Evaluation toolkit

How to evaluate activities intended to increase awareness and use of colorectal cancer screening
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*How to evaluate activities intended to increase awareness and use of colorectal cancer screening*

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INTRODUCTION

The National Colorectal Cancer Roundtable (NCCRT) has partnered with Wilder Research to create this evaluation toolkit. The NCCRT is a national coalition of public, private, and voluntary organizations whose mission is to advance colorectal cancer control efforts by improving communication, coordination, and collaboration among health agencies, medical-professional organizations, and the public. The ultimate goal of the Roundtable is to increase the use of proven colorectal cancer screening tests among the entire population for whom screening is appropriate.

The toolkit is intended to help organizations and communities evaluate programs designed to increase awareness and use of colorectal cancer screening, specifically those activities that are designed to increase community demand for colorectal cancer screening. In addition, the toolkit is applicable to initiatives focusing efforts on enhancing demand for colorectal cancer screening through provider education.

This toolkit will provide you with:

- A basic understanding of evaluation strategies.
- Sample tools that you can use and amend to measure program effectiveness.
- Basic skills to collect outcomes data to inform and improve program decision making.
- Tips for incorporating evaluation results into stronger grant proposals, reports, and other dissemination activities.
- Practical yet comprehensive evaluation references and resources.

This toolkit includes an overall introduction to the concepts and steps involved in evaluating colorectal cancer screening awareness programs. Throughout this toolkit, you will find examples that highlight what programs need to do during each phase of an evaluation process. In addition, a case study focusing on the evaluation of a screening program that worked to educate medical providers is included in the Appendix.

FOCUS OF THE TOOLKIT

There are many ways organizations work to increase participation in colorectal cancer screening. Some activities are aimed at health care, such as informing providers if their patients are due for screening services. Other approaches seek to remove barriers to screening, such as interventions that reduce out-of-pocket costs or provide transportation to screening services. The NCCRT decided to focus this toolkit on evaluating interventions that seek to increase the community demand for colorectal cancer screening, including:
- **Client reminders** – printed or telephone messages advising people that they are due or late for screening.

- **Client incentives** – small, non-coercive rewards (e.g., cash or coupons) to motivate people to seek cancer screening for themselves or to encourage others (e.g., family members or close friends) to seek screening.

- **Small media** – videos or printed materials (e.g., letters, brochures, pamphlets, flyers, or newsletters) distributed from health care systems or other community settings that convey educational or motivational information to promote colorectal cancer screening.

- **Group education** – information on indications for, benefits of, and ways to overcome barriers to screening with the goal of informing, encouraging, and motivating participants to be screened for colorectal cancer. Group education is usually conducted by health professionals or by trained laypeople.

- **One-on-one education** – information conveyed by telephone or in-person on indications for, benefits of, and ways to overcome barriers to screening with the goal of informing, encouraging, and motivating people to seek colorectal cancer screening. These messages are delivered by health professionals or by trained laypeople.

Throughout the toolkit, these activities may be referred to as programs, initiatives, interventions, or efforts. The evidence showing the effectiveness of these interventions to increase community demand for colorectal cancer screening varies. There is strong evidence supporting small media, sufficient evidence supporting client reminders and one-on-one education, and insufficient evidence showing the effectiveness of client incentives and group education. However, all of these interventions are fairly similar in terms of how they would be evaluated. Please remember that whatever type of colorectal cancer screening awareness activity you are implementing, there is a way to evaluate it.

The toolkit is not designed to evaluate mass media campaigns, as evaluating a mass media campaign requires specific skills, knowledge, and resources that are not comprehensively covered here. Evaluating mass media campaigns most often requires the assistance of experienced professionals. Some general information about evaluating mass media campaigns can be found in the Appendix.

While this toolkit was developed specifically for programs working to increase colorectal cancer screening, the concepts described for evaluation can transfer to evaluation of any number of health- or non-health related programs and interventions. These concepts can be successfully applied to evaluate health and human services programs and activities in a wide variety of settings, including clinics, schools, nonprofit agencies, and government programs.
THE IMPORTANCE OF EVALUATION

Chapter overview

By the end of this chapter, you will be able to:

• Understand the importance of conducting a program evaluation.
• Begin identifying your evaluation questions.

Is what you are doing a worthwhile use of your time and resources? Are you making the difference you want to make? How can you do your work even better?

At its most basic level, evaluation helps you gather data to help answer these questions.

We know that screening for colorectal cancer helps prevent and detect the disease early, thus increasing the likelihood of survival. 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. A good evaluation can also help you monitor service delivery, assess participant or community needs, and identify ways to improve.

Evaluation can also support your efforts to secure funding – funders are more willing to provide resources if you can show your program is making a difference. Additionally, evaluation can help you strengthen funding requests by demonstrating a program’s strengths, identifying a need to improve, or justifying a need to expand. The information you collect can also build other types of support, including recruiting staff or volunteers, engaging potential collaborators, or attracting participants. By sharing your evaluation results with others, you expand the knowledge base of effective colorectal cancer screening awareness programs, essentially, multiplying the reach of your work.

When it comes to evaluation, there is no “one-size-fits-all.”
To make the best use of your time and resources, your evaluation should be tailored to your organization. Understanding what your organization hopes to learn through the evaluation will help you determine the information you need to collect and the tools you will use to do so.
**TYPICAL EVALUATION QUESTIONS**

As you begin your evaluation, you need to identify what you want to know at the end of the process. This toolkit focuses on the following types of questions related to activities to increase colorectal cancer screening awareness and use.

- Are we communicating accurate information about colorectal cancer and colorectal cancer screening options?
- Did we reach our target group?
- Did we increase participants’ knowledge of colorectal cancer and the importance of screening?
- Did we increase intention, motivation, or pledges to screen for colorectal cancer?
- Did we increase the number of people who talked to their doctor or health care provider about screening?
- Did we increase discussions about colorectal cancer screening among family and friends?
- Did risk-appropriate individuals get screened for colorectal cancer as a result of our activities?
- Did we increase screening rates among the age-appropriate population?
- How satisfied are people with the program activities and materials? What suggestions do they have for improving activities or materials?

Programs will not generally focus on all of these issues in a single evaluation. Instead, it is important to select the most relevant evaluation questions. Below are descriptions of three sample programs that are embarking on the evaluation process, including their initial evaluation concerns. In subsequent sections of the toolkit, we will follow these programs to see how their questions were used to guide their evaluation process and how they used what they learned to enhance their programming.
ENGAGE STAFF AND PARTICIPANTS IN EVALUATION ACTIVITIES

The following offers a few ways to consider engaging staff and program participants in evaluation activities, helping to ensure evaluation activities meet the needs of all stakeholders.

- Include key stakeholders, such as project staff and participants, at all stages of the evaluation process (e.g., formulation of questions, development of design, collection of data, analysis of results).
- Foster participant trust by stressing the importance of the evaluation work and building relationships between participants and researchers.
- Develop collaborations and mutual relationships with the target population (e.g., community leaders and organizations).
- Recruit research team members from the various communities participating in the program – this can increase the visibility of the project and enhance the credibility of the research.
- Provide outreach and education to inform potential subjects of the purpose and method of the research project.
- Establish credibility of the program by demonstrating local relevance and the usefulness of the evaluation results.
- Recruit participants using personal requests or phone calls from a trusted person, not formally through letters, etc.
- If possible, pay participants for involvement in data collection – if incentives are not viable for all participants, consider a lottery.
**Example 1**

Bayshore Medical Clinic, a small community-based clinic, has been calling patients to remind them that they are due or late for screening.

While developing their annual budget, Bayshore’s executive director expresses concern about the cost of the calls and questions whether it is worth it to continue. She wonders if they are making a difference. Are people more likely to get screened? Would another strategy, like postcards, be equally effective and cheaper?

The director follows up with the staff making the calls, and together they brainstorm a variety of other questions that they would like information about: How often do they successfully reach people? Are people comfortable being called? When is the right time to call in order to reach the most people?

**Example 2**

The Metropolitan Colon Cancer Collaborative, an advocacy group, develops and distributes brochures and other written information to promote colorectal cancer screening. Their target audience is the African American community.

Every five years, the Collaborative engages in a strategic planning process to identify community needs, assess the impact of their materials, and establish future priorities.

As part of this process, Collaborative members consult with core stakeholders including leaders within the African-American community and local public health professionals. Their discussions yield a number of questions: Are they successfully reaching their target group? Do people read and understand their materials? Do their materials provide accurate information about colorectal cancer and screening options? Does it change the way recipients think or feel about screening? Do the materials increase knowledge of colorectal cancer and the importance of screening? Do more people ultimately get screened?

**Example 3**

The Wellness Clinic, a hospital-based medical clinic, has been identifying individuals who should begin screening for colorectal cancer (based on their age or other risk factors) and conducting one-on-one educational sessions during other types of appointments. Their goal is to increase the percentage of patients who get screened.

The staff already know that one-on-one education should help increase knowledge and awareness. However, their clinic manager and board of directors are not convinced. They want to see data on their own patients to justify the cost and staff time dedicated to these one-on-one conversations.

Because the education is happening one-to-one, clinic staff are also interested in patient satisfaction. It is important to them that people are comfortable with the discussion, and view staff as knowledgeable and helpful.
WHAT IS EVALUATION?

Chapter overview

By the end of this chapter, you will:

• Understand the steps involved in program evaluation and the importance of addressing ethical and cultural considerations throughout the process.

• Understand the purpose of measuring outcomes and how the results can show a change in knowledge, attitude, or screening behavior of a targeted population.

• Know how process and satisfaction measures can be helpful for improving program implementation.

• Be ready to get started with your own evaluation.

Evaluation is a technical process that encourages careful planning of what you want to know and how you are going to gather the data to answer your questions. However, evaluation does not need to be overly complicated, time-consuming, or expensive. In fact, the best evaluations are often those that are kept simple and targeted to answering key program questions. Many organizations conduct evaluations to help them improve programming, using limited resources and internal staff who are not formally trained evaluators.

That being said, evaluation does require some knowledge and skill to do well. Rushing into an evaluation without a basic understanding of the process often yields information that is difficult to use. This toolkit provides a step-by-step guide to help staff with limited experience build their knowledge of and capacity to do evaluation. Anyone with the time and interest can become a competent evaluator. However, it can also be helpful to remember that you do not need to tackle this on your own. If you feel confused or overwhelmed as you move through the process, you may want to seek support or advice from a professional evaluator.
A STEP-BY-STEP APPROACH

Evaluation is best thought of as a series of steps, designed to help you identify and prioritize your evaluation needs, collect the right information to answer your questions, interpret your findings, and use the results to enhance your program. It is not uncommon for novice evaluators to want to skip some of the early planning steps, due to a desire to jump more quickly into the information gathering stage. However, by following the steps outlined below, your evaluation is likely to run more smoothly and produce better data. Each of these steps is further described in subsequent chapters of the toolkit.

Rather than being a one-time linear process, it is helpful to think of evaluation as an ongoing process. Once an evaluation cycle is complete (that is, you’ve moved through all seven of the steps we outline), you typically find yourself back at the beginning again. You may want to revise your evaluation to explore additional issues or questions that were not your highest priority the first time around, or which emerged through the course of your evaluation. If you changed your services based on your findings, you may want to continue your evaluation to see if the changes had the desired impact on your program success.
Step 1: Describe and map your program. Whenever you design a program to increase colorectal cancer screening awareness or use, you consider a number of factors, such as who the intervention should target and how the services should be delivered. A necessary part of the evaluation process is being able to clearly articulate why you provide each specific intervention and how these activities will benefit participants or the community. This description is often referred to as a program theory. Concisely describing your theory can help build a shared understanding of the program among stakeholders, identify the right outcomes to measure, and guide program enhancements.

In addition to articulating what your program does, it is helpful to “map” your program. Program maps, or logic models, present a clear picture of the links between your activities and what you expect to happen as a result. They represent an easy way to show stakeholders, such as funders, staff, and participants, what should happen in your program.

Step 2: Prioritize what you need to know. Once you have developed your logic model, you are ready to prioritize the evaluation issues you specifically want to address. Use your logic model and other program materials, as well as feedback from people interested in your program, to decide which evaluation questions are the most important to answer.

Step 3: Design your evaluation. Before embarking on an evaluation, you will save yourself time and energy by assessing your program’s evaluation capacity. By knowing your resources, you can design a process that will answer your evaluation questions and be completed within the available budget, staff, and time. Once you have selected your key evaluation issues or questions and assessed your capacity, the next step is to develop a plan for gathering the right information. For example, you might want to use a survey to collect data from participants at events, conduct a phone interview with patients, or gather information from program records or community databases. All strategies for gathering information have strengths and weaknesses; considering them helps you choose the most appropriate and reasonable options for your situation.

Step 4: Create tools for gathering information. The tools you use to collect information will vary for each evaluation. You could design your own data collection materials or use existing materials. Either way, your data collection materials should align with your prioritized evaluation questions and be tailored to your audience to make it easy for them to understand what you are asking.

Step 5: Collect the information. The next step is to implement the evaluation, by gathering your information. Depending on your evaluation plan, you may need to conduct surveys, interview project partners, document service delivery, or collect information another way.
Step 6: Sort and analyze the information. Whether you have collected verbal data such as open-ended comments from a survey or a key informant interview, or numerical data such as responses to a survey question, the next step is to organize the data in a way that can be easily understood and used to identify your key findings.

Step 7: Use and share the information. Once you have gone through the effort of conducting an evaluation, it is important to use the information to help you make decisions about improving your programming, targeting your efforts, soliciting funding, and communicating your successes. It is also important to share the information with those who care about your program such as funders, participants, medical practitioners, and program staff. Likewise, sharing evaluation information with a broader professional audience, through journals or presentations, can further the field of colorectal cancer awareness and screening.

IMPORTANT CONSIDERATIONS

Across all of these steps, it is important to ensure that the evaluation is appropriate and sensitive to your target population. Making sure that your evaluation is culturally appropriate and ethically sound will require some consideration throughout each step of the process.

Identify ethical implications. Whenever you start an evaluation, ethics should be addressed up front. It is important to think about how the data will be used, what data privacy laws apply, and how the data will be kept confidential. It is also important to ask yourself how the evaluation protects the rights and dignity of program and evaluation participants.

For instance, are you allowing participants the opportunity to opt out of the evaluation? Are you explaining how you will keep their information private? Are you explaining how the information will be used? Are you giving clients opportunities to ask questions and learn the results of the evaluation?

These questions should be a continuous part of the evaluation process. More information about ethical issues can be found in the Appendix, including advice for protecting individuals’ rights, addressing ethical issues, a sample consent form, and information on Institutional Review Boards (IRB).

Address cultural considerations. Throughout the evaluation process, you should consider differences in stakeholders, participants, and communities based on characteristics such as race and ethnicity, language, literacy level, available resources, age, and gender. People react differently to programs and evaluation depending on their background and experiences, and you want your evaluation to be sensitive to the needs of your community. Take care to approach any evaluation activities, as with any program activities, with sensitivity to cultural considerations.
WHAT EVALUATIONS MEASURE

When conducting an evaluation, it is important to decide what you want to know. Your program may want to understand what screening resources people are using or what prevents people from getting screened. You may be interested in how well your program is being implemented, or whether or not you are meeting your objectives. You may also want to know if program participants are satisfied with your materials. These evaluation questions often fall into three broad categories: outcomes, process, and satisfaction.

When you design your evaluation, it is a good idea to consider all three of these categories. For example, your program may be interested in knowing whether your reminder postcards result in more people speaking with their health care providers about getting screened. It may also be beneficial, however, to learn whether you are reaching the people originally intended, and if they are satisfied with the information they received about screening options.

Combining questions about outcomes, process, and satisfaction will help your organization make more informed programming decisions, as you will better understand not only the outcomes that resulted, but where changes should be made to enhance success and increase satisfaction.

Outcomes

Measuring outcomes documents the program’s actual impact and identifies strategies for strengthening or refocusing services. Outcomes are any changes that can be reasonably expected as a result of your intervention.

Although increased screening rates are the ultimate goal of colorectal cancer screening awareness programs, your program may choose to focus on an earlier outcome, such as changes in awareness, knowledge, or intention to be screened. For example, your small media campaign’s desired outcome may be to increase the number of people who speak with their health care providers about colorectal cancer screening. Benefits of an outcome evaluation include:

- **Understanding how well your program reached its goals.** An outcome evaluation can provide evidence of participant change as a result of your program, which is helpful in proving program effectiveness to funders or other stakeholders. In addition to identifying opportunities for program enhancement, these results can help you devise solutions to improve outcomes.

- **Sustaining current funding or securing future funding.** Funders may be more likely to continue to fund your program if there is evidence of increased awareness, knowledge, or behavior among participants.
- **Recognizing a job well done among staff.** Positive outcomes can indicate staff effectiveness and dedication.

- **Identifying best practices.** If your intervention has been shown to produce positive outcomes, you would most likely want to replicate the activities in order to increase your potential impact. An outcome evaluation can help pinpoint these strategies.

The following are sample questions colorectal cancer screening awareness programs could address through an outcome evaluation:

- Do people show increased knowledge of colorectal cancer screening after participating?
- Did the program increase community members’ intention or commitment to get screened?
- Did program participants speak with their health care provider about getting screened?
- Did age-appropriate program participants ultimately get screened? Did these screening rates improve compared to rates prior to our campaign?

**Process**

Process evaluation can help you understand how your program works and if it is working the way you expect. It can help you identify any implementation concerns, determine if the program is communicating the right messages about colorectal cancer screening, or determine if participants understand the information they receive. Benefits of a process evaluation include:

- **Explaining how your program is put into practice and identifying room for improvement.** A process evaluation provides an in-depth look at how your program operates – the reach of your campaign or activities, whether participants understand your materials, the adequacy of funding to meet your objectives, and the strength of your organization’s partnership with other entities. This information will help you see if your program is doing what it intended and can help you pinpoint where changes could be made in order to reach your goals.

- **Understanding potential for program impact.** Although a process evaluation does not assess actual outcomes, it can help you see if the program is on the right course to accomplish its goals. Should any challenges present themselves, you will be able to devise a plan for dealing with them.

- **Describing programs to stakeholders.** Program stakeholders, such as funders, may be interested in understanding how your program functions, the activities you offer, and how many people you reach. Funders may use process evaluation results to decide whether a program should be continued or expanded. Should others be interested in replicating your program, the results can help with understanding how your program runs and any challenges that have emerged.
A process evaluation can help your program answer questions relating to your program message, service delivery and reach, and how program implementation relates to outcomes:

- Are the messages you are sending out about colorectal cancer and screening correct (e.g., culturally appropriate or consistent with guidelines)?

- How many people are you reaching through your colorectal cancer screening awareness program? Are you reaching your intended target groups?

- Does your program have a defined point of completion, such as attending a number of colorectal cancer education sessions or accomplishing certain awareness or screening goals? If so, what percentage of participants successfully completes the program? What factors influence completion rates?

- How well are your activities meeting your participants’ needs?

- What questions or concerns do staff members, participants, or other key stakeholders have about the way services are delivered?

- What challenges and barriers to service delivery have been encountered? How have you addressed those, and with what degree of success?

- Is the program being implemented according to plan (such as timeline, budget, staffing, and the number of participants)?

- If you provide services in collaboration with other health-related agencies or organizations, how are those partnerships working?

- Are there certain aspects of your program that make people more or less likely to benefit from it?

**Satisfaction**

Evaluating satisfaction helps you understand whether the individuals who received services or participated in an activity were pleased with the services, felt they received the right type or amount of services, or have suggestions for change. In some cases, this assessment may include other stakeholders, such as health care providers, family members, and collaborators. Issues often addressed in this component include characteristics of staff and the quality of facilities and other materials. While having satisfied participants is not necessarily the same as having successful outcomes, it can be a useful source of feedback. The following are benefits of conducting an evaluation of stakeholder satisfaction:

- **Understanding your program’s strengths and where there is potential room for improvement.** Key stakeholders can let you know what they enjoyed or disliked about your program and how
helpful they found program staff, materials, or services. Participants should be given the opportunity to offer specific feedback about activities in order to uncover suggestions for improvement.

- **Determining what aspects of your program should continue, what could be improved, and what should be discarded.** This feedback is crucial for your colorectal cancer screening awareness program, as it can determine whether participants continue receiving services or if they would consider referring others to your program, as appropriate.

Here are some evaluation questions that address satisfaction:

- How satisfied are key stakeholders with our program or activities?
- Did participants find the educational or screening materials useful? If so, how? If not, why not?
- Did participants find program staff helpful? If so, why? If not, why not?
- Would participants recommend our information to others?
- Is there additional information about colorectal cancer screening that they would have liked to have received?

**An understanding of community needs**

Evaluations of program outcomes, process, and satisfaction encompass the most common types of program evaluation. Prior to conducting any of these types of evaluation, however, it may be in your organization’s best interest to assess your community’s needs. These assessments are not only critical while planning your program, but can also be beneficial for understanding whether you are still meeting the needs of your target population. Further information on evaluating community needs can be found in the Appendix.
SAMPLE PROGRAMS

As described in the previous chapter, the three sample programs have all identified a number of initial evaluation questions of interest to them. Do these initial evaluation questions reflect outcomes, process, or satisfaction issues?

Example 1
Bayshore Medical Clinic is particularly interested in outcomes such as the impact of the reminder calls on screening behavior. They also identified process questions about the implementation of the calls, such as their success in reaching people by telephone.

Example 2
The Metropolitan Colon Cancer Collaborative is interested in outcomes such as impact of their educational materials on recipients' knowledge and subsequent likelihood of being screened. They also identified a number of process questions about their strategy and materials, including issues related to the accuracy and clarity of the information and their success in reaching their intended population.

Example 3
The Wellness Clinic staff are interested outcomes such as their success in increasing screening rates. Because they provide education in a one-on-one setting, they are also interested in patient satisfaction with the services provided. It is important that participants are comfortable with the discussions and perceive the staff as knowledgeable and helpful.

