

Controlled Trial of a Combined Decision Aid + Patient Navigator Intervention to Increase Colorectal Cancer Screening among Medicaid Patients in North Carolina

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Background: Screening rates for colorectal cancer (CRC) among Medicaid patients are lower than those for the general population despite insurance coverage for tests. The goal of this study was to test, in a controlled trial, an intervention to improve CRC screening rates consisting of a mailed decision aid followed by telephone support from an offsite, payer-based patient navigator.

Methods: The study was conducted in cooperation with Community Care of North Carolina (CCNC), the quality improvement organization for Medicaid in NC. We selected one of fourteen CCNC regions for our study. Within this region, we selected six practices for the intervention and matched them with six control practices. Practices were selected to allow for a mix with regards to size, geographic location (urban vs. rural) and presence of residents. Eligible patients at each practice were age 50 and older, not up-to-date with CRC screening based on Medicaid claims data, and currently covered by Medicaid, but not Medicare.

A CCNC patient outreach coordinator was trained to serve as a patient navigator for the study. Training included an overview of CRC screening plus motivational interviewing techniques focused on helping patients overcome screening barriers. We mailed a packet containing a decision aid DVD, written survey, and a letter from the patient's physician encouraging screening to all eligible patients in intervention practices. The patient navigator called patients beginning one month after the packet was mailed and attempted to contact each person at least 3 times. Patients who had not returned the mailed survey, had the option to complete it over the phone prior to receiving counseling from the navigator.

Our primary outcome was completion of a CRC screening test within six months of enrollment as determined by Medicaid claims data. We compared screening test completion rates among intervention participants with those from the matched control practices, using intent to treat analysis. Other study outcomes were measures of intervention reach based on navigator logs and survey data.

Results: Based on claims data, we identified 240 eligible patients who were not up-to-date with CRC screening from intervention practices (overall screening rate among age-eligible patients was 35.6%) and 174 eligible patients from control practices (overall screening rate of 46.0%). At six months, 9.2% (n=22) of intervention patients had received CRC screening during the intervention period based on claims, compared to 7.5% (n=13) of control patients. The rate difference was 1.7 percentage points (95% CI: -3.6, 7.0)

After excluding anyone who declined participation or self-reported as ineligible, 207 patients remained in the intervention group at follow-up. Of those, 26.6% (n=55) completed the decision aid survey and 40% (n=22) of survey completers reported watching some or all of decision aid. The patient navigator discussed CRC screening with 25.6% (n=53) of the 207 intervention patients at least once by phone.

Conclusions: A mailed decision aid plus phone-based patient navigator intervention had limited reach and was not able to increase CRC screening among older Medicaid patients compared with control. Higher-intensity interventions, such as practice-based navigators, may be needed to better reach challenging patients and improve screening rates among vulnerable populations such as this one.

Primary care providers' response to the USPSTF draft recommendations on screening for prostate cancer

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Background: The US Preventive Services Task Force issued draft recommendations against routine PSA-based screening for prostate cancer in October 2011. Primary care providers' views on the draft guidelines and their willingness to change clinical practice patterns in response remain unknown.

Methods: We performed a self-administered survey of 141 primary care practitioners from a university-affiliated practice network in November 2011. The network includes primary care physicians, family practice physicians, internal medicine/pediatric-trained physicians, and nurse practitioners working in 26 practice settings.

Results: The response rate was 88.7% (125 out of 141). Nearly half (49.1%) agreed or strongly agreed with the recommendations while 36.0% disagreed or strongly disagreed. Few providers (1.8%) said that they would no longer order routine PSA testing and 21.9% would be much less likely to do so. Both agreement with the recommendations and expectations as to how the recommendations would change practice did not significantly vary by years since residency graduation, gender, or race/ethnicity. Even among those clinicians who agreed with the draft recommendations, less than half (41.1%) stated that they would either no longer order routine PSA screening or be much less likely to do so. Providers who were most likely to screen at baseline were least likely to believe the recommendations would affect their practices (45.8% of providers who typically recommend PSA screening did not think the draft recommendations would change their screening behavior compared to 28.3% of those who typically let the patient decide, $p < 0.001$). Providers identified multiple barriers to stopping routine PSA screening including patient expectations, lack of time to explain changes, fear of malpractice litigation, and discomfort with uncertainty associated with stopping screening.

