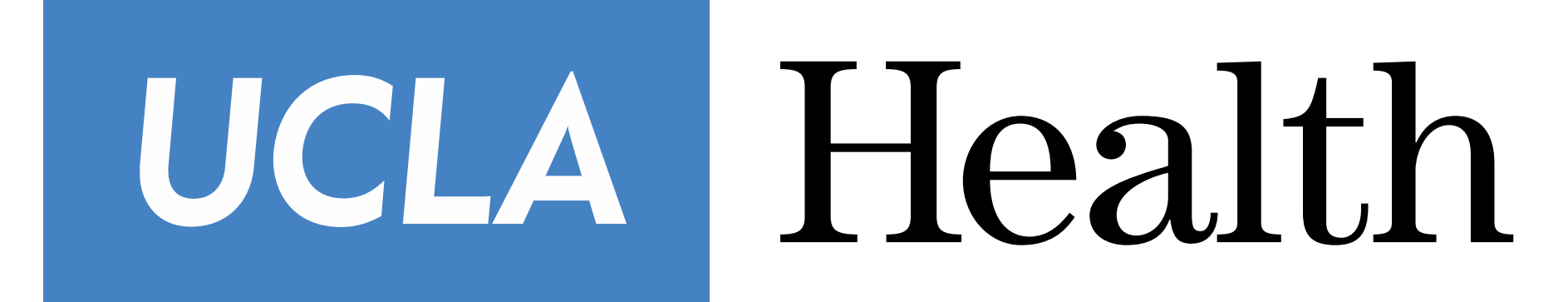




# ASSESSING THE IMPACT OF A MULTI-COMPONENT HEALTH SYSTEM INTERVENTION TO ADDRESS LOW COLORECTAL CANCER SCREENING PARTICIPATION IN PATIENTS WITH A FAMILY HISTORY OF COLORECTAL CANCER



Shailavi Jain MD<sup>1</sup>, Artin Galoosian MD<sup>2</sup>, Jayraan Badiee MPH<sup>2</sup>, Sarah Meshkat MHA<sup>3</sup>, Folasade P. May MD PhD MPhil<sup>1,2,4</sup>  
 [1] Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, California; [2] The Vatche and Tamar Manoukian Division of Digestive Diseases, Department of Medicine, David Geffen School of Medicine, University of California, Los Angeles, California; [3] Office of Population Health & Accountable Care, University of California, Los Angeles, California; [4] Division of Gastroenterology, Department of Medicine, VA Greater Los Angeles Healthcare System, Los Angeles, California

## BACKGROUND

- In the United States, 3-10% of individuals have a family history of colorectal cancer (CRC), which is associated with an increased risk for CRC.
- Population health strategies to increase CRC screening often exclude individuals with a family history, and interventions to improve screening uptake in this group are rare.
- We aimed to use findings from a patient survey study to improve screening rates among individuals in our healthcare system with a family history of CRC.

## OBJECTIVES

- To design and implement a tailored multi-component intervention to increase CRC screening uptake among individuals with a family history of CRC in our healthcare system.
- To evaluate the preliminary impact of the intervention on the number of colonoscopies ordered and scheduled in this population.

## METHODS

### Study Setting:

- Large academic healthcare system with a biannual mailed fecal immunochemical test (FIT) outreach program for individuals at average-risk for CRC.

### Study Population:

- Individuals excluded from the Fall 2021 mailed FIT outreach due to a family history of CRC and confirmed to be overdue for CRC screening based on electronic health record (EHR) documentation.

### Primary Care Provider (PCP) component of Intervention:

- PCPs received a reminder and pended colonoscopy order via EHR for each overdue patient.

### Patient component of Intervention:

- Patients received an EHR message and identical mailed letter that included education about familial risk and colonoscopy, and a prompt to schedule their screening colonoscopy.

