

# Positive Fecal Immunochemical Testing (+FIT) in the COVID-19 Pandemic: Resilient Systems in **Troubled Times**

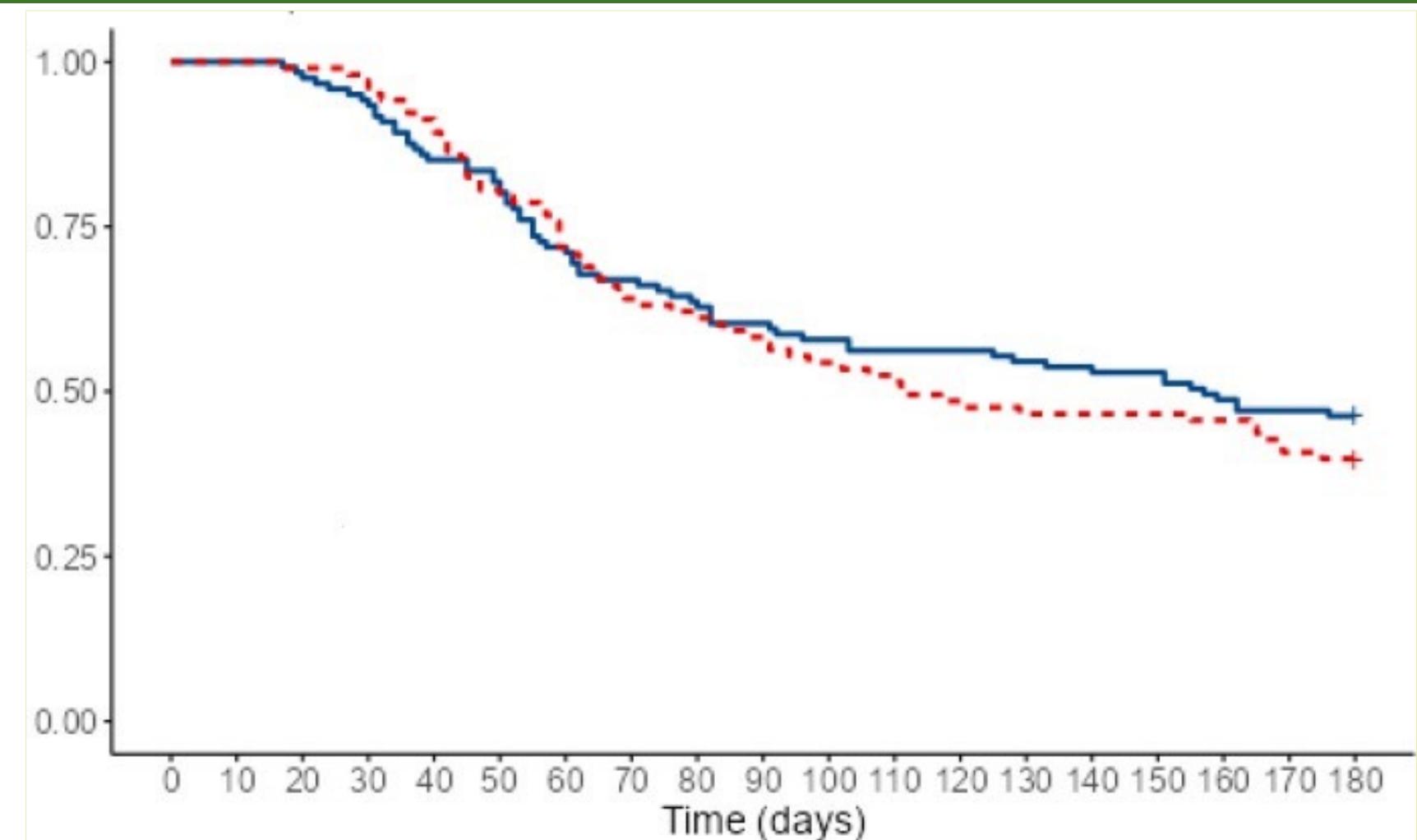
# Introduction

- Colorectal cancer screening via colonoscopy decreased significantly due to the COVID-19 pandemic
- Mail-out fecal immunochemical testing (FIT) were initiated to maintain screening
- Due to concerns surrounding +FIT follow-up we added FIT navigation (FITNav) via a nurse practitioner who followed +FIT to colonoscopy in August 2020.
- After implementation, we noted little improvement in colonoscopy < 180 days compliance
- This prompted a quality improvement (QI) project which resulted in a centralized database
- From the initial QI project, a subgroup analysis to answer the question: were there racial disparities in +FIT follow-up prior to FITNav implementation?