GETTING STARTED

The next chapters will walk you through each of the evaluation steps in more detail. Before you begin to work through the steps, take a few minutes to write down your initial goals for the evaluation. Why are you interested in evaluating your program? What are you hoping to learn? What project partners or stakeholders are interested in your program, and what do you think they want to know?
STEP 1: Describe and map your program

Chapter overview

By the end of this chapter, you will be able to:

• Understand how describing and mapping your program can help you explain how and why your program is supposed to work.

• Describe your own program’s approach, including the evidence to support your intended outcomes.

• Map your program in order to connect activities with expected outcomes.

“Our team was struggling with which activities to include in our logic model and program theory. There are so many activities that we do to deliver our program, it was difficult to narrow our focus on the most important ones. Through review of the toolkit, we were able to more clearly distinguish those key activities that comprised the bulk of our intervention, and were able to narrow our focus on those activities for evaluation.” – Joan Schmidt, R.N., M.S.N, Community Cancer Liaison. Cancer Center, St. Joseph Mercy Hospital, Ann Arbor MI.

DESCRIBE YOUR PROGRAM

When you decide to implement an activity to increase colorectal cancer screening awareness or use, your stakeholders may ask why the program uses a particular approach or why you expect it to be effective in your community. To answer these questions, it helps to have a concise and accurate way to explain what you do, what you expect to happen, and how it should lead to the intended results or benefits. This description is the underlying program theory. A program theory provides a logical and reasonable explanation of how and why a program is supposed to work. Spelling out that theory can be one of the most important things you do for the success of your program.

A clear program theory helps others make sense of your program, and helps you make sure you are implementing an activity that has the best possible chance of increasing screening rates. A clear program theory also makes it easier to choose the most appropriate results to measure in your evaluation. Many unsuccessful evaluations fail to articulate the theory in advance. An
evaluation will not be useful to you if it measures the wrong outcomes or is based on faulty assumptions.

Some screening and awareness initiatives sound promising, but do not result in the desired changes. Of course, this could be because a good theory is not being carried out well, but in some cases the problem is the theory itself. For example, you may not be able to reasonably expect one-on-one education courses to create large-scale community change if the reach is limited. Make sure that your theory is not only clear and makes sense on paper, but that it is based on good underlying evidence about what increases screening rates and how people really change. Evidence can be based on previous work experience, literature and research, and professional opinions from colleagues and national organizations.

**The If-Then connection**

Program theories can often be captured in a series of “if-then” statements – **IF** something is done for the program participants, **THEN** something should change.

For example, a program to increase screening rates could have an underlying theory like this: **IF** at-risk individuals learn colorectal cancer can be prevented with screening, **THEN** they will talk to their health care provider about being screened.”

A program theory should also spell out why you expect the changes to happen. Between the “if” and the “then,” there should be solid evidence or some well-established connection supporting the idea that your initiative will work. For example, if your program plans to distribute pamphlets that encourage people to speak with health care providers about screening, there should be research that supports what you expect to happen. You should know if the message you are sending will resonate with that particular group, if the pamphlets will motivate participants to get screened, and if there are potential barriers to following through with your message. Many well-intentioned programs are not successful because the underlying research did not align with what the program expected to happen.

A good program theory also reflects the fact that change happens in stages. For example, you will likely change someone’s attitudes or knowledge of colorectal cancer screening before you change their screening behavior.

**Sample outline for a program theory**

- **IF** a certain set of resources (such as staff, equipment, materials) are available, **THEN** the program can provide a certain set of activities or services to participants.

- **IF** participants receive these services, **THEN** they experience specific changes in their knowledge, attitudes, or skills.
IF individuals change their knowledge, attitudes, or skills, THEN they will change their behavior and usual practice.

IF enough participants change their behavior and practice, THEN the program may have a broader impact on screening rates in the community.

IF screening rates go up, THEN colorectal cancer incidence and mortality rates will decrease.

Even if a program is incredibly effective, it is not likely that any single program will lead to community-level changes in screening rates, to say nothing of reducing colon cancer mortality. It would not be advisable for most programs to focus on community-level cancer incidence or screening rates as their evaluation focus. Instead, it is usually more appropriate to measure some of the more immediate program impacts. So why do we bother including these more global impacts in a program theory? It can be helpful to continue tying a program’s activities and impacts back to the larger community-vision or goal, to show how our activities support this mission and to keep us focused on the ultimate point of our efforts.
Example 1

Program theory for the Bayshore Medical Center:

Health practitioners call clients to remind them it is time to be screened for colorectal cancer.

- Clients learn about the importance of screening.
- Clients pledge to be screened.
- Clients make an appointment to be screened for colorectal cancer.
- Colorectal cancer screening rates will increase.
- Colorectal cancer incidence and mortality rates will decrease.

Example 2

Program theory for the Metropolitan Colon Cancer Collaborative:

Staff distribute brochures and educational materials at community events.

- African American community members learn about the importance of screening and available community resources related to colorectal cancer screening.
- African American community members talk to their families, friends, and health care providers about getting screened.
- African American community members make appointments to be screened.
- Colorectal cancer screening rates increase.
- Disparities in colorectal cancer incidence and mortality will decrease.

Example 3

Program theory for the Wellness Clinic:

Clinic staff provide one-on-one education sessions.

- Wellness clinic patients gain knowledge and awareness of colorectal cancer screening options.
- Patients will make an appointment to be screened for colorectal cancer.
- Colorectal cancer screening rates increase.
- Colorectal cancer incidence and mortality decrease.
**Developing your program theory**

As you develop your program theory, select one of your activities and answer the following three questions.

- IF the activity is provided, THEN what – realistically – should be the result for participants?

- WHY do you believe the activity will lead to this result? (In other words, what is your assumption about how this kind of change occurs? Are you drawing from an established theory used by others?)

- What evidence do you have that the activity will lead to this result (such as previous results from your own or other programs, published research, or consistent feedback from participants)?

Repeat the same three questions for each activity or service that you provide. Don’t worry, you don’t need to develop a theory for everything! Administrative tasks, such as training staff or doing paperwork, typically are not included in a program theory. These activities, while a necessary part of running a program, are usually not the important services that produce change in participants. Focus on the main services you provide – the ones you most count on to promote positive results.

The Appendix includes a worksheet you can use to document your program theory.

**MAP YOUR PROGRAM**

Once you have developed your theory, map your program to illustrate the connections between what your program does and what you expect to happen because of your program. This is often referred to as a logic model. Simply put, a logic model is a picture of your theory – a drawing that shows how one thing leads to the next.

A logic model uses short phrases to represent what is explained in the program theory. Most often, a logic model is presented in the form of a flow chart with multiple columns. The logic model illustrates the linkages between the If/Then statements. The following components are usually included in a logic model:

- **Inputs** – any resources or materials used by the program to provide its activities (e.g., money, staff, volunteers, facilities, equipment, supplies).

- **Activities** – any services or information provided by the program.

- **Outputs** – amount of activity provided, described in quantifiable terms (e.g., number of group or one-on-one classes taught, number of people served, amount of educational materials distributed, number of client reminder calls made).
The next components of the model are the outcomes of the program for participants. **Outcomes** should not be confused with outputs. Outcomes are what you expect to change as a result of the participant receiving services. Outputs can tell you how much of a service was provided, but not whether the activity had the desired impact. For instance, it may be impressive to say that you distributed 10,000 brochures last year. However, knowing that the brochures were distributed does not tell you whether they actually led to any changes in people’s awareness of colorectal cancer or the importance of screening or likelihood of being screened.

The number of outcomes varies depending on the underlying logic. One frequent approach is to illustrate the following three levels of outcomes, but there may be more or less.

- The first level of outcomes describes the **short-term outcomes**, or results of the program activities. Short-term outcomes typically refer to changes in **knowledge or awareness**, as these types of changes typically precede changes in behavior or practice.

- The next level describes **intermediate outcomes**, which usually refer to **behavioral changes** that follow knowledge and awareness changes.

- Following the intermediate impacts are the **long-term outcomes**. These outcomes usually refer to more **global changes**, such as a community-wide drop in colorectal cancer mortality. At this level the direct impact of the activity decreases.

The following logic models illustrate the underlying program theory for our three sample programs. An example of a more **complex logic model** is included in the Appendix.
Example 3

**INPUTS**
- Educational materials
- Trained staff

**ACTIVITY**
Provide one-on-one education sessions

**OUTPUTS**
- Number of one-on-one sessions completed
  - Number of patients receiving one-on-one sessions

**SHORT-TERM OUTCOMES**
Hospital patients gain knowledge and awareness of CRC screening options

**INTERMEDIATE OUTCOMES**
Patients make an appointment to be screened for CRC

**LONG-TERM OUTCOMES**
CRC screening rates increase
CRC incidence and mortality decrease
Why should I develop a logic model?

If developed thoughtfully, a logic model can provide a starting point for your evaluation design. You can use it to decide which outcomes are most important, and the appropriate timing for measuring success. Logic models can also serve a number of other purposes, including:

- Illustrating the important features of your program to stakeholders such as funders, participants, collaborating agencies, or public health officials.
- Training new staff members about the program theory and approach – programs can use the model to help staff understand how the program works and their role in promoting benefits for participants.
- Controlling ‘program drift’ – some programs review their model periodically to ensure that their services are still consistent with the program’s intended purpose and approach.
- Facilitating program management – the logic model may help programs plan their services and identify necessary resources.

The process of developing a logic model is as important as the final product, especially when stakeholders are involved. The process can help the organization gain a shared vision of the initiative. Further information can be found in the Appendix, including tips for creating a logic model and a sample logic model worksheet.

In addition, some people may find it helpful to think through how to strengthen a logic model. An example of a weak logic model is included in the appendix, as well as a description of how that example may be improved.

TAKING THE FIRST STEP

Using the information presented in this chapter and the supplemental resources in the Appendix, develop a program theory and logic model. Take time to carefully review the theory, including the linkages that you made between each step of the process (for example, between your activities and your short-term outcomes). Share the program theory and logic model with your core stakeholders, such as your staff or funders. Make sure that it is clear and understandable. Begin thinking about what you want to measure, based on the discussions about your logic model.
STEP 2: Prioritize your evaluation questions

Chapter overview

By the end of this chapter, you will be able to:

- Review the importance of all of your potential evaluation questions.
- Select the most important evaluation questions to include in your design.

Developing your logic model will help you start thinking about what outcome, process, and satisfaction issues you specifically want to address in your evaluation. Well-constructed evaluation questions will direct the entire evaluation, so it is important that the questions make sense. A good evaluation question needs to be focused and meaningful. It also needs to be clear and understood by people outside the immediate evaluation process.

At the beginning of this toolkit, a number of evaluation questions relevant to interventions that increase community demand for screening were listed. No evaluation can answer all of these questions, and your program might have different evaluation questions. Regardless, now is the time to identify the most important evaluation questions that you will continually refer to as you go through the evaluation process.

PRIORITIZING OUTCOMES QUESTIONS

If your logic model is complex, or if you have very limited evaluation resources, you might not be able to measure each outcome listed in the model. Ask the following questions to prioritize the one or two most important outcomes:

- Which outcomes will be most useful in understanding our success and guiding improvements?
- Which outcomes are most important to the participants?
- Which outcomes are most important to other stakeholders, including funders?
PRIORITIZING PROCESS QUESTIONS

Process evaluation allows you to scrutinize your services and see new connections between the way that services are provided and participant outcomes or satisfaction. To decide which implementation issues are most important, consider:

- How much would it influence participant outcomes or satisfaction?
- How strongly does it concern staff members or other key stakeholders?
- How substantially would it help with planning or improvement decisions?

PRIORITIZING SATISFACTION QUESTIONS

Your program could ask about dozens of aspects of client satisfaction, and each question would probably hold some interest and value. To prioritize, ask yourself the following questions:

- Do you suspect that certain elements of client satisfaction make a substantial difference in positive outcomes?
- If it turns out that satisfaction with a certain aspect of the program is low, will you be able to do anything about it, or is it beyond your resources or control?
- Are there key stakeholders whose satisfaction will strongly influence your program, such as those who can refer clients or partner with you?

ADDITIONAL TIPS

As you narrow down your list of evaluation questions, consider:

- Reviewing your program materials to determine the degree of fit between your publicly stated objectives and each outcome listed in the model. Which outcomes do people expect you to accomplish?
- Learning from others’ experiences by looking at the activities and outcomes described by similar programs.
- Talking to people most interested in your program, such as staff, current and potential funders, health care providers, participants, community members, and advocacy groups. These stakeholders are all concerned about what changes occurred because of your efforts and can provide great input on prioritizing your evaluation questions. For more information on engaging stakeholders, please see the Appendix.
PRIORITY EVALUATION QUESTIONS FOR THE SAMPLE PROGRAMS

As described in an earlier section of the toolkit, our sample programs all identified a number of evaluation questions of interest. Before proceeding with their evaluation design, the staff must take some time to confirm their priorities.

Example 1
Staff decide that they are most interested in whether the reminders increase screening rates. According to their logic model, the reminders will educate patients about the importance of screening. The clinic would also like to learn whether postcards or telephone calls are more effective and cost-efficient.

The clinic is also interested in knowing what their patients think about the reminders and whether they influenced them to get screened. However, answering these questions would require them to contact patients directly. They decide not to do this at the present time due to capacity concerns.

Example 2
Ultimately, staff are most interested in whether their materials actually help to increase screening rates, as that is their overall mission.

However, evaluating their success in increasing screening rates would be a complex evaluation, and they do not want to embark on something this rigorous without knowing if their materials are even being read or understood by their target audience. With feedback from their core stakeholders, they decide to focus first on whether or not the target audience reads and understands the brochures.

Example 3
Since there is a large amount of money and time allocated to the one-on-one interventions, board members want to know if the costs are justified. Increased screening rates depend on whether patients like the educational materials and discussion they are receiving in the one-on-one sessions, so asking patients about their satisfaction is seen as the highest priority.

TAKING THE NEXT STEP
Compile all of your potential evaluation questions. Review the questions in this chapter to determine which questions are most important. If you need input in establishing your priorities, talk to your program’s core stakeholders, such as staff, funders, or collaborators.
STEP 3: Design the evaluation

Chapter overview

By the end of this chapter, you will be able to:

- Assess your program's budget and capacity for conducting an evaluation.
- Understand the difference between primary and secondary data.
- Understand different methods of data collection and how to select the most appropriate strategy for your program.
- Select a strategy for collecting your data.

ASSESS YOUR CAPACITY

While it does not need to be cumbersome or elaborate, conducting an evaluation is a commitment. Before proceeding with your evaluation, it is important to have an honest and accurate assessment of your program’s capacity to design and implement the evaluation. Your evaluation design has to make sense in light of your available financial resources and staff capacity. However, you do not have to conduct an evaluation all on your own. You can draw on the expertise of fellow staff to assist you. This toolkit will also help you conduct simple but effective evaluations. You may find that answering your highest priority evaluation questions is beyond your current resources. If so, you may want to explore ways to increase your evaluation capacity by raising additional funds, training internal staff, or hiring consultants to help you.

Available budget

Evaluation does not need to be expensive, but it does take some time and money to plan an evaluation, collect the right information, and use the results to strengthen your program. A commonly recommended starting point is to allocate 10 percent of the total program budget to evaluation, but the cost will ultimately depend on the activities offered and the evaluation methods used. Many can be done less expensively. Also remember that your full cost includes the value of the time that program staff will spend on the evaluation; it won’t all be out-of-pocket costs.
While it may be difficult to allocate funding to evaluation, it is important to remember that the information received through an evaluation can be extremely valuable. This information can help you understand areas in need of improvement and document your successes and strengths. This information can ultimately help your program grow by impressing funders. The funds dedicated to an evaluation should be seen as an important aspect of the program itself, rather than drawing funding away from services. Overall, it will be beneficial to allocate a percentage of your budget toward evaluation to know that your program is running efficiently and effectively, rather than spending funds on a program that may not be meeting the needs of your clients. Remember that money you spend on evaluation is an investment in your program and can save you money in the long run.

The most common evaluation costs include:

- Salary and benefits for program staff, based on the time they will spend on the evaluation.
- Travel expenses to and from meetings and evaluation sites.
- Incentives for evaluation participants, like food or gift cards.
- Communication tools such as postage, telephone or Internet access.
- Printing and duplication of surveys, reports, or other documents.
- Supplies and equipment, such as computers or software.

Additional information is found in the Appendix, including tips for constructing a budget and reducing evaluation costs and a sample budget worksheet.

**Evaluation skills**

To successfully complete an evaluation, staff must have some evaluation skills and knowledge. These include:

- Understanding of evaluation methods and the ability to design evaluation studies.
- Computer and database skills.
- Data analysis skills.
- Ability to collect data using a variety of strategies.
- Ability to summarize results and identify implications.
This toolkit will help you build your skills and knowledge, thus increasing your organization's capacity to evaluate your colorectal cancer screening awareness program. Taking note of the skills that you and your colleagues bring to the evaluation identifies areas of expertise and areas where capacity building may be necessary. While the scope of your evaluation does depend on your available resources, you may be able to conduct a larger or more complex evaluation than previously thought by assessing your current skills. The Appendix includes several tip sheets for assessing the current evaluation capacity of your staff and overall agency, as well as some tips for building capacity.

In some cases, you may require external evaluation assistance, such as when it is required by a funder or if you intend to conduct a time-intensive evaluation. External support may also be needed if internal staff do not have the time or interest to build their own capacity. Information about hiring and working with external evaluators is located in the Appendix.

Capacity of the sample programs

**Example 1**

The Bayshore Clinic is small and does not have funds specifically allocated to evaluation. They do have several other resources available to them, however. Their staff includes one person who developed several surveys as part of a graduate school project and another who is good at making databases in Excel. They also have access to some volunteers who help out at the clinic several afternoons each week.

**Example 2**

The Collaborative has a small evaluation budget, as well as some large donors who may be interested in evaluation. Several staff members took undergraduate courses in research methods.

**Example 3**

The Wellness Clinic has some funding available through a grant to support evaluation, and the hospital board authorized some funds to support the evaluation. The Wellness Clinic manager lacks formal training in evaluation, but was able to build her knowledge and skills with a useful colorectal cancer evaluation toolkit.
DECIDE WHAT DATA YOU NEED

Once you have selected the key evaluation questions and assessed your capacity, you can develop a plan for gathering the right information. You have created a list of outcome issues to explore through your evaluation and prioritized a few that are most important. You may also have identified a few process issues to examine and decided whether to assess satisfaction of any core stakeholders. Now you are ready to develop a measurement plan and a strategy to collect information.

PRIMARY VERSUS SECONDARY DATA

When deciding how to measure each issue, you may have several options. Often, your program participants can provide you with evaluation information. For instance, you could conduct a follow-up survey with participants to see if they got screened after an educational phone call. There may be other people who could provide useful information, such as your own staff or staff at other community agencies. For example, they might describe challenges they face when conducting one-on-one education classes. Information gathered specifically for your evaluation is called primary data.

Secondary data are data that have already been collected. This information can be used to further evaluate or understand your program’s participants and may provide an overall picture of colorectal cancer screening awareness and behaviors for a particular group. For example, if you want to report colorectal cancer screening rates within your community, consider comparing these rates to statewide rates as measured by Health Information National Trends Survey (HINTS) or the Medicare Claims database, which allows you to search for colorectal cancer screening rates for the Medicare population by zip code. Information extracted from client-specific sources, such as medical records, would also be considered secondary data.

Using existing information may save you time and money, but can also present challenges. In some cases, it may be difficult to obtain information from clinics or medical offices about specific participants. You may need to get permission from the clinic or from patients or clients themselves to use the data.

Here are some tips when considering using secondary data:

- Make sure the source of the information is reputable, such as government or medical data.
Be sure the available information aligns with the question you are trying to answer.

Take into account the methods that were used in collecting the data to make sure they are reliable and valid. Are the methods sound? Did they collect data from an appropriate range of people?

Know when the information was collected and determine if it is still relevant.

“With our evaluation, we knew we were going to be able to identify how our participants felt and what they learned from our program overall, through our pre/post surveys. What we felt was missing, however, was the impact of the program on participants. What were the stories of those who participated in our program? What was the impact on their lives? By doing a case study of a participant who was impacted by the program, we’re able to convey that story to others.” - Tawana Thomas-Johnson, Director, Health Disparities. American Cancer Society. South Atlantic Division, Inc.

COLLECTING NEW INFORMATION

Secondary data may not always be available to answer your questions. If this is the case, you will need to collect new information, or primary data. When collecting new information, select a manageable approach that will provide accurate information. Some of the most common methods include:

- **Surveys or questionnaires** – collecting information from respondents without direct contact. Paper versions of a survey may be handed out or mailed. You might also ask people to complete surveys electronically via email or the Internet.

- **Interviews** – collecting information verbally from informants, using a question and answer format. Interviews can be conducted in different ways, such as in person or over the phone. Interviews can be fairly unstructured, allowing you flexibility in deciding what questions to ask or how to best ask the question, or can be tightly scripted, requiring you to ask questions the same way across respondents.

- **Focus groups** – conducting group interviews with a small group of participants or other informants at the same time.

- **Case studies** – conducting interviews with one or two individuals who were impacted by a program. Interviews may be tailored to match the experience of each individual.

