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Cancer

A2-1:

Patterns of Colorectal Cancer Testing in Men and Women Newly Eligible for Screening

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Background/Aims: Since 1993, the US Preventive Services Task Force has recommended screening to prevent colorectal cancer among average risk adults, beginning at age 50. Many studies over the past 20 years evaluated factors associated with screening uptake; however, few have focused on individuals who are newly eligible (i.e., those turning 50 years). We evaluated patient characteristics associated with uptake and time to initiation of colorectal cancer tests in a population newly-eligible for screening. **Methods:** The study included 128,358 individuals who were members of an integrated care delivery system (Group Health) and enrolled on their 50th birthday from 1996-2011. We assessed receipt of colorectal cancer tests within 5 years of eligibility, and calculated the median time to first test. We examined patient characteristics associated with use of colorectal cancer tests overall using Cox proportional hazards models. **Results:** Stool-based tests were most commonly used, with uptake ranging from 35-40% of the cohort across the study period. The proportion of individuals initiating colorectal cancer testing via colonoscopy increased from 3% in members becoming eligible in 1996-1998 to 21% in 2005-2007. Time to first test varied across test types. Median time to the first test was 3 months shorter in members who chose stool-based tests (25.2 months) compared to those who chose colonoscopy (28.2 months) among members newly eligible in 2005-2007. However, we observed no temporal changes in median time to first test, conditional on test type. Characteristics associated with increased uptake included more recent enrollment at age 50 (e.g., 2008-2010:HR = 2.16, 95% CI 2.09-2.23) and Asian background (HR = 1.08, 95% CI 1.05-1.11). Factors associated with reduced uptake included being a woman (HR = 0.93, 95% CI 0.91-0.94), African-American (HR = 0.95, 95% CI 0.91-0.99) or Pacific Islander (HR = 0.86, 95% CI 0.76-0.96), diagnosed with diabetes (HR = 0.88, 95% CI 0.85-0.91) and being moderately or severely obese (HR = 0.83, 95% CI 0.81-0.85 and HR = 0.75, 95% CI 0.73-0.77, respectively). **Conclusions:** Patient characteristics associated with initiation of colorectal cancer testing in a newly eligible population are similar to previous findings among all-age eligible adults. Further, while the time to the first test remained stable, there was an increase in colorectal cancer testing during the study period.

Keywords: Screening; Colorectal Cancer; Prevention
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A2-2:

Systems of Support to Increase Colorectal Cancer Screening (SOS): A 2-Year Randomized Trial of an Automated Intervention with Stepped Increases of Support to Increase Uptake of Colorectal Cancer Screening

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Background/Aims: Screening decreases colorectal cancer (CRC) incidence and mortality, yet almost half of age-eligible patients are not screened at recommended intervals. Our objective was to determine whether interventions using electronic health records, automated mailings, and stepped increases in support increased being current for CRC testing over 2 years. **Methods:** Setting and participants: SOS was a four-arm parallel design randomized controlled comparative effectiveness trial with concealed allocation and blinded outcome assessments (ClinicalTrials.gov registration number: NCT00697047). Patients aged 50-73 at baseline (n = 4674) not current for CRC screening and with no life-threatening illnesses from 21 primary care medical centers were randomized. Interventions: Usual care (UC), Automated mailed (Automated), Automated plus medical assistant telephone assistance (Assisted), or both Automated and Assisted interventions plus nurse navigation until testing was completed or declined (Navigated). Interventions were repeated in year 2. Measurements: Primary outcomes were the proportion current for screening in both years, defined as completion of a colonoscopy or sigmoidoscopy in year 1, or fecal occult blood test (FOBT) in year 1 and either FOBT, colonoscopy, or sigmoidoscopy in year 2. **Results:** Compared to UC, intervention patients were more likely to be current for CRC screening for both years of the study, with incremental increases by intervention intensity (UC 26.5% vs. Automated 50.7%, Assisted 57.7%, or Navigated 64.4% P <.001). Automated interventions increased CRC screening in all patient subgroups compared to UC. The higher-intensity Assisted and Navigated interventions were less effective in patients age ≥65, and African American/Blacks and those reporting mixed race. Two-year intervention cost estimates were $57,000 for Automated, $67,000 for Assisted, and $79,000 for Navigated. Inclusion of CRC test costs produced total intervention costs of $314,000, $342,000, and $390,000 for three arms respectively, compared to $339,000 for UC costs for CRC tests alone. **Conclusions:** A low-cost stepped intervention that leveraged automated data and centralized processes led to twice as many people being current for CRC screening over 2 years. The rapid growth of electronic health records provides opportunities for spreading this model broadly.

Keywords: Colorectal Cancer; Screening; Electronic Health Records
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A2-3:

Pass this Message Along: Self-Edited Email Messages Promoting Colon Cancer Screening Among Friends and Family

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Background/Aims: Encouraging communication within a social network may promote uptake of desired medical services or health behaviors. Little is known about the use of this approach to promote colorectal cancer (CRC) screening. We conducted in-person interviews with 438 insured adults ages 42-73 in Massachusetts, Hawaii, and Georgia. **Methods:** Participants were shown a sample message in which the sender shares that he has completed a colonoscopy and urges the recipient to discuss CRC screening with a doctor. We asked participants to edit the message to create one they would be willing to send to friends and family via email or postcard. Changes to the message were recorded. Edited text was analyzed for content and concordance with original message. **Results:** The majority of participants (61.6% [270/434])