

## Presenting Stool Testing as the Default Option for Colorectal Cancer Screening: Results of a Randomized Trial

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**Purpose:** Individuals eligible for colorectal cancer (CRC) screening can choose from multiple approved tests, including colonoscopy and stool testing. The existence of multiple options allows patients to choose a preferred strategy but also may lead to indecision and delay. Behavioral economics suggests presenting one option as a default choice, i.e. the one that patients should receive if they do not wish to decide. We conducted a randomized trial to measure the impact of describing stool testing as the default option for CRC screening in a decision aid (DA).

**Methods:** 105 patients, aged 50-75 years, who were at average risk for CRC and due for screening were recruited from primary care clinics. All subjects viewed a CRC screening DA and half (n=53) were randomized to view, in addition, a description of stool testing with the fecal immunochemical test (FIT) as the default choice. Participants completed questionnaires before (T0) and after (T1) viewing the DA that assessed perceived CRC risk, intended screening behavior, intent to be screened (overall, with FIT, or with colonoscopy) and decisional conflict. At six months (T2), screening behavior was assessed.

**Results:** Members of both groups showed significant increases in perceived CRC risk, intent to be screened, intent to undergo FIT, and reduction in overall decisional conflict scores (all  $p < 0.0001$ ). No significant between-group differences in these change scores were observed. Intent to undergo colonoscopy increased in the Control group and decreased in the Default group, with a significant between-group difference in change scores (0.21 vs. -.09,  $p=.03$ ).

Intended screening behavior at T0 and T1 is shown in the Table. The percentage of patients who did not intend to be screened declined in both groups taken together ( $p=.0002$ ), though reductions did not differ significantly between the groups (Control 17.3% vs. Default 20.8%). Among patients who did not choose FIT at T0, a significantly higher percentage switched to FIT at T1 in the Default group compared to Controls (43% vs. 21%,  $p=.02$ ).

At six months, the percentage of patients who underwent screening with FIT or colonoscopy did not significantly differ by group.

**Conclusion:** Presenting stool testing as the default choice for CRC screening significantly reduced patients' intent to undergo colonoscopy and significantly increased the proportion intending to be screened with FIT.

**TABLE: Intended Screening Behavior**

	Intend to be screened with			Do not intend to be screened
	Colonoscopy	Stool Testing (FIT)	Don't know	
<b>CONTROL group (n=52)</b>				
Before intervention (T0)	14 (26.9%)	5 (9.6%)	4 (7.7%)	29 (55.8%)
After intervention (T1)	19 (36.5%)	12 (23.1%)	1 (1.9%)	20 (38.5%)
<b>DEFAULT group (n=53)</b>				
Before intervention (T0)	20 (37.7%)	4 (7.5%)	4 (7.5%)	25 (47.2%)
After intervention (T1)	15 (28.3%)	24 (45.3%)	0 (0%)	14 (26.4%)