There is not one ideal way to gather information. Each approach has advantages and disadvantages. It is important that you select one best suited to your program. The following table summarizes some of the advantages and disadvantages of these common methods of data collection:
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<tr>
<th>Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Examples for when to use this method</th>
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<tr>
<td>Surveys – paper or online/email</td>
<td>Surveys can be relatively easy and inexpensive to conduct. You can collect responses from more people compared to conducting interviews. If conducted online or through email, responses can be loaded directly into data analysis software, which saves data entry time.</td>
<td>Surveys are less successful with respondents with limited literacy or motivation to respond. Response rates are often low, requiring multiple attempts to obtain information. Surveys are less useful if you need open-ended information (they work better for structured, closed-ended questions). Mailed surveys are usually more costly than online surveys (due to postage and printing costs). Not all potential respondents may have an email address or Internet access.</td>
<td>If you are holding an event such as a 5k or walk/run, you can email surveys out to participants using the information they used when registering for the event. This information can be used to understand changes in colorectal cancer screening intention or behavior. A survey of participants at an event can assess what they enjoyed or disliked about the program, and if they have any suggestions for improvement. Brief surveys can be distributed at health fairs to understand participants' knowledge of colorectal cancer, their perception of risk, and intention to get screened. Respondents can also be asked to do a follow-up survey (to assess whether they ended up getting screened) by providing an incentive to leave their contact information.</td>
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<td>Interviews</td>
<td>If done in person, you have a chance to establish rapport and help the respondent feel comfortable. If done in person, you can see and react as needed to a respondent’s emotions and body language. There is often a high response rate. If relatively unstructured, interviews allow you to be flexible in deciding what questions to ask and how to ask them. You have the opportunity to explore topics in more depth than you can with a survey. If needed, you can explain or clarify questions, increasing the likelihood of useful responses.</td>
<td>Interviews can be expensive and time-consuming to conduct (especially if done in-person). It may be difficult to reach possible interviewees by telephone. Interviewers need to be trained to make sure that interviews are done well. Respondents may change their answers to try to please the interviewer or to avoid embarrassment.</td>
<td>Interviews can be used with program staff during a process evaluation to understand potential barriers to their work. A sample of community members can be briefly interviewed to understand what they liked about your small media campaign, what messages they took from it, and what they would improve. A sample of clinic patients who are appropriate for screening (based on age or risk factors), but have not yet made an appointment could be interviewed by phone to identify the reasons why they have not pursued screening.</td>
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<td>Method</td>
<td>Advantages</td>
<td>Disadvantages</td>
<td>Examples for when to use this method</td>
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<td>Focus groups</td>
<td>Group interaction generates ideas and insights that would be unlikely to emerge with one individual.</td>
<td>You can usually only include a small number of participants.</td>
<td>Similar to an interview, focus groups can be held with community members to assess attitudes toward colorectal cancer screening and understand barriers to getting screened.</td>
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<td></td>
<td>Like interviews, focus groups allow you to explore topics more in-depth than you can with a survey.</td>
<td>Focus group participants may not be representative of your entire target audience.</td>
<td>If you are conducting a small media campaign, focus groups can be held to understand what people liked/disliked about the materials, what they understood the main message to be, and what they would improve.</td>
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<td></td>
<td>Like interviews, you can explain or clarify questions which may increase the likelihood of useful responses.</td>
<td>Focus groups only work when they are facilitated by someone who has been trained to conduct groups.</td>
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<td>Focus groups can be vulnerable to group dynamics, and the conversation may be dominated by a few individuals.</td>
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<td>It may be difficult to transcribe and summarize results.</td>
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<td>Case studies</td>
<td>Case studies highlight the experience of one or two people who were impacted by program.</td>
<td>Case studies are limited to only a very small number of participants.</td>
<td>Case studies can be a great complement to a survey or other more quantitative method.</td>
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<td>Case studies offer additional context to survey results.</td>
<td>The experience of one or two individuals may not reflect the experience of the majority.</td>
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<td>With case studies, you can explore personal experience in a more unstructured way.</td>
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<td>Have the opportunity to clarify questions throughout the data collection with case studies.</td>
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<td>This method can be useful to help illustrate impact of program on one or two people for funders or others interested in the program.</td>
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CULTURAL CONSIDERATIONS

- Explicitly consider the strengths/weaknesses of different data collection strategies and select those that will be most appropriate given available resources.

- In addition to quantitative approaches, consider qualitative measurement approaches (e.g., focus groups, narrative accounts, case studies) – not only can these be useful for exploring issues in greater depth, but they may also be more successful with some cultural communities.

- Seek guidance from the cultural community to ensure that the proposed methods will be appropriate and yield meaningful data.

- If a comparison group is going to be used, make sure that the group is comparable to the target population in terms of relevant characteristics (e.g., ethnicity, age, gender, socio-economic status, community). If an appropriate comparison cannot be found, which can be the case with some cultural communities in particular, consider using a different design.

- Consider using multiple data collection approaches and be creative in considering non-traditional data collection strategies.
DATA COLLECTION APPROACHES SELECTED BY THE SAMPLE PROGRAMS

Our sample programs have prioritized their evaluation questions and assessed their capacity. They are now ready to select their data collection methods.

Example 1

The Bayshore Clinic decides to track all information internally, using a combination of primary and secondary data sources. Staff want to know the number of people who made a screening appointment within one month of the reminder. This information can be extracted from medical records. However, they also want some additional information, including the number and type of reminders given and the number of contacts that were unsuccessful. They decide to create a spreadsheet to track this information.

Example 2

Experts in the field of colorectal cancer screening have already reviewed the Collaborative’s materials, and they know that the information is accurate. However, they don’t know how it comes across to African-American community members. They would like to talk to their target audience in-depth about what they think of the materials. Do they understand them? Did they change their awareness, knowledge, or intent to be screened?

While interviews are a good option, they decide to conduct focus groups. Staff felt it would be easier to arrange a small number of focus groups rather than many individual interviews. They were also interested in having the participants react to the comments and suggestions of others, to help them identify areas of consensus and disagreement. The questions would not be very personal, so participants should be comfortable speaking in groups.

Example 3

The clinic’s evaluation questions relate primarily to participant satisfaction with the one-on-one education sessions. This will require gathering information directly from participants to understand whether they felt comfortable or perceived staff positively.

Because their board wants evidence that awareness and knowledge increased, clinic staff decide to do a pre-test/posttest/ follow-up survey design. They would like to collect surveys from participants before and after the sessions, to see if there are any increases in knowledge, awareness, or intent to be screened. They are also interested in knowing whether patients subsequently take any steps towards screening. To explore this issue, they decide to mail a follow-up survey to patients three months after the education session.

Some of these questions could be addressed using other approaches, but surveys have several advantages. They will be able to include more of their patients in the evaluation rather than conducting more costly and time-consuming interviews. Patients may also feel more comfortable sharing their feedback in a survey rather than directly with program staff, especially if they were not satisfied with the services.
TAKING THE NEXT STEP

Based on your prioritized evaluation questions and your capacity and resources to conduct an evaluation, what are the most appropriate strategies for gathering the information that you need? Why is this strategy appropriate? What are the advantages and disadvantages of your proposed approach? Don’t forget that you can choose a combination of these approaches, as needed.
STEP 4: Identify or develop data collection instruments

CHARACTERISTICS OF GOOD EVALUATION TOOLS

There are several existing data collection tools related to colorectal cancer. If an existing data collection tool does not capture what you would like to measure, however, you can develop new ones, such as surveys or interview guides. This section will provide information on existing data collection tools, as well as recommendations for creating new instruments.

Whether you use an existing data collection instrument or develop your own, you’ll need to know that these materials will provide useful information. The following characteristics of a good tool should be kept in mind whether you create your own or use existing materials. Make sure they are:

- Valid – accurately measuring the concept or idea that you want to measure.
- Reliable – yielding consistent results over time when used the same way with similar respondents.
- Culturally appropriate – being appropriate for the target population in terms of language, measurement approach, and questions asked.
- Ethical and legal – conforming to all established standards and laws for the ethical treatment of evaluation participants.
- Sensitive to change – being able to identify changes in participant outcomes over time.
Focused – addressing your specific questions and only including questions that are essential to know.

The materials must also be easy to use. For example, you may find a set of interview questions that fits all of the above criteria, but it is too long for participants or staff would need extensive training in order to conduct the interview. In that case, it may not be a feasible evaluation tool, even if you believe it would provide useful information. Other considerations:

- Reasonable cost.
- Reasonable time for administration.
- Clear guidelines for how to collect information and interpret the results.
- Easy-to-use format.

**EXISTING DATA COLLECTION INSTRUMENTS**

Before you develop your own data collection materials, look for existing tools such as questionnaires or surveys. Finding these materials can be challenging, but this guide will help you get started with sample instruments. The Appendix contains [sample survey instruments](#) with questions from existing tools.

If you don’t find what you need in the Appendix, a good search may be worth the effort since developing valid and reliable questions can be surprisingly difficult. Using materials that were developed by someone with specific test development expertise will help ensure quality data.

Once you have found some possible materials to use, ask yourself the following questions:

- Is the instrument’s intended use similar to what I intend to do?
- Will it provide useful information? Does it measure the right things given my evaluation priorities?
- Is the instrument appropriate for my audience? Will people be able to understand and complete the instrument? Can the instrument be easily adapted to fit my community?
- Are the procedures for collecting information clear and reasonable?
- Is the instrument free to use? If not, is the cost reasonable and affordable?
- Do I need any special training or authorization to use the instrument?
- How long does it take to complete the instrument? Is this reasonable?
LOCATING EXISTING INSTRUMENTS AND TOOLS

Including established questions as part of your data collection instrument may allow you to compare your results with statewide or national data. Finding existing instruments, data sources, and tools can require some investigative skills.

Consider the following tips in locating and using existing information:

- **Explore national- or state-wide databases.** The following sites contain data as well as questions from national surveys. Consider using individual questions as part of your surveys or interview/focus group protocol. Compare results from your program participants to national or state-wide data. A list of core questions from the BRFSS survey can be found at the end of this chapter.

  - **Behavioral Risk Factor Surveillance System (BRFSS)**

    The BRFSS, a division of the Centers for Disease Control and Prevention (CDC), is the largest on-going telephone health survey. It has tracked health conditions and risk behaviors in the United States annually since 1984. Survey data can be accessed by year, by state or territory, and by metropolitan/micropolitan areas.

    Here you will find links to interactive databases, survey data, and the questionnaires used by year. The questionnaire can also be accessed in Spanish. General website:  
    [http://www.cdc.gov/brfss](http://www.cdc.gov/brfss)

    To see prevalence and trends by state, use this link. Under category, use the drop-down menu and choose “Colorectal Cancer Screening.”  

    The Selected Metropolitan/Micropolitan Area Risk Trends (SMART) project uses the BRFSS to analyze selected metropolitan/micropolitan statistical areas (MMSAs) with 500 or more respondents. Click on “Access Local Area Health Risk Data” for information on your specific area. Click on “View Local Area Quick-View Charts” to compare data from your MMSA to another.  

    BRFSS Maps allows you to see data maps of survey questions. Use the drop-down menu and select “Colorectal Cancer Screening.”  

  - **Health Information National Trends Survey (HINTS)**

    HINTS, a service of the National Cancer Institute and the National Institutes of Health, collects nationally representative data about the American public’s use of cancer-related information. Question categories include health communication, mental models of cancer, primary cancer risk behaviors, and respondent characteristics. There is a specific section
for colon cancer, with data from the 2003, 2005, and 2007 HINTS surveys.  
http://hints.cancer.gov/

- **National Health Interview Survey (NHIS)**

  The NHIS is conducted by the National Center for Health Statistics, which is part of the Centers for Disease Control and Prevention. NHIS data are used widely throughout the Department of Health and Human Services (DHHS) to monitor trends in illness and disability and to track progress toward achieving national health objectives. A copy of the questionnaire can be found at this link in English and Spanish, along with datasets.  

- **Cancer Control P.L.A.N.E.T.**

  This site provides data and resources to design, implement, and evaluate evidence-based cancer control programs. The colorectal cancer section contains five steps to effective cancer control planning, including how to evaluate your program. Click on “Find research-tested programs and products” to find information on Research-Tested Intervention Programs (RTIPs) relating to colorectal cancer. Some of the program descriptions also include instruments.  
  http://cancercontrolplanet.cancer.gov/colorectal_cancer.html

- **Review the published literature about the type of program you are implementing.** It is always a good idea to look for evaluations of similar programs or activities. There are many good literature search systems available. If you are unfamiliar with these systems, consider getting help from a reference librarian at a college or university library. When reviewing existing studies, make note of how other programs conducted their evaluations and the tools that they used. If any of these look promising, track them down either by finding the reference for the original source or by contacting the author directly.

- **Talk to others in the field to see what materials they have used and what they recommend.** These individuals include other program directors or staff, as well as those conducting research or evaluation.

**DEVELOPING NEW DATA COLLECTION INSTRUMENTS**

“It’s important to be culturally sensitive in the questions you ask. Cancer is a sensitive issue, but can be especially sensitive for some communities of color. We needed to have questions that were direct and straightforward.” - Tawana Thomas Johnson, Director, Health Disparities. American Cancer Society, South Atlantic Division, Inc.

Sometimes existing data collection instruments will not capture the information you would like from your program participants. In this case, it may be necessary to create new tools specific to
Developing new tools may take time, but questions may be more focused on the information you hope to receive. Here are some things to keep in mind if you plan to create your own instruments.

- **Surveys or questionnaires** – There are various things to consider when creating a survey or questionnaire, including content, formatting, and strategies for getting a good response rate. Survey questions can be closed- or open-ended, depending on how structured you would like responses to be. You may choose to use pre- and post-surveys, or post-only surveys. Writing effective questions can be tricky, and there are important literacy issues to keep in mind when preparing a survey. Pre-testing your survey is also a good idea to ensure that the order and wording of your questions are understandable. Information on writing and conducting a survey can be found in the Appendix. Additionally, information about strengths and weaknesses of different survey questions are included in the Appendix.

- **Interviews** – Interviews can take various forms and can be as structured as necessary. When writing your interview questions, pay attention to formatting and how long the interview will reasonably take. To build trust, consider placing the more sensitive questions toward the end of the interview. Remember that the interviewer may need to probe for more information, so consider any follow-up questions that may arise in advance. Further information on writing protocols and conducting interviews can be found in the Appendix.

- **Focus groups** – Since focus groups require input from multiple people, you may have to limit the number of questions so that everyone is heard without taking too much time. A moderator can probably get through five to seven questions in a one and a half hour session. Keep group dynamics in mind and encourage participation from all participants. Select participants who are opinionated and comfortable sharing information in a group. A checklist for items needed when conducting a focus group, a sample protocol, and tips for conducting a focus group can be found in the Appendix.

- **Case studies** – Case studies can be done in different ways, and can include interviews with participants, their families, and their providers. As one of the benefits of case studies is to highlight the experience of one or two individuals, questions can be tailored to best capture the unique experiences of those individuals. As information is likely to be identifiable, ensure you have appropriate informed consent processes in place.

Be sure to consider the social desirability of any questions you include as part of an evaluation, whether survey questions, interview questions, or other types of questions. Social desirability bias can occur when respondents answer questions in a way to make themselves look more positive or favorable manner to others, that is, trying to give the “right answer”. There are a number of ways that social desirability bias could emerge in your evaluation. Here are some examples and things to consider to minimize the risk of social desirability for your participants.
CULTURAL CONSIDERATIONS

- Directly assess psychometric and methodological adequacy of existing instruments (e.g., validity, reliability, relevance to goals, sensitivity to change, developmental appropriateness, cost, time required, user-friendliness, clarity of instructions).

- Consider using instruments that are useful for multiple purposes (e.g., providing clinical knowledge to guide service delivery while also measuring outcomes).

- When using instruments across cultural communities, ensure their equivalence for different groups, including:
  - Conceptual equivalence (same theoretical construct is measured across cultures)
  - Semantic equivalence (concepts are translated appropriately)
  - Content equivalence (content is relevant to the phenomenon being studied in that culture)
  - Criterion equivalence (interpretation of variables is in reference to cultural norms)
  - Methodological equivalence (assessment methods yield comparable responses across cultures)

- Before using any instrument, pilot test it with the population being evaluated and directly obtain feedback regarding their perceptions.

- To the extent possible, offer a choice of languages to participants – instruments should be translated both linguistically and conceptually.

- If no appropriate data collection instruments exist, consider developing your own – obtain consultation if you are not skilled in test development.

- Ask community members to review data collection instruments prior to their use to ensure that question style and content are appropriate.

- Be cautious about use of Likert type response scales, as these types of questions are not familiar to members of all cultural communities.

- Consider order of questions – start with least threatening questions and avoid more sensitive issues until some level of trust has been established.

- Consider alternatives to direct questioning (e.g., key informant data, secondary data).
DATA COLLECTION MATERIALS DEVELOPED BY OUR SAMPLE PROGRAMS

Our sample programs have selected their data collection approaches and must now develop their tools for gathering the needed information.

Example 1
The Bayshore staff person with database skills sets up an Excel tracking system. The spreadsheet includes the patient number, information on whether patients were given a reminder phone call or postcard, how many contacts were successful, and whether that patient eventually was screened for colorectal cancer.

Example 2
Collaborative staff members with some survey development skills make the first effort to write up some focus group questions. Because nobody on staff has specific focus group experience, however, they hire a consultant to review the protocol in advance.

Example 3
Wellness Clinic staff write a survey for patients to complete before and after their one-on-one education session. They create a separate survey for the three-month follow up. In order to compare their data to results nationwide, they include questions from HINTS and BRFSS.

Sample data collection tools for each of these three programs follow:

Example 1: Tracking spreadsheet

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Date of reminder</th>
<th>Type of reminder</th>
<th>Success reaching patient</th>
<th>Date of CRC screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>05034563</td>
<td>7/9/2010</td>
<td>Postcard</td>
<td>Yes</td>
<td>9/12/2010</td>
</tr>
<tr>
<td>04385964</td>
<td>7/9/2010</td>
<td>Postcard</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>93837542</td>
<td>7/11/2010</td>
<td>Telephone</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>02843459</td>
<td>7/13/2010</td>
<td>Postcard</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Example 2: Focus group protocol

First, I would like to go around the room and give each of you the opportunity to briefly introduce yourselves. Please tell us your **first name and how learned about the work of the Collaborative**.

Once again, your personal information will not be shared and your answers will be confidential.

**We would like for you to take a look at these written materials.**

**What is your first impression of them?**

**What do you feel is the main message?**

**Are the materials understandable? [PROBE: If no, what could make them more easily understandable to you?]**

**Who do you think is the target audience? What about the materials made you believe that is the target audience?**

**Does the message motivate you to get screened for colorectal cancer? What kind of messages would motivate you?**

**Where would be the best place to distribute the materials in order to reach people in your community?**

Thank you for your time!
Example 3: Post-test survey

The Wellness Clinic would like to know your thoughts about colorectal cancer screening and the education session you had with a health care professional today. Your responses will be kept confidential, and the health care professional that assisted you today will not see your answers. You may skip any question you feel uncomfortable answering. Thank you for taking our survey!

Would you say you strongly agree, agree, disagree, or strongly disagree with the following statements?

1. There's not much you can do to lower your chances of getting colon cancer.
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Disagree
   - [ ] Strongly disagree

2. Colon cancer develops over a period of several years.
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Disagree
   - [ ] Strongly disagree

3. There are ways to slow down or disrupt the development of colon cancer.
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Disagree
   - [ ] Strongly disagree

4. Colon cancer is most often caused by a person's behavior or lifestyle.
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Disagree
   - [ ] Strongly disagree

5. People with colon cancer have pain or other symptoms prior to being diagnosed.
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Disagree
   - [ ] Strongly disagree

6. Have you thought about doing a home stool blood test?
   - [ ] Yes
   - [ ] No
   
   If yes, would you say that you plan to do one, you don't plan to do one, or you're undecided?
   - [ ] I plan to do one
   - [ ] I do not plan to do one
   - [ ] I am undecided

7. Have you thought about getting a sigmoidoscopy or colonoscopy?
   - [ ] Yes
   - [ ] No
   
   If yes, would you say that you plan to do one, you don't plan to do one, or you're undecided?
   - [ ] I plan to do one
   - [ ] I do not plan to do one
   - [ ] I am undecided
Please indicate whether you strongly agree, agree, disagree, or strongly disagree with the statement:

8. I feel the information on colorectal cancer screening I received from the health care professional today was helpful.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

9. The health care professional I met with today was very knowledgeable about colorectal cancer screening.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

10. I felt comfortable asking her questions about colorectal cancer screening.
    - Strongly agree
    - Agree
    - Disagree
    - Strongly disagree

11. The information I received today during my meeting with the health care professional convinced me to consider getting screened for colorectal cancer.
    - Strongly agree
    - Agree
    - Disagree
    - Strongly disagree

12. I would recommend meeting with a health care professional to discuss colorectal cancer screening to my family and friends.
    - Strongly agree
    - Agree
    - Disagree
    - Strongly disagree

Demographics

13. What is your sex?
    - Male
    - Female

14. What is your age?
    Age (in years) ______

Thank you for completing our survey!
CORE QUESTIONS

One of the challenges of comparing evaluation results from one program to the next is that programs often write survey questions in very different ways. For the most part, that is fine and to be expected. Still, there are benefits to comparing program results nationwide or with work done in previous years. As such, the National Colorectal Cancer Roundtable suggests that programs consider including the five “core” questions on the next page in their evaluation instruments to improve our ability to compare results on a few key measures.

The core questions have been pulled from the Behavioral Risk Factor Surveillance Survey (BRFSS). The BRFSS is the largest, on-going telephone health survey. It has tracked health conditions and risk behaviors in the United States annually since 1984. Survey data can be accessed by year, by state or territory, and by metropolitan/micropolitan areas. The BRFSS provides reliable and valid questions that have been asked for a number of years. Not only will you be able to compare what you learn from your survey to what has been gathered using past survey questions, but you will have the confidence of using questions with considerable research behind them.

In addition, you can use the core questions to make the case for program support. Maybe your program is doing much better than the national average? Perhaps you can show steady progress toward national screening rates, despite working in an underserved community with limited funding? If everyone uses these core questions in their evaluation instruments, it will help us improve our overall understanding of effective programming in a wide variety of settings.
Programs are encouraged to use the following five core questions, pulled from the BRFSS survey, in their evaluation instruments.