### Methods

- We queried +FIT from patients 45-85 y/o from 3/1/2019/20-9/3/2019/20, defined as the prepandemic and pandemic cohorts respectively
- Patients with dementia & >65 y/o, diagnostic/inpatient FIT, or provider-initiated cancellation of colonoscopy due to comorbidities were excluded
- Chart review retrieved FIT indications, patient/navigator notification time, GI consult placement time, and colonoscopy
- We added the Area deprivation index (ADI) to evaluate neighborhood-level disparities

Wesley Wright, MD<sup>1</sup>; Molly Orlick<sup>2</sup>; Judah Kreinbrook, BS<sup>2</sup>; Ambuj Kumar, MD, MPH<sup>3</sup>; Brijesh Patel, MD<sup>3</sup> Department of Internal Medicine, University of South Florida Morsani College of Medicine<sup>1</sup>; Tampa VA Research and Education Foundation<sup>2</sup> James A. Haley Veterans' Hospital<sup>3</sup>



**Chart 1.** Kaplan-Meier Plot Colonoscopy in <180 days Pre-pandemic vs. Pandemic y-axis= Probability Blue= Pre-pandemic Red= Pandemic.

		Total	HR (univariable)*	HR (multivariable)*
Cohort	Pre-pandemic	114 (53%)		
	Pandemic	101 (47%)	1.08 (0.76-1.54, p=0.676)	1.03 (0.71-1.50, p=0.872)
Race/Ethnicity	Caucasian/ Non-Hispanic	162 (75%)		
	Black/ Non- Hispanic	26 (12%)	2.09 (1.33-3.29, p=0.001)	1.59 (0.92-2.74, p=0.093)
	Hispanic	15 (7%)	0.80 (0.37-1.73, p=0.573)	0.74 (0.33-1.64, p=0.454)
	Others	6 (4%)	0.74 (0.33-1.64, p=0.454)	0.82 (0.25-2.67, p=0.741)
	Declined/Unknown	6 (4%)	0.55 (0.13-2.22, p=0.398)	0.47 (0.11-1.98, p=0.304)
Marital Status	Married	113 (52.6%)		
	Not Married	102 (47.4%)	0.68 (0.47-0.97, p=0.033)	0.74 (0.51-1.10, p=0.136)
ADI National Rank	Mean (SD)	64.1 (22.7)	0.99 (0.99-1.00, p=0.127)	1.00 (0.99-1.01, p=0.441)
Days to FIT Notification	Mean (SD)	9.0 (12.7)	0.98 (0.96-1.01, p=0.141)	0.98 (0.95-1.01, p=0.131)
Age	Mean (SD)	66.4 (8.4)	0.98 (0.96-1.00, p=0.035)	0.98 (0.96-1.01, p=0.133)

**Table 1.** Hazard Ratios Obtained on Cox Regression for Pre-pandemic/Pandemic Cohorts



- An adjusted and unadjusted cox regression
  - model was used to evaluate colonoscopy < 180 days between pandemic/pre-pandemic, summarizing via hazard ratios (HR) and 95% confidence intervals (CI)

# Results

- There were 121 & 103 +FIT meeting criteria in the pandemic & pre-pandemic respectively
- Demographics (age, marital status, race, ADI, and sex) between periods showed no statistically significant differences
- Proportion receiving colonoscopy < 180 days in</li> the pre-pandemic and pandemic periods was 53.7% and 60.2% (unadjusted HR 1.08, 95% CI 0.76-1.54, p=0.676)
- This remained insignificant when adjusted for race/ethnicity, marital status, priority group, ADI, time to notification, and age (adjusted HR 1.03, 95% CI 0.71-1.50, p=0.872)
- While Black, non-Hispanic individuals had a univariate HR of 2.09 (95% CI 1.33-3.29 p=0.001), multivariate HR was 1.59 (95% CI 0.92-2.74, p=0.093)
- ADI did not show a statistically significant difference upon univariate or multivariate analysis

#### Discussion

- No findings were present which suggested new or exacerbated racial disparities
- Additionally, neighborhood-level disparities did not modify these findings
- The evaluation is limited by sample size