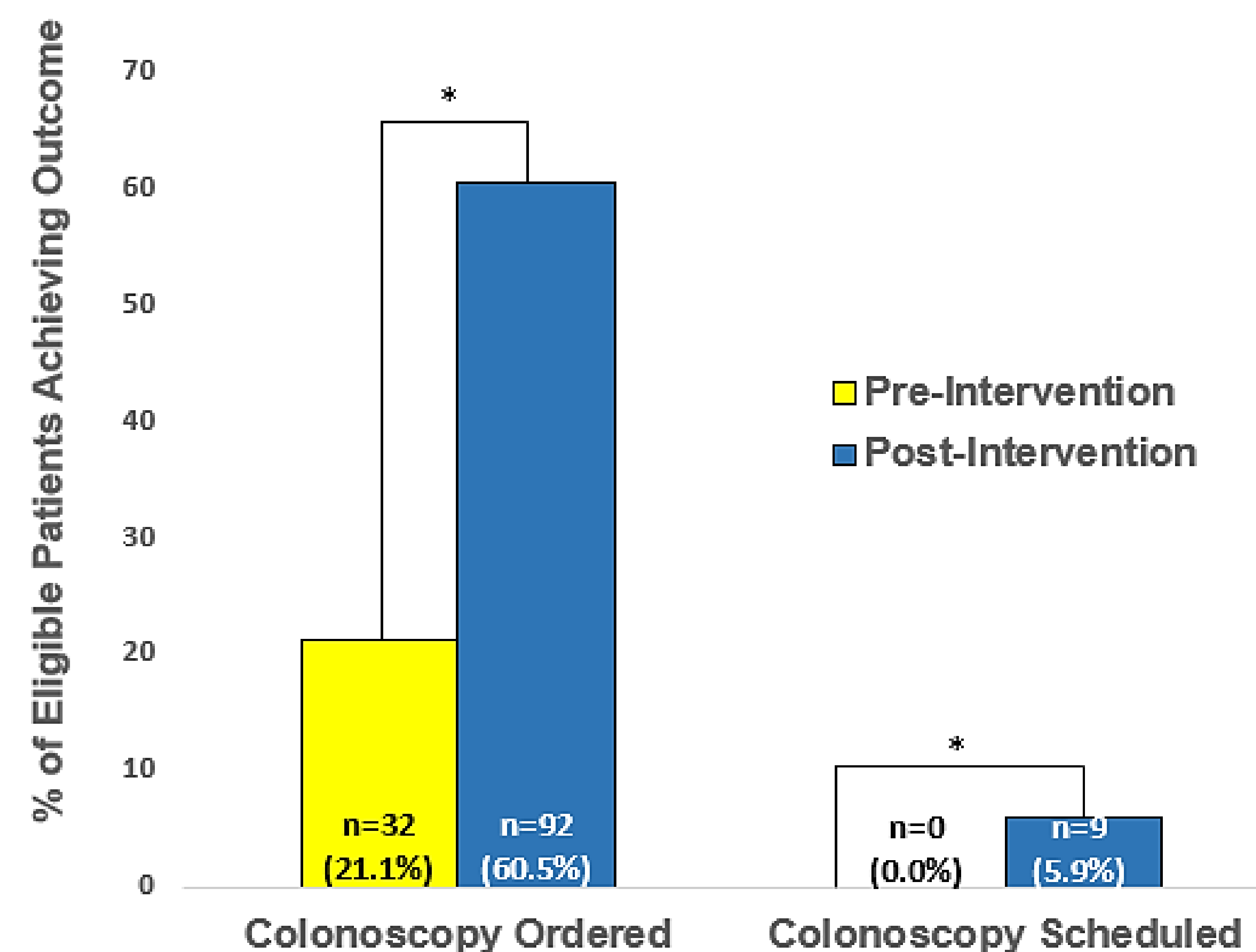
### Post-Intervention Analyses:

- Chart review at two months post-intervention to determine whether a colonoscopy was ordered and/or scheduled for each patient.
- Descriptive statistics to describe the study cohort and paired t-tests to compare study outcomes pre- and post-intervention.

Table 1: Study population characteristics, n= 152

Patient characteristic	Study Population
Age [years, mean (SD)]	61.3 (7.0)
Male Sex [n (%)]	50 (32.9)
Race/Ethnicity [n (%)]	
Non- Hispanic White	64 (42.1)
Non- Hispanic Black	15 (9.9)
Hispanic	20 (13.2)
Other Race/Ethnicity	53 (34.8)
Non-Hispanic Ethnicity [n (%)]	116 (76.3)
Private Insurance [n (%)]	149 (98.0)
Married [n (%)]	83 (54.6)
English Language Preference [n (%)]	147 (96.7)
Social Vulnerability Index [median (IQR)]	25.9 (11.8-47.8)
Current or Former Tobacco Use Disorder [n (%)]	38 (25.0)
Current or Former Alcohol Use Disorder [n (%)]	13 (8.6)
Body Mass Index ≥ 25 [n (%)]	100 (66.2)
Hemoglobin A1c ≥ 5.7 [n (%)]	75 (52.8)
Years since Last PCP Visit [median (IQR)]	1.01 (0.75-1.62)
Years since Last GI Visit [median (IQR)]	2.3 (2.5-9.2)
Breast Cancer Screening Up-To-Date [n (%)]	47 (47)
Cervical Cancer Screening Up-To-Date [n (%)]	61 (83.6)

Figure 1: Screening colonoscopies ordered and scheduled pre-intervention versus post-intervention, n= 152



## RESULTS

- 152 patients received the intervention (Table 1).
- Colonoscopies ordered increased from 32 (21.1%) to 92 (60.5%) from pre- to post-intervention (p< 0.0001) (Figure 1).
- Colonoscopies scheduled increased from 0 to 9 (5.9%) from pre- to post-intervention (p=0.002).
- One colonoscopy was completed.

## CONCLUSIONS

- Preliminary findings suggest that this multi-component intervention led to a **significant increase in both colonoscopies ordered and colonoscopies scheduled**.
- Population health strategies to increase provider and patient intention-to- screen may be successful in this high-risk population.

## FUTURE DIRECTIONS

- Determine colonoscopies ordered, scheduled, and completed six months post-intervention
- Evaluate strategies to improve provider documentation of degree and age of family members with a history of CRC.

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## CONTACT INFORMATION

Shailavi Jain, MD  
[ShailaviJain@mednet.ucla.edu](mailto:ShailaviJain@mednet.ucla.edu)  
 Folasade P. May MD, PhD, MPhil  
[FMay@mednet.ucla.edu](mailto:FMay@mednet.ucla.edu)



@ShailaviJainMD  
 @drfolamay  
 #MayLabUCLA  
 #UCLAGI