Core questions:

1. A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?
   - Yes
   - No
   - Don't know / Not sure
   - Refused

2. How long has it been since you had your last blood stool test using a home kit?
   - Within the past year (anytime less than 12 months ago)
   - Within the past 2 years (1 year but less than 2 years ago)
   - Within the past 3 years (2 years but less than 3 years ago)
   - Within the past 5 years (3 years but less than 5 years ago)
   - 5 or more years ago
   - Don't know / Not sure
   - Refused

3. Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?
   - Yes
   - No
   - Don't know / Not sure
   - Refused

4. For a sigmoidoscopy, a flexible tube is inserted into the rectum to look for problems. A colonoscopy is similar, but uses a longer tube, and you are usually given medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test. Was your most recent exam a sigmoidoscopy or a colonoscopy?
   - Sigmoidoscopy
   - Colonoscopy
   - Don't know / Not sure
   - Refused

5. How long has it been since you had your last sigmoidoscopy or colonoscopy?
   - Within the past year (anytime less than 12 months ago)
   - Within the past 2 years (1 year but less than 2 years ago)
   - Within the past 3 years (2 years but less than 3 years ago)
   - Within the past 5 years (3 years but less than 5 years ago)
   - Within the past 10 years (5 years but less than 10 years ago)
   - 10 or more years ago
   - Don't know / Not sure
   - Refused
OTHER QUESTIONS TO CONSIDER

Aside from the five core questions, the Appendix also includes questions to assess:

- Knowledge of colorectal cancer screening.
- Intention to screen.
- Discussions with family, friends, or medical providers about colorectal cancer and screening.
- Attitudes toward screening.
- Satisfaction with the program or program materials.

Since these questions have been included in national surveys, you can compare your results to those within your state or region. They can be included in evaluations of program process, outcomes, and satisfaction.

TAKING THE NEXT STEP

Before you use a data collection instrument, make sure that it fits the criteria of a good evaluation tool. Consider using existing tools, or create new data collection instruments if existing materials do not address your evaluation questions. Use the materials in the Appendix to help you get started. If you are using a survey, please consider including the core questions in your instrument, to help advance our knowledge base in a variety of settings.
STEP 5: Collect the data

WHEN AND HOW WILL YOU COLLECT INFORMATION

Once you have selected a general approach for collecting information, you need to develop a data collection plan. To develop your plan, first list all of the outcome, process, and satisfaction issues that you want to measure in your evaluation. For each, identify the data collection strategy that you will use, the people who will provide the information, and your plan for collecting the information. Identifying the person responsible is important to ensure accountability for the task.

As you develop your data collection plan, consider:

- When is the activity going to take place, and what are logical data collection points?
- What do funding sources expect? When will you need to report the results?
- When does staff have the most availability to help?
- When and how will you collect data?

Answering these questions will increase the likelihood of collecting useful data.
Sample data collection plans:

It can be helpful to summarize your evaluation plan in a chart or grid. Several templates for creating and describing your evaluation plan can be found in the Appendix.

**SAMPLE DATA COLLECTION PLAN FOR THE WELLNESS CLINIC**

The chart below lists each of the priority evaluation items for the Wellness Clinic, along with a plan for collecting the data. It is helpful to think separately about each of your evaluation priorities to ensure that you have a plan for gathering each item. You will note that two separate types of information should be collected in the post-test survey. This does not mean that two surveys are needed, only that the survey should include both the needed outcome evaluation items and questions related to participant satisfaction.

<table>
<thead>
<tr>
<th>Information to be collected</th>
<th>Possible data collection strategy</th>
<th>Data source</th>
<th>Data collection procedures</th>
<th>Person responsible for data collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROCESS: How well are the one-on-one education courses meeting the education and awareness needs of our patients?</td>
<td>Pre-test survey</td>
<td>Patients</td>
<td>Pre-test survey answers will be compared to post-test surveys in order to see if there is a change, or whether patients should be provided different information.</td>
<td>Staff providing the one-on-one course</td>
</tr>
<tr>
<td>OUTCOME: Are there any changes in colorectal cancer screening awareness and knowledge after completing a one-on-one education session?</td>
<td>Post-test survey</td>
<td>Patients</td>
<td>Patients who receive a one-on-one education session will receive a survey immediately after the session.</td>
<td>Nurses and medical assistants</td>
</tr>
<tr>
<td>SATISFACTION: Do patients like the one-on-one sessions, and do they feel comfortable with the staff who are providing them?</td>
<td>Post-test survey</td>
<td>Patients</td>
<td>Questions on satisfaction with materials and staff will be included in the post-test immediately after the one-on-one session.</td>
<td>Nurses and Medical Assistants</td>
</tr>
<tr>
<td>OUTCOME: Did patients who received the one-on-one education courses take any steps toward getting screened?</td>
<td>Follow-up survey</td>
<td>Patients</td>
<td>Three months after their visit, patients will receive a follow-up survey in the mail along with a $5 incentive.</td>
<td>Clinic administrative staff</td>
</tr>
</tbody>
</table>
DATA COLLECTION PLANS CREATED BY OUR SAMPLE PROGRAMS

Example 1

The clinic decides to track reminders for six months. Some patients receive postcards, others receive telephone calls. They track which patients were given a reminder and how many contacts were unsuccessful (because phone numbers were incorrect or because mail came back as non-deliverable) using their Excel database.

Clinic volunteers, who already have access to patient files, review files to see how many people receiving reminders made an appointment to be screened within one month of the reminder. They enter this information into the Excel database as well.

Staff also keep track of their expenses, including staff time to make calls and printing/postage costs for the postcards.

Example 2

The Collaborative staff recruit focus group participants by handing out fliers at community events and posting information on their web page. Community members are offered $25 to participate in one of three hour-long focus groups, which will take place at the local community center. Food will be provided.

The consultant they hired to review the protocol is also a trained focus group facilitator. They hire the consultant to conduct the focus groups.

Example 3

Hospital staff collect surveys while patients are in the waiting room before their appointments. They ask them to do the post-test immediately following the one-on-one education session. Clinic Administrative Staff also mail a follow-up survey three months later, along with a self-addressed stamped envelope. Participants receive a $5 incentive when they return the follow-up survey.
IMPORTANT CONSIDERATIONS WHEN COLLECTING DATA

Time and budget considerations

Keep time and budget in mind when implementing an evaluation. For instance, if you want to measure participants’ satisfaction with your program, consider the method you’d like to use to gather the information, the time that is involved with implementing the method, and the cost associated with the task. Measuring participant satisfaction can be done in a variety of ways, with varying resource implications.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Method</th>
<th>Time intensive?</th>
<th>Budget implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program participants</td>
<td>Written survey</td>
<td>Medium (survey development, piloting, coding)</td>
<td>Low</td>
</tr>
<tr>
<td>Program participants</td>
<td>Web survey</td>
<td>Low-medium (survey development, programming survey into computer)</td>
<td>Low</td>
</tr>
<tr>
<td>Community members</td>
<td>Focus group</td>
<td>High (interview guide, piloting, transcribing)</td>
<td>High depending on if there is a stipend/incentive and if an outside trained facilitator is used</td>
</tr>
<tr>
<td>Members of community agencies</td>
<td>Interviews</td>
<td>Medium-high (depends on how many will be interviewed)</td>
<td>Potentially high (depends on how many will be interviewed)</td>
</tr>
</tbody>
</table>

Appropriateness for your target population

There are several important points to consider when planning your evaluation and data collection tasks. Cultural differences among people involved in the evaluation, language comprehension, and discomfort with the subject of colorectal cancer must be taken into account. Be mindful of the following when collecting information:

- Avoid using jargon or terms that may be unfamiliar to some participants. This is especially important when describing colorectal cancer screening tests, including stool tests (FOBT or FIT), flexible sigmoidoscopy, or colonoscopy. If you are asking participants whether they have been screened for colorectal cancer, include a brief description of the screening tests they might have used.

- Consider participants’ fluency and familiarity with English. It may be necessary to translate surveys or interview protocols into various languages.

- Identify someone from the cultural group to recruit participants or collect data. Keep in mind, however, that some individuals (especially those in tight-knit communities) may have concerns about being surveyed by someone from their own community who knows their family and friends.
Any collaboration or support from community leaders should be made clear to potential participants through letters of support or having the leader actively recruit participants.

Be mindful that the topic of colorectal cancer may be uncomfortable for some individuals to discuss. People may also feel uneasy discussing particular screening tests, such as stool sample collection for FOBT. When conducting interviews or surveys, it will be important to take respondents’ sensitivity on the subject into consideration.

There may be reluctance among culturally diverse individuals to participate in evaluation efforts, given historical concerns and the perception of the process as intrusive and potentially exploitative.

When analyzing results, keep in mind that differences from within the group might be important to capture. For example, recent immigrants from a particular ethnic group may have very different views about colorectal cancer screening compared to second or third generation members of the same group.

Consider issues related to religion, clan, language or dialect, and other characteristics. These cultural differences can help to shed light on potential findings.

Tailor data collection instruments to your potential respondents. Language, reading level, use of jargon, and the format of your data collection should be considered. If you translate the survey into another language, have bilingual individuals review the original survey and the translated version to ensure that the question meaning did not change. Including jargon or technical terms may be appropriate for a survey of medical providers, but brief descriptions of screening types may need to be included in a survey of their patients. See the Appendix for a description of screening tests.

**Paper vs. online**

Many surveys are done on paper, however online surveys have become increasingly popular. To complete a survey online, potential respondents receive an Internet link that allows them to answer questions directly on their computers. While this may be quick and convenient, online surveys are not always the right choice. Consider issues such as your intended audience’s access to the Internet and comfort with computers before selecting this approach. If you do choose to do an online survey, there are numerous Internet sites, such as Survey Monkey or Zoomerang, that allow you to create and collect surveys for a small fee.

**Anonymity and confidentiality of survey data**

Anonymous surveys collect no identifiable information from a respondent. It is often desirable to keep surveys anonymous and not request information such as name or social security number. If survey respondents do not need to provide this information, they may feel more comfortable
being honest. However, there are a number of reasons you may need identifying information and, therefore, choose to keep surveys confidential. Confidential surveys collect personal identifiable data but keep the information private. If you are collecting surveys at two points in time (such as before and after the program), you need to have a way to match surveys together. You may also need to collect names in order to distribute incentives to those who completed surveys. For a more advanced evaluation, you will need to connect survey data to other information, such as medical records or background information about participants.

Collecting names or other identifying information does not need to be a deterrent for respondents, however. Often people are comfortable providing their names, so long as the reasons for collecting that information and the precautions that will be taken have been explained to them. Regardless of whether surveys are conducted anonymously or not, personal information that is provided should be kept private and secure.

Making your evaluation design more “thorough”

There are always opportunities to make your design more detailed, so that it is more accepted by the medical and academic communities. If you have the budget, time, and staff to add pre-tests, follow ups, and comparison groups, you may be able to understand the impact of your program more comprehensively. Keep in mind that the more you are able to measure and compare, the more information you will have about what works.

Multiple time periods. Post-tests will give you information about how participants changed after receiving the intervention. If you test participants before (pre-test) and after the intervention, you will have a sense of how they have changed over the course of the program. To go further, if you are able to follow up with participants after they complete or leave a program, you may see evidence that attitude, knowledge, and behavior changes were maintained over time. For example, you may be able to follow up with patients at a community clinic to see if they continued to complete an annual FOBT test over a period of years.

Keep in mind, however, that pre-post tests are not always necessary. Review your evaluation questions to decide if one is needed. A post-test only design would be sufficient if, for example, you are only interested in whether program participants understood materials or found the staff helpful.

Comparison groups. Your evaluation will also be stronger if you include both a participant group and a comparison group, made up of people who do not receive the intervention, but are like the intervention group in other ways. The design is particularly strong if you randomly assign participants to receive the intervention. Using randomly assigned groups is the strongest method to determine that attitude, knowledge, and behavior changes are due to the program itself, and not to other factors. This approach may be ideal in demonstration studies of new approaches.
“I want to get evaluation information from former program participants, but I no longer have their contact information.”

When needed, ask participants for their contact information when they receive services. In addition to asking for their phone number or email address, you may want to ask for an additional phone number or email address of someone who will have the participant’s current contact information. When appropriate, you could also increase the chances of getting the data by asking all or some of the evaluation questions at the conclusion of a service, rather than after a follow-up period. For instance, if a person receives an educational phone call, include some questions about their understanding of colorectal cancer screening at the end of the phone call.

It may be necessary to partner with another organization in order to follow up with participants to see if they ended up getting screened. For example, if you conduct a campaign to increase community awareness of colorectal cancer screening, it would be optimal to partner with a local health clinic that provides stool tests or assists participants with colonoscopy appointments. The clinic could then ask patients how they received the referral.

“My program serves hundreds of people each year. I want to include all of them in my evaluation, but we have limited time and resources.”

With a very large program, it may be more manageable to gather information using a survey, rather than interview all participants. If interviews are your best strategy to get your needed information, consider interviewing only a sample of your participants. For example, you could conduct interviews with people served in specific months or select every tenth person to interview. As long as your sample is large enough and similar to the overall group of people served, your results should generally reflect the opinions and experiences of your entire group of clients.

“I developed a data collection plan, but collected too much/too little information. What could I have done differently?”

Having a plan is only the first step – it is important that your plan is realistic and can be carried out. Consider the following:

- Focus on your priorities, and only ask questions that are necessary to understanding program outcomes and operation. It is better to measure a few things consistently and reliably than try to collect more comprehensive information that may be unreliable or too time consuming to analyze.
Assign responsibility for overseeing the data collection and make it part of that person’s job description.

Ask staff for input into the evaluation design and procedures to increase their “buy-in” when the time comes to collect information.

Integrate data collection into program activities when possible, rather than making it an “add-on” activity to tackle later.

Consider using existing data before you develop plans for collecting new information.

Identify potential barriers to data collection and develop strategies to address them.

“I don’t know when to schedule my data collection.”

Scheduling data collection should be decided, in part, by whether your program is conducting ongoing program evaluation to assess quality or evaluating a specific initiative. For an ongoing evaluation, you can collect information through program attendance or service records. You can also ask participants questions relating to satisfaction to learn of any issues that should be addressed. To evaluate a specific activity, your program should have an understanding of its goals and when you expect these outcomes to be achieved. You may be able to collect some information, such as participants’ satisfaction with services, at the time that services are completed or even midway through a longer-term program. However, if you want to know about changes people have made in their lives, you will need to allow more time and plan accordingly. Use your program theory and logic model to help you decide when to collect information.

If it is important to your evaluation to show change in someone’s attitudes, behavior, or situation over time, you may need to collect information at least two times, such as at the beginning and end of services.

CULTURAL CONSIDERATIONS

Take time to establish rapport with participants prior to collecting information – in some cases, it may be necessary for interviewers to provide information about them beyond what is customary.

Use a communication style that approximates the style of the cultural groups participating in the evaluation (e.g., formal and direct questioning may be appropriate for some audiences while others prefer informal conversation).
- Be aware of familial and cultural dynamics during data collection (e.g., is it appropriate for individuals to be interviewed alone or should a family member be present?).

- Provide adequate training and ongoing support to data collection staff to ensure that data are collected appropriately, consistently, and safely.

**OTHER TIPS**

The Appendix contains a variety of additional resources for collecting your information, including tips for increasing your survey response rate, tips for conducting interviews, tips for conducting focus groups, and a focus group checklist.

**TAKING THE NEXT STEP**

Before you create a data collection plan, think through logical data collection points and expectations from funders and other stakeholders. Determine the staff members who will assist in collecting the data and keep time and your budget in mind. Before you collect data, consider the method’s appropriateness for your target population. Brainstorm any possible challenges that may occur when collecting the data and come up with potential solutions beforehand.
STEP 6: Organize and analyze information

Chapter overview

By the end of this chapter, you will be able to:

- Understand quantitative and qualitative analysis.
- Organize your evaluation information effectively.
- Interpret results accurately and report sound conclusions.

Once data have been collected, you need to organize and analyze the information. The best time to start thinking about the analysis plan is while you are identifying key evaluation questions and determining the data collection plan. Your analysis strategy should match the type of information that you have and the evaluation questions that you are trying to answer. You will first need to prepare your data by entering the information into an appropriate format. The Appendix includes some tips for effectively entering data.

Depending on the scope of your evaluation and your available resources, you may want to create a database or spreadsheet to organize your information. Readily available computer programs, such as Excel and Access, can be useful. Excel tends to be easily accessible for most people who have access to a computer with Microsoft products. Other software is available to help you analyze both quantitative and qualitative evaluation results, such as SPSS or ATLAS-ti. Some of this software is expensive and requires specific training, however, and you may be able to analyze your findings without it. Before investing in this software, seek outside consultation to determine if it is needed.
ANALYZING QUANTITATIVE DATA

Quantitative data is information you collect in numerical form, such as counts, percentages, and rating scales. Closed-ended survey questions, which limit responses to predetermined categories (e.g., yes or no), are typically given a numerical value so they can be analyzed quantitatively.

Summarizing results

Once you have collected your data, you must decide on what types of analysis to use. There are some relatively simple statistics that can provide useful information. Descriptive statistics can help you summarize your data and identify key findings. Descriptive analysis is used to reduce your raw data to an understandable level.

Common methods include:

■ Counting how many of your participants fall into various categories of interest (e.g., how many said they “strongly agree,” “agree,” “disagree,” and “strongly disagree”), often called, “frequency distributions.”

■ Finding the number that best represents the “typical score,” such as the average, called, “central tendency.”

■ Calculating the amount of variation or disagreement in your results, called “variability.”

Detailed, step-by-step instructions for calculating this information is included in the Appendix. Additionally, if you are using Microsoft Excel to organize, database, and/or analyze your quantitative data, it may be helpful to review some basic Excel functions, as well as learn some more complex analysis tools. Here are some helpful free tutorials that can guide you through the vast majority of Excel functions.

- GCF LearnFree.org
  http://www.gcflearnfree.org/excel2010

- Baycon Group
  http://www.baycongroup.com/el0.htm

- Free Training Tutorial
  http://www.free-training-tutorial.com/

Determining whether results are meaningful

The overall goal of inferential analysis is to determine whether results are meaningful. For example, did participants of your colorectal cancer screening awareness program change in important ways over time? Were participants really different from people who did not participate in the program activities? In statistical terms, the meaningfulness of findings is typically described in terms of “significance.”
Many statistical tests can be used to conduct inferential analysis. Common statistical tests include chi-squares, correlations, t-tests, and analyses of variance. These statistics would most likely NOT be familiar to people without evaluation or research experience. If these statistics are not familiar to you, but you want to see if your results are “statistically significant,” seek consultation to ensure that you select the right type of analysis for your data and interpret the findings appropriately.

To be considered significant, there has to be a high likelihood that the results were not due to chance or random variation. When this occurs, you can conclude that a relationship between two variables is strong and reliable. For example, your program would want to know whether participant knowledge of colorectal cancer screening options increased due to your small media campaign, or if another program’s activities caused this change. Several factors influence the likelihood of significance, including the strength of the relationship (i.e., how related are your results to your program activities?), the amount of variability in the results (i.e., did the results from one group differ greatly from another?), and the number of people in the sample.

**Quantitative analysis tips**

- Review and correct data entry before beginning your analysis.

- Leave enough time and money for analysis – it is easy to focus so much on data collection that you do not leave enough time to analyze the results.

- Identify the appropriate statistics for each key question – get consultation if needed.

- Do not use the word “significant” when describing your findings unless it has been tested and found to be true either statistically or clinically. As a rule of thumb, an intervention is considered clinically significant when a patient has experienced a meaningful level of change during a treatment.

**ANALYZING QUALITATIVE DATA**

Qualitative data are non-numerical information, such as responses gathered through interviews, observations, focus groups, written documents or journals, or open-ended survey questions. On its own, or in combination with quantitative information, qualitative data can provide rich information about how programs work. However, meaningful analysis of qualitative information can take time.

The first step in analyzing qualitative information is to reduce or simplify the information. Because of its verbal nature, this simplification may be difficult. Important information may be scattered throughout interviews or focus group proceedings. During this first stage of analysis, you must make important choices about which aspects of the information should be emphasized, minimized, or left out altogether. While it can be difficult to remove comments provided directly by participants,
it is important to focus on the questions that you are trying to answer and the relevance of the responses to these questions.

Depending on the amount and type of data that you have, you might want to identify the common themes in your data. Identifying these themes is often called “coding.” You can begin developing a set of codes or themes before you collect your information, based on the theories or assumptions you have about the anticipated responses. However, it is important to review and modify your codes as you proceed to ensure that they reflect the actual findings. When you report the findings, the codes will help you identify the most prevalent themes that emerged. You might also want to identify quotes that best illustrate the themes, for use in reports. The following example illustrates some sample coding for Example 2, the focus groups conducted by the Metropolitan Colon Cancer Collaborative.
**Coding example**

**Question:** Are the materials understandable?

**Focus group responses:**

- “I get that the brochures are supposed to give us more information about colon cancer and how to get screened, but the language used to talk about the screening tests is confusing. I can’t keep all the ‘-oscopies’ straight!”
- “Honestly, I still don’t know the difference between a sigmoidoscopy and a colonoscopy after reading this. Maybe you can talk about what each test looks for specifically, and what it’s supposed to be like.”
- “I know I’ve had one of these tests before, but I can’t tell which one by looking at the brochure. The big words on the handout make it a little confusing. It would be helpful to know which one, though, since I think it’s important for me to get one done again.”

A code for the three responses to the question would be that the **language used to describe the screening test options is too complicated.** People reading the educational materials may be confused by the different screening test options and would like the tests to be described in simpler terms. Since multiple people had the same feeling about the brochures, it may be fair to say that this is an important concern for the group to address.