Conclusions: If finalized, the USPSTF recommendations may encounter significant barriers to adoption, even among those primary care providers who agree with the recommendations. To the extent that PSA screening should be reduced, it may be necessary to address these barriers.

Preventive cancer screening practices in HIV positive patients

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Background: With the wide spread use of antiretroviral therapy, patients with HIV are living longer and are at risk of developing non-AIDS Defining Malignancies. In this study we evaluate the rates of routine colorectal and breast cancer screening in patients with and without HIV and identify factors associated with cancer screening.

Methods: Design: We performed a cross-sectional survey of patients willing to complete the study questionnaire in waiting rooms of three outpatient HIV clinics and one general internal medicine clinic in Philadelphia, Pennsylvania. The survey asked about basic demographics; their colorectal and breast cancer screening history; cancer risk; and presence of other chronic diseases. The HIV positive patients were given additional questions about their HIV disease and their HIV providers. HIV clinics were categorized as integrated (providing HIV and primary care) and non-integrated (providing only HIV care).

Study population: Women with and without HIV age 40 and older and men with and without HIV age 50 and older who agreed to complete the survey.

Outcome: Survey respondents were considered current for their colorectal cancer (CRC) screening if they reported having at least one colonoscopy during the past 10 years, a flexible sigmoidoscopy during the past five years, or fecal occult blood testing during the last year regardless of the reason for the test. Women were on target on their breast cancer screening if they reported having at least one mammogram during the past year regardless of the indication for the study.

Results: 762 complete surveys were collected. 401 respondents were HIV positive. Patients with HIV were younger (mean age 54 versus 62, $p < 0.001$), mostly male (53.6% versus 30.5%, $p < 0.001$) black, non-Hispanic (62.8% versus 56.5%, $p = 0.006$) and low-income (62.8% versus 27.4%, $p < 0.001$). Co-morbidity counts were similar across both groups (0.76). Patients with HIV were less likely to be up-to-date with their routine cancer screening (45.6% versus 65%, $p < 0.001$ for CRC screening and 20.4% versus 62.3% $p < 0.001$ for breast cancer screening). After adjusting for demographic and clinical factors, the odds of up to date CRC screening were no longer significantly different between patients with and without HIV (OR 0.6; 95% CI 0.3-1.2); however, HIV positive women remained significantly less likely to be current with breast cancer screening (OR 0.1; 95% CI 0.0-0.2). HIV positive patients enrolled in the integrated and the non-integrated care clinics differed significantly: whites, males, high income and highly educated patients were more likely to attend the non-integrated care clinic. There was a trend toward decreased CRC screening and increased breast cancer screening in integrated care clinics but this finding did not reach statistical significance.

Conclusions: Routine cancer screening needs to be improved in HIV positive patients. The integrated care clinic provides care to more disadvantaged HIV patients and is not associated with higher cancer screening rates. This could be secondary to non-adherence. It is also possible that patients in the integrated care clinic encounter competing priorities between HIV care and primary care during their visits in contrast to patients in the non-integrated care clinic.

Prevenir Es Mejor Que Lamentar: A culturally tailored colorectal cancer screening intervention for Latinos

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Background: Rates of colorectal cancer (CRC) screening are lower in racial and ethnic minorities, including Latinos. The goal of this study was to assess the impact of a culturally tailored CRC educational brochure and DVD on CRC cancer behavior among predominantly Spanish-speaking Latinos in a primary care setting.

