Colorectal Cancer Screening: Interventions That Work
Arizona Alliance for Community Health Centers and Arizona Cancer Prevention and Control
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American Cancer Society

ACS and Primary Care
- ACS has prioritized the need to effectively partner with primary care practices and community health centers (CHCs)
- More than 100 staff across the country whose primary responsibility is establishing relationships and providing support to primary care practices, CHCs, PCAs and state chapters of primary care organizations
- A multitude of tools and resources have been created, and more are in development
- Grant opportunities available for community organizations and CHCs

CHANGE Grants Program
- Community Health Advocates Implementing Nationwide Grants for Empowerment and Equity

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CHANGE Grants Program
- From 2011-2014 ACS awarded 272 grants with a total value of over $17.1 million to community based partners – mainly CHCs – to implement evidence based interventions for CRC, breast and cervical cancer screening improvement.
- Over 547,000 men and women have been reached with cancer prevention and early detection education and outreach and over 140,000 cancer screenings have been provided at low or no cost
- Funders for the CHANGE program (2011-2014)
  - Walmart
  - Walgreens
  - WellPoint
  - NFL
  - Lee Denim
  - General Mills

Additional ACS Offerings
- Practice Facilitation assistance
  - Specially trained ACS staff in each region
  - Talk to your ACS primary care representative
- ACS/NACHC/NCCRT CRC Speakers Bureau
  - CHC clinicians trained on CRC screening science, practice change, tools and resources
  - Available for conference presentations, webinars, and technical assistance
  - Visit nccrt.org for more information

Evidence-Based Interventions
**Standing Orders**

- Standing orders allow nursing staff or medical assistants to discuss CRC screening options, provide FOBT/FIT kits and instructions, and submit referrals for screening colonoscopy have been demonstrated to increase CRC screening rates.
- Staff training on risk assessment, components of the screening discussion, ... is essential for a successful program.
- Variable state rules – AZ?

**Electronic Medical Records**

- Studies have demonstrated significant improvement in screening and outcomes with effective use of EMRs.
- Tremendous potential...
  - Registry functions
  - Population management tools/resources
  - Reminders
- However the potential is often not met.

**EMRs and CRC Screening**

- Collaboration with NACHC
- Surveyed CHC clinicians, QI and IT staff (including “super-users”)
- Identified multiple barriers to effective use
  - EMR system issues
  - CHC staff and resources
  - Organizational issues
- Report also describes high performing models and best practices.


**Characteristics of High Performers**

Some CHCs Have Overcome EMR Barriers

- Have access to IT staff and programmers to optimize their EMR, develop add-on tools, customize reports, and conduct ongoing training.
- Often in larger systems or member of a Health Center Controlled Network
- Have a culture of quality improvement
- Leadership views EMR data as an asset
- Leadership prioritizes CRC screening
Organizational Best Practices

- Use of standing orders for routine screening
- Conduct post-implementation re-training on EMR
- Detailed entry of colonoscopy results in structured data
- Workflow allows time for staff to use EMR data for follow up on incomplete screenings
- Use screening dashboards or data summaries
- Conduct regular (monthly) reporting of screening performance

Characteristics of High Performers

Mailed Screening Outreach

- Mailed invitations to CRC screening to patients from safety net hospital clinic who were not up to date with screening
  - Group 1 – mailed no-cost FIT kit
  - Group 2 – mailed invitation to no-cost colonoscopy
  - Group 3 – usual care, consisting of opportunistic PCP visit–based screening
- FIT and colonoscopy outreach groups received telephone follow-up to promote test completion.

Mailed Outreach

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Figure 2. CRC Screening Participation For Usual Care, Colonoscopy Outreach, and FIT Outreach

![Figure 2](image)

 CRC indicates colorectal cancer; FIT, fecal immunochemical test.

Screening Navigation

Patient Navigation

Navigator models may include:

- mailed or phone call reminders to patients to aid FOBT kit returns
- assistance with scheduling colonoscopy
- bowel preparation instructions
- appointment reminders
- More expansive models may include:
  - assistance with transportation
  - translation services
  - referral to other social services
CRC Screening Navigation

- Chart audit to identify patients due for colonoscopy
- Manage provider reminder systems to prompt health care providers to refer patients for screening
- Coordinate screenings & follow-up services
- Provide one-on-one education and appointment reminders
- Assist patients in overcoming barriers (transportation)
- Ensure that colonoscopy recall schedule is entered into patient charts
- Coordinate provider feedback on screening referral patterns

System-Level Barriers | Patient-Level Barriers

Figure 1. Flow diagram is shown for Community Cancer Screening Program patient navigator activities at community health center clinics.

CRC Screening Navigation – Rural GA

Screening Navigation

Intervention patients were:
- 4 times more likely to be up to date with CRC screening (43% vs 11%)

CRC Screening Navigation – NYC

Screening Navigation

Intervention patients were:
- 59% more likely to be screened
- Twice as likely to get a colonoscopy

Multiple Interventions

<table>
<thead>
<tr>
<th>Table 2. Primary Outcomes for the SOS Trial</th>
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</thead>
<tbody>
<tr>
<td>Primary Outcome</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Current for screening years 1 and 2</td>
</tr>
<tr>
<td>Patients, n</td>
</tr>
<tr>
<td>Adjusted percentage (95% CI)</td>
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<tr>
<td>P value</td>
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<tr>
<td>Any CRC screening</td>
</tr>
<tr>
<td>Patients, n</td>
</tr>
<tr>
<td>Adjusted percentage (95% CI)</td>
</tr>
<tr>
<td>P value</td>
</tr>
</tbody>
</table>

Multiple Interventions

FluFOBT/FluFIT

Figure 2. Type of colorectal testing completed for those current for testing, both years 1 and 2.
CRC Screening Outreach During Annual Flu Shot Activities