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**INTERPRETING YOUR RESULTS AND DRAWING CONCLUSIONS**

Both quantitative and qualitative analyses only get you so far. While the analysis can help to summarize and identify key findings, you still need to interpret the results and draw your conclusions. Drawing conclusions involves stepping back to consider what the results mean and what they imply about your work. During this phase, ask yourself the following types of questions:

- What patterns and themes emerge in the results?
- Are there any deviations from these patterns? If yes, what might explain these deviations?
- Do the results make sense?
- Are there any findings that are surprising? If so, how do you explain these results?
- Are the results significant from a clinical or statistical standpoint? Are they meaningful in a practical way?
- Do any interesting stories emerge from the responses?
- Do the results suggest any recommendations for improving the program?
- Do the results lead to additional questions about the program? Do they suggest that additional data may need to be collected?
**Involve stakeholders.** Consider including key stakeholders in this process by reviewing findings and preliminary conclusions with them prior to writing a formal report. This will ensure that their interests have been met through the evaluation and that any questions have been answered.

**Consider practical value, not just statistical significance.** Statistically significant results are those that are unlikely to have occurred by chance. Do not be discouraged if you do not obtain statistically significant results. While a lack of significant findings may suggest that a program was not effective in promoting change, other factors should be considered. You may have chosen to measure an outcome that was too ambitious, such as a community-wide increase in colorectal cancer screening rates. These outcomes may take longer to emerge. Or, you may simply not have had enough cases to produce statistical significance. In interpreting your results, consider whether there are alternate explanations to the lack of significance. It is also important to consider the practical significance of the findings. Some statistically significant results do not yield important information to guide program enhancements, while some findings that are not significant are still useful.

**Watch for, and resolve, inconsistencies.** In some cases, you may obtain contradictory information. For example, you may find that stakeholders describe important benefits of your group education classes, but these improvements do not appear in pre-post test comparisons of screening rates. Various stakeholders may also disagree. For instance, staff may report changes that are not reported by the participants themselves. It can be challenging to determine which information is accurate, especially when comparing different peoples’ viewpoints or perspectives. Remember that various stakeholders can have valid viewpoints that vary based on their unique perspectives and experiences. Try to resolve these discrepancies and reflect them in your findings to the extent possible.

**CULTURAL CONSIDERATIONS**

- Make sure that sampling procedures result in an evaluation sample that reflects the target population of interest.
  
  — Use sampling techniques that provide for adequate representation among all targeted audiences and address appropriate subpopulations, not merely broad racial or ethnic categories.

  — Consider outreach to targeted groups.

  — Over-sampling or “stratification” of samples may be necessary if the samples of culturally diverse individuals are too few in number to be representative.

- If the sample of participants does not constitute a representative sample of the cultural groups of interest, findings should not be attributed to cultural differences.

- Collect data from enough people to allow for adequate power to obtain reliable answers.
When interpreting data, avoid explanations that are based on cultural stereotypes or use “deficit model” interpretations (e.g., explanations that compare diverse groups to a monocultural standard).

When exploring cultural differences, make sure that culture is appropriately measured and relevant other variables are also included.

— Consider not only differences that arise from culture but also other plausible variables that may account for the observed differences between the two groups (e.g., gender, age, socioeconomic status).

— Consider measuring issues such as acculturation, biculturism, and ethnic identity to aid interpretation of data.

— Define and measure ethnicity in a meaningful manner.

Have someone with knowledge of the particular group being evaluated analyze the data alongside the evaluators in order to point out variables that should be considered.

Be cautious when collapsing data across subgroups for the sake of analysis – conduct analyses in a manner that reflects the heterogeneity in the data.
Example 1

The Excel spreadsheet that Bayshore Clinic staff created contains all of the information needed. Staff run simple frequency distributions to explore issues of interest. Comparing their two reminder strategies (phone calls and postcards) the staff calculate:
1) The percentage of reminder efforts where they successfully reached the person.
2) Of those they reached, the number who made an appointment to be screened.
3) The average cost, by dividing the total costs (including staff time and postage) by the number of reminder calls or mailings made.
Using Excel, they created the following three charts (insert).

As a result of their analyses, Bayshore Clinic staff learn that success rates are similar for the postcards and the telephone calls. They reach a similar percentage of people, and a comparable number of those reached ultimately get screened. There were significant cost differences, however. The relative costs of the telephone calls were $15/call, compared to only $2/postcard, much higher than the costs of the postcards.

Example 2

The Collaborative advocacy group types up detailed notes from the three focus groups. With their consultant’s assistance, they create a list of codes, reflecting key issues that emerged. They then use the list of codes to categorize the focus group comments into themes. They review the coded notes to identify the most prevalent and/or significant issues (see page 57 for an example of how to code the focus group results).

Focus group participants provided useful suggestions for the Collaborative. For the most part, they liked the educational materials. They felt the brochures did a good job of conveying the importance of screening, and that that they were visually appealing.

Participants offered a few suggestions for improvement. They recommended using simpler language when describing screening test options and providing more suggestions for local screening resources. They also suggested a stronger focus on encouraging men to pursue screening, through changes in the materials and greater outreach at community events.

Example 3

The Wellness Clinic staff collect surveys over a period of six months. They enter all of the survey results into an Excel spreadsheet. They run a number of cross-tabs analyses, to compare changes in survey responses (for example from pretest to posttest) and to explore differences in responses based on the gender or age of the participant.

They first compare patient knowledge and awareness ratings before and after the one-on-one education session. They find that patients did generally increase their knowledge, and they were more likely to say that they would pursue screening following the session.

They compare these ratings to those in the follow-up surveys and find some decline. Some people did not remember the material covered, and many of those who had indicated an intention to seek screening on their post-test survey did not subsequently get screened.

Satisfaction ratings were generally high, with most people rating the person who provided the education as helpful and competent. However, males reported less comfort with the discussion and with the educator, all of whom were women.
Note – would appear that telephone is more successful. However, given small sample size (N=23 in each group), this actually only amounts to a difference of two more people who got screened, within a likely margin of error.

**Average cost per reminder**

<table>
<thead>
<tr>
<th></th>
<th>Postcard</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$20</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$25</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Percentage of reminders that successfully reached intended person**

<table>
<thead>
<tr>
<th></th>
<th>Postcard (N=36)</th>
<th>Telephone (N=39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>64%</td>
<td>59%</td>
<td></td>
</tr>
</tbody>
</table>

**Percentage of people reached who made appointments for screening**

<table>
<thead>
<tr>
<th></th>
<th>Postcard (N=23)</th>
<th>Telephone (N=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56%</td>
<td>65%</td>
<td></td>
</tr>
</tbody>
</table>

**TAKING THE NEXT STEP**

Now is the time to sort through all the valuable information you have received through data collection. If you collected quantitative data, look for any patterns or surprising results. Qualitative data can give you a detailed picture of how participants perceived your activities and how satisfied they are with the program. Involve stakeholders in reviewing the results, as they may be interested in learning about the information you received through the evaluation.
STEP 7: Using and sharing evaluation results

SELECT THE RIGHT COMMUNICATION STRATEGY

Once you have obtained your evaluation results, you should share the findings with your key audiences and stakeholders. Sharing results is beneficial for a number of reasons, as they can inform the public, make health information meaningful, and translate research into action. They can also assist your program with building community relations, developing partnerships with funders, and helping to sustain or secure future funding. You may have several different intended audiences, each with their own interests and preferences regarding the report format. For example, an evaluation designed to help staff improve their methods for increasing awareness of colorectal cancer screening may lead to a report that is very different from one required by an external funding source or one designed to share lessons learned with a broader professional community.

As you prepare to share your evaluation findings, think about what you want to communicate to various audiences. Content is not always best shared in a long and complicated report. A few concise pages may have more impact than a larger report. Instead of producing a document describing a complex set of ideas, consider dividing the results into several smaller reports. In determining your approach, consider what will be the easiest and clearest way to present the information to your key stakeholders. With any stakeholder audience, it is critical that the method of sharing information is consistent with the needs of the audience. Tips for writing a report can be found in the Appendix.
MAKE YOUR FINDINGS RELEVANT

As you talk to stakeholders, take note of what might be of interest to them. Health care agencies might be interested in findings and implications of your outreach efforts, whereas policy makers might only want to hear recommendations and next steps. A report for staff within your organization will differ significantly from a report for a funder in terms of length, content, language, form, and key points. It is important to always present your information specifically for the intended audience. This frequently will mean multiple versions of reports containing similar information. A template for identifying research implications, such as the one below, can also be found in the Appendix.

<table>
<thead>
<tr>
<th>Research question</th>
<th>Method</th>
<th>Findings</th>
<th>Implications</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent do services meet the needs of clients?</td>
<td>Satisfaction survey administered to clients by program staff</td>
<td>20% of clients not satisfied with staff knowledge of resources</td>
<td>Clients may not receive adequate referrals to community resources</td>
<td>Develop training for new and existing staff related to community resources</td>
</tr>
<tr>
<td>To what extent do colorectal cancer education brochures provided at medical clinics impact adults' awareness of colorectal cancer?</td>
<td>Surveys collected by health care providers within past 6 months</td>
<td>55% of adults have increased knowledge about symptoms and risk factors associated with colorectal cancer</td>
<td>Brochures provided at medical clinics are increasing knowledge among adults and may increase numbers of adults who are screened for colorectal cancer</td>
<td>Partner with hospitals and clinics to distribute brochures more broadly</td>
</tr>
<tr>
<td>What impact is the pilot program having on African American adults' screening rates?</td>
<td>Interviews with health care providers and clients participating in pilot program</td>
<td>15% increase in colorectal cancer screening</td>
<td>More African American adults are being screened for colorectal cancer</td>
<td>Consider expanding pilot program within county and promote to surrounding counties</td>
</tr>
</tbody>
</table>

Tips for communicating your message effectively:

- Know your audience, what will impact and what might overwhelm.
- Determine if each audience is interested in ‘hard facts’ or a more anecdotal narrative of the evaluation findings.
- Avoid jargon and acronyms, specifically those terms which are common within your field of interest but might be lost on the general public.
- Use clear and concise writing, and include charts and graphs where appropriate.
In addition to keeping in mind the key findings, implications and/or recommendations for each audience, it is also important to consider what your stakeholders will do with the evaluation results. Will the results be used to make changes to your colorectal cancer screening awareness program? Will the evaluation inform others or support advocacy efforts? Will the evaluation help stakeholders plan for future programs? Will the results help to secure future funding?

**CONSIDER CULTURE WHEN PRESENTING RESULTS**

Presenting the results of a study or program evaluation can be especially challenging when the audience for the report is from a different cultural background. Here are some specific items to consider, but keep in mind that many of these tips apply when presenting results to any audience:

- Be aware of your intended audience and use of the report. Be careful not to present the data in a way that generalizes to only one culture (“one size fits all” approach limits applicability to culturally diverse groups).

- Do not exclude findings that would be relevant to culturally diverse communities.

- Present in different languages and take time to get the translations done right.

- Ask yourself whether data or stories would be more meaningful to the members of this community. This may help the community “buy-in” to the results.

- Use appropriate channels of communication. Determine whether written formats (e.g., reports and summaries) or oral presentations would work best to disseminate results.

- Assess the potential impact of the evaluation results on the program or community.

- Inform community members of the actions that will be taken as a result of the evaluation. What changes will be made? How will the changes affect the services they receive?
CONSIDER CREATIVE STRATEGIES FOR SHARING RESULTS

Be creative and innovative in reporting evaluation findings. Use a variety of techniques such as visual displays, oral presentations, reports, and informal conversations. Additional ideas include:

- Writing separate executive summaries and popular articles using evaluation findings, targeted at specific audiences or stakeholder groups.
- Sharing your results with the media, through a press release and/or press conference.
- Making presentations to select groups, such as community partners or potential funders.
- Making a short video presenting the results to use in discussions with stakeholders.
- Sharing results with local, regional, and national professional communities.
- Publishing results in an academic journal, if your organization has completed a particularly rigorous evaluation or a demonstration study of a new approach.

Here are some journals that specifically include articles on colorectal cancer:

- **Journal of Cancer Education**

- **Preventive Medicine**
  [http://www.elsevier.com/wps/find/subject_all_products_browse.cws_home/704?SH1Code=H03&showProducts=Y](http://www.elsevier.com/wps/find/subject_all_products_browse.cws_home/704?SH1Code=H03&showProducts=Y)

- **American Journal of Health Behavior**

- **American Journal of Health Education**

- **Health Promotion Practice**
  [http://hpp.sagepub.com/](http://hpp.sagepub.com/)
INVITE STAKEHOLDERS TO REVIEW AND DISCUSS RESULTS

Review the results with colleagues and program staff before finalizing an evaluation report. Circulate a draft report and holding a meeting to discuss it together. Having this conversation in advance can provide you with additional views regarding the meaning of the data. For example, your colleagues can discuss and help interpret any findings that are puzzling or surprising. Their interpretations or opinions about the findings may help you determine strategies for framing your conclusions and recommendations in the final report.

There may be political considerations as well. Before a report is released publicly, you may want to brief important stakeholders. The briefing gives board officials or others some time to digest the findings and think about the implications, and provides them with an opportunity to prepare a response. Through this process, you will also learn what appear to be the most important findings from the perspective of the groups that will use them.

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So often the energy behind an evaluation of a program is to suit the needs and desires of a funding source, or, like a lot of programs, several funding sources. It’s easy to think of evaluation as a means to an end, a process that must be endured in order to get the funds you need to get the work done. Evaluation can have a significant impact in other ways, such as program improvement. It is important for evaluation staff and stakeholders to remember that evaluation can be incredibly useful in making your colorectal cancer screening awareness program more effective and will likely increase the likelihood of the program continuing. Evaluation is much more than a final report. The evaluation process teaches many lessons, and the process is most meaningful when different groups of stakeholders are involved from the beginning.

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IMPORTANCE OF SHARING EVALUATION RESULTS

An action plan for using your evaluation results can be found in the Appendix.
EVALUATION RESULTS FOR PROGRAM IMPROVEMENT

There are many different ways an evaluation can have impact. Perhaps you learned something interesting about program outcomes or learned something about participant characteristics that predicts their satisfaction with the program. The following will help identify some of these findings and guide you and your stakeholders to use these results successfully.

Outcomes

If your evaluation measured the outcomes of your program on participants, you should now have some information about the extent to which the program met its goals. Think about the following:

- What knowledge, awareness, intention, or behavior outcomes showed the highest success rates? What program components do you think contributed to these outcomes the most? Why do you think these components were important?

- What outcomes showed the lowest success rates? Were these success rates below the level expected or below an acceptable level? How do these rates compare to those of other programs, in other states, or nationally? Why do you think outcomes were not positive? How could existing programming be strengthened to promote positive outcomes? Are there new programming components that should be considered?

Process

In addition to providing information about program participants, an evaluation often includes an assessment of the activities that were provided. This information allows you to look at the connections between service delivery and program outcomes or participant satisfaction. Consider the following:

- How many activities did participants receive? What kinds of activities did they engage in? Was this consistent with the program’s intended approach? If not, does the program need to be modified to increase or decrease the amount of activities each individual receives?

- Does variation in activities (i.e., type or amount of service provided) relate to differences in either participant outcomes or satisfaction? If so, are there changes in the activities that should be considered?

- Are there ways the program should be modified to increase the percentage of participants who complete? For example, do multiple calls need to be made to remind participants they are due for screening?
If the program was attempting to replicate an established model used by another agency, was it implemented with conformity to the original model? If not, why not? How do you think the changes in the model may have impacted outcomes? What strategies can be used to ensure stronger fidelity in the future?

What challenges and barriers did participants encounter? How can these barriers be reduced in the future? For example, could materials be provided in a different language if there were communication barriers?

**Satisfaction**

Assessing satisfaction provides valuable information about how participants experienced the program. If you collected satisfaction information, you will want to consider these questions:

- What satisfaction areas showed the most positive ratings? What program components do you think most contributed to these ratings?

- What satisfaction areas showed the lowest ratings? Were these ratings below the level expected or below an acceptable level? Why do you think satisfaction was not positive? How could program activities be strengthened to increase satisfaction?

**Participant background/characteristics**

Review the information you have learned about the program participants and ask:

- Who participated in the activities or received services? What were their major demographic characteristics? What kinds of issues brought them to the program?

- Are there any features of the population served that have changed over time, such as an increase in older adults or a different cultural group? If so, do these changes have any implications for changes in outreach?

- Do any participant characteristics predict differences in outcomes or satisfaction? If so, do activities need to be modified to better meet the needs of diverse participants?

**Evaluation design**

If you intend to evaluate your program again in the future, it is also important to reflect on the evaluation process itself. You may be able to save yourself time, money, and headaches if you can apply lessons learned from carrying out the evaluation the first time around to future evaluation work. Consider the following:

- What challenges emerged during the implementation of the evaluation plan? Should the evaluation design be revised to minimize these challenges?
Based on your review of the results, will you modify your services or activities? If so, do these changes require modifications to the evaluation design?

Did your review of evaluation results raise any questions that you could not answer? Do you want to revise the evaluation materials to explore this issue further in the future?

**TIPS FOR USING RESULTS TO ENHANCE PROGRAMMING**

Consider the following suggestions when making programmatic decisions based upon your evaluation findings:

- Set goals for outcomes and stakeholder satisfaction – they can help you gauge your success in meeting outcomes and help you prioritize program improvement efforts.

- When reviewing the evaluation results, be open in discussing different options, explanations, and alternatives.

- Review your list of key stakeholders and consider including them in your discussion.

- Consider both short-term and long-term program improvement strategies.

- Review other colorectal cancer screening awareness programs or evaluation studies for suggestions for promoting the effectiveness of your program.

- Consider a broad range of program improvement strategies, but prioritize those follow-up steps that are most likely to help you achieve your program goals.
Example 1
Based on their analysis, the Bayshore Clinic staff decide to switch their reminder approach from telephone calls to postcards.

Example 2
The Collaborative uses the feedback from the focus groups to modify their materials. They revise the brochures by simplifying their descriptions of the screening and adding more local resources. They also identify some new opportunities for dissemination and outreach.

As they move forward with these revisions, the Collaborative revisits their initial evaluation questions. They are still interested in broader issues regarding the ultimate impact of their materials – are people who read the brochures more likely to pursue screening? They begin planning the next phase of their evaluation to explore these issues.

Example 3
The clinic decides to make two changes to their approach. First, they decide to recruit and train several male staff to provide the one-on-one education, so that they can match the gender of the patient with the gender of the educator. Second, they add a follow-up step in which the educator calls patients approximately six weeks after the education session to see if they have any questions and encourage them to pursue screening if they have not already done so.

Both of these actions result in higher costs for the clinic, but they are able to use their evaluation findings to successfully obtain grant funds from a local foundation.

WRAP UP
Through this toolkit, we have outlined the basic steps for conducting a program evaluation, including describing and mapping your program, prioritizing your evaluation questions, designing your evaluation, creating the tools for gathering information, gathering information, sorting and analyzing the information, and using and sharing the information. Remember that doing an evaluation well does require attention to the concepts and tips that we outlined here. However, our best advice is to just get started. If you experience difficulty, review the tips in this toolkit, and do not be afraid to seek additional support from professional evaluators if needed. With experience, you should find that your evaluation provides you with useful information about your services.
For more information about colorectal cancer, please visit the American Cancer Society website at cancer.org or the Centers for Disease Control and Prevention website at http://www.cdc.gov/. For questions about evaluation, please contact Mary Doroshenk, Director of the National Colorectal Cancer Roundtable at Mary.Doroshenk@cancer.org.
APPENDIX

PROVIDER CASE STUDY  Back to educate medical providers.

Describe and map your program

The Pennsylvania Family Physicians received a grant from the CDC grant to increase colorectal cancer screening rates. The PA Family Physicians are working with physicians groups to raise awareness, provide education, and ultimately improve screening rates through systems change and improved knowledge among providers by participating in Grand Rounds with providers across the state.

Staff implementing the grant activities are interested in measuring the degree to which the Grand Rounds sessions change the knowledge and awareness of physicians regarding current recommendations for colorectal cancer screening, and the degree to which providers may change their screening behavior based on what they learned through Grand Rounds.

The following program theory describes how Grand Rounds will lead to increased colorectal cancer screening rates:

- PA Family Physician staff present to providers at Grand Rounds. The presentation focuses on current screening recommendations for colorectal cancer screening, including who should be referred for screening, when they should be referred, and what the appropriate screening might be for patients meeting certain criteria.

- Providers who attend Grand Rounds have increased knowledge of the current screening recommendations.

- Increased knowledge of screening recommendations increases the likelihood that providers will make appropriate referrals for colorectal cancer screening.

- Patients will receive referrals for the appropriate colorectal cancer screening from their providers at the appropriate time, given their unique characteristics.

- Patients who receive appropriate referrals for screening will be more likely to follow-up on that referral and get screened.

Prioritize evaluation questions

Program staff would like to ultimately know if the education they provide to providers is resulting in increased screening rates for patients. Based on their logic model, they know that providers are more likely to make referrals for patients eligible for screening if they have the
correct information about screening recommendations. Therefore, the team is interested in assessing any increases in knowledge and awareness of current screening recommendations of providers who attend the Grand Rounds. In addition, program staff want to know if providers feel they are more likely to make referrals after participating in the Grand Rounds discussion.

*Design the evaluation*

The Pennsylvania Family Physicians grant had some funding set aside for evaluation, and limited staff time. Given the available resources, and the somewhat limited time available for intervention with individual providers (approximately 1 hour during Grand Rounds), the team determined the best evaluation design was to ask providers to complete post-surveys immediately following the Grand Rounds presentation. Staff were interested in doing both pre- and post-tests, as they were interested in measuring a change in knowledge among providers, but given the limited amount of time they had with providers to present information, and given the changes in knowledge and behavior they could expect given their limited intervention time, a post-only survey was determined to be the most appropriate evaluation method.

