

An Overview and Discussion of Evidence-based Interventions to Increase Colorectal Cancer (CRC) Screening: Translating Research into YOUR Clinic and Community Setting

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May 4, 2016

Who We Are

Gloria Coronado, PhD



Melinda Davis, PhD



Four key talking points

- To achieve “80% by 2018” for CRC screening you need an intervention (or a few) and an implementation strategy.
- Evidence based interventions (EBIs) to improve CRC screening exist.
- Many toolkits/resources are available to help users (e.g., hospitals, primary care doctors, employers, community organizations, insurers) implement EBIs to improve CRC screening.
- Strategies (resources/approaches) are needed to support implementation and adaptation of EBIs based on your local context.

The Challenge

- 45% of care is not based on available evidence (McGlynn, 2003; Grol 2003)
- It takes an average of 17 years to get new knowledge generated by RCTs to be incorporated into practice; application is highly uneven (Balas & Boren, 2000)



FELIX HELLOR 2012

ADAPTED FROM AN ORIGINAL BY S. HELLOR



SIPRESS

"Daddy works in a magical, faraway land called Academia."

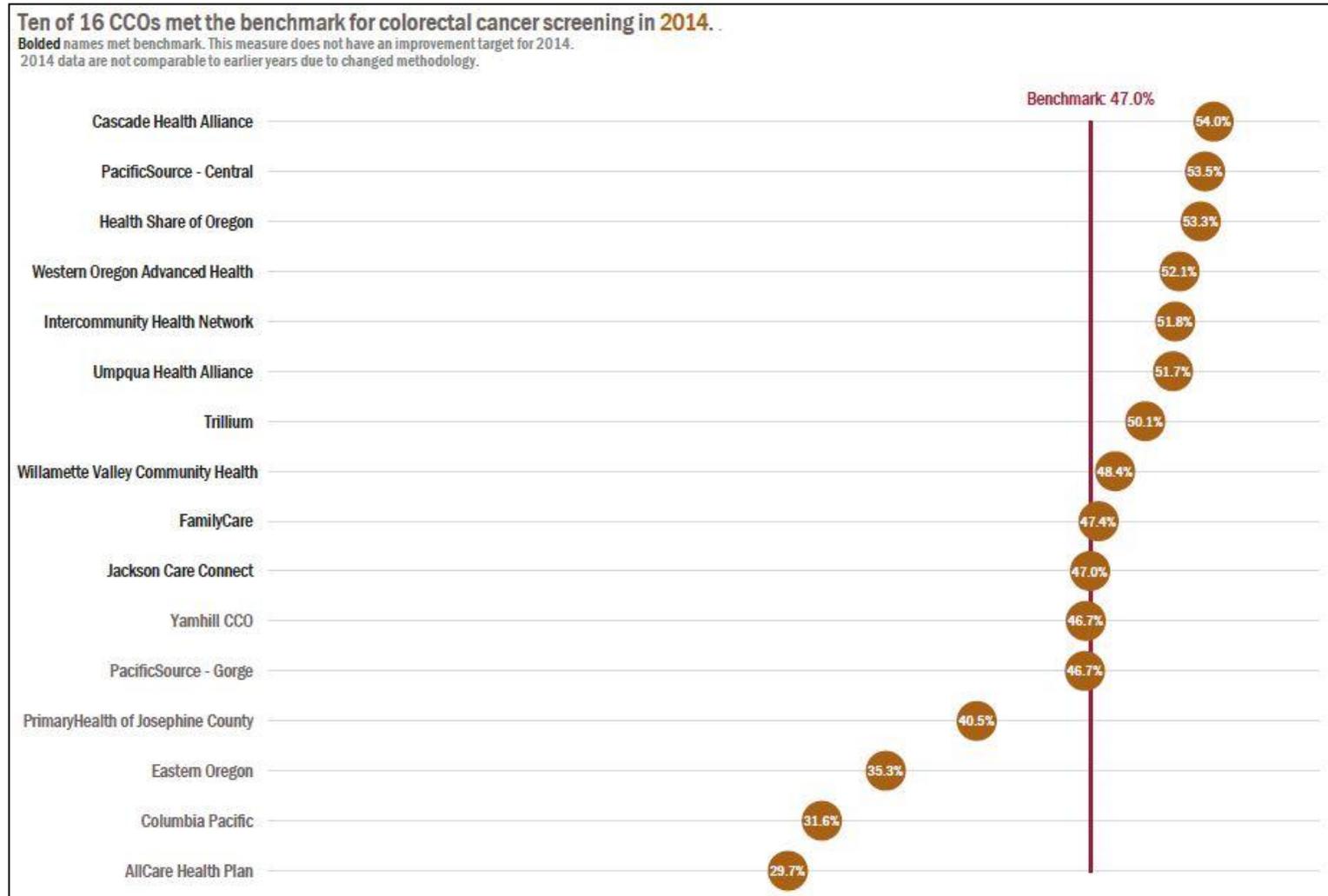
“The barrier to reducing the number of deaths from colorectal cancer is not a lack of scientific data but a lack of organizational, financial, and societal commitment.”

Danial K. Podolsky, MD (NEJM 7/20/00)

Poll: What “primary” affiliation brought you here today?

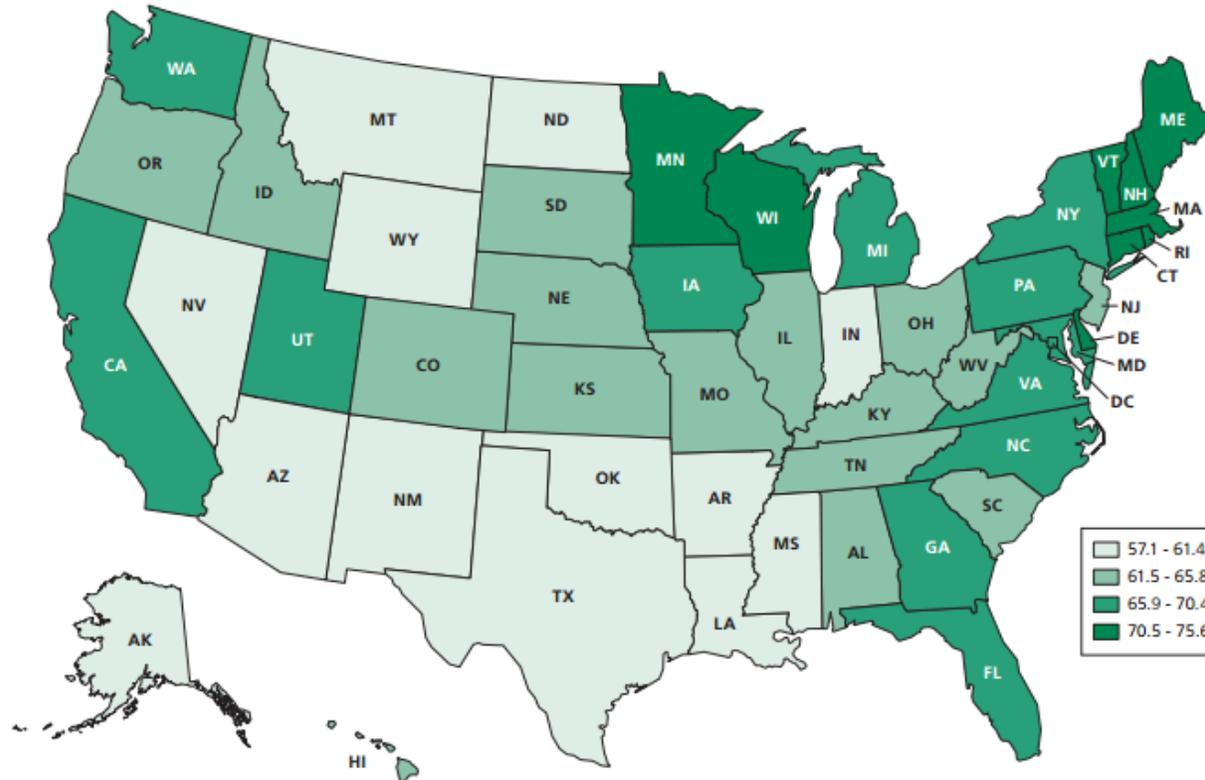
- Health Insurance Plan
- Coordinated Care Organization
- Primary Care Clinic
- Researcher/Academic
- Other

10 of 16 CCOs met the 47% Benchmark for CRC Screening in Medicaid Members in 2014



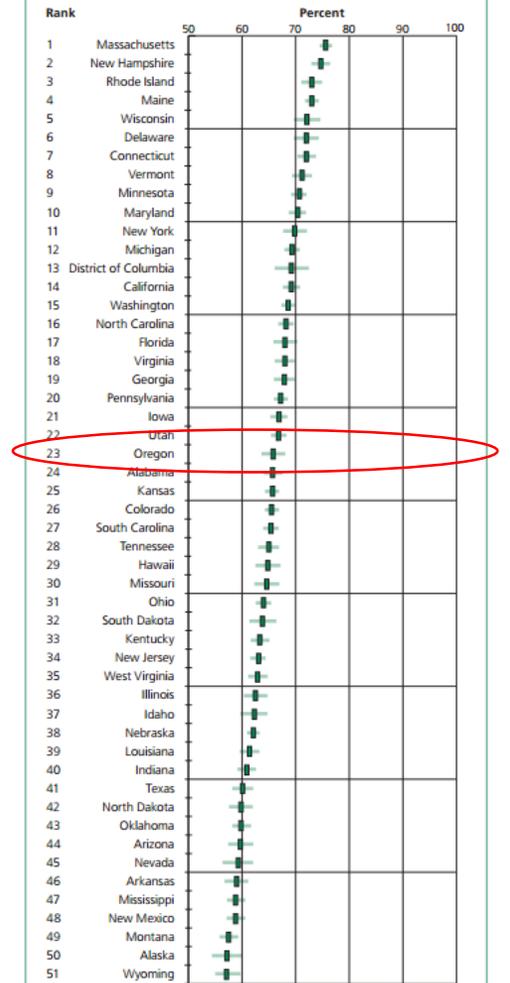
Oregon Ranks 23rd for CRC Screening

Colorectal Cancer Screening* Prevalence (%) among Adults Age 50 Years and Older by State, 2012



*Either a fecal occult blood test within the past year or a sigmoidoscopy or colonoscopy within the past 10 years (includes diagnostic exams).
Source: Behavioral Risk Factor Surveillance System Public Use Data Tapes 2012, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.

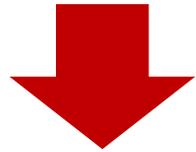
Figure 10. Colorectal Cancer Screening* Prevalence among Adults Age 50 Years and Older by State, 2012



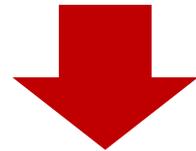
*Either a fecal occult blood test in the past year or a sigmoidoscopy or colonoscopy in the past 10 years.
Source: Behavioral Risk Factor Surveillance System Public Use Data Tapes 2012, National Center for Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.
 American Cancer Society, Surveillance Research, 2014

Oregon CRC Roundtable – April 22, 2016

- CRC screening saves lives. Multiple effective screening options exist.



