HOW TO EVALUATE ACTIVITIES INTENDED TO INCREASE AWARENESS AND USE OF COLORECTAL CANCER SCREENING

Using your toolkit to conduct an evaluation
Welcome

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Evaluation toolkit

How to evaluate activities intended to increase awareness and use of colorectal cancer screening
Assessing organization capacity

OVERVIEW: An important early step in conducting an evaluation is to assess your agency's readiness, to help you to design an evaluation that aligns with your existing capacity, or to help you prioritize areas where you need to build your capacity in order to conduct a meaningful evaluation. This worksheet can be used to identify the existing evaluation capacity of your organization and to identify areas for improvement.

1. Who is currently responsible for overseeing program evaluation?

2. What resistance, if any, has your agency experienced from staff when engaging in evaluations? What resistance, if any, from clients?

What is evaluation?

We know that screening for colorectal cancer helps prevent and detect the disease early, thus increasing the likelihood of survival in those individuals. For these reasons, many organizations focus resources on raising awareness about colorectal cancer and increasing individuals' commitment to undergo screening. Evaluation, collecting information about how your program operates and its impact, helps you demonstrate the success of your activities and identify ways to improve. A good evaluation can also help you monitor service delivery, assess participant or community needs, and secure or maintain funding for your program.

The materials presented in this tip sheet and the larger toolkit are intended to help you evaluate an array of strategies designed to promote colorectal cancer screening initiatives that consider client need.
Webinar overview

- Webinar 1 – Introduction, mapping the program, prioritizing what you need to know
- Webinar 2 – Designing the evaluation and creating tools
- Webinar 3 – Collecting data, analyzing and using data
Today’s speakers

- Robert Smith, Ph.D., NCCRT Co-Chair, Senior Director, Cancer Screening, American Cancer Society
- Cheryl Holm-Hansen, Ph.D., Senior Research Manager, Wilder Research
- Laura Martell Kelly, MPA, Research Scientist, Wilder Research
- Andi Dwyer, Program Director, Cancer Prevention and Control Research Network - Colorado
Screening for the Prevention and Early Detection of Colorectal Cancer

Robert A. Smith, PhD
Senior Director, Cancer Screening
Cancer Control Science Department
American Cancer Society
Colorectal cancer is the #2 cause of cancer death in the US

Colorectal cancer can be detected early & is often preventable
About Colorectal Cancer

- Includes cancers of the colon and rectum
- Often referred to as *colon* cancer
- Affects both men and women
- Most colon cancers occur in adults *age 50 and older* but younger people can get this disease.
- Certain risk factors, such as a *family history of colon polyps or cancer*, increase the risk.
- Most colon cancers occur in people with no family history.
About Colorectal Cancer

- One of few cancers for which we have screening tests that not only detect cancer early, but often can prevent the cancer
Some types of polyps, called adenomatous polyps, can potentially progress into cancer.

It can take years for a polyp to progress into cancer.

This is our window for prevention.

Colon polyps and early colon cancers often cause no symptoms.

Screening is done before symptoms develop.
Colorectal Cancer: Concept of Early Detection

Early Stage:
- Often no symptoms
- Surgery alone
- High rate of cure

Late Stage:
- Symptoms
- Surgery and chemotherapy
- Lower rate of cure
Take-Home Messages:

- A polyp can take several years to turn into a cancer.
- Polyps & early colon cancers often cause no symptoms.
- Screening is done before symptoms occur.
- Screening allows for both the early detection and often the prevention of colon cancer.
- Screening remains underutilized.
COLORECTAL CANCER SCREENING
# ACS Screening Guidelines

## Options for Average risk adults age 50 and older

### Tests That Detect Adenomatous Polyps and Cancer

<table>
<thead>
<tr>
<th>Test</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colonoscopy every 10 years, or</td>
<td></td>
</tr>
<tr>
<td>Flexible sigmoidoscopy (FSIG) every 5 years, or</td>
<td></td>
</tr>
<tr>
<td>Double contrast barium enema (DCBE) every 5 years, or</td>
<td></td>
</tr>
<tr>
<td>CT colonography (CTC) every 5 years</td>
<td></td>
</tr>
</tbody>
</table>

