

TO SCREEN OR NOT TO SCREEN: WHY YOUNG PEOPLE CHOOSE TO PARTICIPATE IN COLORECTAL CANCER SCREENING

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Introduction

In 2022, our health system conducted a randomized controlled trial to compare four screening outreach approaches for average-risk individuals age 45 to 49. In this follow-up survey, we aimed to determine the factors that influence decision-making and screening practices of young adults at average-risk for CRC and newly eligible for screening.

Methods

We conducted a survey of participants of a 2022 trial to compare screening outreach strategies in a large, diverse, academic health system. All unscreened average-risk patients age 45 to 49 with an assigned primary care provider were randomized to one of four screening strategies: fecal immunochemical test (FIT)-only active choice (Arm 1), colonoscopy-only active choice (Arm 2), dual-modality (FIT and colonoscopy) active choice (Arm 3), or default mailed FIT outreach (usual care, Arm 4). Post-intervention, participants were sent an electronic survey to indicate barriers and facilitators to screening participation. The survey contained an open-ended item and multiple choice items. We calculated frequencies and percentages for survey responses and compared factors influencing screening choices overall and by race/ethnicity for individuals who did and did not participate in screening.

Results

Of the 20509 participants, 3206 (15.6%) completed the survey. Survey respondents were 46.9% Non-Hispanic White (NHW), 4.1% Non-Hispanic Black (NHB), 13.6% Non-Hispanic Asian (NHA), and 14.9% Hispanic. Overall completion of screening among respondents was 30.6%. Among respondents who pursued FIT screening, the predominant reason was convenience (71.3%) overall and in each racial/ethnic group (71.2% NHW, 82.3% NHB, 75.6% NHA, 69.0% Hispanic). Among respondents who pursued colonoscopy, the predominant reason was provider recommendation (43.0% overall, 42.3% NHW, 56.1% NHB, 42.8% NHA, 46.5% Hispanic)(Figure). Polyp removal as a reason for colonoscopy was significantly less commonly reported among NHB respondents than among NHW and NHA respondents (12.1% vs 23.6% vs 28.9% respectively; $p=0.014$), as was the 10-year screening (21.2% vs 33.9%; $p=0.048$).

However, provider recommendation for colonoscopic screening was a significantly more common facilitator for NHB respondents than NHW respondents (56.1% vs 42.3%, $p=0.034$).

Conclusion

In a large, randomized trial to evaluate the impact of various population health approaches to screen individuals age 45 to 49 for CRC, we found that provider recommendation was a major influencer for colonoscopic screening; this appeared to be strongest for NHB patients. Other important motivators were screening interval, ability for polyp removal, and convenience. These findings underscore the importance of healthcare providers discussing all aspects of CRC screening modalities with patients to maximize participation in screening and improve overall screening rates.

Table: Characteristics of Survey Respondents

	All Survey Respondents (n=3206)	Preferred FIT (n=1623)	Preferred Colonoscopy (n=1,371)
Age (mean, SD)	47.4 (1.5)	47.4 (1.5)	47.3 (1.5)
Sex [n (%)]			
Male	1448 (45.2)	676 (41.7)	686 (50.0)
Female	1758 (54.8)	947 (58.4)	685 (50.0)
Race/Ethnicity [n (%)]			
NH White	1502 (46.9)	774 (47.7)	628 (45.8)
NH Black	132 (4.1)	62 (3.8)	66 (4.8)
Hispanic	476 (14.9)	226 (13.9)	217 (15.8)
NH Asian	436 (13.6)	226 (13.9)	180 (13.1)
NH Other	168 (5.2)	87 (5.4)	72 (5.3)
Unknown	492 (15.4)	248 (15.3)	208 (15.2)
SVI [Median (IQR)]	24.8 (10.9 – 45.8)	26.1 (10.7 – 47.4)	23.7 (10.9 – 44.1)
Insurance [n (%)]			
Private	3074 (95.9)	1555 (95.8)	1321 (96.4)
Public	65 (2.0)	36 (2.2)	22 (1.6)
Self-Pay	2 (0.1)	1 (0.1)	1 (0.1)
Unknown	65 (2.0)	31 (1.9)	27 (2.0)
Completed Any CRC Screening	981 (30.6)	505 (31.1)	410 (29.9)

Figure: Most reported reasons why trial participants in arms 1, 2, and 3 choose FIT or colonoscopy screening by race/ethnicity

