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Introduction

- Colorectal cancer (CRC) screening is a critical preventative service and part of routine patient care
- CRC is the second leading cause of cancer death in the US, yet a third of the eligible population does not undergo routine screening
- Endoscopy centers have been stretched thin by both COVID-19 and the recent inclusion of adults aged 45-50 in screening guidelines
- Fecal immunochemical testing (FIT), a sensitive and specific CRC screening modality, may be used to reach and risk-stratify more patients to increase the yield for detecting advanced neoplasia and cancer, reducing pressure on colonoscopy centers
- FIT is often seen as suboptimal due to low rates of completion and return of the test kits

Methods

- Retrospective analysis of 5211 individuals at a single internal medicine residency clinic who had FIT ordered as part of USPSTF recommended care from 01/2017 through 12/2021
- A dedicated patient navigator was introduced in Jan 2021 to support patients in completing FIT. The navigator was bilingual and provided personal outreach via phone
- Chi-squared, Fisher's exact test, and Student's t-tests were performed for descriptive analyses
- Multivariable logistic regression was used to compare FIT kit drop off rates pre- and post-intervention, with the model adjusted by age, gender, race, ethnicity, language, and insurance status
- Analysis was performed in SAS version 9.4

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VARIABLE	STUDY GROUP PRE-INTERVENTION N=4030 (77.3%)	STUDY GROUP POST-INTERVENTION N=1181 (22.7%)	P-VALUE	TOTAL N=5211 (100%)
N (%)				
Female Gender	1880 (46.7)	562 (48.3)	0.3139	2442 (47)
Age, mean (SD)	59.5 (+/- 6.8)	58.8 (+/- 8.4)	0.0076	59.3 (+/- 7.2)
	45-50	210 (17.8)	<0.0001	475 (9.1)
	51-64	671 (56.8)	<0.0001	3430 (65.8)
	65-75	300 (25.4)	0.7593	1306 (25.1)
Hispanic/Latino	1740 (43.5)	529 (47.4)	0.0200	2269 (44.3)
Race				
	White/Caucasian	321 (27.4)	<0.0001	1705 (33.0)
	Black/African American	279 (23.8)	0.4524	1189 (23.0)
	Asian	25 (2.3)	0.1685	140 (2.7)
	Others	546 (46.6)	<0.0001	2131 (41.3)
Insurance				
	Neighborhood	435 (38.7)	0.3609	1861 (37.0)
	Medicare	167 (14.9)	<0.0001	941 (18.7)
	Medicaid	37 (3.3)	0.0292	222 (4.4)
	Commercial	481 (43.0)	0.0592	2000 (39.8)
Language				
	English	578 (48.9)	0.0004	2785 (53.4)
	Spanish	453 (39.0)	0.0899	1913 (36.8)
	Portuguese	18 (1.6)	0.3342	98 (1.9)
	Others	96 (8.3)	0.1133	374 (7.2)