- We have an extraordinary opportunity to achieve our goal of 80% colon cancer screening rate by 2018.



- Sign the National Colorectal Cancer Roundtable (NCCRT) pledge today at <http://nccrt.org/tools/80-percent-by-2018/80-percent-by-2018-pledge/>



21

Community health
centers are at 80%

39

Health plans
are at 80%

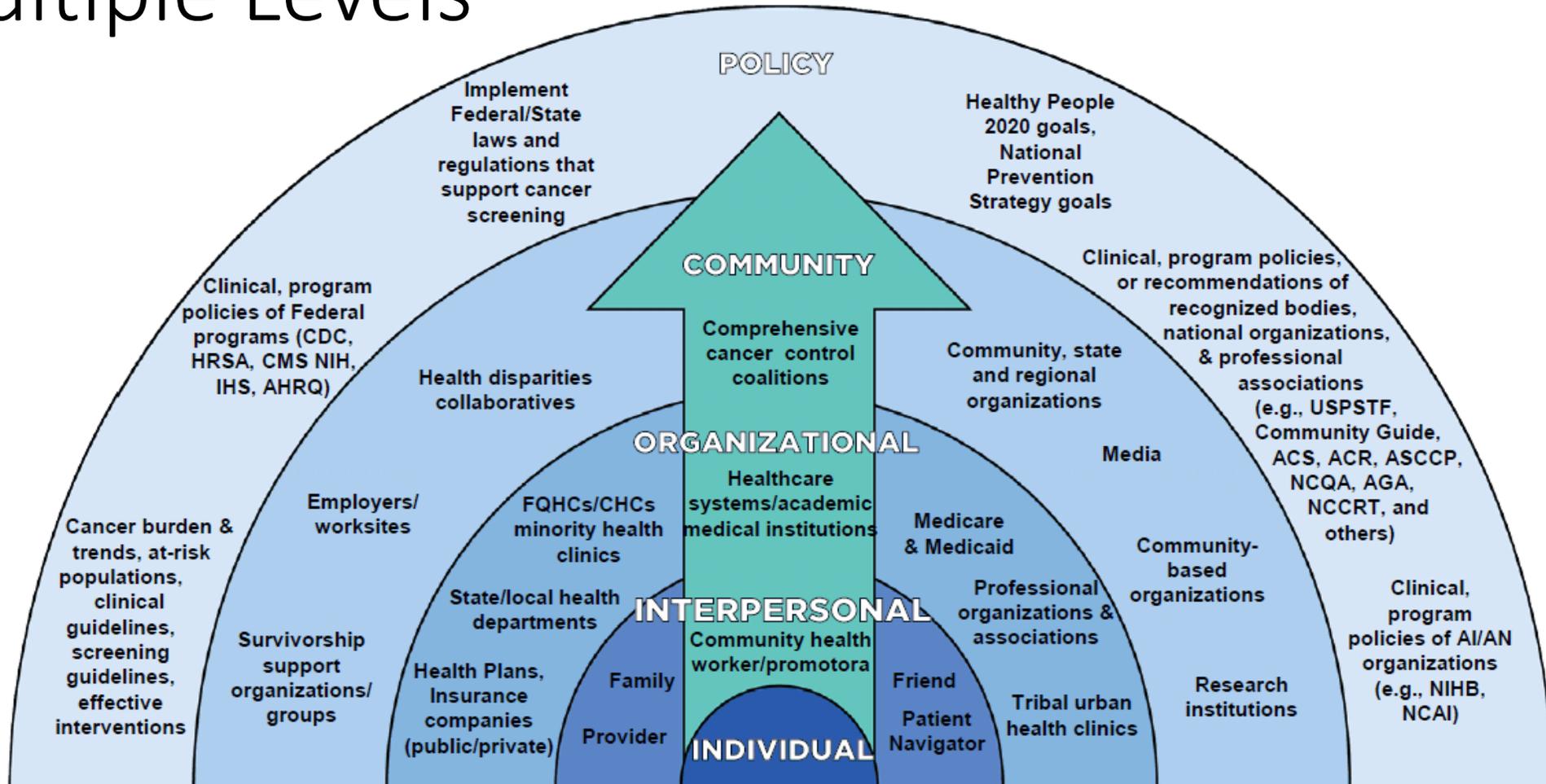
“Can you share a bit about what strategies are most effective in improving screening rates?”

Review: USPSTF Recommendations for CRC Screening

- Average-risk individuals aged 50 -75*:
 - High-sensitivity fecal occult blood test (FOBT), including fecal immunochemical tests (FIT) annually plus colonoscopy for abnormal test results;
 - Colonoscopy every 10 years;
 - Sigmoidoscopy every 5 years (*10 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.
- Preferred ACS screening message: “population screening with FIT and follow-up on positives with colonoscopy.”

*based on US Preventive Services Task Force (USPSTF) Recommendations

Screening Behaviors Are Influenced by Multiple Levels



*Some groups may fit within multiple levels of this model.

Frequent targets for interventions to improve CRC screening in the US*

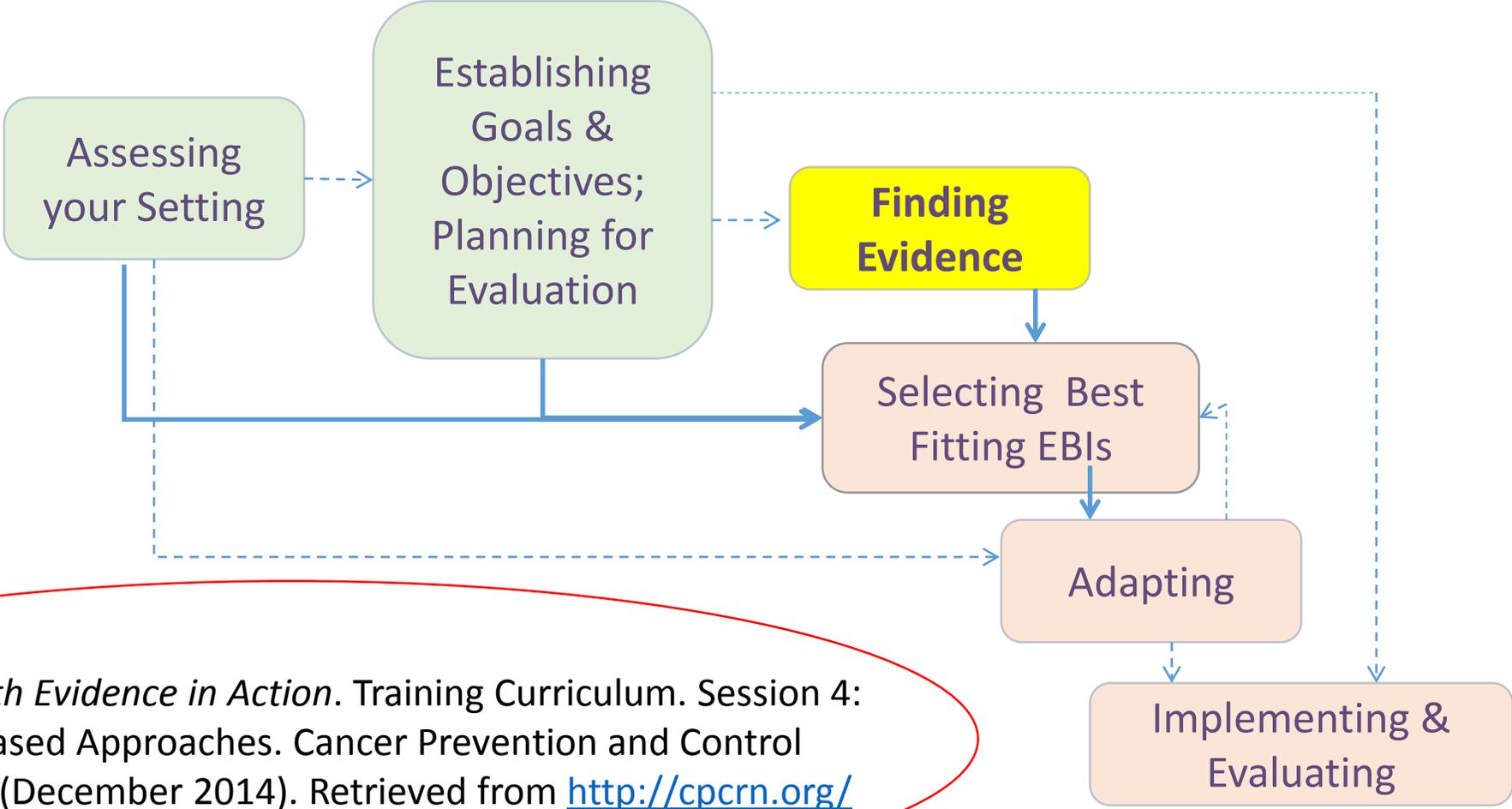
- 1) Screening at the point of care
- 2) Population based approach organized by single practice, group practice, or health delivery system
- 3) Public health approach – screening invitations extended to regional public outside of medical delivery

*Efforts may occur individually or in combination

Challenges Moving Evidence into “Real World”

- Many studies test multiple intervention elements; exact combination may not be feasible here (cost, resources, setting)
- Patient characteristics and recruitment methods vary
- Articles provide limited detail on:
 - Context – What was it like BEFORE the intervention? What EHR system was used (and how)? Who paid for the intervention?
 - Implementation strategies – Who did what and when? How would that work here?
- Publications and recommendations may lag behind clinic/community needs

Putting Evidence into Action....



Putting Public Health Evidence in Action. Training Curriculum. Session 4: Finding Evidence-based Approaches. Cancer Prevention and Control Research Network. (December 2014). Retrieved from <http://cpcrn.org/>

“If we want more evidence-based practice, we need to create more practice-based evidence.”

Larry Green, UCSF

Locating Evidence-based Interventions & Implementation Resources





Cancer Control P.L.A.N.E.T. portal provides access to data and resources that can help planners, program staff, and researchers design, implement and evaluate evidence-based cancer control programs.

DATA

[State Cancer Profiles](#) (CDC, NCI) ⓘ

COLLABORATION

[Research to Reality](#) (NCI) ⓘ

RESEARCH SYNTHESIS

[Guide to Community Preventive Services](#)
(Federally Supported) ⓘ

[U.S. Preventive Services Task Force](#)
(Federally Supported) ⓘ

[Evaluation of Genomic Applications
in Practice and Prevention \(EGAPP\)](#) ⓘ ⓘ

[Additional Research Evidence Reviews](#)

PROGRAMS

[Research-tested Intervention Programs \(RTIPs\)](#) ⓘ

TOPICS

- Breast Cancer
- Cervical Cancer
- Colorectal Cancer
- Diet / Nutrition
- HPV Vaccination
- Informed Decision Making
- Obesity
- Physical Activity
- Public Health Genomics
- Sun Safety
- Survivorship/Supportive Care
- Tobacco Control

WHAT'S NEW

[HPV Vaccination](#)
[State Cancer Profiles 2012 cancer data](#) ⓘ
[Additional Resources](#)

E-NEWSLETTER

[Sign up](#) ⓘ to receive monthly updates on Cancer Control P.L.A.N.E.T.

