Improving Colorectal Cancer Screening in Community Clinics: STOP CRC

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Why colon cancer screening matters...

- Colon cancer is a leading cause of cancer death;
- Nearly 1/3 of age-eligible adults in the US are not up-to-date;
- Colon cancer can be prevented; survival is
 - 93% for Stage 1
 - 8% for Stage IV;
- Screening is effective, inexpensive, easy to do;
- Unscreened generally receive care at community clinics.

Percentage up-to-date with CRC screening



Colorectal Cancer statistics for Oregon

Stage of CRC detection*

CRC screening disparity*

Colorectal cancer, stage at diagnosis, OR 2010



*Source: Oregon State Cancer Registry



Colorectal cancer screening, OR 2010-11

*Source: Behavioral Risk Factor Surveillance Survey

Colorectal cancer screening options

- Average-risk individuals aged 50 -75*:
 - High-sensitivity fecal occult blood test (FOBT), including fecal immunochemical tests (FIT);
 - Colonoscopy every 10 years;
 - Sigmoidoscopy every 5 years plus interval FOBT/FIT.
- The Affordable Care Act (ACA) mandates that screening tests recommended by the USPSTF be covered with no out-of-pocket costs.

FIT as a viable option

- No dietary or medication restrictions; usually fewer samples collected; requires colonoscopy follow-up
- Patients prefer fecal testing over colonoscopy, in studies using data from a given year;
- Some geographic regions have limited colonoscopy capacity, fecal testing allows for 'risk stratification';
- "I will not get a colonoscopy unless I believe something is wrong"; fecal testing can motivate patients to get colonoscopy
 - Rates of first-line colonoscopy screening: ~ 40% (without reminders)
 - Rates of follow-up diagnostic colonoscopy: 60 90%

FIT reduces colon cancer mortality

Fecal testing can reduce colon cancer mortality by 33%; Fecal testing and colonoscopy are equally effective at reducing colon cancer mortality; Number Needed to Scope to find an advanced adenoma*: Colonoscopy screening scenario: 47.4 FIT-based screening scenario: 8.3

Colonoscopy screening

FIT-based screening



Free FIT vs. Free colonoscopy program

- Study included uninsured patients aged 54-64 at the John Peter Smith Health Network, a safety net health system.
- Randomized patients into 3 groups:
 - Free FIT (n = 1593)
 - Free colonoscopy (n = 479)
 - Usual care (n = 3898)



Gupta et al. JAMAIM 2013

Low colonoscopy access impedes FIT

- "...I hear a lot of frustration from doctors that want to have their patient have the colonoscopy and it's just not happening. It's really an expensive exam..." (Nurse Practitioner)
- "Even if you have insurance ... it takes about nine months for a routine colonoscopy in this community. Usually, to get a colonoscopy with any speed, you need some reason." (Medical director)

STOP CRC AIMS

Phase 1 (1 year)



Phase 2 (4 years)

- Conduct a real-world trial in 26 clinic sites (involving 8 health centers) in Oregon and California;
- Develop and implement tools that will allow program to be sustainable; conduct costeffectiveness assessment;
- Understand how to efficiently deliver program (using PDSAs);
- Over 2 years: mail 30,000 kits; Identify ~30 new cancers; prevent many more, through removal of pre-cancerous polyps.

Clinic partnership

- Founded in 1975
- Provides over 132,000 office visits to 34,000+ patients per year in Washington and Yamhill Counties
- Operates 4 primary care clinics, 3 dental offices, and 2 schoolbased health centers.

	Clinic	N Patients aged 50- 74	% Hispanic aged 50- 74	% aged 50-74 who obtained FIT or FOBT	
	#1	898	73	3.7	-
	#2	1562	52	3.9	_
	#3	1495	31	5.2	
	#4	1235	38	7.6	

Virginia Garcia Memorial Health Center



STOP CRC Pilot Findings

STOP CRC Intervention Activities and Outcomes

	<i>Auto</i> Intervention	Auto Plus Intervention
Letters mailed	112	101
FIT kits mailed	109	97
Reminder postcards mailed	95	84
Reminder call delivered	NA	30*
FIT kits complete	44 (39.3%)	37 (36.6%)
Positive FIT result	5 (12.5%)	2 (5.7%) attempts

Fecal test completion rates*



*Auto and Auto Plus as percentage of patients mailed a FIT kit.

Coronado et al. BMC Cancer 2014

Participating clinics*

Open Door Community Health Centers (4) Multnomah County Health Department (6) La Clinica del Valle (3) Mosaic Medical (4) Virginia Garcia Memorial Health Center (2) Community Health Center (CHC) Medford (3) Benton County Health Department (2) Oregon Health & Science University (OHSU) (2)

*Overall: colonoscopy screening in past 10 years: 5%; fecal testing in past year: 7.5%



Findings to-date from Virginia Garcia









Conclusion

- Colorectal cancer screening saves lives;
- Fecal testing can lower colon cancer mortality;
- Screening rates are low, and particularly low in diverse racial/ethnic groups and person of low socioeconomic advantage;
- A direct mailed approach may boost screening rates in 'hard-to-reach' populations.

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