



Improving Colorectal Cancer Screening in Community Clinics: STOP CRC

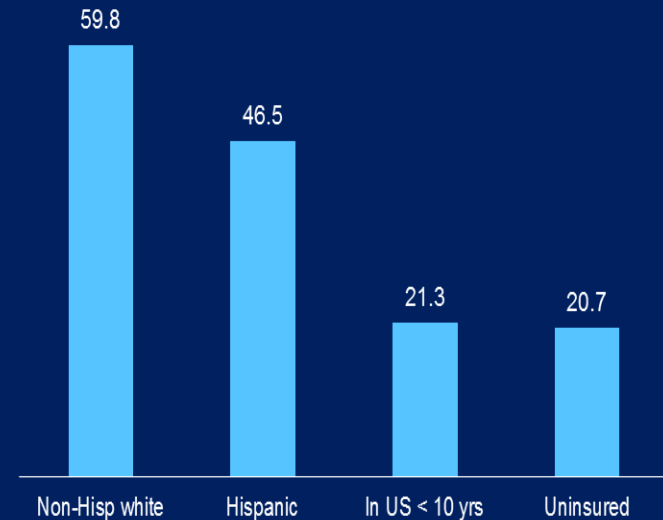
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Why colon cancer screening matters...

- 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.

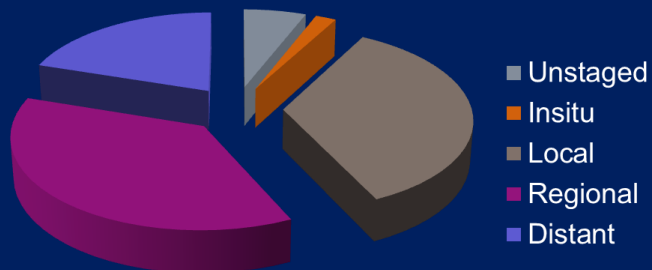
Percentage up-to-date with CRC screening



Colorectal Cancer statistics for Oregon

Stage of CRC detection*

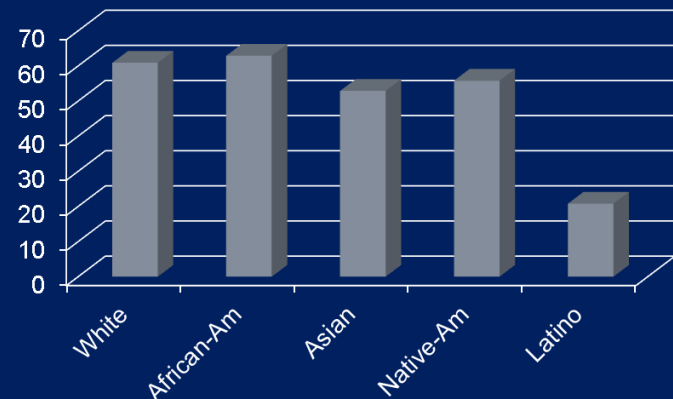
Colorectal cancer, stage at diagnosis, OR 2010



*Source: Oregon State Cancer Registry

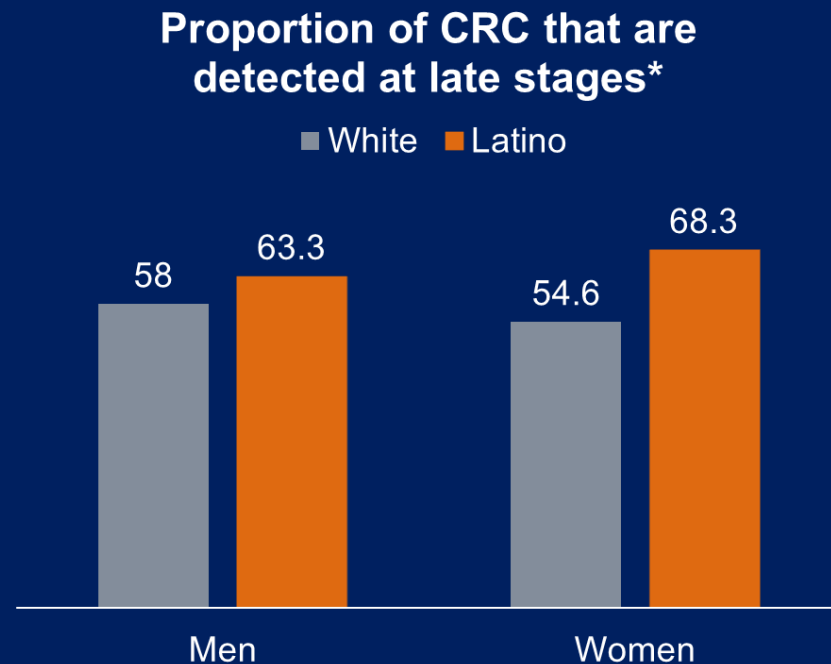
CRC screening disparity*

Colorectal cancer screening, OR 2010-11



*Source: Behavioral Risk Factor Surveillance Survey

Stage of diagnosis disparity



*Source: Oregon state cancer registry



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;