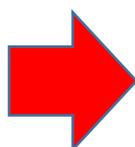
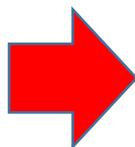
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Search

New Publications: [Behavioral Screen Time Interventions Prevent Childhood Obesity](#)

Interventions have been shown to reduce sedentary screen time among children. Peer-reviewed journal publication now available online.

1 2 3 4

Task Force

2016 Meetings

June 22-23
October 26-27

Annual Reports to Congress

Text Size: [S](#) [M](#) [L](#) [XL](#)

✉ Get Email Updates

Submit your email address to get updates on The Community Guide topics of interest.

Your email address

Submit

[What's this?](#)

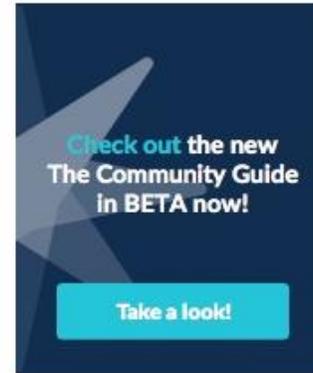
Topics

- | | | | |
|---|---|--------------------------------------|------------------------------------|
| Adolescent Health | Diabetes | Motor Vehicle Injury | Social Environment |
| Alcohol - Excessive Consumption | Emergency Preparedness | Nutrition | Tobacco |
| Asthma | Health Communication | Obesity | Vaccination |
| Birth Defects | Health Equity | Oral Health | Violence |
| Cancer | HIV/AIDS, STIs, Pregnancy | Physical Activity | Worksite |
| Cardiovascular Disease | Mental Health | | |

What is The Community Guide?

The Guide to Community Preventive Services is a free resource to help you choose programs and policies to improve health and prevent disease in your community. Systematic reviews are used to answer these questions:

- Which program and policy interventions have been proven effective?
- Are there effective interventions that are right for my community?
- What might effective interventions cost; what is the likely return on investment?



<http://www.thecommunityguide.org/index.html>

Home » Topics » Cancer

Cancer

Screening

+ [Client-Oriented](#)

+ [Provider-Oriented](#)

Skin Cancer

+ [Education and Policy](#)

+ [Parents and Caregivers](#)

+ [Community-Wide](#)

+ **Informed Decision Making**

Publications

Cancer Prevention and Control

- Cancer is the second leading cause of death in the United States, responsible for an average of 1,575 deaths each day (CDC).
- In 2010, the cost of medical care for cancer was an estimated \$12.7 billion in the United States (National Cancer Institute).
- More systematic efforts to expand use of established screening tests, reduce tobacco use and obesity, and improve diet and physical activity could prevent much of the suffering and death from cancer.

Community Guide Systematic Reviews

The Community Guide includes systematic reviews of interventions in the following areas:

Increasing Breast, Cervical, and Colorectal Cancer Screening

[Client-Oriented Interventions](#) (e.g., group education, reducing out-of-pocket costs)

[Provider-Oriented Interventions](#) (e.g., reminders, incentives)

Home » Topics » Cancer » Screening: Client-Oriented

Cancer

Screening

- [Client-Oriented](#)

Summary of Findings

[Client Reminders](#)

[Client Incentives](#)

[Small Media](#)

[Mass Media](#)

[Group Education](#)

[One-on-One Education](#)

[Reducing Structural Barriers](#)

[Reducing Out-of-Pocket Costs](#)

[RTIPs](#)

[Supporting Materials](#)

[Archived Reviews](#)

+ [Provider-Oriented](#)

Skin Cancer

+ [Education and](#)

Cancer Prevention and Control: Client-Oriented Interventions to Increase Breast, Cervical, and Colorectal Cancer Screening

Raising Awareness



BREAST, COLORECTAL & CERVICAL CANCER

Interventions for clients either provide education to increase cancer screening or make it easier for clients to be screened. Results are reported separately for breast, cervical, and colorectal cancer screening because routine screening recommendations differ by age and sex.

Task Force Recommendations and Findings

This table lists interventions reviewed by the Community Guide, with a summary of the Task Force finding (definitions of findings). Click on an underlined intervention title for a summary of the review, and where available, [Research-tested Intervention Programs \(RTIPs\)](#).

Interventions	Breast Cancer	Cervical Cancer	Colorectal Cancer
Client Reminders	Recommended July 2010	Recommended July 2010	Recommended July 2010
Client Incentives	Insufficient Evidence July 2010	Insufficient Evidence July 2010	Insufficient Evidence July 2010
Small Media	Recommended December 2005	Recommended December 2005	Recommended December 2005
Mass Media	Insufficient Evidence October 2009	Insufficient Evidence October 2009	Insufficient Evidence October 2009

Take a look!

Partners

What Interventions Increase CRC Screening?

Intervention	Recommended for stool tests?	Median increase	# Studies	Target
Patient reminders	Yes	10.9%	5	Client
Small media (e.g., brochures, flyers)	Yes	12.7%	7	Client
One-on-one education	Yes	19.1%	7	Client
Reducing structural barriers	Yes	36.9%	12	Client
Provider assessment and feedback	Yes	12.3 to 23%	9	Provider
Provider reminder and recall systems	Yes (& flex sig)	17.6%	6	Provider
Client Incentives	Insufficient		0	Client
Mass Media	Insufficient		1	Client/Pop
Group education	Insufficient		2	Client
Reducing out-of-pocket costs	Insufficient		0	Client
Provider incentives	Insufficient		5	Provider

<http://www.thecommunityguide.org/cancer/index.html>, see webinar handout by Basak et al (2016)

Question: What EBIs Are You
Using or Considering Using?

Promising Interventions in Vulnerable Populations (N = 27), Systematic Review Underway

Davis et al

Intervention Classification	Total studies	N studies by study design (N = total patients combined)	Does Intervention Improve FOBT/FIT Screening?	Strength of evidence
Direct Mail	9	8 RCTs (N=8275) 1 non-randomized CT (N=959)	Yes	High
Fiu-FOBT/FIT	2	1 RCT (N=1372) 1 cohort study (N=1499)	Yes	High
Clinic processes	2	2 RCTs (N=1939)	Mixed	Moderate
Patient Navigator	2	2 RCTs (N=543)	Yes (overall screening) Mixed (FOBT only)	Moderate
Education at clinic visit	5	4 RCTs (N=1801) 1 pre/post study (N=401)	Mixed	Low
Education with lay health advisors	4	3 RCTs (N=1794) 1 pre-post (N=186)	Unclear	Low
Education with media (community)	1	1 pre-post study (N=304)	Unclear	Insufficient
Education with media (clinic + community)	2	1 feasibility assessment (N=549) 1 nonrandomized CT (N=1672)	Mixed	Low

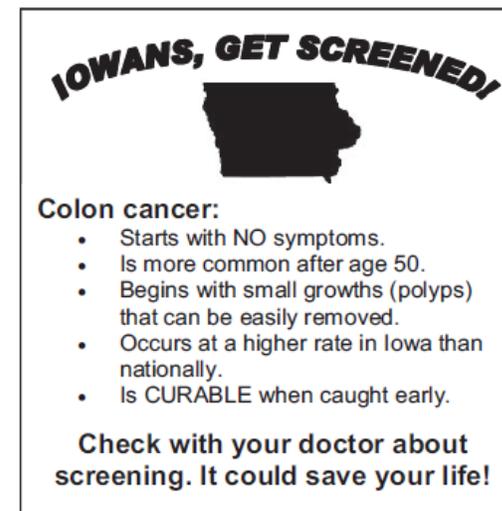
Example: Rural, Direct Mail Intervention

Setting:

- 16 rural family physician clinics affiliated with the Iowa Research Network (IRENE)
- 54% baseline CRC screening rate (Standard Deviation = 14.8%)

Method:

- Clinics provided list of patients to research team
- Patients provided informed consent; \$20 for baseline questionnaire
- Only individuals due for CRC screening eligible for the study



Intervention/Outcomes: 743 patients randomized to 4 intervention levels. FIT returned to investigators who processed and mailed results to patient and physician.

	Usual Care (n = 185)	Chart reminder (n=185)	Chart + mailed education + magnet + postage paid FIT (n=186)	Chart + mailed education + magnet + postage paid FIT + phone call (n=187)
% Any CRC test	17.8	20.5	56.5	57.2
OR (95% CI)	Reference	NS	6.0 (3.7-9.6)	6.2 (3.8-9.9)

Example: Repeat FIT Tiered Direct Mail Intervention

Setting: Erie Family Health Center, FQHC in Chicago

- 4 clinics serving adults (87% Latino; 36% uninsured)
- Baseline CRC screening rates: 43%

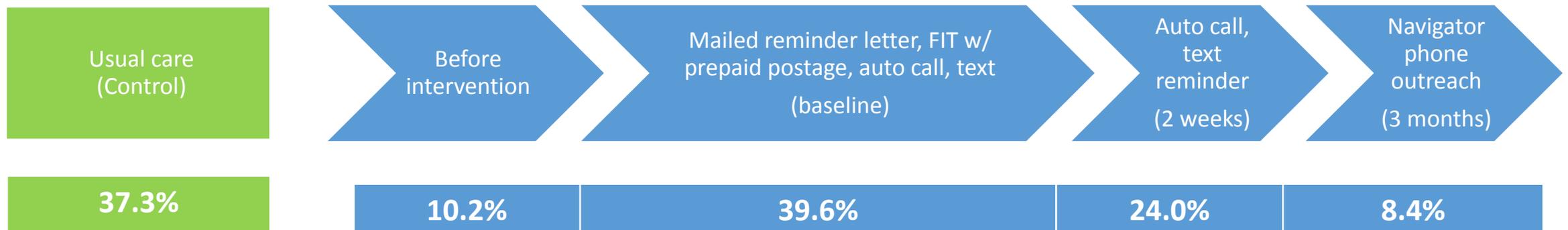
Method:

- Patients age 51-75 identified from EHR; waived informed consent
- Eligible patients = negative FOBT in past year (repeat screening)

CRC screening increased from 17 - 43% between 07 – 09 by:

- 1) Empowering medical assistants to identify, counsel, and give FOBT kit
- 2) Routine quality measurement and feedback
- 3) CRC included as quality metric for clinicians' incentive compensation

Intervention & Outcomes: 450 patients randomized to usual care (n=225) or stepped intervention (n=225)



Example: FluFIT

Setting: Kaiser Permanente Northern California, 5 clinics

Intervention: Provide FIT kits to eligible patients along with influenza vaccinations

Outcomes:

- 26.9% - FLU-FIT, completed FIT in 90 days
- 11.7% - FLU only, completed FIT in 90 days
- Most patients reached by intervention had ≤ 1 PCP visits in the last year
- FLU-FIT intervention increased CRC rates regardless of whether or when FIT kits were previously mailed to patients

What Interventions are Recommended for Racial and Ethnic Minorities?

