

A Randomized Trial of an Alerting System to Improve Colonoscopy Follow-up Rates

The Problem

Systems are generally available to ensure results of tests are communicated to patients. However, there is currently no generalized accepted strategy to ensure that patients undergo recommended endoscopic follow-up. Lack of adherence to recommended follow-up increases risk of both medical-legal issues and adverse health outcomes.

Aim/Goal

The aim of this study is to test the effectiveness of a prototype follow-up system on a cohort of patients due for a surveillance colonoscopy and to ensure that this communication is documented in the online medical record.

The Team

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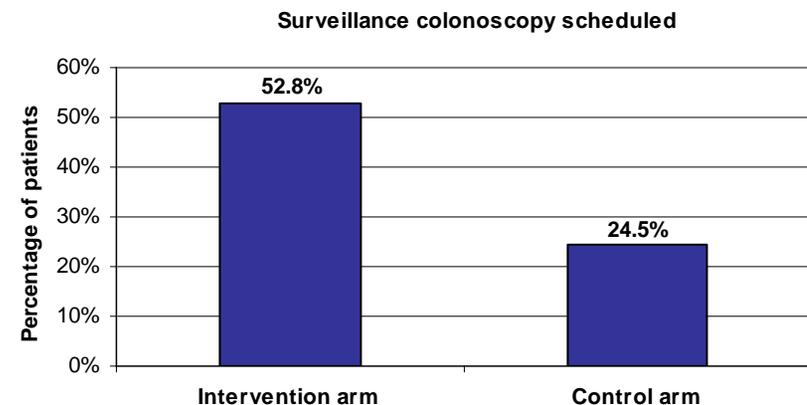
The Interventions

Electronic medical records were reviewed for individuals due for a repeat surveillance colonoscopy within the coming four months. Patients were randomized to standard of care or the follow-up system. Follow-up protocol included four steps: 1. A letter to the primary care provider stating that their patient is due for a colonoscopy; 2. A mailed reminder to the patient three months before the procedure due date; 3. A mailed reminder to the patient one month before the procedure due date; and 4. A phone call to patients who had not yet scheduled an exam by the procedure due date. Fisher's Exact test was used to compare follow-up rates in the two patient cohorts.

The Results/Progress to Date

Of 350 patient records reviewed, 102 (29.1%) were deemed appropriate for the study with surveillance colonoscopy due in the coming months. Of the 102 patients, 53 patients were randomly assigned to the intervention group, and 49 were assigned to the control group. Of the 53 patients enrolled to the intervention

group, 6 (11.5%) had had procedures scheduled at the time of enrollment. Of the 47 remaining patients, 3 (6.3%) patients were opted out by their PCPs; 3 (6.3%) had procedures scheduled after the note to their PCP; 13 (27.6%) had procedures scheduled after the first letter; 2 (4.2%) had procedures scheduled after the second letter, 4 (8.5%) had procedures scheduled after the phone call, and 2 (4.2%) patients had procedures scheduled at outside institutions following intervention. In total 28 patients in the intervention arm (52.8%) underwent colonoscopy at our institution within the recommended time compared to 12 patients (24.5%) in the control arm ($p=0.005$).



Lessons Learned

Our data suggests that a simple protocol of letters and a phone call to patients coming due for colonoscopy significantly improves in adherence to endoscopic follow-up recommendations. Of note, the difference between intervention and control arms remained significant ($p=0.03$) even excluding the phone call step.

Next Steps/What Should Happen Next

This work provides justification for the creation of reminder systems to improved patient adherence to medical recommendations.