*based on US Preventive Services Task Force Recommendations

Comparison between FOBT and FIT

■ FOBT

- 3-sample test
- Dietary and medication restrictions
- Tests for any type of blood in the stool
- Requires colonoscopy follow-up

■ FIT

- 1- sample, 2-sample, or 3-sample test
- No dietary or medication restrictions
- Tests for human blood in the stool
- Requires colonoscopy follow-up



FIT as a viable option

- 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%

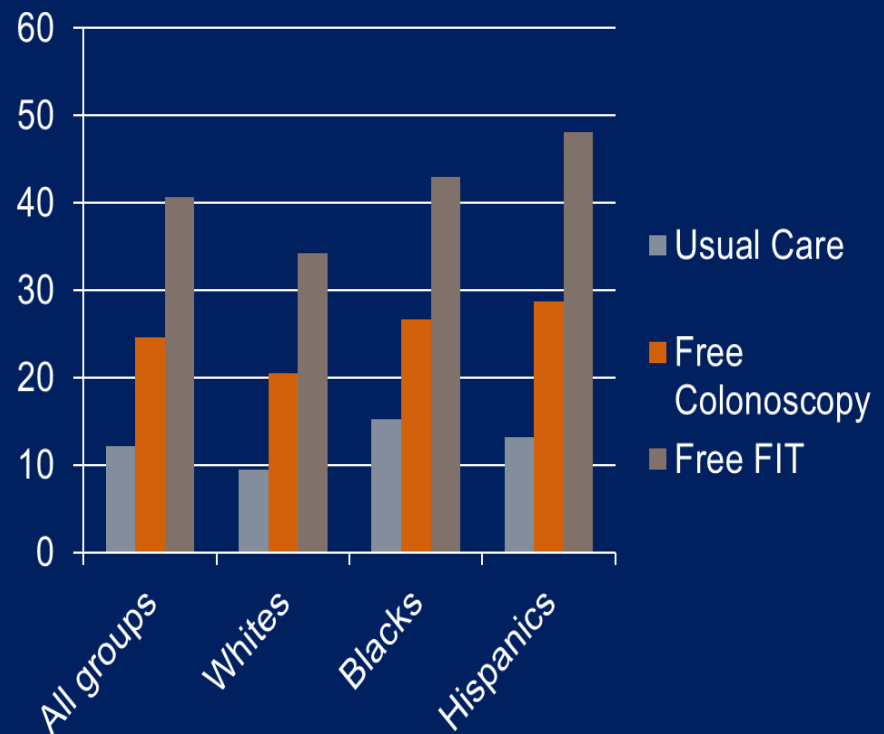


FIT reduces colon cancer mortality

- Fecal testing can reduce colon cancer mortality by 33%;
- Studies have shown that fecal testing and colonoscopy are equally effective at reducing colon cancer mortality;
- Number Needed to Scope to find an advanced adenoma:
 - Females aged 50-59
 - Colonoscopy screening scenario: 47.4
 - FIT-based screening scenario: 8.3

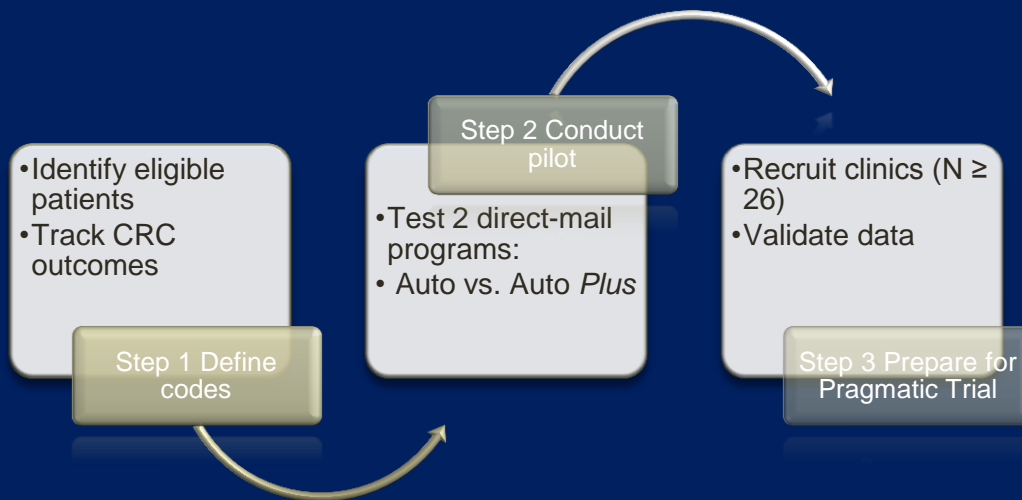
Free FIT vs. Free colonoscopy program

- 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)



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 cost-effectiveness 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 school-based health centers.

