** Randomized controlled trial
- **Methods and Measures:**
 - A survey measured providers' perceptions of the effectiveness of the electronic reminders.
 - Patient records were examined to assess the completion of screening during the intervention period.

Outcomes:

- **Short Term Impact:** Most providers in the intervention group reported that the electronic reminders were "very effective" or "somewhat effective" in increasing colorectal screening rates among their patients. Reminders increased the proportion of patients who had an order for an invasive screening placed during the intervention period.
- **Long Term Impact:** Screening rates were significantly higher for patients who received mailings compared to those who did not. Screening rates were similar among patients of providers receiving electronic reminders and the control group, but electronic reminders tended to increase screening rates among patients with three or more primary care visits. The screening rate among patients who received mailed reminders and whose providers received electronic reminders was higher than those in other groups.

Maintenance: Not mentioned

Lessons Learned: Mailed reminders to patients are an effective tool to promote colorectal cancer screening. Electronic reminders to providers may increase screening among adults who have more frequent primary care visits. The clear advantage of patient involvement over provider reminders suggests that future strategies should increasingly involve patient-based activity.

Citation(s):

Sequist TD, Zaslavsky AM, Marshall R, Fletcher RH, Ayanian JZ. Patient and physician reminders to promote colorectal cancer screening: a randomized controlled trial. Arch Intern Med. Feb 23 2009; 169(4):364-371.