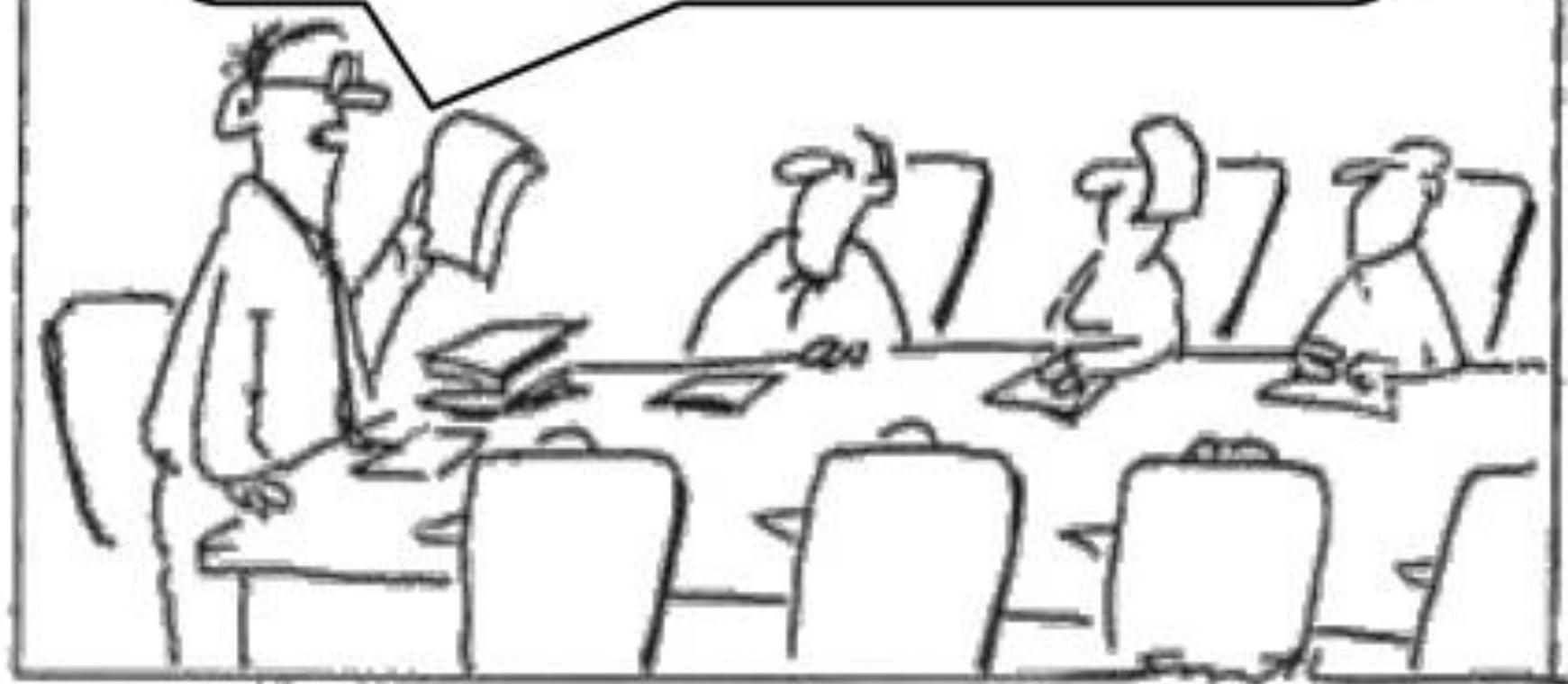
Naylor et al, 2012

Method: Systematic Review of 33 studies

Population: Minority populations; predominately Hispanic and African American

Level (# Studies)	Type of interventions	% screening increased
Patient (n=13)	Education through direct contact by trained professionals (excludes navigation)	15% (11% - 41.9%)
Patient Navigator (n=7)	<u>Minimum:</u> Repeat phone calls for scheduling, bowel prep, appointment reminders <u>Other:</u> Transportation, translation, additional referrals, face-to-face meetings, accompanying to endoscopy appt.	16% (7% - 40%)
Provider & System (n=13)	<ul style="list-style-type: none">• Focused provider education• Health system educational initiative• Provider reminder systems• Health literacy training to help physicians improve communication with patients	17.7% (12.3% - 55.8 %)

THE LATEST RESEARCH SHOWS THAT
WE REALLY SHOULD DO SOMETHING
WITH ALL THIS RESEARCH



Toolkits to guide increased CRC screening at the point of care and across a delivery system exist



Download at www.nccrt.org

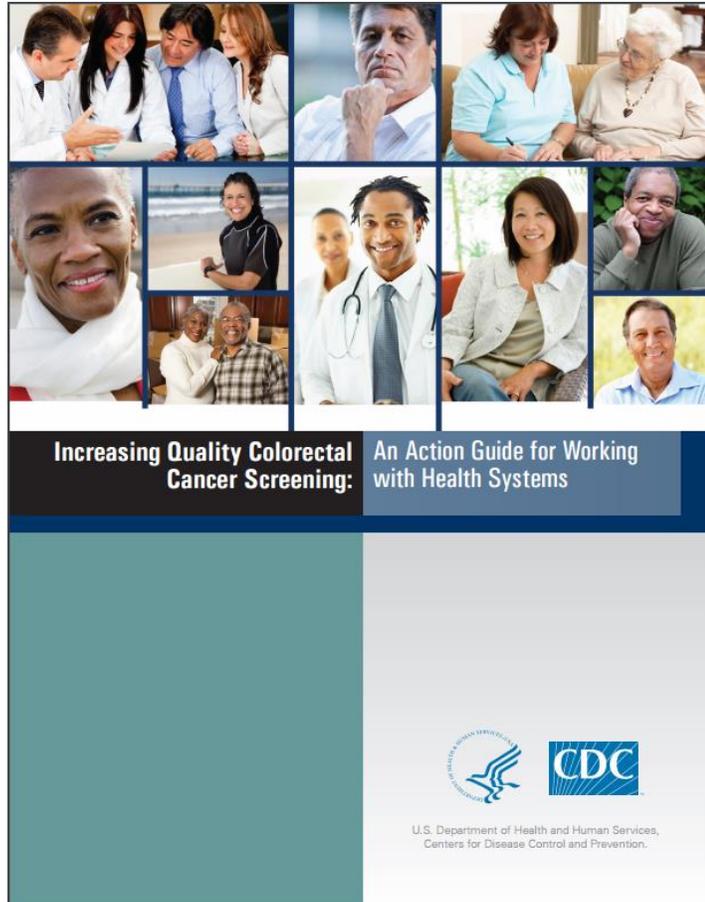
Tools – The Cancer You Can Prevent

The screenshot shows the website's header with the title "The cancer *you* can prevent." and social media links for Twitter and Facebook. Below the header are two green navigation buttons: "Encourage people in your life to get screened" and "Learn more about screening". A left sidebar contains a menu with items: "BEEN SCREENED? Your story can save a life.", "NEED TO BE SCREENED? It could save your life.", "For Health Care Providers", "For Employers", "Your Stories", "What to Know", "About This Campaign", and "Oregon Data". The main content area features a large photo of Rick Rebel, a man with a mustache in a light green polo shirt, with the text "I got screened. Now, I'm talking about it." overlaid. A small yellow sticky note with "<< >>" is in the top right of the photo. The name "Rick Rebel" and "Benton County, Oregon" are in the bottom right of the photo.

- Campaign funded by the CDC to the Oregon Health Authority
- Promotes sharing stories by those who have been screened for CRC

<http://thecanceryoucanprevent.org/>

Toolkit for CDC Funded Programs to work with Health Systems



- Health system: an entity that is or could be involved in delivering CRC screening services in a community
 - Hospitals
 - Medical practices
 - Health insurance providers
 - Public health systems
 - Large employers
- Strategies to Address
 - Provider barriers
 - Patient barriers
 - Infrastructure barriers

<http://www.cdc.gov/cancer/crccp/pdf/colorectalactionguide.pdf>



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Cancer Control P.L.A.N.E.T. portal provides access to data and resources that can help planners, program staff, and researchers design, implement and evaluate evidence-based cancer control programs.

DATA

[State Cancer Profiles](#)  (CDC, NCI) 

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[Research to Reality](#)  (NCI) 

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[Guide to Community Preventive Services](#) 
(Federally Supported) 

[U.S. Preventive Services Task Force](#) 
(Federally Supported) 

[Evaluation of Genomic Applications
in Practice and Prevention \(EGAPP\)](#)  

[Additional Research Evidence Reviews](#)

PROGRAMS

[Research-tested Intervention Programs \(RTIPs\)](#) 

TOPICS

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- Cervical Cancer
- Colorectal Cancer
- Diet / Nutrition
- HPV Vaccination
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- Obesity
- Physical Activity
- Public Health Genomics
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- Survivorship/Supportive Care
- Tobacco Control

WHAT'S NEW

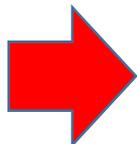
[HPV Vaccination](#)
[State Cancer Profiles 2012 cancer data](#) 
[Additional Resources](#)

E-NEWSLETTER

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FEEDBACK

We welcome your [feedback](#) on the Cancer Control P.L.A.N.E.T. and its satellite web sites. Thank you for helping to improve this site for the cancer control community.



Use the link below to select a number of criteria, and see a list that contains evidence-based programs from several topics.

Select from 167 Evidence-Based Intervention Programs

RTIPs is a searchable database of evidence-based cancer control interventions and program materials and is designed to provide program planners and public health practitioners easy and immediate access to research-tested materials.

Register your program now and be part of the RTIPs Community.

For more information on how to participate in a RTIPs review, read the [RTIPs Submission and Review Process: A Guide for Program Developers](#)



[Search Research to Reality \(R2R\)](#), NCI's online community of practice that links cancer control practitioners and researchers, for discussions, cyber-seminars, and much more.

RTIPs and Research Reviews

The [Guide to Community Preventive Services](#) evaluates the effectiveness of types of interventions (as opposed to individual programs) by conducting [systematic reviews](#) of all available research in collaboration with partners.



The [Task Force](#) on Community Preventive Services then uses the systematic review findings as the basis for their recommendations for

New programs on RTIPs:

- Informed Decision Making
 - ★ [-Prostate Cancer Screening: Making the Best Decision](#) (Post date: April, 2016)
- Colorectal Cancer Screening
 - [-Family CARE \(FCARE\)](#) (Po
 - [-Community C](#) (2016)
- ★ New evidence-b updates.

News and Ann

- [RTIPs highlighte](#)

Tools Available

- [Putting Public](#) Prevention and created an inte community pro developing skill

<http://rtips.cancer.gov/rtips/index.do>

Search

Select program attributes (if you like) and then click the button at the bottom of the page to get a list of relevant programs. Multiple selections within a category expand your criteria; selections in different categories narrow them.