Virginia Garcia Memorial Health Center



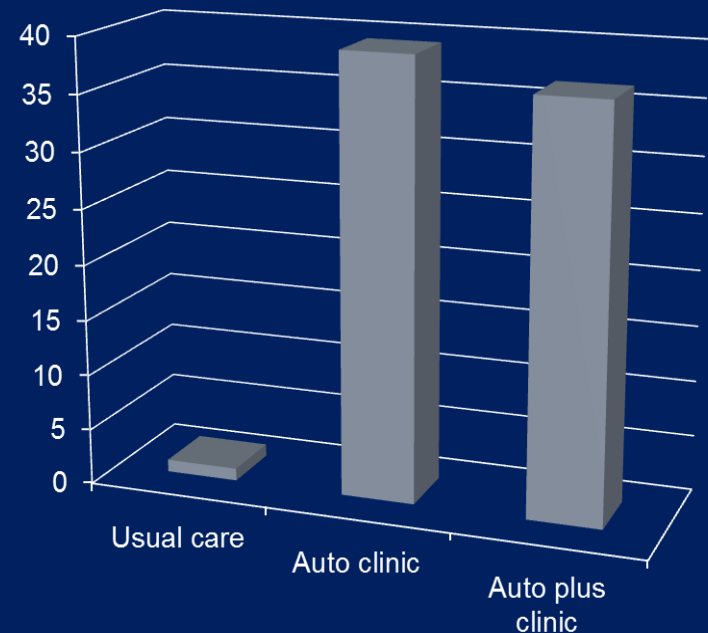
Clinic	N Patients aged 50-74	% Hispanic aged 50-74	% aged 50-74 who obtained FIT or FOBT
#1	898	73	3.7
#2	1562	52	3.9
#3	1495	31	5.2
#4	1235	38	7.6

STOP CRC Pilot Findings

STOP CRC Intervention Activities and Outcomes

	<i>Auto Intervention</i>	<i>Auto Plus Intervention</i>
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%)

Fecal test completion rates*



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

STOP CRC intervention

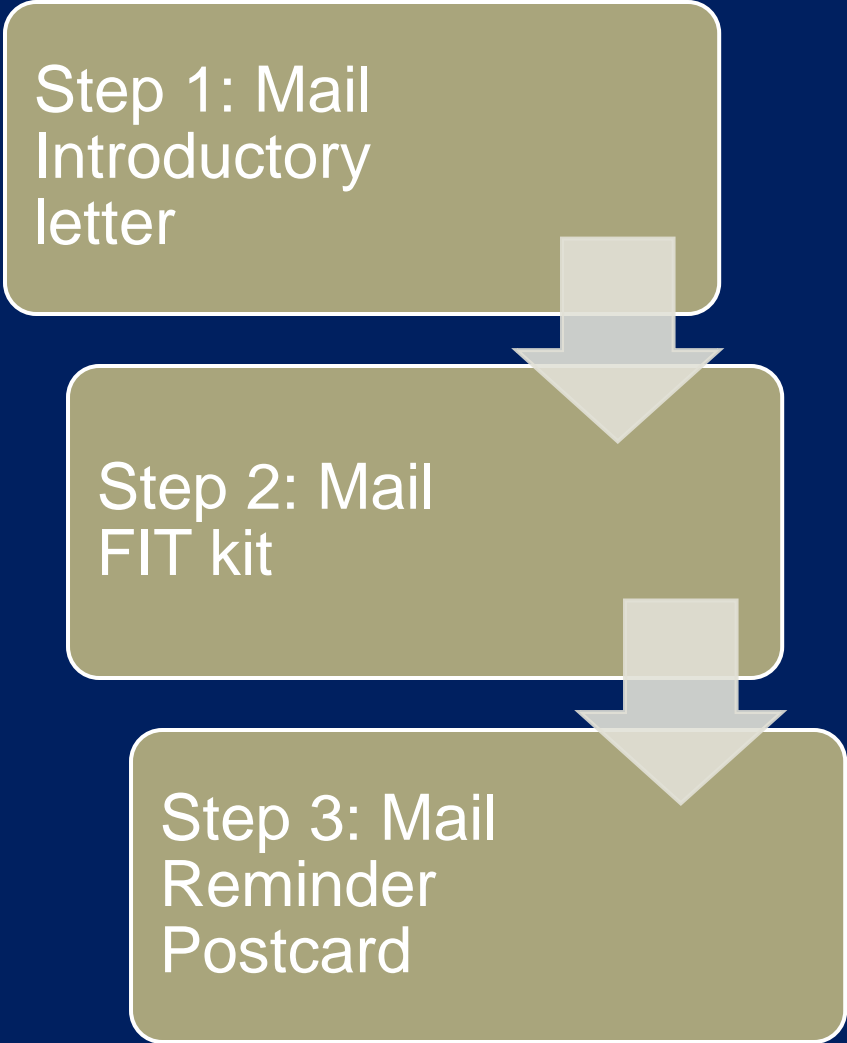
EMR tools in Reporting Workbench,
driven by Health Maintenance;