## Tests That Primarily Detect Cancer

<table>
<thead>
<tr>
<th>Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Guaiac-based fecal occult blood test (gFOBT) with high test sensitivity for cancer, or</td>
<td></td>
</tr>
<tr>
<td>Fecal immunochemical test (FIT) with high test sensitivity for cancer, or</td>
<td></td>
</tr>
<tr>
<td>Stool DNA test (sDNA), with high sensitivity for cancer</td>
<td></td>
</tr>
<tr>
<td>Risk Category</td>
<td>Age to Begin Screening</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>Average risk</strong></td>
<td>Age 50</td>
</tr>
<tr>
<td>No risk factors</td>
<td>Age 50</td>
</tr>
<tr>
<td>No symptoms²</td>
<td>Age 50</td>
</tr>
<tr>
<td></td>
<td>Age 50</td>
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<td>Age 50</td>
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<td></td>
<td>Age 50</td>
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<tr>
<td></td>
<td>Age 50</td>
</tr>
<tr>
<td><strong>Increased risk</strong></td>
<td>Age 40 or 10 years younger than the earliest diagnosis in the family, whichever comes first</td>
</tr>
<tr>
<td>CRC or adenomatous polyp in a first-degree relative³</td>
<td>Age 40 or 10 years younger than the earliest diagnosis in the family, whichever comes first</td>
</tr>
<tr>
<td><strong>Highest risk</strong></td>
<td>Any age</td>
</tr>
<tr>
<td>Personal history for &gt; 8 years of Crohn’s disease or ulcerative colitis or a hereditary syndrome (HNPPC or, FAP, AFAP)</td>
<td>Any age</td>
</tr>
</tbody>
</table>
Table 4F. Colorectal Cancer Screening (%), Adults 50 Years and Older, US, 2010

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Fecal Occult Blood Test*</th>
<th>Endoscopy †</th>
<th>Combined FOBT/Endoscopy ‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>9.0</td>
<td>57.4</td>
<td>60.2</td>
</tr>
<tr>
<td>Female</td>
<td>8.6</td>
<td>55.6</td>
<td>58.3</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-64</td>
<td>8.0</td>
<td>52.3</td>
<td>55.2</td>
</tr>
<tr>
<td>65+</td>
<td>9.7</td>
<td>61.2</td>
<td>63.7</td>
</tr>
</tbody>
</table>

*Rates are age-adjusted to the 2000 US standard population.
Colorectal Cancer Screening Prevalence by State among Adults 50+, 2006-2008

Percentage of Adults Aged 50–75 Years Who Reported Being Up-to-Date* with Colorectal Test Screening, by State
Behavioral Risk Factor Surveillance System, United States, 2010
Stool Tests: gFOBT, FIT, sDNA
High Quality Stool Testing

- CRC screening by FOBT should be performed with *high-sensitivity* FOBT - either FIT or a highly sensitive gFOBT (such as Hemoccult SENSA).
  - Older, less sensitive guiaic tests (such as Hemoccult II) should not be used for CRC screening.

- Tests should be repeated yearly

- In-office FOBT is essentially *worthless* as a screening tool for CRC and must be *strongly discouraged*.

- All positive screening tests should be evaluated by colonoscopy
Polypectomy prevents Colorectal Cancer

The National Polyp Study observed a 76-90% reduction in CRC incidence after polypectomy

Winawer et al, NEJM 1993
Colonoscopic polypectomy was associated with a 53% reduction in colorectal cancer mortality.
CT Colonography

2-D view

3-D view

Polyp

Courtesy of Beth McFarland, MD
Factors Associated with Adult Uptake of Cancer Screening

- Education
- Health Insurance
  - Even better---health insurance and no copays
- Risk awareness
- Younger age
- A regular source of health care
- A personal physician
- A physician’s recommendation
- Reminder systems
- A Checkup
Before we begin...why evaluate?

- Reasons to conduct evaluations
  - Guide programming decisions
  - Show effectiveness
  - Reach target audience
  - Compare outcomes with similar programs
  - Seek funding

- Cultural/ethical considerations
Who should do the evaluation?