- Potential Benefits of "Flu-FOBT" or "Flu-FIT" Programs:
  - Reaches patients at a time each year when they are already thinking about prevention
  - Creates a seasonal focus on cancer screening that may add to other screening efforts
  - Time-efficient way to involve non-physician staff in screening activities
  - Educates patients that "just like a flu shot, you need FOBT/FIT every year"

Slide courtesy of M. Potter, MD

San Francisco General Hospital Randomized Trial
(Flu-shot clinic attendees randomized to Flu Only vs. Flu + FOBT on different dates – included telephone follow-up for FOBT recipients)

<table>
<thead>
<tr>
<th></th>
<th>FLU+FOBT days</th>
<th>FLU Only days</th>
</tr>
</thead>
<tbody>
<tr>
<td>(268 patients)</td>
<td>(246 patients)</td>
<td></td>
</tr>
<tr>
<td>Up-to-Date Before Flu Season</td>
<td>52.9%</td>
<td>54.5%</td>
</tr>
<tr>
<td>Up-to-Date After Flu Season</td>
<td>57.3%</td>
<td>84.3%</td>
</tr>
<tr>
<td>Change: (p&lt;0.001) points</td>
<td>+4.4 points</td>
<td>+29.8 points</td>
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</tbody>
</table>

Ann Fam Med, 2009

FLU-FOBT/FIT

- FLU-FOBT/FIT Interventions
  - Has been tailored and results replicated in:
    - (1) primary care underserved settings,
    - (2) high volume managed care flu shot clinics
    - (3) commercial pharmacies where flu shots are increasingly provided
  - Can be done with limited resources
  - Leads to higher screening rates

FLuFOBT – Kaiser Trial

<table>
<thead>
<tr>
<th></th>
<th>Intervention (n=3393), No. (%)</th>
<th>Control (n=2464), No. (%)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOBT</td>
<td>999 (29.9)</td>
<td>306 (12.7)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Flexible sigmoidoscopy</td>
<td>62 (1.8)</td>
<td>68 (2.4)</td>
<td>.36</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>86 (2.6)</td>
<td>83 (3.3)</td>
<td>24</td>
</tr>
<tr>
<td>FOBT, sigmoidoscopy, or colonoscopy</td>
<td>916 (29.7)</td>
<td>456 (18.2)</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Note: FIT = fecal immunochemical test.

Flu/FIT Implementation Guide and Materials

http://flufobt.org

ACS FluFOBT Implementation Guide and Materials

www.cancer.org/flufobt
“Steps” Manual

- Provides step-by-step instructions to help primary care implement team-based, systematic processes to increasing CRC screening.
- Builds on and serves as compliment to the existing set of tools and resources.
- Most information relevant to wide range of primary care practices (not just CHCs)

http://nccrt.org/about/provider-education/manual-for-community-health-centers-2/

Step #1: Baseline Data

Guidance on how to:
- Determine accurate baseline screening rate
- Calculate colonoscopy need

Step #2: Create a Team

- Engage staff at multiple levels
- Identify champions who can ingrain new processes into practice.
- Integrate screening navigation

Step #3: Get Patients Screened

- Ensure high-quality screening, as well as diligent tracking of test completion and follow-up
- Develop and implement measurement and feedback

Step #4: Coordinate Care

Suggestions on creation of a medical neighborhood to coordinate the care of patients

Includes the facility, pathology, anesthesia, back up surgery, radiology, hospital, and possibly oncology.
Appendix A-7: Action Plan

Appendix A-8: Tracking Template

Appendix C-1: Sample Screening Policy

Putting It All Together

Model Programs

A number of local/regional programs have demonstrated success in delivering CRC screening (including needed colonoscopies) and follow up care to uninsured, underinsured, and low-income adults in their respective communities.

Key Characteristics of Model Programs

Common Features of High Performing Models
1. Strong Physician Leadership
2. Focus on Care Coordination
3. Effective Use of Data.
4. Clarity of Expectations and Fair Division of Labor
5. Standardization for Efficiency
Model Programs Report

*Improving Access to Specialists for Community Health Center Patients in the Delivery of CRC Screening and Follow up Care: Advice from Model Programs*

Profiles four local/regional programs that have demonstrated success in delivering CRC screening and follow up care to the underserved.

Outlines important elements of program design and implementation, and includes a wide variety of template tools and resources.

Available at [www.nccrt.org](http://www.nccrt.org)

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Links of Care Pilot Project

The pilot builds on key characteristics of these model programs, and utilizes concepts, tools and technical assistance from leadership of these programs.

Awarded grants to three Federally Qualified Health Centers (FQHCs) networks and local system partners (i.e. state primary care associations, Health Center Controlled Networks (HCCNs), state or local departments of health, state or local comprehensive cancer coalitions, etc.) to advance the Society’s mission priority outcome to decrease colorectal cancer mortality rates.

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The Goals

**Primary goal:**

- Increase timely access to specialists for FQHC patients after a positive colorectal cancer screening result.

**Secondary goals:**

- Advance evidence-based strategies to increase colorectal cancer screening rates within primary care systems.
- Develop processes, tools and templates to promote replication of this work in other communities and for other cancer sites.

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Medical Professional Societies

A number of national and regional medical professional societies have been engaged to support the effort, including societies representing gastroenterologists, endoscopic surgeons, anesthesiologists, pathologists, oncologists, Commission on Cancer hospitals and ambulatory surgery centers.

Support from these organizations include:

- Promoting the effort among their membership.
- Identifying physicians in the pilot locations who are willing to support a local effort to improve links of care, patterned after that of the high performing models.
- Identifying members in other locations not in the pilot where local efforts emerge to improve collaboration around the delivery of colorectal cancer screening and follow up care.