Step-wise exclusions for:

- Invalid address
- Self-reported prior screening
- Completion of CRC screening

Improvement cycle (e.g. Plan-Do-
Study-Act)

Step 1: Mail
Introductory
letter



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graph TD; A[Step 1: Mail Introductory letter] --> B[Step 2: Mail FIT kit]; B --> C[Step 3: Mail Reminder Postcard];
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Step 2: Mail
FIT kit

Step 3: Mail
Reminder
Postcard

Participating clinics*

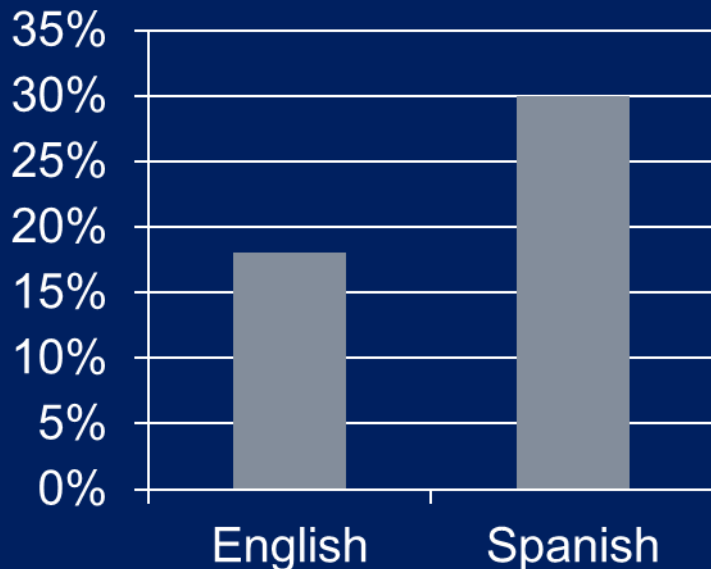
- Open Door Community Health Centers (4)
- Multnomah County Health Department (6)
- La Clinica del Valle (3)
- Mosaic Medical (4)
- Virginia Garcia Memorial Health Center (2)
- Community Health Center (CHC) Medford (3)
- Benton County Health Department (2)
- Oregon Health & Science University (OHSU)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

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

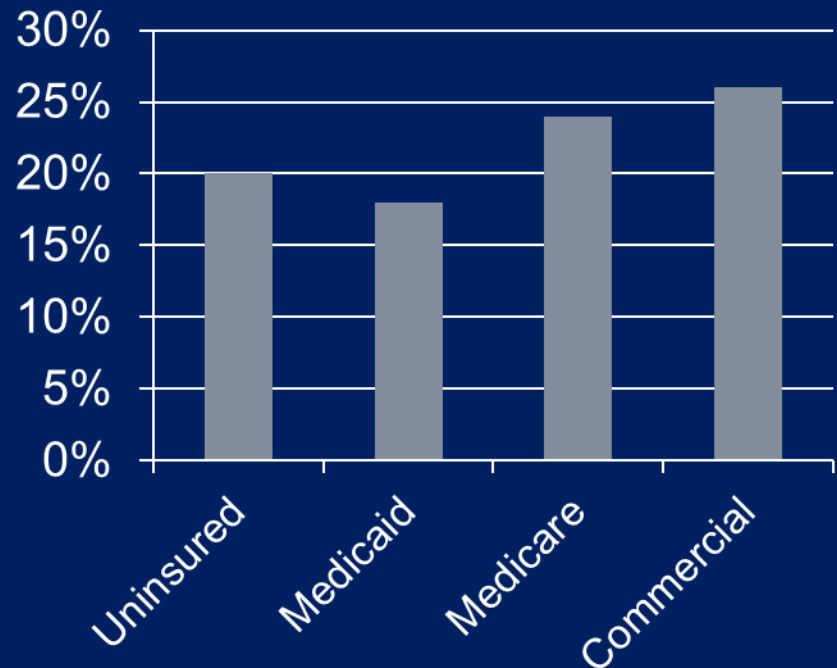


Findings to-date from Virginia Garcia

FIT Return Rate, by language (n = 141)



FIT Return Rate, by Payer (n = 141)



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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