*Identify or develop data collection instruments*

Given the unique research questions of the program, staff developed a post-only survey to be administered to providers immediately following the Grand Rounds presentations. The post-survey asks providers to indicate the degree to which they had knowledge about current screening recommendations, their intention to change their practices for encouraging patients to receive screening, and overall satisfaction with the presentation.

*Collect the data*

Providers were asked to complete a paper/pencil survey immediately following the Grand Rounds presentation. Surveys were collected by program staff and kept confidential prior to entering the data into a format for data analysis.

*Organize and analyze information*

Program staff developed an Excel spreadsheet to organize survey data. Once survey data was entered into the spreadsheet, program staff reviewed the survey as well as their key research questions to determine an analysis plan. Staff created some charts in Excel, as well as descriptive analysis, looking at the range of responses to key survey questions. Staff looked for results that were actionable, or those findings that indicated how the program could be enhanced or modified in future years.
**Using and sharing evaluation results**

Results from the surveys have been helpful as program staff report program impact to their funders, and have also been used internally as they modify the program for the future. Survey results were included in the annual report to the Pennsylvania Department of Health, detailing how the program was successful, and opportunities for enhancing the program. Internally, staff learned from the surveys which components of the training were especially meaningful to physicians, which components they were most likely to integrate into their practice and why. Staff will take care to emphasize these components in future Grand Rounds sessions.

In addition to modifying the program, staff also have modified the survey instrument for future years. Based on the results from this evaluation, staff will remove some questions that were not as helpful, and expand those questions that lead to the richest information from respondents.
Evaluating media campaigns

OVERVIEW: Media campaigns have become increasingly popular in recent years. The field of health communication has grown as the public’s use of television, the Internet, and social media has increased. Media campaigns can be quite costly, so it would be in your program’s best interest to understand if a media campaign is using its resources as efficiently and effectively as possible. Evaluating these initiatives can incorporate each dimension discussed in this toolkit – outcomes, process, and satisfaction - as well as an assessment of community needs. Here are some tips for evaluating your media campaign, which can be integrated throughout your campaign activities.

EVALUATE COMMUNITY NEEDS TO INFORM MEDIA CAMPAIGNS

Your media campaign will be stronger if it reflects the needs of the community. The data collection procedures described in this toolkit can be used to determine:

➤ The population that would benefit most from your message – are there certain groups or neighborhoods that you should focus on?

➤ Your campaign message – what information does your community need to know about colorectal cancer screening?

➤ The resources available in your community – for example, is colorectal cancer screening free at a particular clinic?

➤ The best type of media to use to reach the community – would radio, television, Internet, billboards, posters, print materials, or some combination of these media types work best?

Understanding this information prior to creating and launching your media campaign can ensure that you use your resources wisely.

EVALUATE OUTCOMES

Assessing the impact of your media campaign can be difficult, as results often can be attributed to a number of other factors. For example, an increase in colorectal cancer screening rates within a particular community could be due to your campaign, but could also be the result of a local health clinic’s initiative to offer colonoscopy appointments to all older adults. As with other outcome evaluations, it is important to keep your program’s end-goal in mind. If your program
seeks to increase awareness of colorectal cancer screening, for example, your evaluation questions should explore whether people became more aware of screening guidelines. If your goal is to see increased screening rates, it may be necessary to track screening rate changes within the community where your campaign is being publicized. Some common methods for evaluating the outcomes of a media campaign include:

- **Including a “call to action.”** Your campaign may incorporate a call to action – a phone number, hotline, or web site to access to learn more about your program or the topic. You can track the number of people that contacted your program, ask respondents how they learned about it, and collect contact information to follow-up with people at a later date. If you are able to follow up with individuals who responded to the call to action, you may also be able to assess changes in participant knowledge, attitudes, intention to screen, or screening behavior.

- **Making randomized calls.** Brief telephone surveys or interviews can be used to see whether people in your broadcast area saw your materials, how they felt about them, and if they changed their behavior as a result of the advertisement. You can also ask questions relating to future campaigns, such as how often they watch television, listen to the radio, or access the Internet; what sources they frequent; and what media sources they trust most for health information. Keep in mind that the information you receive through these phone calls is self-reported, so there may be some bias. Participants may also overestimate how often they saw your materials. There may also be important differences in the people that choose to answer your survey versus those who refuse. This may also take quite some time to accomplish. Additionally, if you choose to contract with a survey research center, there can be substantial cost to administer telephone surveys.

- **Targeting message recipients.** As a more time-intensive option, you can consider assigning certain segments of the population to receive your campaign. This way, you can assess changes in your target community compared to those who did not view your materials. Those who do not receive your campaign would be considered a “control” group, or a group whose awareness or screening behavior you would not expect to change during your media campaign. If your program is considering a large-scale media campaign, or using random assignment to determine which population will receive your message, it may be in your best interest to hire someone with previous experience conducting this type of study.
EVALUATE PROCESS

A process evaluation can be used to measure your campaign’s reach. It can also measure the number of times your advertisement ran and how many people potentially viewed it. Common methods for conducting a process evaluation of a media campaign include:

■ **Newspaper tracking:** Clipping services can keep track of your campaign’s coverage, including the volume of readers on the day your ad appeared in the newspaper.

■ **Television or radio tracking:** If you are paying to air a public service announcement or commercial, you can track information about its airing for an extra fee. This information can tell you the dates and times that it aired, the areas in which your message was broadcasted, and the estimated audience size.

■ **Web site monitoring:** If you have an Internet campaign or web site, the web site administrator may have software that can help you track the number of “hits” on your site, navigation patterns, who accessed the site, how long they stayed on the site, and if there are areas on the site that are more or less popular.

EVALUATE SATISFACTION

Evaluating participant satisfaction can help you learn how people felt about your materials and what changes they would recommend. The information gathered through a satisfaction evaluation can determine:

■ Overall satisfaction with the materials.

■ Aspects of the campaign they found most helpful.

WORK WITH PARTNERS

Remember that for an intensive or in-depth evaluation, hiring an external evaluator or someone with experience in this area might be the best use of your resources. Likewise, if you have a media partner, they may also be interested in the effectiveness of their communications and may be willing to contribute to the evaluation.
Identifying and addressing ethical concerns

OVERVIEW: Throughout the evaluation process, strategies to protect the rights and dignity of individuals who participate in the evaluation should be considered. This section provides a number of tips for ensuring that your project conforms to accepted ethical standards, including an overview of typical ethical considerations, tips for addressing these issues, and recommendations for solving ethical challenges.

OVERARCHING ETHICAL PRINCIPLES

The following four principles are core ethical issues identified by many professional organizations and evaluators:

- Help or benefit to others – acting in ways that promote the interests of others by helping individuals, organizations, or society as a whole.

- Do no harm – the corollary principle is not bringing harm to others, including physical injury and psychological harm (such as damage to people’s reputation, self-esteem, or emotional well-being).

- Act fairly – treating people in ways that are fair and equitable, including making decisions that are independent of race, gender, socioeconomic status, and other characteristics.

- Respect others – respecting the rights of individuals to act freely and to make their own choices, while protecting the rights of those who may be unable to fully protect themselves.

KEY ETHICAL ISSUES RELATED TO EVALUATION

Consideration of risks and benefits

Your evaluation can benefit program participants and others. In some cases, there may be benefits to an individual who participates in an evaluation, such as receiving a gift certificate or other incentive in exchange for completing an interview. Other benefits emerge as a result of changes made at the program or agency level – for example, the evaluation may guide strategies for improving a program’s impact, leading to more positive outcomes for current or future participants. These positive outcomes can include increased screening rates, which may help reduce the incidence of cancer or improve survival rates.
However, associated risks can come with these benefits. You should carefully consider any harm that may result from an evaluation, and take steps to reduce it. With evaluations of colorectal cancer screening and awareness initiatives, potential consequences may include:

- Sacrificing time and energy to participate.
- Emotional consequences (e.g., anxieties or fear related to screening).
- Discomfort with discussing colorectal cancer screening.

In weighing benefits relative to risks, you want to use your resources of time and money to develop an evaluation that minimizes risk to individuals and provides information that will be used for program improvement and sharing knowledge.

*Informed consent*

Everyone who participates in the evaluation should do so willingly. In general, people participating in any research project, including an evaluation, have the right to:

- Choose whether or not they want to participate without penalties (e.g., participation in the evaluation should not be a mandatory requirement for receiving services).
- Withdraw from the project at any time, even if they previously agreed to participate.
- Refuse to complete any part of the project, including refusing to answer any questions.

The word “informed” is important – in addition to choosing whether or not to participate in the evaluation, people have the right to understand all implications of participating. To ensure that potential participants can make an informed decision regarding their involvement, you should:

- Provide potential participants with information about the evaluation, including why it is being done, what you are asking them to do, how you will use the information, and how long it will take.
- Describe both the potential benefits of participation and any foreseeable risks, including possible discomfort due to participation.
- Share this information using understandable language – avoid jargon and translate if needed.
- Allow the participant the opportunity to ask any questions about the evaluation.

Participants may not need to sign a consent form if they are adults capable of making decisions, have not been coerced, and will not be put at significant risk by participating in the evaluation. For example, if you want participants to fill out an optional anonymous survey asking them if
they were satisfied with specific elements of a program, the fact that they complete and return the survey can be construed as providing consent. Signed consent forms may be necessary in other situations, however, especially if you plan to:

- Collect very personal or sensitive information.
- Use the results for purposes other than program improvement, such as publication, training activities, or participation in a larger research project.
- Gather information about participants from third parties, such as program staff, family members, or others.
- Require significant time or effort on the part of participants, such as asking them to participate in multiple or time-consuming interviews.

**Confidentiality**

It is not always possible for evaluations to be conducted anonymously, without collecting identifying information such as a participant’s name or social security number. However, all information gathered should be considered confidential and not shared with others. To ensure confidentiality, consider these strategies:

- Collect data in a private location where surveys cannot be seen and interviews cannot be overheard.
- Do not discuss information about individual participants with other people, including other agency staff – findings should generally only be discussed at an aggregate level or with identifying information disguised.
- Shred or securely dispose of completed evaluation materials when they are no longer needed.
- Allow respondents to have a private way of returning surveys, such as providing them a sealed return envelope. Do not require respondents to hand their surveys directly to a staff person.
- Once you have received surveys, keep them stored in a safe and secure place where they will not be seen or read by others.

You may encounter situations in which you believe that it is important to disclose confidential information. To the extent possible, consider in advance the types of disclosures that may be needed and develop a plan to handle these situations. Provide information about possible disclosure of confidential information with the consent instructions.
Other issues

Safety: In some cases, you may have concerns for the safety of your participants. Be thoughtful about participants’ needs and take care to protect participants as much as possible.

Health Insurance Portability and Accountability Act (HIPAA): If you are a health care provider collecting information related to physical health, you may be required to comply with HIPAA, a federal law enacted in 1996 designed to protect the privacy and security of health information. If you are unsure whether HIPAA applies to your evaluation, research this issue in advance to ensure that your procedures comply with the guidelines. For information about HIPAA, go to http://www.hhs.gov/ocr/hipaa/.

Institutional Review Boards (IRBs): An IRB is a federally-recognized committee authorized to review research projects and ensure that procedures comply with ethical standards. Many colleges, government offices, hospitals, and research agencies have established IRBs. IRB approval is generally not required for program evaluations. In rare instances it may be required, especially with some types of federal funding. Evaluations may also require IRB approval when the evaluator intends to share the results outside of the program being evaluated, such as published articles or journals. Some typical evaluations that might require IRB approval are:

- Evaluations that use sensitive health information, such as information from medical records
- Evaluations where you contract or work with a faculty member or student from any academic setting

More information about IRBs and research with human subjects can be found at: http://www.hhs.gov/ohrp/.

ADDRESSING ETHICAL CHALLENGES

In some cases, you might face situations in which the ethical direction is not clear. Ask yourself the following questions when faced with an ethical challenge:

- What does my intuition tell me? Am I feeling stress or self-doubt about a direction that has been chosen?
- Is there an established way that my colleagues would act in the same situation?
- Does my profession have a set of ethical codes or guidelines? If so, do they suggest a course of action?
- Are there existing laws that apply to this situation? If so, what requirements do I need to follow?
Which overarching ethical issues apply to this situation (e.g., helping others, doing no harm, acting fairly and being respectful)? Does a clear solution to the challenge emerge when considering these principles?

What are my personal values and beliefs? What guidance do they provide?

If you are unable to decide the best course of action, consult with others as needed, including colleagues, supervisors, your board of directors, evaluators or researchers, or legal counsel.
OVERVIEW: In some cases, you may need to have participants indicate that they have consented to participate in the evaluation. This section provides a sample consent form that can be modified. This sample is based on Example 3, the Wellness Clinic. The form is being used to obtain permission to complete brief surveys before and after they receive one-on-one education, and to participate on a follow-up by telephone three months later.

Dear Participant:

The Wellness Clinic is working on an initiative to increase the percentage of patients who get screened for colorectal cancer. The clinic staff is conducting an evaluation to learn more about patients' knowledge of screening options and willingness to be screened.

The clinic staff will ask you to complete a survey before and after your regular appointment. The survey will ask questions about your knowledge of colon cancer and screening options and your perceptions of the staff who met with today. The survey is confidential and voluntary. We would also like to call you three months after your appointment to ask a few follow-up questions.

Please note the following:

- All information collected through this project will be private. Your name will not appear in any document describing the results of this project.
- Participation is completely voluntary. Your decision to participate or not participate will have no affect on the services that you receive from the Wellness Clinic.
- Your permission is valid for the duration of the research project. However, you may revoke your permission and stop participating in the project at any time. Please see the Notice of Privacy Practices for more information.
- No specific information will be provided to anyone without your permission, unless required by law. Please see the Notice of Privacy Practices for more information.
- When information is sent to a third party, the information could be re-disclosed by the third party that receives it and may no longer be protected by state or federal privacy laws.

The list below describes the information to be collected. Please indicate your consent below. Check all that apply.

**YES**

- [ ] I am willing to complete a brief survey before and after my appointment. I know that I will have the right to refuse to answer any of the questions.
- [ ] I am willing to complete a brief survey over the telephone three months after my appointment. I know that I will have the right to refuse to answer any of the questions.

Thank you for considering participation in this evaluation project. The information we gather will help us make changes to our program and provide the best possible service to you and future patients.

______________________________________________ __________________

Patient signature Date signed
Assessing community needs

OVERVIEW: A community assessment helps establish the needed services and available resources in your community. Community can mean a neighborhood or geographic community, but can also refer to different systems that people are a part of, such as a collection of employees, a professional group, a church congregation, or the health care professionals and patients in a clinic. This assessment is a systematic process of gathering, analyzing, and reporting information about the needs of the community and the capacities or strengths that are available to meet those needs. This section describes the value of community assessments, and some issues to consider in conducting one.

The primary benefits of conducting an evaluation of community needs include:

- **Creating an information base for program decisions.** An evaluation of community needs allows you to select programs and services that are grounded in the needs, priorities, and resources within the community. For example, an assessment can help you decide what should be included in an informational brochure about colorectal cancer screening for a church congregation. It can also help you develop alternative strategies for solving a problem or forging networks or alliances to address issues.

- **Gaining community involvement and support.** A community needs assessment can engage community members before decisions need to be made. Allowing residents, community organizations, health care clinics, and others to be involved in decision making may increase their investment in your program and promote effective partnerships. At a minimum, community members may be involved by sharing their perceptions of a community.

- **Creating a baseline picture of the community.** An assessment can create a baseline understanding of the current issues or resources regarding colorectal cancer that face a community. If your goal is to promote community change, this baseline information can be used over time to identify progress and changes. Baseline information will also be useful as you evaluate program effectiveness.

Identifying needs and assets can be helpful to your organization at almost any point in your initiative. Assessment should be an ongoing process. Regularly updating community information ensures that assessment results are available and relevant when you need to make a decision or take an action. It will also help you to continually strengthen relationships and networks. Fully
incorporating assessment information into ongoing program management will greatly enhance the value of your evaluation process.

SAMPLE COMMUNITY NEEDS ASSESSMENT QUESTIONS

The following are sample questions your colorectal cancer screening awareness program could address through an assessment of your community:

- What are the characteristics of this community (e.g., relevant demographics, including size)?
- What are current colorectal cancer screening rates in the community? Are there disparities in these rates?
- Are community members aware of their potential risk for colorectal cancer? Aware of screening recommendations?
- What types of information do community members need about colorectal cancer screening?
- What are community attitudes toward colorectal cancer screening?
- Do community members feel they are at risk for colorectal cancer?
- What prevents some community members from getting screened for colorectal cancer?
- What encourages or motivates people to get screened?
- How do community members like to receive information?
- Do community medical clinics have the resources to screen patients for colorectal cancer?

When determining the questions you and your community want to address, it will be very helpful to engage stakeholders in the process of designing and prioritizing your assessment. This process provides an opportunity for anyone who has an interest in the findings to be involved and helps ensure that the community assessment covers all important areas and topics. Prioritizing questions with stakeholders will increase their buy-in to the process and promote use of the findings once the assessment is completed.
There are many ways to use the findings of an evaluation of community needs, including:

- Determining your program’s goals and long-range and short-range program objectives.
- Determining the populations that will be served by the program, if resource limitations make it impossible to serve everyone.
- Determining the information or services that are most needed and how they are best delivered.

Now that you have established your community’s needs, it is time to select program activities that will best fill the gaps in your community. Start by prioritizing the findings from your assessment. How important is addressing the need to your organization? To the community? Is your organization the best one to address this issue?
OVERVIEW: One of the important early steps of an evaluation is to map out your program, to identify the major activities provided and the intended outcomes of those activities. Program theories map out this alignment, as well as the evidence supporting the connection between your activities and intended impact. This worksheet can be used to organize information as you create your program theory.

In collaboration with your stakeholders, identify the major activities of your program. Then, as a group, determine the result of each activity. Use evidence from other programs or your own program to answer why you believe each activity will have that effect.

<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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Tips

Building a logic model

OVERVIEW: A logic model can be a useful tool for illustrating your program’s underlying theory. This section describes the four steps to creating a high-quality logic model. Several challenges to logic model development, as well as potential solutions, are also presented.

STEPS IN CREATING A LOGIC MODEL

1. Review and clarify the links between activities and outcomes

When you developed a program theory, you spelled out the major services that you provide and the intended benefits of those services. Review this list and make sure the connections between each activity and its outcomes are clear and logical.

Consider the order in which results should occur. What would be the first changes experienced by participants? How would these initial changes promote other, more long-term changes? Hint: Behavior change is rarely the first result. People usually need to change their knowledge, attitudes, or skills before they start to change behavior. Likewise, moving farther down the line, community change usually cannot occur until enough individuals (or the right individuals) change their behavior or practices. In other words, people are not likely to pursue CRC screening unless they first know about the recommended screening guidelines and understand its importance.

2. Add inputs and outputs for each activity

Inputs are the resources and raw materials that go into your program. Consider the resources that you need to operate your program, such as funding, staff, or volunteers. Some programs may require a facility, transportation services, educational materials, and other resources. You do not need to be overly precise in the logic model regarding the amount of each resource that is needed.

Outputs quantify the services you provide. Remember: Outputs are different from outcomes. While outcomes describe the actual impact (the change that results), outputs simply describe the amount of service provided. Outputs are most often expressed in numbers, such as the number of people who participate in an activity or the hours of service received.

3. Construct a draft model

The model may end up being simple or complicated, but should accurately reflect the complexity of your program. Use arrows to show the connections between your inputs and your activities,
between your activities and outputs, and between your outputs and each sequence of outcomes. Remember that one activity could lead to multiple outcomes, or that multiple activities could lead to only one outcome. In the following section of the appendix, a logic model template is provided to aid in this process.

4. Review and revise

Answer the following questions. If your answer to any question is “not sure” or “no,” go back to the model and consider making revisions. It usually takes multiple revisions of the model before it reaches its final form.

- Does the logic model include all of the program’s most important activities or services?

- Do the outcomes represent changes that are important to your program’s participants? Likewise, does the model contain the outcomes of greatest interest to your stakeholders, such as staff or funders?

- Are the outcome goals clear enough to be understood by stakeholders who might review your logic model? Are the goals realistic?

- Are the connections between your inputs, activities, outputs, and outcomes realistic? Are they reasonable based on existing research, theory, or other evidence?

**CHALLENGES AND POSSIBLE SOLUTIONS**

The logic model process may reveal some challenges, either in your program or specific to the logic model and evaluation process. Some common challenges you face may include:

- There is disagreement among stakeholders about which services or outcomes to include in the logic model.

- The funders require a logic model and staff are worried they will be accountable to outcomes in the logic model that are impacted by things beyond their control.

- Staff do not want to spend time on logic model development.

- The logic model we developed is too complicated.

- The program is intended to change the community, not a small group of individuals.

Luckily, these are challenges faced by many organizations and there are relatively simple ways of addressing them.
Keep key stakeholders involved, including staff, program participants, collaborators, or funders – even as a resource for reviewing materials. This will help clarify the common outcomes and expectations.

Focus on the process, not the product. Take time to explore the reasons for disagreement about what should be captured in the logic model. Also, consider how you can use the logic model in meaningful and interesting ways.

Logic models that are rushed often end up displaying faulty logic, insufficient evidence, or models copied from other programs that don’t quite fit yours. Keep asking yourself “IF-THEN-WHY” questions to make sure that the model is sound. **IF** you provide a service, **THEN** what should be the impact for participants? **WHY** do you think this impact will result? What evidence do you have to support that connection?

If needed, recruit a facilitator from outside your agency who is trained and experienced in logic model development.

Think through each step that must occur. For instance, how does each activity impact individuals? In what ways does their behavior change? What has to occur in order for these individual changes to result in widespread community change?

Consider issues or events outside the control of your agency that may promote or impede the change you are seeking. If needed, develop strategies for monitoring or documenting these issues.