Topics

- Breast Cancer Screening
- Cervical Cancer Screening
- Colorectal Cancer Screening
- Diet/Nutrition
- HPV Vaccination
- Informed Decision Making
- Obesity
- Physical Activity
- Public Health Genomics
- Sun Safety
- Survivorship/Supportive Care
- Tobacco Control

Setting

- Community
- Religious establishments
- Rural
- Suburban
- Urban/Inner City
- School-based
- Clinical
- Workplace
- Home-based
- Day care / Preschool

Materials

- Available on RTIPs
- Partially available on RTIPs
- Available from third party only

Origination

- Australia
- Canada
- United Kingdom
- United States

Gender

- Male
- Female

Age

- Children (0-10 years)
- Adolescents (11-18 years)
- Young Adults (19-39 years)
- Adults (40-65 years)
- Older Adults (65+ years)

Race/Ethnicity

- (of of the study population)
- Alaskan Native
 - American Indian
 - Asian
 - Black, not of Hispanic or Latino origin
 - Hispanic or Latino
 - Pacific Islander
 - White, not of Hispanic or Latino origin

Intervention Programs

Search Criteria Used: Colorectal Cancer Screening

[Refine Your Search](#)

Program Title & Description (13 programs alphabetically listed)

1. Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing

Designed to increase colorectal cancer screening among adults. (2010)
NCI (Grant number: R01CA132709)

Criteria Matched: Colorectal Cancer Screening

2. Colorectal Cancer Screening in Chinese Americans Project

Designed to help increase colorectal cancer screening among low-income, less acculturated Chinese Americans. (2006)
NCI (Grant number: CA92432)

Criteria Matched: Colorectal Cancer Screening

3. Colorectal Cancer Screening Intervention Program (CCSIP)

Designed to increase colorectal cancer screening among African American adults. (2010)
CDC (Grant number: U57/CCU42068) , CDC (Grant number: 548DP000049) (Grant number: U01CA1146520) , NCI (Grant number: U54CA118638) , NCI (Grant number: UL1RR025008)

Criteria Matched: Colorectal Cancer Screening

4. Community Cancer Screening Program (CCSP)

Designed to increase colorectal cancer screening among low-income adults. (2013)
CDC (Grant number: 1U48DP0010909-01-1)

Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing

On This Page

- [The Need](#)
- [The Program](#)
 - » [Implementation Guide](#)
- [Community Preventive Services Task Force Finding](#)
- [Time Required](#)
- [Intender Audience](#)
- [Suitable Settings](#)
- [Required Resources](#)
- [About the Study](#)
- [Key Findings](#)
- [Publications](#)

Products



Preview, download, or order free materials on CD-ROM



Browse more programs on [Colorectal Cancer Screening](#)

Highlights

Program Title Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing
Purpose Designed to increase colorectal cancer screening among adults. (2010)
Program Focus Awareness building and Behavior Modification
Population Focus Adults
Topic Colorectal Cancer Screening
Age Adults (40-65 years), Older Adults (65+ years)
Gender Female, Male
Race/Ethnicity Alaskan Native, American Indian, Asian, Black, not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White, not of Hispanic or Latino origin
Setting Clinical
Origination United States
Funded by NCI (Grant number(s): R01CA132709)

RTIPs Scores

This program has been rated by external peer reviewers. [Learn more about RTIPs program review ratings.](#)

- Research Integrity**
 4.6
 - Intervention Impact**
 2.0
 - Dissemination Capability**
 5.0
- (1.0 = low 5.0 = high)

RE-AIM Scores

This program has been evaluated on criteria from the [RE-AIM](#) framework, which helps translate research into action.

- Reach**
 80.0%
- Effectiveness**
 66.7%
- Adoption**
 100.0%
- Implementation**
 57.1%

Awareness building and medically underserved
Behavior Modification

Choose Topic

Browse and choose product

BREAST CANCER SCREENING

CERVICAL CANCER SCREENING

COLORECTAL CANCER SCREENING

MEALS ON WHEELS

PROMOTING HPV VACCINATION

PROMOTING TOBACCO QUITLINES

POSTER



FLYER



INSERT



Now What?

Determining which intervention to use...

Deciding how to implement...

ACS Recommends: “80% by 2018 What Insurers Can Do”

- 1) Set your system-wide goal at 80% by 2018 for colorectal cancer screening;
- 2) Use data in strategic ways to track and promote screening;
- 3) Educate clinicians, health plan staff, and patients about what is and is not covered;
- 4) Promote quality screening options;
- 5) Incentivize providers;
- 6) Be familiar with potential barriers to screening from the patient perspective (or convene a group of patients to identify/address)

See cancer.org/colonmd or ncrt.org/tools for more information

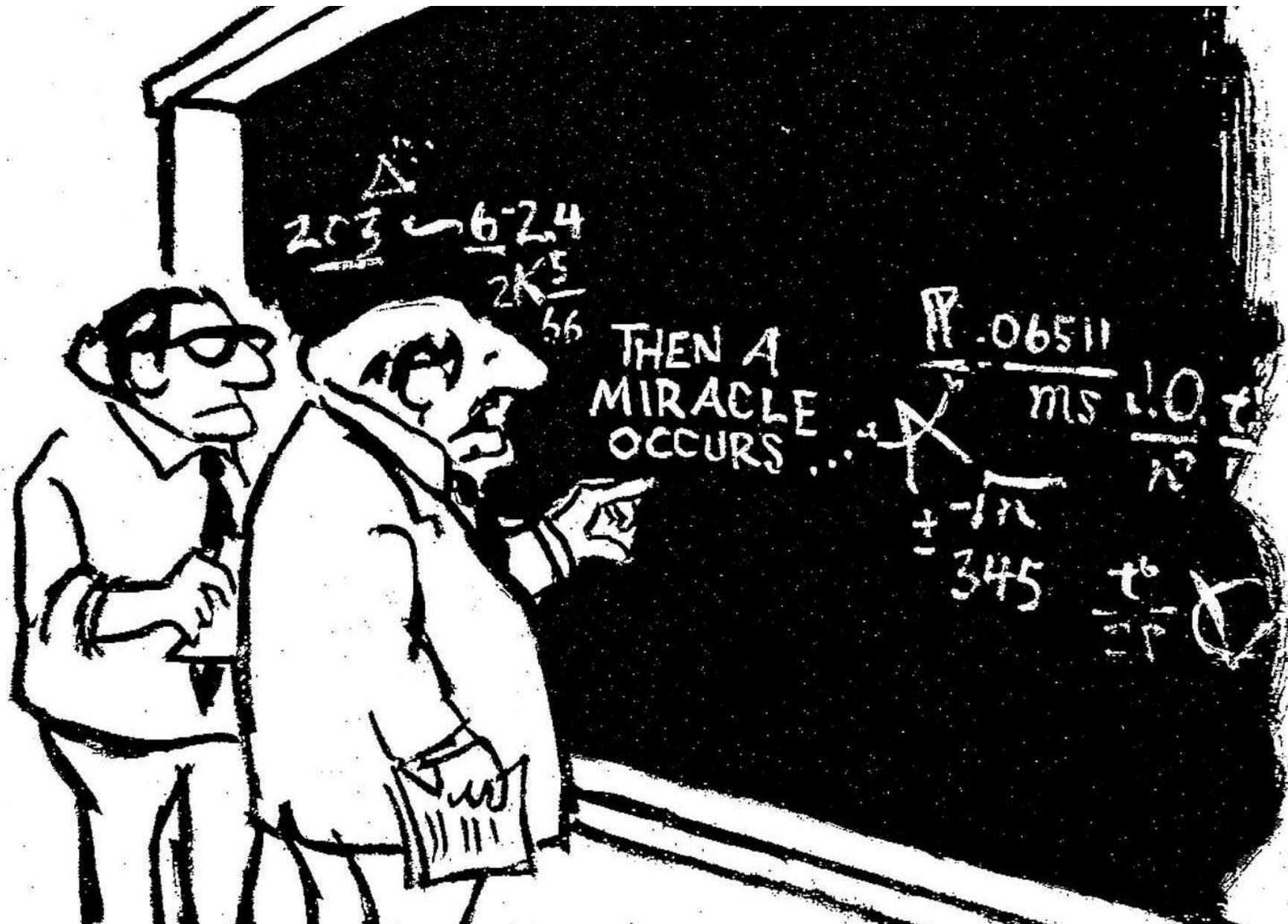
What We've Observed for Clinic/Health Plan Partnerships to Improve CRC Screening

Challenges

- Parallel processes
- Different FIT kits
- Lag in data at health plan level; practice-level challenges producing EHR data queries
- Only targeting sub-set of patients
- No system to follow-up on positive FIT screens or ensure ANNUAL screening

What Might Health Plans Do?

- Engage in coordinated efforts with clinics (e.g., use the same FIT kit)
- Advocate for use of high-quality FIT
- Focus on ways to optimize return rates
- Leverage existing lab interfaces so kit results automatically enter EHR
- Support sustainable programs for annual FIT and follow-up colonoscopy (e.g., cost of FIT kits or mail out, phone or text reminders, infrastructure)



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THEN A
MIRACLE
OCCURS...

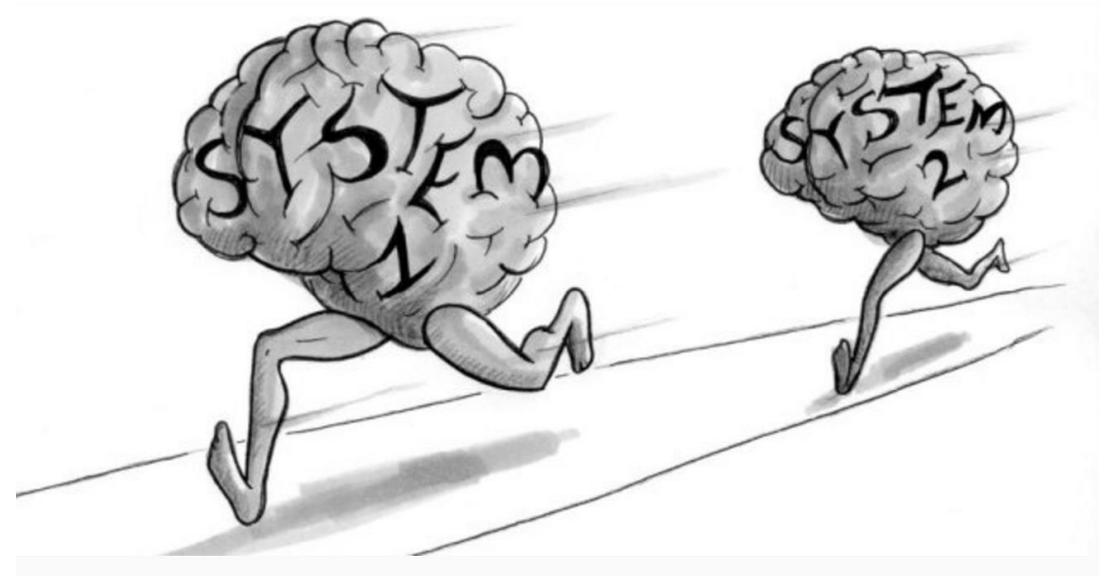
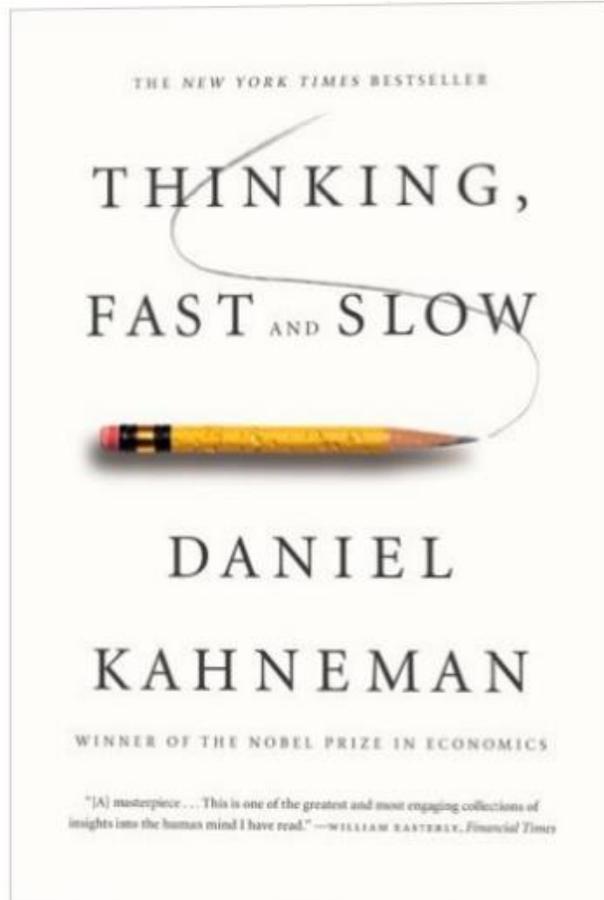
$$\begin{array}{r} \pi \cdot 06511 \\ \hline \sigma \quad \tau \cdot 0 \\ \hline \tau \\ \hline \pm \tau \\ 345 \end{array}$$