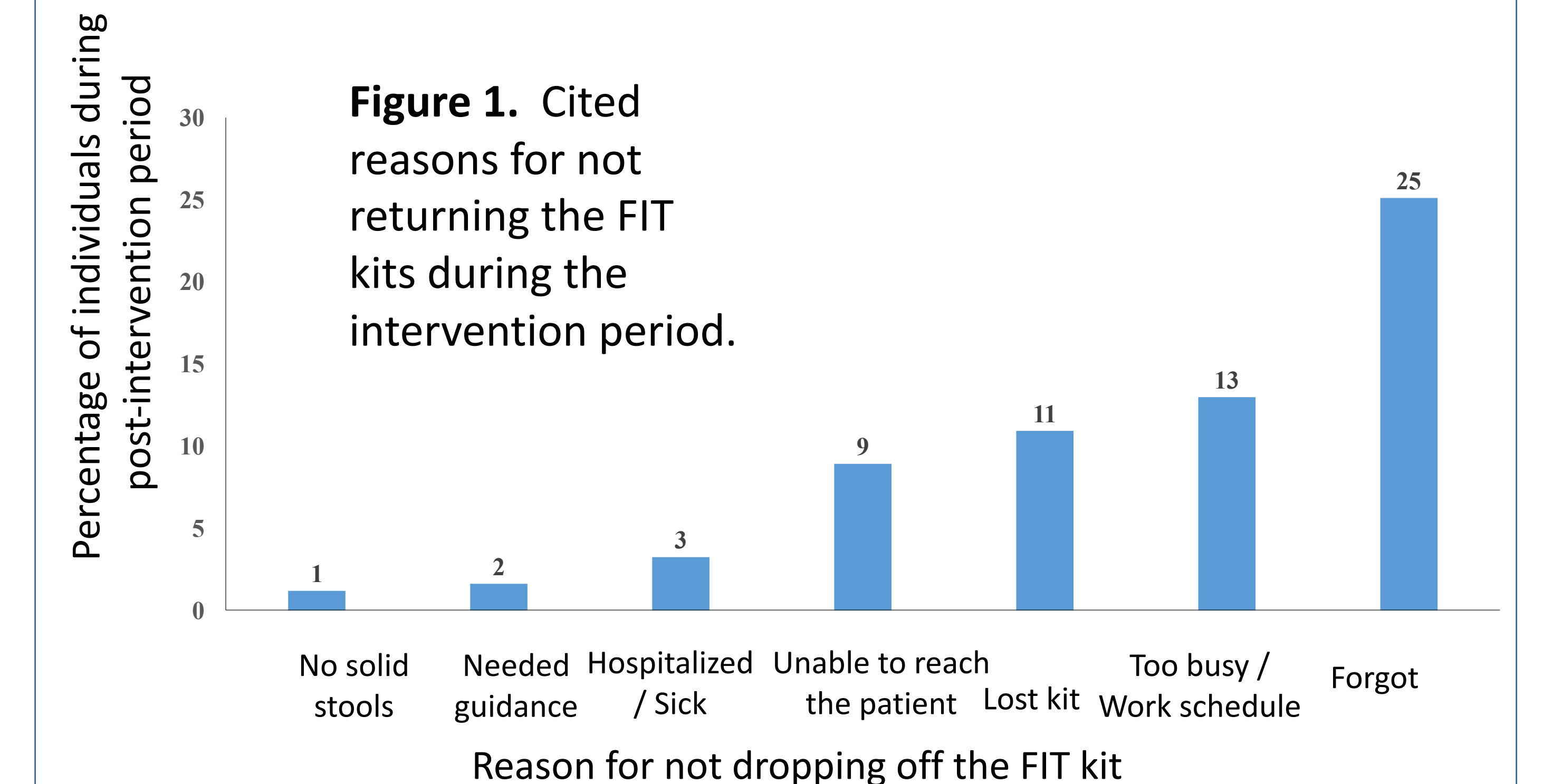
Table 1. Baseline characteristics of patients who underwent FIT testing, comparing pre- and post-intervention periods, from 2017 to 2021.

Discussion

- FIT can increase CRC screening rates, particularly in resource-limited settings, and may decrease the burden on endoscopy centers nationwide by improving the efficiency of colonoscopy in the average risk screening population
- The addition of a dedicated patient navigator is a simple intervention that, by providing culturally competent care and personalized attention, improves completion rates and return time, allowing FIT to be a reliable method of screening
- The ability to increase screening rates and prioritize patients for diagnostic colonoscopies will ultimately lead to earlier detection and treatment of CRC

Results

- The post-intervention period included 1181 (22.7%) patients
- Predominant reasons cited for failure to complete testing were "forgot" (25%), "too busy" (13%), and "lost kit" (11%)



- Our intervention improved drop off rates from 46.4% to 51.3% at 2 weeks (OR 1.19, 95%CI 1.01-1.41), 56.7% to 73.7% at 1 month (2.14 [1.78-2.58]), 64.7% to 89.7% at 3 months (4.73 [3.66-6.12]), and 78.9% to 98.2% at 1 year (14.39 [8.25-25.12])
- Overall, our intervention improved FIT kit drop off rates by 53.4% (1.53 [1.30-1.81])**
- FIT was positive in 4.9% (p=0.0529)

Overall FIT kit drop off

Drop off within 2 weeks

Drop off within 1 month

Drop off within 3 months