Focus on the most important activities and outcomes and clearly explain what will happen as a result of your activities without adding excessive detail.

Only include (and subsequently measure) outcomes that are realistic. If you do not want to be held accountable for something, it must not be an essential outcome goal. Outcomes are not hopes or wishes, but reasonable expectations.

Remember that a logic model should be a dynamic tool that can and should be changed as needed; it is not a rigid framework that imposes restrictions on what you can do.
BENEFITS OF DEVELOPING LOGIC MODELS

Taking the time to work through the process carefully and thoughtfully can be a very worthwhile endeavor. It can help you:

► Build consensus and clarity among your staff and other stakeholders about your chosen awareness and screening activities and expected outcomes.

► Identify opportunities for improving your initiatives (such as by promoting discussion of best strategies for achieving desired results).

► Spell out the beliefs and assumptions that underlie your choice of activities and intended outcomes.

► Assess your program’s likelihood of success and identify factors that could impact success. For instance, how do the manner, amount, and quality of activities affect the likelihood of achieving the outcomes?

► Increase your understanding of program performance by clarifying the sequence of events from inputs through outputs through outcomes.

► Educate funders regarding realistic expectations.
Worksheet

Developing a logic model  Back to tips for creating logic model.

OVERVIEW: Once you have identified your program theory, it can be helpful to illustrate that theory with the use of a logic model. This section provides a basic worksheet for creating your logic model, helping you to organize the relationships between your activities, outcomes, inputs, and output.

Consider the following

► Do each of these activities refer to services provided directly to participants? Administrative functions of the program, such as hiring staff or preparing budgets, are certainly an important part of providing community programming and should be reflected in your work plans. However, administrative activities that are not expected to lead directly to changes for participants should not be included in an evaluation design.

► Does your list contain any redundancies (e.g., same basic activity described in several different ways)? If so, eliminate duplicate activities. In designing your evaluation, consider your core activities without redundancies.

► Of those activities listed, which do you feel are most important in terms of either the potential for impact on the participants or the level of resources that are devoted to the activity?
## Logic Model Worksheet

<table>
<thead>
<tr>
<th>Activity</th>
<th>Inputs</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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</table>
Example 1

**COMPLEX LOGIC MODEL**

Back to complex logic model.
Example 2

**WEAK LOGIC MODEL**

**ACTIVITY**
- Coordinate and schedule patient pick-ups/returns
- Pick up and return clients from home to clinic

**OUTPUTS**
- Number of clients scheduled

**SHORT-TERM OUTCOMES**
- Patients schedule screenings
- Potential patients in targeted community learn about available driving services

**INTERMEDIATE OUTCOMES**
- More patients make appointments to be screened
- Targeted community members increase screening rates

**LONG-TERM OUTCOMES**
- CRC screening rates increase
Tips

Engaging stakeholders in your evaluation

OVERVIEW: An important early stage in selecting a program or designing an evaluation is to identify individuals or groups who have an interest in your program, will be interested in the evaluation, and might have a role in using the results. Stakeholders concerned with colorectal cancer prevention may include program staff, current and potential funders, health care providers, county health workers, patients, advocacy groups, community members, insurers, and others. These stakeholders are all concerned about what changes because of your efforts and can provide great input on prioritizing your evaluation questions. This section provides some recommendations for prioritizing stakeholder groups and engaging them in the evaluation process.

PRIORITIZE STAKEHOLDER GROUPS

Typically, a program or initiative has multiple stakeholders that are interested in different evaluation issues. Since it may not be possible to adequately meet the information needs of all of your stakeholders, it is important to carefully prioritize among these groups. Take time to consider the following questions:

- Are there groups, such as funders or a Board of Directors, to which you have a contractual obligation to provide evaluation information? If so, what are you required to provide?

- Is there information that you would like to receive from participants, such as descriptions of the benefits of services, recommendations for program enhancements, or clarification of their needs?

- Are there significant decisions facing your program in terms of the nature or amount of services that can be provided? If so, is there any information that would be helpful in making these decisions?

- Are there groups that can be helpful in ensuring program continuation or expansion? Do you need to solicit funding from new sources to meet your programming goals? What information would be helpful in this process?

- Are you currently collaborating with other agencies or organizations? Is there information that potential collaborators would want to know about your program?
Does your program address an issue that is important to the general public? If so, are you interested in collecting information that will help shape their perceptions of this issue or effective service options?

Given your answers to these questions, which stakeholders do you feel are most important as you consider your evaluation needs? If you are unsure, talk to others in your organization, as interesting insights can emerge from a group discussion.

**ENGAGE STAKEHOLDERS IN THE EVALUATION PROCESS**

In addition to understanding the specific needs and interests of these groups prior to developing your evaluation plan, directly involving some stakeholders in the evaluation design process can be beneficial especially if there are stakeholders who are not clear about their needs, or if they will need to approve of your resulting evaluation plan. You might consider involving stakeholders in developing evaluation questions to ensure that their priorities are addressed.

Involving stakeholders does not necessarily mean they have complete control of the evaluation, nor does it mean that the evaluation must take into account the ideas and points of view of every stakeholder. It likely cannot. Involving stakeholders does, however, help everyone understand the process of prioritizing and the logic behind the decisions that are made.

Consider these questions:

- Which stakeholders are MOST important to include in the evaluation planning process? Why?
- What steps can be taken to ensure that the perspectives of these key stakeholders are incorporated into the evaluation design process? This could range from providing opportunities for period review or feedback to including them at all stages of the process.

These steps will help to ensure that stakeholders will continue to buy-in to the evaluation process and to help guide the efforts required to complete an evaluation.
**Tips**

**Creating an evaluation budget** Back to [tips for constructing a budget](#).

---

**OVERVIEW:** Evaluation does not need to be expensive, but it does take time and money to plan an evaluation, collect the right information, and use the results to strengthen your program. This section of the toolkit describes things to include in an evaluation budget, and outlines some potential strategies for reducing costs.

---

**DEVELOP AN EVALUATION BUDGET**

A commonly recommended starting point is to allocate 10 percent of the total program budget to evaluation. This includes the value of the time that staff will spend on the evaluation, as well as out-of-pocket costs. If this amount of money is simply not available for evaluation, we provide some practical tips for working on a shoestring budget. However, budgets that are inadequate for evaluation might lead to evaluations that are less comprehensive or of lesser quality. Weigh your options carefully before deciding a reasonable budget is not possible.

Until you actually design your evaluation, your specific resource needs will be rough estimates. However, you need to start somewhere in thinking about your budget and other available resources in order to design an evaluation that is doable. The most common evaluation costs include:

- Salary and benefits for program staff who might be involved with the evaluation. Think about the amount of time each staff person will spend on evaluation.
- Travel expenses. Think about travel to and from meetings and to and from evaluation sites.
- Incentives for evaluation participants, like food or gift cards.
- Communication tools. This includes costs like postage, telephone, Internet access, and so on.
- Printing and duplication. You will need to budget money to prepare and print surveys, reports, or other documents.
- Supplies and equipment, such as computers or software. This generally refers to equipment that you would need to purchase in order to complete the evaluation.
- Funds to pay for an external evaluator. This can vary quite a bit, depending on the degree to which the evaluator is involved in the evaluation. Consider asking a consultant for different options for their involvement and the estimated costs associated with each option.
CONSIDER COST-REDUCTION STRATEGIES IF NEEDED

Conducting a useful evaluation does not need to be expensive. If your funding is falling short, consider these options:

- Prioritize your evaluation questions. Focus on the “need to know,” not the “nice to know.”

- A big chunk of many evaluation budgets goes for data collection. When you design the evaluation, consider options for gathering information as inexpensively as possible.

- If your program collaborates with others, consider opportunities to conduct a shared evaluation.

- If you’re using an external evaluator, work with them to identify the phases of the project where program staff or volunteers might be able to help with some of the work.

If you’re really on a shoestring budget

- What materials or information do you already have that could become part of an evaluation?

- What resources are available at little or no cost? Common examples include volunteer hours and donated goods or gift cards to use as incentives for survey participants.

- Can you get funding specifically for the evaluation? Some funders provide grants for this purpose.

- Can you find an evaluator, especially one associated with a college or university, who might provide services for free or at a reduced rate in exchange for the opportunity to publish a research article or to fulfill their service requirements? In some cases, graduate students working on degree requirements might provide evaluation assistance under the supervision of a more experienced faculty member.
**OVERVIEW:** Creating a budget is essential as you assess the resources available for your evaluation. Take time up front to brainstorm with stakeholders about these potential costs. Although it is very common to make budget adjustments as you proceed, the more accurate your original budget, the easier it will be to work with those adjustments further into the evaluation. This section provides a worksheet for filling in your project budget.

<table>
<thead>
<tr>
<th>Amount</th>
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<tbody>
<tr>
<td><strong>Revenue</strong></td>
</tr>
<tr>
<td>a) Grant funds</td>
</tr>
<tr>
<td>b) Government funds</td>
</tr>
<tr>
<td>c) Fundraising funds</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
</tr>
<tr>
<td>a) Program staff time</td>
</tr>
<tr>
<td>b) Evaluation/Data analysis/Data collection staff time</td>
</tr>
<tr>
<td>c) Administrative support staff time</td>
</tr>
<tr>
<td>d) Consultant time</td>
</tr>
<tr>
<td>e) Local travel/mileage</td>
</tr>
<tr>
<td>f) Long distance travel</td>
</tr>
<tr>
<td>g) Postage</td>
</tr>
<tr>
<td>h) Printing/copying</td>
</tr>
<tr>
<td>i) Telephone (long distance, conference calls)</td>
</tr>
<tr>
<td>j) Other (meeting expenses, office supplies, incentives, etc.)</td>
</tr>
</tbody>
</table>
OVERVIEW: You do not need to be on your own when you conduct an evaluation. There are many professionals who might be available to help you, though often there is a fee for their service. You might also have colleagues or volunteers within your own agency that have some skills that you could draw on as you conduct your evaluation. This worksheet can be used to document staff that could be evaluation resources for you.

Think through the various stages of your evaluation and identify early on where you might need some additional training or resources to complete the evaluation. By identifying these needs up front you can budget your money and time accordingly.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Staff with experience</th>
</tr>
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<tbody>
<tr>
<td>Evaluation methods and design</td>
<td></td>
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<tr>
<td>Evaluation planning and budgeting</td>
<td></td>
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<tr>
<td>Computer and database skills</td>
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<tr>
<td>Data analysis skills</td>
<td></td>
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<tr>
<td>Qualitative and/or quantitative strategies</td>
<td></td>
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<tr>
<td>Interpersonal and teamwork skills</td>
<td></td>
</tr>
<tr>
<td>Writing experience/reporting</td>
<td></td>
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<tr>
<td>Ideas about how to use evaluation results</td>
<td></td>
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<tr>
<td>Other:</td>
<td></td>
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<td>Other:</td>
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</table>
**Worksheet**

**Assessing organization capacity**  
Back to [overall agency](#).

**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?**
   
   ____________________________________________________________________________________
   
   ____________________________________________________________________________________
   
   ____________________________________________________________________________________

3. **How do you distribute evaluation findings? Who sees the findings? How does someone obtain a copy of the findings?**
   
   ____________________________________________________________________________________
   
   ____________________________________________________________________________________
   
   ____________________________________________________________________________________

4. **Have staff members put evaluation findings to use? How?**
   
   ____________________________________________________________________________________
   
   ____________________________________________________________________________________
   
   ____________________________________________________________________________________

5. **What changes at the organization or program have resulted from evaluation findings?**
   
   ____________________________________________________________________________________
   
   ____________________________________________________________________________________
**Tips**

**Building evaluation capacity**  [Back to building capacity.]

**OVERVIEW:** Building capacity of the organization for evaluation is a good way to ensure evaluation is a well-integrated process for your programs. These tips might help evaluation champions in your program or agency build the awareness and capacity of other staff members.

| Develop a logic model | ▪ Develop shared understanding of program goals and activities  
▪ Clarify expectations for outcomes  
▪ Identify and address underlying assumptions |
|-----------------------|-----------------------------------------------------------------|
| Make evaluation findings useful | ▪ Provide results to other staff members and stakeholders as early as appropriate  
▪ Work with stakeholders to develop actionable recommendations  
▪ Identify strengths as well as opportunities for improvement |
| Keep the evaluation plan reasonable | ▪ Build on existing data collection as appropriate  
▪ Focus on the most important evaluation issues  
▪ Anticipate and address challenges to implementation |
| Engage all staff | ▪ Meet with all staff to identify questions and possible data collection strategies  
▪ Listen to staff concerns  
▪ Share findings and recommendations with all staff |
| Maintain focus of evaluation team | ▪ Work collaboratively to solve problems  
▪ Stress the difference between evaluation and performance assessment |
Finding and working with external evaluators

OVERVIEW: Assessing the skills and background of staff members or other stakeholders will help to determine whether your program can manage the evaluation activities internally or whether it might be best to contract with an outside evaluator, for some or all of the evaluation activities. This section will provide some suggestions for deciding whether you need external support, finding potential evaluators, and deciding which one is right for you.

DECIDE WHETHER EXTERNAL HELP IS NEEDED

In deciding whether to hire an evaluator, start with these questions:

- Do you, or does someone on your staff, have the expertise to conduct an evaluation that meets your needs or at least a desire to learn the necessary skills?
- Can you (or other staff members) devote enough time to it?
- How important is external, objective assistance and feedback?
- Is external evaluation required by any funding sources?

There are other considerations that go into the decision to work with an outside evaluator, as opposed to doing the work internally. Working with an outside evaluator can bring specialized knowledge and experience in program evaluation. External evaluators have likely conducted dozens if not hundreds of different evaluations and have experience working with many different groups of stakeholders. They will be able to draw on practical experience to address any obstacles encountered throughout the evaluation. External evaluators might also have increased objectivity and credibility when it comes to reporting evaluation findings.

On the other hand, working with an external evaluator often increases the cost of an evaluation as compared to doing the work in-house, and it will take time and resources to not only select and hire an evaluator, but also for the evaluator to become familiar with your organization and program. You may also encounter resistance or skepticism among other staff members or stakeholders who may view a contracted evaluator as an ‘outsider.’ Here are some practical tips for working effectively with an outside evaluator:
Develop a formal contract that spells out the responsibilities of the evaluator, the products that they are to deliver, and a timetable for completing the project. Specify how the evaluator will bill for services and include a payment schedule.

It is not uncommon for evaluation clients to withhold some of the fee (20 to 30 percent) until a final report has been submitted and accepted. The contract should also specify the program’s responsibilities in the evaluation – to provide timely and appropriate guidance, to review and approve materials, and to assist in problem-solving.

Allow time for the evaluator to become familiar with your project or program. It is important for the evaluator to understand the project and implementation and also to develop rapport with staff members and other stakeholders. This rapport will help increase evaluation buy-in.

Work closely with the evaluator throughout the entire project. You should have regular meetings with the evaluator. In addition, invite them to program events and activities as appropriate. The more they understand your project, the more effective they are likely to be.

Learn as much as you can about evaluation – this will help you to be an effective partner with your evaluator.

Formally or informally, you should periodically assess the evaluation process itself. Consider how the evaluation is progressing, what could be done differently, and how you might improve the process.

**FIND AN EXTERNAL EVALUATOR**

Search online evaluator databases such as the W.K. Kellogg Foundation.

Contact local colleges and universities, starting with the departments that are the best match for the services you provide. Faculty members or advanced graduate students sometimes do evaluation work.

Advertise in publications specific to your type of work.

Contact local professional organizations, such as local chapters of the American Evaluation Association. They may have websites or other resources for finding evaluators in your area.

Contact other local, state, or national organizations focused on your field of service for recommendations.

Ask colleagues about evaluators they have worked with.
SELECT AN EVALUATOR

The two most important criteria are an evaluator’s qualifications to provide the services you need and their ability to work effectively with your agency. Here are a few tips to help select the most compatible evaluator for your program:

- **Start your search with a clear idea of what you need the evaluator to do.** For instance, someone who can help you conduct in-person interviews might not also be able to develop a computerized database.

- **Pay attention to formal education.** Although relatively few people actually have a degree in evaluation, an evaluator should have graduate training (master’s or doctoral level) in research methods. Be skeptical of someone who has only undergraduate training (college classes), unless they have a tremendous amount of on-the-job evaluation experience.

- **Look for someone with relevant experience.** Ideally, you want an evaluator who has worked with organizations or programs similar to yours. However, it is more important that they have solid experience in evaluation work (research design, data collection, statistics) than strong knowledge of colorectal cancer screening programs.

- **If the evaluator does not have experience evaluating colorectal cancer programs, look for a basic understanding of the special issues involved in the work you do.** Perhaps they have done work on other cancer screening programs or other prevention efforts.

- **Ask about the evaluator’s general approach or philosophy.** The strongest external evaluators are typically those who take a collaborative approach – working together to create a credible, useful evaluation that fits your circumstances. Someone who comes in as an “expert” with little interest in listening or adapting to your needs and interests, or as a researcher more interested in scholarly recognition or theoretical exploration, is less likely to give you the practical results that you need.

- **Assess the communication skills of the potential evaluators.** They should be able to clearly explain the evaluation process. You will need them to present findings in a clear and interesting way to your staff and other stakeholders.

- **Whenever possible, select an evaluator in your geographical area.** When this is not possible, make sure that they are available to travel to your site when needed.

- **Review previous evaluation reports written by potential evaluators.** Ask for examples of their evaluation reports. Are the reports clear, readable, well organized, and useful? Avoid candidates whose reports are overly technical, poorly written, disorganized, or difficult to understand.
Ask candidates to provide references for similar organizations or projects. Ask the references if the evaluation was done in a timely fashion. Did the costs stay within their budget? Was the evaluation report useful? Would they hire the consultant again?

Ask your top candidates to submit a proposal. This proposal should detail their work plan, timeline, and budget for completing your evaluation.

And finally, pay attention to your general reaction to potential evaluators. You will want to find an evaluator that is compatible with your organization and your staff. You will need to work together effectively and efficiently.

Before selecting an external evaluator, it is appropriate to interview your top candidates. The Centers for Disease Control and Prevention suggests covering the following topics with potential evaluators:

- How do they understand the difference between research and evaluation?
- How do they understand your program?
- What would be their general approach to the evaluation?
- Can they conduct the evaluation with the available funding?
- How do they handle supervision by the program director or evaluation committee?
- What is their prior evaluation experience?
- Will their current commitments interfere with their ability to do your project?
TIMING OF DATA COLLECTION – PRE/POST OR POST ONLY?  Back to post-only surveys.

If you want to gather objective data about whether people have changed their knowledge or behavior over the course of your program, it is often a good idea to have people complete data collection before (pre) and after (post) your intervention. Comparing what people have said at these two time periods can give you a more rigorous comparison that is less subject to errors in people’s memory. However, in some cases, it can be adequate (and even advantageous) to collect evaluation information only once, after the services have been provided.

Example: You are providing a one-hour group education session at a local community center. You really want to do a rigorous evaluation, so you decide to measure participants’ knowledge about colorectal cancer and screening options before and after your program. You devote the first and last 10 minutes of the session to completing surveys, reducing your total education time to only 40 minutes. When you review the surveys, you find that people clearly rushed through the post-test surveys. Several express annoyance at the amount of evaluation, and most do not take the time to answer your open-ended questions. Many people simply leave following the program, leaving their uncompleted surveys on the table.

In this case, doing two evaluation forms for such a brief intervention may simply have been too much evaluation. The potential advantage of having a pre and post comparison was overshadowed by the loss in intervention time and the increased burden for participants. In this case, it would have been better to just do one evaluation at the end, asking people questions related to whether they feel they gained knowledge due to the group education result. People are generally reliable in answering these types of questions accurately, and you will likely get more complete and useful information to work with. In general, the shorter the intervention, the less appropriate it is to do data collection at multiple time periods. A pre/post design may be a good option, however, if your intervention extends over a longer period of time, or if you want to give people time to make behavioral changes following an intervention.
You’ll need to be mindful of the tendency of respondents to answer questions how they think they should answer questions, due to social desirability bias. Below are some examples that illustrate how social desirability bias can be overt, or can be more subtle.

**Example 1:** You complete a one-on-one education session regarding colorectal cancer screening with a nurse. Following the education session, the nurse asks if he can complete a brief survey with you. Sitting across the table from you, he asks “How would you rate my communication skills?” You thought his skills were weak, but you don’t want to hurt his feelings. You give him a positive rating.

**Example 2:** You participate in a group education event at your church. At the conclusion of the event, the trainer says that their evaluation procedures include counting how many people plan to pursue a colorectal cancer screening within the next three months. You still are not sure if you want to be screened, and you’d like a chance to ask more questions before making up your mind. However, as your friends and fellow parishioners around you all raise their hands, you feel embarrassed keeping yours down. You raise your hand to be included in the count.

**Example 3:** You are a physician who has just completed session where a speaker is presenting a summary of key colon cancer research news, and discusses her interpretation of a newly published major study and its results. At the end of the session, the coordinator hands out a survey to all participants. The evaluation survey asks you how helpful this information was. You disagree with the speaker’s interpretation of some of the research discussed, but because you must include your name and the speaker is a colleague of yours, you check “very helpful.”

In all three examples, participants feel some subtle or explicit pressure to answer evaluation questions “the right way.” As a result, the information provided will not be accurate or valid, and will not be useful in determining whether the related activities were effective. As you design your materials, take a step back and think carefully about how participants will feel completing the evaluation. Avoid language or procedures that may guide people towards a “correct” answer that may not actually be true for them.
Other tips:

- Pretest your materials with people who are similar to your intended evaluation audience – ask for feedback about your questions and people’s comfort answering them honestly.

- Be clear with participants about the purpose of your evaluation and the importance of honest feedback.