Primary Care and Public Health Leader Views on Intervention Toolkits

“I think [the toolkit] would be easy to use. I think the bigger issue is finding the time and energy to implement [the change] and to get staff buy-in. No matter how good the toolkit is, unless it is used correctly it won't help solve the problem.”

“I appreciate the nuts and bolts, how-to of the toolkit. The harder part is the practical. Who do you have do this and with what resources? Having instructions is different than having someone knowledgeable to help make the change. Toolkits can be helpful, but also intimidating...they're different than working with a practice facilitator or other another clinic that's done it. It's different than having a cheerleader in the practice to actually help you make the change.”

Moving between Type I and Type II Thinking



Webinar Schedule

DATE (Weds 11am-Noon)	TOPIC
✓ April 13th	Screening Options for CRC – <i>A Summary of the Evidence Behind Colonoscopy and Fecal Testing (FIT/FOBT)</i>
✓ May 4th	An Overview and Discussion of Evidence-based CRC Screening Interventions – <i>Translating Research into YOUR Clinic and Community Setting</i>
May 11th	Finding the Right Interventions for the Right Setting at the Right Time – <i>A Focus on STOP CRC</i>
May 18th 11:30 am-12:30 pm Register here	Improve Colorectal Cancer Screening Rates and Save Lives! - <i>Additional webinar opportunity hosted by the Patient-Centered Primary Care Institute</i> <i>Presenters: Patricia Schoonmaker, MPH & Gloria Coronado, PhD</i>
May 25th	Partnerships with Health Plans – <i>Design of BENEFIT, a direct-mail program supported by a Medicaid Health Plan</i>
June 9th 12:30 pm -1:30 pm Register here	The FluFIT Program - <i>FREE webinar opportunity hosted by the Nevada Cancer Coalition</i> <i>Presenter: Michael Potter, MD</i>
June 29th	Operationalizing Direct-Mail Interventions in Practice – <i>EMR Tools and Practice Readiness Assessment</i>

One-on-one TA Available*

Colorectal Screening Technical Assistance: Consultation Form

Directions: Please fill out this form and return it to Robyn at gharo@ohsu.edu. The primary contact person will be contacted to schedule a 1-2 hour phone or in-person consultation with your group.

Primary contact information

Name	
Title	
CCO	
Work Phone	
Email Address	

Regional stakeholder team

The initial consultation is tailored for small groups of regional stakeholders including CCO leaders, quality improvement personnel and/or clinic leadership. Please provide the below information for stakeholders participating in the consultation:

Name	Title	Organization

Consultation/technical assistance interests

Tell us in which areas you are interested in receiving consultation/technical assistance:

- Presentations at clinical advisory panel meetings to engage stakeholders and providers about CRC
- Plans for improving capture of colonoscopy information in EMRs
- Design or modification of EMR tools
- Data needs for reporting
- Incorporating patient feedback into programs
- Local workflow mapping
- Plans for Plan-Do-Study-Act cycles (PDSAs)
- Materials (videos, instructions, clinic posters)
- Other (describe below):

Continued on next page

Regional background

Briefly tell us about what your CCO has been doing in the realm of colorectal cancer.

Colorectal cancer screening plan

Briefly tell us about your CCO's plan for colorectal cancer screening, and/or if there are specific areas you would like assistance for improvement or planning

Clinic colorectal cancer screening rates

Please list the practices in your CCO network and its colorectal cancer screening rates:

Practice Name	CRC Screening Rate

Best times to schedule an initial consultation:

Please check what days/times would work best to schedule an initial consultation. These meetings will take place either in person or by phone depending on where stakeholders are located.

	M	T	W	Th	F
8am - 10am					
10am - noon					
noon - 2pm					
2 - 4pm					

Additional availability notes (if needed):

*ask Laura Kreger if you need another form

Funding & Acknowledgements

Funding source: Centers for Medicare and Medicaid Innovation State Innovation Models Grant, Center for Disease Control and Prevention Oregon Health Authority cooperative agreement, Centers for Disease Control and Prevention [U48 DP-14-0012, Baldwin, Coronado, Green], NIH Common Fund [UH2AT007782 and 4UH3CA188640-02], and Kaiser Permanente Community Benefit Fund.

Dr. Davis is partially supported by a PCOR K12 award from the Agency for Healthcare Research & Quality-funded PCOR K12 award [Award Number 1 K12 HS022981 01]. Dr. Davis, Dr. Coronado, and Ms. Pham receive support from a technical assistance contract from the Oregon Health Authority.

Questions & Answers?

Gloria Coronado, PhD



Melinda Davis, PhD



Additional Slides

Example: Participatory Media Intervention

Setting: High Plains Research Network & Community Advisory Council members (rural Colorado)

Intervention: “Boot Camp Translation”

- Iterative, participatory approach (6 months of development)
- Simple and direct messaging
- Newspaper stories, Community talks, Radio outreach

Outcomes:

- 70% of the target population reached through media campaign
- Increased screening
- Participatory research + community ownership = locally relevant, culturally appropriate interventions

Farm Auction
ask your doctor about
Colon Cancer

Auction
Take Action

Did you know that... colon cancer is the second leading cause of cancer death in the U.S., colon cancer is preventable... colon cancer testing is worth it... you should talk to your doctor about testing today!

Tractors, Combine, Trucks Pickups and Cars

Your risk for colorectal cancer may be higher than average if you or a close relative have had colorectal polyps or cancer or if you have inflammatory bowel disease.

Your doctor can find and remove colon polyps before they develop into cancer.

A sigmoidoscopy views the lower part of the colon (where two-thirds of colorectal cancers occur).

A colonoscopy examines the entire colon and allows any polyps found to be removed.

Regular screening for polyps using sigmoidoscopy or colonoscopy can prevent cancer and save your life.

A colonoscopy examines the entire colon and allows any polyps found to be removed.

Talk to your doctor!

Farm and Shop Items

Colorectal cancer is cancer that occurs in the colon or rectum. The colon is the large intestine or large bowel. The rectum is the passageway connecting the colon to the anus.

Several different screening tests can be used to test for polyps or colorectal cancer. Each can be used alone. Sometimes, they are used in combination with each other.

Fecal Occult Blood Test or Stool Test—A test you do at home using a test kit you get from your health care provider. You put stool samples on test cards and return the cards to the doctor or lab. This test checks for occult (hidden) blood in the stool.

Flexible Sigmoidoscopy—A test in which the doctor puts a short, thin, flexible, lighted tube into your rectum. The doctor checks for polyps or cancer in the rectum and lower third of the colon. Sometimes this test is used in combination with the fecal occult test.

Colonoscopy—This test is similar to flexible sigmoidoscopy, except the doctor uses a longer, thin, flexible, lighted tube to check for polyps or cancer in the rectum and the entire colon. During the test, the doctor can find and remove most polyps and some cancers.

Double Contrast Barium Enema—A test in which you are given an enema with a liquid called barium. The doctor takes x-rays of your colon. The barium allows the doctor to see the outline of your colon to check for polyps or other abnormalities.

Talk to your doctor!

Machinery

Colon cancer occurs when polyps (small growths in the colon) start to grow abnormally. Not all polyps will develop into cancer, but nearly all colon cancers come from polyps.

Removal of polyps prevents the chance that one might become abnormal and develop into colon cancer.

Talk to your doctor!

Miscellaneous

- Most colon cancers develop from polyps in the colon.
- An estimated 105,000 new colon cancer cases will be diagnosed this year in the U.S. 1000 new cases will be in Colorado.
- Each week, about 6 women in Colorado die from colon cancer compared to about 9 women dying from breast cancer.
- 1 in 3 people over 65 has a colon polyp.
- Most people who have colon polyps do not experience any symptoms.
- Men and women have a similar risk of getting colorectal cancer.
- Regular testing for colon polyps to prevent colon cancer can save your life.

Talk to your doctor!

Collectables

People who have polyps or colorectal cancer don't always have symptoms, especially at first. Someone could have polyps or colorectal cancer and not know it. If there are symptoms, they may include:

- Blood in or on your stool (bowel movement).
- Stomach aches, pains, or cramps that happen a lot and you don't know why.
- A change in bowel habits, such as having stools that are narrower than usual.
- Losing weight and you don't know why.

If you have any of these symptoms, talk to your doctor. These symptoms may be caused by something other than cancer. However, the only way to know what is causing them is to see your doctor.

Talk to your doctor!

Auctioneers:
The Joint Planning Committee, High Plains Research Network

Talk to your doctor!