Methods: We conducted a randomized controlled trial of 204 Latinos age 50-79 recruited from academic and community primary care clinics in San Francisco CA. Participants were assigned to the intervention, which included a mailed bilingual CRC educational brochure and a Spanish-language DVD versus usual care. Usual care is defined by standard US Prevention Task Force recommendations within the clinical practice. Participants completed a baseline telephone survey and follow up survey 6-9 months later. Demographic data, knowledge of CRC screening and screening tests, facilitators and barriers to screening and self-reported rates of CRC screening were assessed. Descriptive statistics were computed for all demographic and dependent variables, including means and standard deviations for continuous data and frequency distributions for each of the categorical variables. Chi-square tests and t-tests were computed for assess differences in covariate distributions across groups. Multivariate analyses were performed to determine the independent impact of the intervention on rates of CRC screening. The primary outcome was the impact of the intervention on any CRC screening.

Results: 190 Latinos completed the baseline and follow up survey. The majority of respondents were female (69.5%) and the average age of study participants was 66 years (SD 9.2) Baseline survey revealed similar rates of self reported fecal occult blood testing between the intervention and control group (58.5% vs. 55.3%, $p < 0.65$). At follow up, self reported rates of fecal occult blood testing (FOBT) were greater in the intervention group compared to the control group (73.7% vs. 60.4%, $p = 0.05$). Rates of colonoscopy at baseline were 58.2% in the intervention group and 71.4% in the control group ($p < 0.13$) Rates of colonoscopy at follow up were similar between the intervention and control group (73.5% vs 73.9%, $p < 0.38$). Multivariate analysis revealed that the intervention strongly improved rates of any CRC screening among participants (OR 2.23; 95% CI 1.02-4.87). Those with prior knowledge of screening were more likely to report CRC screening (OR 6.65; 95% CI 2.8-15.6). Those who reported good health were less likely to have had any screening (OR 0.44; 95% CI 0.21-0.90), as were those with fatalistic attitudes measured by a 4-item scale (OR 0.27; 95 CI 0.13-0.58).

Conclusions: Exposure to a culturally tailored brochure and DVD increased rates of self-reported CRC screening in Latinos.

Boston Patient Navigation Research Program: The Impact of Navigation on Time To Diagnostic Resolution After Abnormal Cancer Screening

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Background: There is a need for controlled research studies to assess the impact of patient navigation on cancer outcomes in a vulnerable population. The objective of this study was to evaluate whether patient navigation decreased time to diagnosis for subjects with a breast or cervical cancer screening abnormality.

Methods: The Boston PNRP program was designed as a clinical effectiveness study of patient navigation as a new standard of care. Boston Patient Navigation Research Program collected baseline data (2004-2005) and intervention data (2007-2008) at 6 community health center sites (CHCs) on all women with cervical or breast cancer screening abnormalities. During the intervention period 3 CHCs were assigned breast navigators and 3 were assigned cervical navigators, and served as a control site for the other abnormalities. Kaplan-Meier survival curves and proportional hazards regression examined the effect of navigation on time to definitive diagnosis, adjusting for clustering by clinic and adjusting for age, race, language, and insurance. Hazard ratios greater than 1.0 indicate a decrease in time to diagnosis.

Results: We enrolled N = 997 subjects in the baseline period and N = 3,041 subjects during the intervention period (n = 1,499 navigated, n = 1,542 control). 30% were African American, 28% were Hispanic and 34% were white; 32% had no insurance, 38% were publically insured. Among those with a breast screening abnormality, there was a significant decrease in time to diagnosis for navigated subjects who resolved after 60 days (aHR 1.4, 95% CI: 1.1-1.9) compared with controls, but no differences for those who resolved before 60 days (aHR 1.04, .83 – 1.3). Among those with a cervical screening abnormality, there was a significant decrease in time to diagnosis for all navigated subjects when compared with controls (aHR 1.5, 95% CI: 1.4-1.9).

Conclusions: This clinical effectiveness study documents a benefit of patient navigation on time to diagnosis among a racially/ethnically diverse inner city population cared for in CHCs.