- Inventory internal resources
- Consider staff experience with:
  - Evaluating
  - Budgeting
  - Managing data
  - Analyzing data
  - Communicating information
Overview of the evaluation process

1. Collect the information
2. Create tools for gathering information
3. Design your evaluation
4. Prioritize what you need to know
5. Describe and map your program
6. Use and share the information
7. Sort and analyze the information
8. Collect the information
STEP 1:
Describe and map your program

- Who does your intervention target?
- How are services delivered?
- Why do you provide these specific services?
- How do you hope your activities benefit participants or the community?
## Program theory

- **You are here.**
- **You need to be there.**

**What needs to happen to get from here to there?**

<table>
<thead>
<tr>
<th>Activity</th>
<th>IF the activity is provided, THEN what should be the result for participants?</th>
<th>WHY do you believe the activity will lead to this result?</th>
<th>What evidence do you have that this activity will lead to this result (data from your own or other programs, published literature, etc.)?</th>
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### Mapping your program

#### One approach to a logic model

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short-term outcomes (changes in knowledge, attitudes)</th>
<th>Intermediate outcomes (changes in behaviors or practices)</th>
<th>Long-term outcome/Overall Impact</th>
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AN EXAMPLE:

St. Joseph’s Church

Better understanding about screening
<table>
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<tr>
<td>Group education sessions</td>
<td>Parishioners gain knowledge about screening options, make a pledge to be screened, and are more likely to get screened</td>
<td>Awareness and knowledge can be a key step in deciding to get screened</td>
<td>In the area of breast cancer, group education has been shown to be effective in increasing screening</td>
</tr>
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<td>• Location</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>• # of trainings</td>
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<td>• CRC screening rates increase</td>
<td>• CRC screening rates increase</td>
</tr>
<tr>
<td>• Location</td>
<td></td>
<td>• # of materials provided</td>
<td>• # of people attending</td>
<td>• CRC incidence rates decrease</td>
<td>• CRC incidence rates decrease</td>
</tr>
<tr>
<td>• Trainer</td>
<td></td>
<td></td>
<td>• # of materials provided</td>
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<tbody>
<tr>
<td>• Materials</td>
<td>• Group education sessions</td>
<td>• # of trainings&lt;br&gt;• # of people attending&lt;br&gt;• # of materials provided</td>
<td>• Parishioners learn about the importance of screening&lt;br&gt;• Parishioners pledge to be screened</td>
<td>• Parishioners make appointments to be screened for CRC&lt;br&gt;• Parishioners get screened</td>
<td>• CRC screening rates increase&lt;br&gt;• CRC incidence rates decrease&lt;br&gt;• CRC mortality rates decrease</td>
</tr>
</tbody>
</table>
Why do we need a logic model?

Logic models help you:

- Describe the program
- Train new staff or volunteers
- Control program drift
- Facilitate program management
STEP 2: Prioritize what you need to know

- Program impact (outcomes)
- Program implementation (process)
- Satisfaction
Prioritize outcome questions

Which outcomes will be the most . . .

- Useful in understanding success and guiding improvements?
- Important to the participants?
- Important to other stakeholders, including funders?
Prioritize process questions

How much will a process issue . . .

☐ Influence participant outcomes or satisfaction?
☐ Concern staff members or other key stakeholders?
☐ Help with planning or improvement decisions?
Prioritize satisfaction questions

- Do elements of client satisfaction make a difference in positive outcomes?
- Will you be able to do anything with your satisfaction results, or is it beyond your resources or control?
- Are there key stakeholders whose satisfaction will strongly influence your program?
Questions
Next steps

- An online evaluation survey will be distributed shortly.
- The second webinar is scheduled for July 10, [register here](https://www1.gotomeeting.com/register/449932617).
- The third webinar is scheduled for September 3, [register here](https://www1.gotomeeting.com/register/363452945).
- If you have any additional questions that you’d like addressed in upcoming webinars, please email them to Cheryl at Wilder ([cheryl.holm-hansen@wilder.org](mailto:cheryl.holm-hansen@wilder.org)).
Thank You!

- Today’s speakers
- Wilder Research
- NCCRT evidence-based education & outreach task group
- National Comprehensive Cancer Control Program
- Centers for Disease Control and Prevention (CDC)
- CDC’s Colorectal Cancer Control Program
- American Cancer Society
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