Norman, 2013

Example: Patient Navigation

Method: SR of 15 articles; PN interventions in diverse, urban primary care settings

Interventions:

- Professional PN
- Language-concordant or ethnic-concordant professional
- Language-concordant or ethnic-concordant lay person or peer

Outcomes:

- All studies reported increase CRC screening rates; 11-91% (3 RCT, 5 non RCT = statistically significant)
- Increased patient knowledge, improved quality of bowel prep and patient satisfaction
- Language/ethnic-concordant professional = quicker uptake of services
- Outcomes are better after a 6 month period of PN intervention

Strategic Prevention Framework

Step 1. Assess population needs, the resources required to address the problem, and the readiness to act;

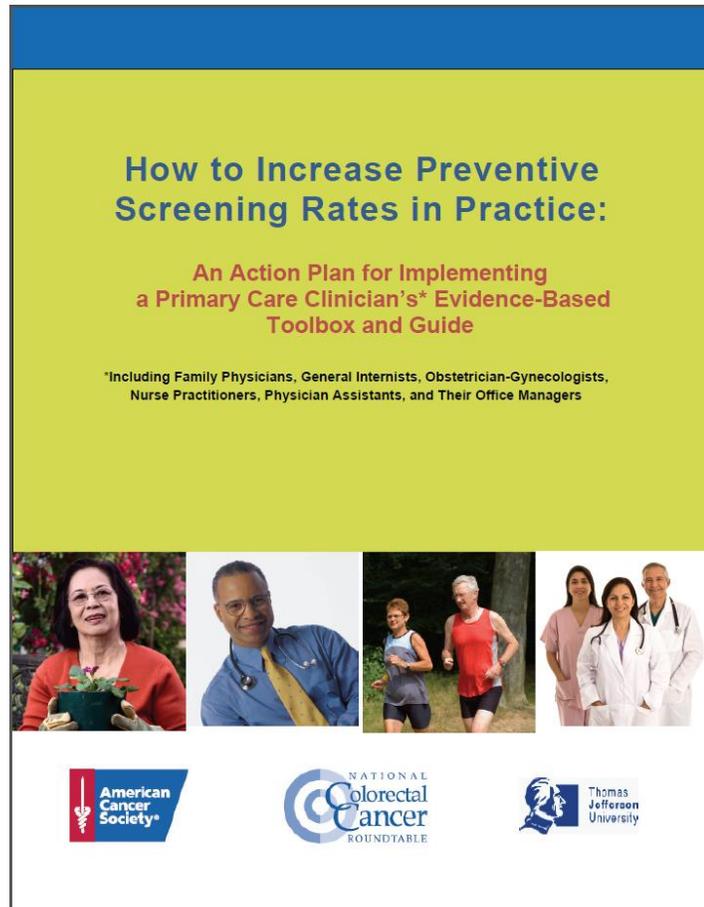
Step 2. Build capacity at patient, practice, health system levels to address needs and problems identified in Step 1;

Step 3. Develop a strategic plan – this plan articulates a vision for organizing specific interventions, policies, and practices locally;

Step 4. Implement the evidence-based interventions identified in Step 3;

Step 5. Monitor implementation, evaluate effectiveness, sustain those that improve or replace those that fail.

Practice-Level Toolkit #1



- Developed by the National Colorectal Cancer Roundtable (NCCRT) and American Cancer Society (ACS)
- Updated information on screening targets and guidelines
- Evidence-based tools and strategies for improving performance
- Materials available in multiple formats

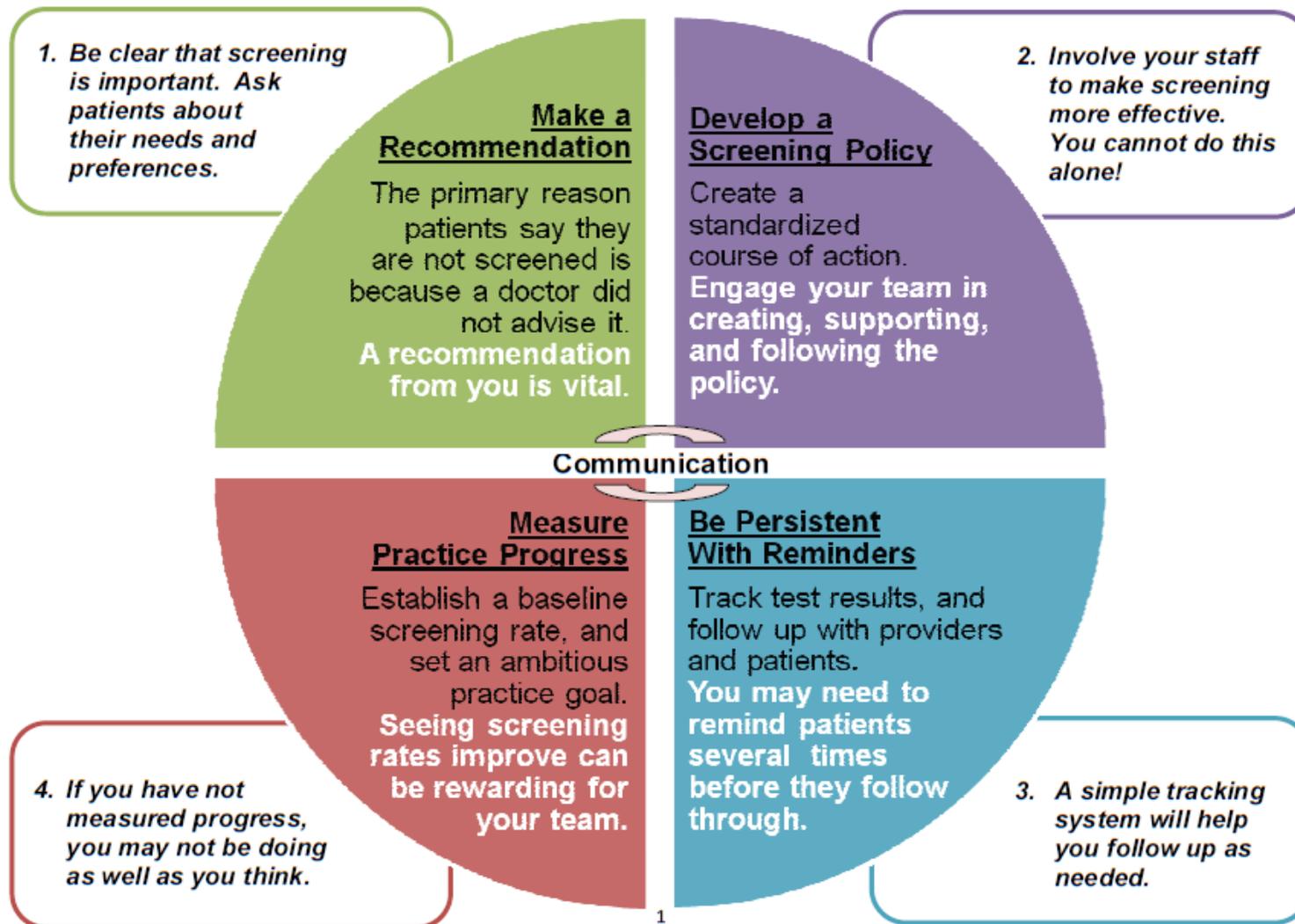
Brief: <http://www.cancer.org/acs/groups/content/@editorial/documents/document/acspc-029276.pdf>

Long: <http://www.cancer.org/acs/groups/content/documents/document/acspc-024588.pdf>

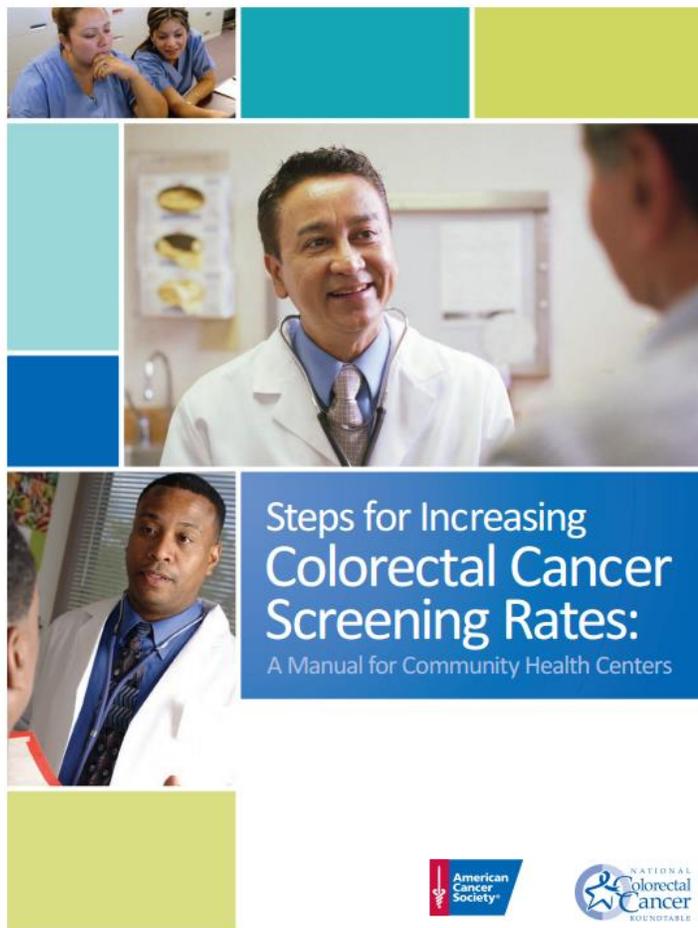
Key Steps/Process Recommendations

- Implement practice changes to achieve the four essentials
- Take steps to identify and screen every age-appropriate patient
- Involve your staff and put office systems in place
- Follow a continuous improvement model to develop and test changes (e.g., PDSA cycles)

Improve Cancer Screening Rates Using the Four Essentials



Practice-Level Toolkit #2 (Supplement to #1)

