

STOP CRC Screen TO Prevent Colon Cancer



Strategies and Opportunities to STOP Colorectal Cancer in Priority Populations is a cluster-randomized pragmatic study designed to increase rates of colorectal cancer (CRC) screening in safety-net primary care practices and decrease CRC screening disparities in priority populations (minority racial/ethnic and low income individuals).

The STOP CRC pilot raised colorectal cancer screening rates from 1% in UC to 38% in intervention arms. The pilot measured screening rates in three clinics assigned to either: (1) usual care (2) an automated, EHR-linked program for mailing FIT kits to patients due for CRC screening (Auto Intervention); or (3) a higher-intensity program consisting of a mailed FIT kit plus a linguistically and culturally tailored telephone intervention (Auto Plus Intervention).

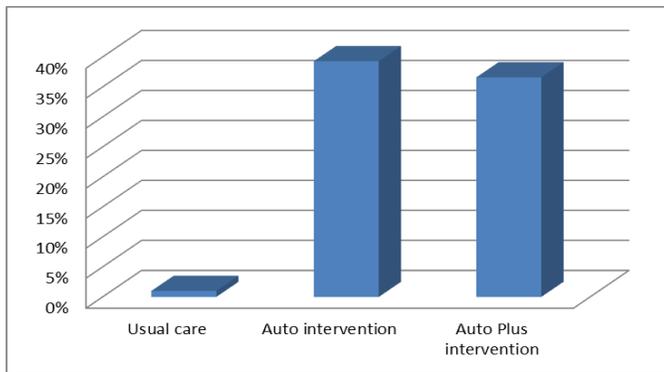
Gloria D. Coronado, PhD
Kaiser Permanente Center for Health Research

Beverly Green, MD, MPH
Group Health Research Institute

STOP CRC Screen TO Prevent Colon Cancer

The Pilot

The mailed interventions were designed to encourage patients to perform home-based FIT testing and included pictographic instructions and return postage. The higher intensity program included mailings plus motivational phone calls. The study leveraged an EHR-based decision support tool that works within Epic. The tool uses real-time data to identify patients due for CRC screening and track CRC-related outcomes.



Registry

We used Reporting Workbench, a registry tool within Epic, to track eligible patients, project mailings, reason for declining participation, phone encounters, and outgoing phone call attempts, and completed FITs.

Patients aged 50-74 eligible for STOP CRC				
	Auto Clinic		Auto Plus Clinic	
	N	%	N	%
Introductory letter	112		101	
Mailed FIT kit	109		97	
Reminder postcard	95		84	
Live phone call*	0		30	
Completed FIT	40	39.3**	36	36.6**

*live phone call used motivational interviewing
** based on N FIT kits mailed

Inclusion/Exclusion

Minimal criteria were used to select patients who needed screening. Eligible participants were ages 50-74, had a visit in the participating safety net clinic in the prior year, had a viable address, were not up-to-date with CRC screening recommendations, and had no history of colorectal disease.

Pilot Clinic Audit

We reviewed charts from 100 pilot participants. Among the 80 *eligible* patients whose charts we audited, 89% were correctly included. For the 20 *ineligible* patients whose charts we audited, 85% had evidence for exclusion in the chart.

Follow-up Colonoscopy

A particular challenge to follow-up of positive CRC screening is access to colonoscopy, and the degree to which it is covered by the patients' insurance. In the Portland area, PANOW links underinsured patients, including undocumented individuals, to specialists volunteering to provide services such as follow-up colonoscopy after a positive FIT. Other regions are served by community hospitals that provide colonoscopy on a sliding fee scale. Among the 76 patients screened, 7 had a positive result, and 6 successfully completed a colonoscopy.

Patients with a positive FIT result			
	Positive FIT		Colonoscopy completed
	N	%*	N
Auto Clinic	5	11.4	4
Auto Plus Clinic	2	5.6	2

*Percentage of completed FITs

Pilot cost

Pilot costs were estimated for labor (e.g. motivational calls) and non-labor costs (e.g. mailings and FIT processing costs), and costs to develop the EHR tool. The estimated costs to develop the EHR tools and deliver the program were \$23,320, and \$4,274, respectively.

STOP CRC Screen TO Prevent Colon Cancer

Qualitative Analysis: Patient interviews

We gathered qualitative data from patients to understand barriers to completing the FIT and possible enhancements to the STOP CRC program. We conducted 20 phone interviews (10 in English and 10 in Spanish) among patients who were mailed a FIT kit but did not return it for processing. The most common reasons for not completing the FIT were fear of the results or cost of the test, concerns about mailing the completed test, and not having received the test in the mail.

English Language Speakers		Spanish Language Speakers	
2	Fear of results, cost, or follow-up	7	
1	Did not receive FIT kit	6	
6	Concern about mailing fecal matter	0	
4	Busy / forgetful	0	
2	Other health conditions	2	
3	Provider encouraged colonoscopy	0	
2	Prefer conversation with provider	1	
0	Living out of country / traveling	2	
2	Not as good as colonoscopy	0	
2	Unemployed / financial	0	
1	Unnecessary / waste of resources	0	
0	Confusion about why receiving FIT kit	1	
0	Unsure if FIT kit is free	1	

Qualitative Analysis: Clinic Staff Interviews

We interviewed nine clinic personnel to understand experiences of the STOP CRC program; its challenges, successes, and the lessons learned. The primary success was that patients completed the test. Primary challenges were the minimal training in use of the tools and the time it took to order the lab tests and prepare the FIT kits.

Successes of STOP program	Challenges of STOP program
<ul style="list-style-type: none"> Patients completed the test 	<ul style="list-style-type: none"> More complex than anticipated
<ul style="list-style-type: none"> Skilled team to implement project 	<ul style="list-style-type: none"> Took more time than anticipated (to place orders)
<ul style="list-style-type: none"> Workflows were easy to implement 	<ul style="list-style-type: none"> Roles were less clear than desired
<ul style="list-style-type: none"> Follow-up colonoscopies were guaranteed 	<ul style="list-style-type: none"> More training was needed
<ul style="list-style-type: none"> Few calls from patients with questions 	
<ul style="list-style-type: none"> Providers were supportive of program 	

Acknowledgements

STOP CRC is supported by the NIH under Award Number UH2/UH3 AT007782. STOP CRC is a partnership among KP Center for Health Research, Group Health Research Institute, OCHIN, and several federally sponsored health centers.