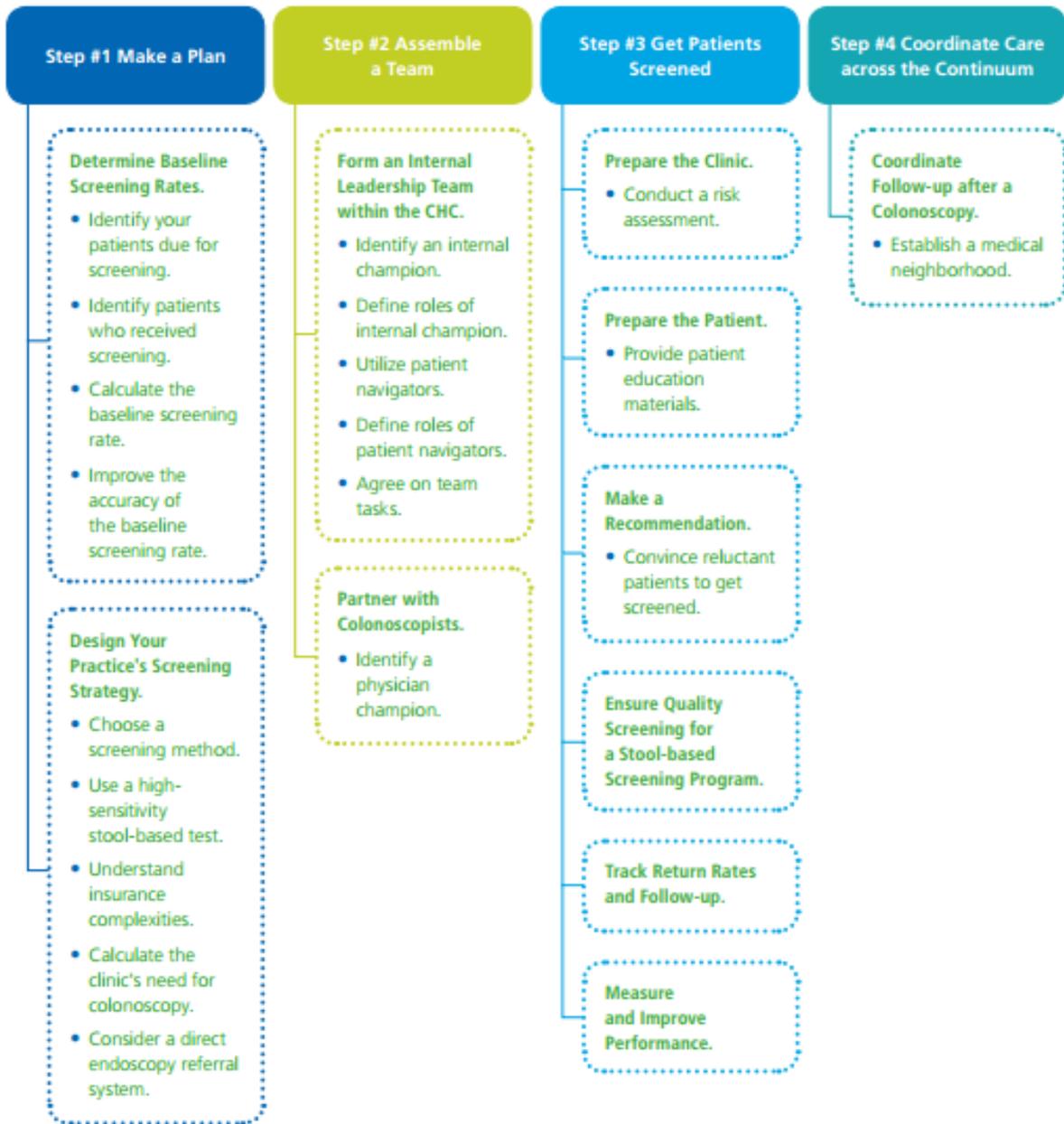


Part 1: Introduction

Part 2: Recommended Steps

- 1) Make a Plan
- 2) Assemble a Team
- 3) Get Patients Screened
- 4) Coordinate Care across the Continuum

Part 3: Resources/Tools



Appendix A: 7 – Action Plan Work Sheet

Action Plan Work Sheet

Name of Health System:

Colorectal (CRC) screening goal:

Existing methods, processes, and programs that can be used to achieve the goal:

How will progress be tracked and how often?

Evidence-Based Strategies Chosen	Major Tasks to Implement Strategy	Expected Outcomes	Challenges and Potential Solutions	Person(s) Responsible	Due Date	Information or Resources Needed

Source: Centers for Disease Control and Prevention. *Increasing Colorectal Cancer Screening: An Action Guide for Working with Health Systems*. Atlanta: Centers for Disease Control and Prevention, US Dept of Health and Human Services; 2013.

Tools – The Cancer You Can Prevent

The screenshot shows the website's header with the title "The cancer *you* can prevent." and social media links for Twitter and Facebook. Below the header are two green navigation buttons: "Encourage people in your life to get screened" and "Learn more about screening". A left sidebar contains a menu with items: "BEEN SCREENED? Your story can save a life.", "NEED TO BE SCREENED? It could save your life.", "For Health Care Providers", "For Employers", "Your Stories", "What to Know", "About This Campaign", and "Oregon Data". The main content area features a large photo of a man, Rick Rebel, with the text "I got screened. Now, I'm talking about it." and a small navigation arrow. The man's name and location, "Rick Rebel, Benton County, Oregon", are displayed in the bottom right corner of the photo.

- Campaign funded by the CDC to the Oregon Health Authority
- Promotes sharing stories by those who have been screened for CRC

<http://thecanceryoucanprevent.org/>

General Resources/Training on How to Select and Implement Evidence-based Interventions (EBIs)

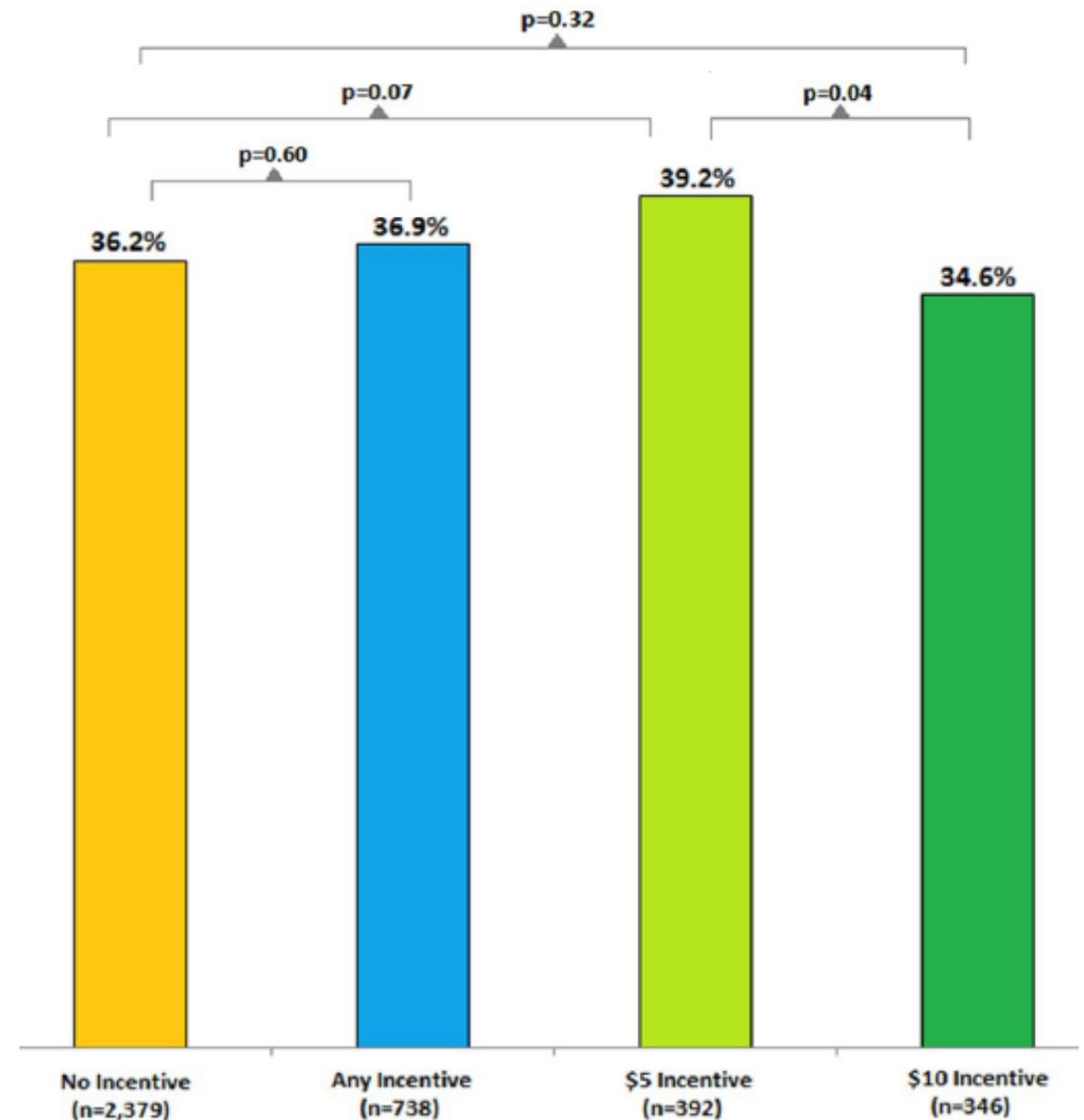
- <http://cpcrn.org/pub/evidence-in-action/>

Patient incentives

Setting: RCT, safety-net health system in Fort Worth, Texas

Outcomes:

- No significant difference in screening rates with financial incentives
- Results did not differ by age, sex, race, neighborhood poverty rate
- Median time to FIT completion did not differ across groups



Preliminary Data: Payer, Gender, Age, PCP Visit, and Geography Associated with CRC screening for publically and commercially insured populations in Oregon

	All (N = 64,989)	Medicaid Only* (N = 4,516)	Commercial Only (N = 60,473)
Medicaid Payer	0.63 (0.59, 0.67)	--	--
Female	1.12 (1.09, 1.16)	1.22 (1.06, 1.39)	1.12 (1.08, 1.15)
Years observed after 50			
2 years	1.73 (1.66, 1.82)	1.67 (1.38, 2.01)	1.72 (1.66, 1.82)
3 years	2.30 (2.19, 2.40)	1.89 (1.57, 2.29)	2.32 (2.22, 2.44)
4 years	2.63 (2.52, 2.76)	2.16 (1.80, 2.60)	2.67 (2.55, 2.80)
PCP visit in first year	1.36 (1.31, 1.41)	3.52 (2.73, 4.55)	1.34 (1.29, 1.39)
Geography (Frontier ref)			
Rural	1.64 (1.24, 2.17)	1.17 (0.75, 1.82)	1.74 (1.29, 2.36)
Urban	1.89 (1.43, 2.51)	1.46 (0.93, 2.28)	2.02 (1.49, 2.73)

*Race/Ethnic Categories only available for Medicaid Members, not significant

Microsimulation Modeling:
Which Interventions are Most
Cost Effective Here?

Comparing Programs to Increase CRC Screening in Vulnerable Population: A Cost-Effectiveness Analysis in North Carolina

Intervention	Cost Components	Base (\$)	Notes
Medicaid Mailed Reminder	Develop registry & reminder content (one-time)	\$10,000	Programmer and physicians' time
	Programming time to identify enrollees	\$200 / year	
	Materials (postage, paper, ink)	\$0.71 / reminder	
	Mail reminders	\$3,850 / year	
Endoscopy Expansion	Financial incentive to locate facility in underserved areas	\$500,000 / facility	
Mass Media	Content development (one-time)	\$368,000	From campaign promoting seat belt use
	Advertising purchase of month long campaign	\$332,000 / year	
Voucher for uninsured	Voucher for colonoscopy	\$750 / person	2013 Medicare physician fee schedule

Mailed Reminder as Most Cost-Effective Strategy in NC Microsimulation

Undiscounted:

	Cost of intervention	Additional life years up-to-date	Intervention cost per additional life year up-to-date
Mailed Reminder	\$1,619,578	111,516	\$14.52
Endoscopy Expansion	\$3,000,000	11,832	\$253.98
Mass Media	\$3,694,800	148,305	\$24.91
Voucher for Uninsured	\$3,750,000	41,709	\$89.91

Hassmiller Lich K.M et al (in review)

South Carolina study shows benefit of FIT-based program

Outcome	Colonoscopy program	Annual FIT program	Relative difference
Individuals screened	2,747	21,153	7.7
Colonoscopies performed	2,747	1,540	0.6
CRC cases prevented	13	30	2.4
CRC deaths prevented	6	26	4.1
Life-years gained	68	258	3.8

*Assumes fixed state funding of \$1 million over 2 years for uninsured, low income population aged 50 – 64

Source: van der Steen A et al. Optimal Colorectal Cancer Screening in States' Low-Income, Uninsured Populations – The Case of South Carolina. Health Services Research, June 2015.