- Keep the evaluation anonymous wherever possible – in cases where you need to gather names, explain why you need the names and how the data will be used.

- Avoid having people directly collect evaluation information about themselves – if you want to evaluate your services, consider confidential ways for people to turn in a survey or have another staff person conduct the interview.
OVERVIEW: Depending on what you most need to know through your evaluation, a survey might be the right approach for gathering information. This section provides some sample survey questions that can be used or modified, addressing areas such as outcomes, process, and satisfaction. It also includes sample demographic questions, and the five core questions being recommended for consistent use in evaluations of programs seeking to increase colorectal cancer screening.
**SAMPLE SURVEY INSTRUMENTS**

Programs are encouraged to use the following five core questions from BRFSS in their evaluation instruments, so that they will be able to compare their findings with state and national data.

**Core questions:**

1. A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?
   - [ ] Yes
   - [ ] No
   - [ ] Don't know / Not sure
   - [ ] Refused

2. How long has it been since you had your last blood stool test using a home kit?
   - [ ] Within the past year (anytime less than 12 months ago)
   - [ ] Within the past 2 years (1 year but less than 2 years ago)
   - [ ] Within the past 3 years (2 years but less than 3 years ago)
   - [ ] Within the past 5 years (3 years but less than 5 years ago)
   - [ ] 5 or more years ago
   - [ ] Don't know / Not sure
   - [ ] Refused

3. Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?
   - [ ] Yes
   - [ ] No
   - [ ] Don't know / Not sure
   - [ ] Refused

4. For a sigmoidoscopy, a flexible tube is inserted into the rectum to look for problems. A colonoscopy is similar, but uses a longer tube, and you are usually given medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test. Was your most recent exam a sigmoidoscopy or a colonoscopy?
   - [ ] Sigmoidoscopy
   - [ ] Colonoscopy
   - [ ] Don’t know / Not sure
   - [ ] Refused

5. How long has it been since you had your last sigmoidoscopy or colonoscopy?
   - [ ] Within the past year (anytime less than 12 months ago)
   - [ ] Within the past 2 years (1 year but less than 2 years ago)
   - [ ] Within the past 3 years (2 years but less than 3 years ago)
   - [ ] 10 or more years ago
   - [ ] Don't know / Not sure
   - [ ] Refused
Knowledge questions:
These questions can be asked as part of an evaluation of program outcomes. They can be used before and after program activities to assess any changes in knowledge, or can be asked after the activities have been completed. (Adapted from HINTS 2003)

At what age are most people supposed to start colorectal cancer screening? _____

Colorectal cancer can be prevented through screening.

☐ Agree ☐ Disagree

Is colorectal cancer screening recommended for men, women, or both?

☐ Men ☐ Women ☐ Both

People 50 and older should be screened for colorectal cancer, even if they do not have any symptoms.

☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree

Which of the following tests are recommended for colorectal cancer screening? Choose all that apply.

☐ A take-home blood stool test, such as FOBT or FIT
☐ A blood stool test performed in a health care provider’s office
☐ Colonoscopy
☐ Flexible Sigmoidoscopy
☐ Digital rectal exam

In general, once people reach the age for colorectal cancer screening, if they choose the {INSERT TEST CHOSEN: FOBT home blood stool test; FIT home blood stool test; colonoscopy; flexible sigmoidoscopy} option for screening, how often should they have them done assuming results are normal? Choose only one.

☐ Every year
☐ Every 2 years
☐ Every 3 years
☐ Every 5 years
☐ Every 10 years
☐ Other, specify: __________________________________________

Intention, motivation, and pledge to screen questions:
These questions can be used in an evaluation of program outcomes to understand any changes in intention to screen after program activities. (Adapted from HINTS 2003)

In the future, would you say that…

☐ You plan to get screened for colorectal cancer ☐ You don’t plan to get screened for colorectal cancer
☐ You’re undecided

If you don’t plan to get screened for colorectal cancer, why not? __________________________________________

If you are undecided, what would motivate you to get screened? __________________________________________
If you have not yet been screened for colorectal cancer, when do you expect to have a (colonoscopy/FOBT/FIT/flexible sigmoidoscopy)?

☐ Within 3 months from now
☐ Within 6 months from now
☐ Within the year
☐ If I have symptoms
☐ When doctor/health care provider recommends

If you have previously been screened for colorectal cancer, when do you expect to have your next colorectal cancer screening test?

☐ At the recommended interval
☐ I am not planning to have another
☐ If I have symptoms
☐ When doctor/health care provider recommends

Will you commit to get screened for colorectal cancer screening?

☐ Yes ☐ No

If no, why not? _________________________________________________________________________

**Discussions with family, friends, or medical provider about colorectal cancer and screening:**
These questions can be used in an evaluation of program process to understand where your participants are prior to your activities. They can also be used in an outcome evaluation to assess any changes that may have occurred as a result of the program. (Adapted from HINTS 2003)

Did a doctor, nurse, or other health professional ever advise you to get a screening test for colorectal cancer?

☐ Yes ☐ No ☐ Don’t Know

**These questions can be used in an evaluation of program outcomes. They can be used in a pre- and post-survey to understand any changes that have occurred prior to the activities, or in a survey after activities have been completed.** (Adapted from WE CAN! survey)

I will talk to my health care provider about colorectal cancer screening in the next month.

☐ Yes ☐ No ☐ Don’t Know

I will talk to friends and family about colorectal cancer screening in the next month.

☐ Yes ☐ No ☐ Don’t Know
**Attitude toward screening:**
These questions can be used in an outcome evaluation to understand any changes in attitude toward screening. (Adapted from HINTS 2005)

Do you agree or disagree with the following statements?

There's not much you can do to lower your chances of getting colorectal cancer.
□ Strongly agree □ Agree □ Disagree □ Strongly disagree

Getting checked regularly for colorectal cancer increases the chances of finding the cancer when it's easy to treat.
□ Strongly agree □ Agree □ Disagree □ Strongly disagree

There are so many different recommendations about preventing colorectal cancer that it's hard to know which ones to follow.
□ Strongly agree □ Agree □ Disagree □ Strongly disagree

You are reluctant to get checked for colorectal cancer because you fear you may have it.
□ Strongly agree □ Agree □ Disagree □ Strongly disagree

Getting checked regularly for colorectal cancer increases the chances of preventing the cancer.
□ Strongly agree □ Agree □ Disagree □ Strongly disagree

You are reluctant to get checked for colorectal cancer because of the prep needed for the test.
□ Strongly agree □ Agree □ Disagree □ Strongly disagree

You are reluctant to get checked for colorectal cancer because the test is embarrassing.
□ Strongly agree □ Agree □ Disagree □ Strongly disagree

**Process evaluation questions**
These questions can be used in a process evaluation to understand how well activities are meeting participant needs, what challenges or barriers have been encountered, and what stakeholders would change about the way services are delivered. (Some questions adapted from the Colon Cancer Alliance Perceptions Survey)

What did you like most about the program/brochure/educational session?

What did you like least about the program/brochure/educational session?

What, if anything, would you change about the program/brochure/educational session?

Did the program/brochure/educational session meet your needs? Please explain your answer.

Did the program/brochure/educational session increase your knowledge of colorectal cancer? Please explain your answer.

Did the program/brochure/educational session increase your willingness to get screened for colorectal cancer? Please explain your answer.
Satisfaction (with program and/or program materials)

These questions can be used in an evaluation to assess satisfaction. (Adapted from WE CAN! survey and the Professional Worker Career Experience Survey, United States, 2003-2004)

The staff who presented the program were knowledgeable about colorectal cancer.
   □ Strongly agree □ Agree □ Disagree □ Strongly disagree

The information provided by the program was useful.
   □ Strongly agree □ Agree □ Disagree □ Strongly disagree

The materials provided by the program were easy to understand.
   □ Strongly agree □ Agree □ Disagree □ Strongly disagree

How satisfied are you with the program [materials/staff/activities]?

<table>
<thead>
<tr>
<th>Very satisfied</th>
<th>Satisfied</th>
<th>Neither satisfied nor dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

A-45
Demographics questions
(Adapted from The American Community Survey and BRFSS)

What is your sex?
☐ Male  ☐ Female

What is your age and what is your date of birth?
Age (in years) _____ Month/Day/Year ____/____/______

Which of the following best describes your race? Choose one.
☐ White alone
☐ Black or African-American alone
☐ Asian alone
☐ Native Hawaiian or other Pacific Islander alone
☐ American Indian/Alaska Native alone
☐ Multiracial (two or more races)
☐ Other

Are you of Hispanic, Latino, or Spanish origin?
☐ Yes ☐ No

Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?
☐ Yes
☐ No
☐ Don’t know/Not sure

What is the highest degree or level of school you have completed? (Adapted from the United States Census 2000)
☐ Less than high school
☐ High school graduate
☐ Some college
☐ Associate degree (for example: AA or AS)
☐ Bachelor’s degree (for example: BA, BS)
☐ Master’s degree (for example: MA, MS, MBA, MPH)
☐ Professional degree (for example: MD, DDS, JD)
☐ Doctorate degree (for example: PhD, EdD)

Based on the following criteria, are you at an increased risk of developing colorectal cancer? (Adapted from the Colon Cancer Alliance Perceptions Survey)
Colorectal cancer risk factors include:
• Personal history of polyps or inflammatory bowel disease
• Inherited syndromes such as familial adenomatous polyposis (FAP) and hereditary non-polyposis colorectal cancer (HNPCC)
• Personal or family history of colorectal cancer
• Lifestyle factors such as diet, lack of exercise, obesity, smoking, heavy use of alcohol or type 2 diabetes.

☐ Yes ☐ No ☐ Don’t know
OVERVIEW: This section provides some suggestions to consider if you are going to write your own surveys. It describes some issues to consider when deciding to use a survey, as well as detailed recommendations for how to write clear and effective survey questions.

WHEN TO CONSIDER USING A SURVEY

Surveys allow you to gather information from people in a written form, such as paper-and-pencil or online questionnaires (as opposed to interviews, which are completed in-person or over the telephone). Compared to other data collection approaches, surveys are relatively easy to conduct and allow you to gather information from a large group of people in a cost-effective way. However, a survey may not be your best choice if:

- You want information from people who have limited literacy skills.
- You need in-depth information about people’s experiences or perspectives.
- You want to interact with your respondents, by clarifying questions or providing them with information.
- You only need to gather information from a few people.
- Your intended respondents represent cultural communities for whom structured surveys are a less familiar or uncomfortable strategy for gathering information.
- You do not have a way to contact potential participants.

DEVELOPING YOUR SURVEY

Closed-ended versus open-ended questions

Closed-ended questions are structured and provide respondents with response choices (e.g., yes/no, or agree/disagree). Open-ended questions ask respondents to provide answers in their own words (e.g., How would you improve the services that you received?).

Closed-ended questions should be used whenever possible since these questions tend to be easier to answer and analyze. It is often recommended that at least 70 percent of the survey be closed-
ended. Save open-ended questions for areas where you want deeper responses or where you cannot provide a useful set of response options.

To gather the most useful information, be careful when selecting the response choices for closed-ended questions. Remember that your response options should be:

- Mutually exclusive and non-overlapping.
- Exhaustive, containing every logical alternative response.
- As specific as possible.
- Balanced, with both positive and negative answers.
- Relevant and appropriate from the respondent's perspective.

**Order of questions**

Respondents should understand the order in which questions are asked and be able to move easily through the questions without confusion. Consider the following:

- Choose your first question carefully. It is crucial in determining whether the respondent will participate. Make sure it is relevant, easily understood and answered, applicable to everyone, and interesting.
- Group questions into coherent sections (e.g., those that deal with a specific topic or those that use the same response options).
- Place “sensitive” questions that respondents may be uncomfortable answering as close to the end of the survey as possible.

**Writing effective questions**

It seems like writing a good survey should be easy. However, there are some common errors in survey writing that can limit respondents’ ability or willingness to complete the survey. To avoid these errors, consider the following:

- Keep each question short and use simple sentence structure – it is generally recommended that surveys be written at a fifth or sixth grade reading level.
- Use basic vocabulary that is free of professional jargon. Provide definitions for terms that may not be common. If your question includes definitions, however, be sure to include them before the question itself. An example of a good question would be, “A Fecal Occult Blood Test, or FOBT, is a test to determine whether you have blood in your
stool. You use a stick to obtain a small amount of stool at home and send it back to the doctor or lab. Have you ever had a blood stool test using a take home test kit?”

- Present questions neutrally – make sure nothing in the question or the response choices suggests a “right” answer.
- Think carefully about words and phrases that may have double meanings – especially if you are of a different age, ethnic/cultural background, or educational level than the respondents.
- Be specific about time frames.
- Be clear about what constitutes an acceptable answer to a question. For example, if you ask, “When did you have your last colonoscopy?,” responses can potentially range from “Last year” to “When I was 58.” Although these are both correct answers to the question, information cannot be easily compared or analyzed. To prevent this from occurring, a better question would be, “In what year did you have your last colonoscopy?”
- Avoid questions that are too abstract. People usually cannot predict what they will do or how they will feel in a situation they have not yet experienced. Therefore, hypothetical questions should be left out of a survey. An example of a hypothetical question to avoid would be, “Do you think the discomfort of a colonoscopy will prevent you from asking your health care provider about receiving one?”
- Avoid asking questions that require unreasonable amounts of time or work to answer. Survey questions should be concise and to the point.
- Avoid asking two questions at once.
- Use existing survey questions where you can. Surveys such as the Health Information National Trends Survey (HINTS) or Behavioral Risk Factor Surveillance Survey (BRFSS) provide reliable and valid questions which have been asked of people for a number of years. Not only do you know you are using a question with considerable research behind it, but you will also be able to compare what you learn from your survey to what has been gathered using past survey questions.

**Likert scales** Back to [Likert type response scales](#).

Likert scales are commonly used in questionnaires. They are often used to assess a respondent’s level of agreement with a statement. They are also used to understand a participant’s level of satisfaction with an activity. Here are some rules of thumb for writing questions using a Likert scale:

- Likert scales measure both positive and negative feelings toward a statement. Be sure that the response options are balanced and include an equal number of positive and negative statements.
Likert scales commonly include 5 response options (including a “neutral” category). You may also choose to use a 4-point scale and include a “non-applicable” or “don’t know” response. Research has shown that if respondents are given too many answer choices (e.g., 9), they can be hard to differentiate.

Response options should be mutually exclusive. Each option should have a different meaning, so that responses cannot overlap. Here is an example of a common error when writing a question using a Likert scale:

NOT mutually exclusive:
- Agree
- Somewhat agree
- Somewhat disagree
- Disagree

Mutually exclusive:
- Strongly agree
- Agree
- Disagree
- Strongly disagree

It can be argued that if someone “somewhat agrees” with a statement, they also “somewhat disagree” as well. Therefore, the respondent may be unsure of what their answer to the question should be. There is a greater distinction, however, between “strongly agreeing” with a statement and “agreeing.”

A qualitative meaning should be assigned to each response option. Here is an example of a common error when writing questions with a Likert scale:

How satisfied are you with the program materials?

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>
This might be confusing for some respondents, since there is no way, for example, to distinguish between a “3” and a “4.” In order to be able to analyze results properly, all respondents should be asked the same question in the same way. By doing so, you do not leave room for the person to interpret the question in their own way. A better example for this type of question would be:

**How satisfied are you with the program materials?**

<table>
<thead>
<tr>
<th>Very dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither dissatisfied nor satisfied</th>
<th>Satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Assigning a qualitative meaning to each response option makes it clear to the respondent what each number means. It will also be easier to analyze results, since it will be clear what sentiment each number corresponds to.

**Formatting**

- The appearance of the survey is also important – the fonts used and the layout of the survey will influence how easy or difficult it is for respondents to complete the survey.
- Provide a title that identifies the purpose of the survey – use a bold, prominent font.
- Separate each distinct section of the survey with appropriate headings and subheadings.
- Use an easy-to-read, clean font such as Times or Helvetica.
- Do not crowd the survey – make sure that the survey has “white space.”
- Include brief instructions in each section, explaining how to respond.
- If using a two-sided survey, clearly indicate that additional questions are on the other side.

**Important considerations**

Be sure to keep in mind the group and sub-group you are evaluating. Making sure everyone is literate, for example, is important when asking participants to fill out a survey. If there are language barriers, you want to be sure to offer the survey in different languages. To help you prepare, follow some of these tips.

- Attempt to find data collection tools that have been developed specifically for your target population, by factors such as race or socio-economic level.
Attempt to find tools that have been translated if necessary. This can save time and the expense of getting translations done, and you can be more certain that the translations were done well.

If collecting information about participants’ race or ethnicity, have them self-identify. Interviewers or surveyors may make inaccurate assumptions about the race or ethnicity of a participant.

Answering questions about colorectal cancer screening can be uncomfortable. Consider conducting an anonymous survey, or ensure participants that their answers will be kept confidential.

*Review and pre-test the survey*

Before you begin to collect data, it can be especially helpful to read the survey out loud, so that you can determine how the survey flows and identify questions that sound awkward or unclear. Also, have several people similar to your intended respondents complete the survey and provide you with feedback about questions that were unclear.
Because those doing evaluation are usually unable to directly interact with participants taking a survey, it is important to have well written survey questions that are clear, concise, and unbiased. The way a survey question is worded will affect the clarity and validity of the subsequent responses and data. Here are some examples of common errors that result in poorly written survey questions, and corresponding examples of poorly written and well written survey questions.

<table>
<thead>
<tr>
<th>Error</th>
<th>Weak Example</th>
<th>Stronger Example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Specificity</td>
<td>When is the last time you visited the doctor’s office?</td>
<td>What is the date of your last screening test for colorectal cancer?</td>
<td>It is important to have precisely worded questions in order to prevent any possible confusion or misinterpretation. In the first example, a visit to the doctor’s office may be interpreted as any visit, such as paying a bill or scheduling an appointment. It also doesn’t specify what kind of doctor. The second example specifically asks for the date of the last visit and the nature of the visit (endoscopy screening).</td>
</tr>
<tr>
<td>Double-barreled</td>
<td>Agree or disagree: I felt comfortable discussing screening options with my doctor and finding the necessary resources for screening.</td>
<td>Agree or disagree: I felt comfortable discussing screening options with my doctor. Agree or disagree: I felt comfortable finding the necessary resources for my recommended screening.</td>
<td>Each survey question should be asked in such a way that elicits a single response. With the first example, it may easily result in confusion for anyone who may have felt comfortable with discussing screening options but not finding resources, and vice versa. The second example corrects this error by creating two questions that address each area of interest separately.</td>
</tr>
<tr>
<td>Verbosity</td>
<td>Colorectal cancer is a commonly diagnosed form of cancer in both men and women. Early detection is critical. Are your patients generally aware of current screening recommendations for colorectal cancer?</td>
<td>In general, how knowledgeable are your patients about current screening recommendations for colorectal cancer? -No knowledge -Very little knowledge -Some knowledge -Very knowledgeable</td>
<td>It is important to not have overly lengthy questions and unnecessary information. Keep your questions concise and direct. The first example provides what is most likely redundant information to the clinic staff about the prevalence of colorectal cancer and the importance of screening and early detection. Although it is related to the question at hand, it is not necessarily critical information that affects the integrity of the question being asked. On the other hand, the second question focuses specifically on the question being asked.</td>
</tr>
<tr>
<td>Negative Wording</td>
<td>Yes or no: Would you say that you are not satisfied with the ease of scheduling appointments at this clinic?</td>
<td>Agree or disagree: I am satisfied with the ease of scheduling appointments at this clinic.</td>
<td>Negative words in a question can often result in confusion and incorrect responses. A person taking the survey may overlook the word “not” in the first example and accidentally select the opposite response. It is best to avoid using negative terms in a question, and instead use positive terms that directly and clearly align with the possible responses.</td>
</tr>
<tr>
<td>Biased Wording</td>
<td>Don’t you agree it is necessary to educate others on the importance of regular colorectal screening?</td>
<td>Agree or Disagree: It is necessary to educate others about regular colorectal cancer screening.</td>
<td>The way a survey question is worded can easily bias the responder towards a certain answer that he/she may not have selected if given a more neutrally worded question. The first example is biased inasmuch as the wording appears to imply that the responder should agree that educating others is important. The second example poses the same question in a more neutral light by avoiding using such phrases like “don’t you...?”</td>
</tr>
</tbody>
</table>
### Sample survey questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Critique</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 12 months, how many doctor’s visits have you had?</td>
<td>Response options are overlapping, making it more difficult for respondents to select the correct answer. For example, someone who attended 10 visits could select option (c) or option (d). This will also make it harder to interpret the results. Respondents may also have different definitions for “doctor’s visits,” so it would be important to clarify.</td>
</tr>
<tr>
<td>a) None</td>
<td></td>
</tr>
<tr>
<td>b) 1 – 2 visits</td>
<td></td>
</tr>
<tr>
<td>c) 3 – 4 visits</td>
<td></td>
</tr>
<tr>
<td>d) 5 – 10 visits</td>
<td></td>
</tr>
<tr>
<td>e) 10 – 12 visits</td>
<td></td>
</tr>
<tr>
<td>f) 15 or more visits</td>
<td></td>
</tr>
<tr>
<td>How helpful was the program staff?</td>
<td>The response options do not contain every possible response that people may want to give. They are also not balanced, since they do not allow respondents to provide negative answers.</td>
</tr>
<tr>
<td>a) Very helpful</td>
<td></td>
</tr>
<tr>
<td>b) Somewhat helpful</td>
<td></td>
</tr>
<tr>
<td>How often have you been checked for colorectal cancer?</td>
<td>The question itself is vague, as it requires each participant to define for themselves what it means to be checked for cancer. It will be difficult for you to interpret their responses, as you will not know what they meant by “checked.” The response options also need more clarity. Terms such as “frequently” can be defined differently by different respondents.</td>
</tr>
<tr>
<td>a) Very frequently</td>
<td></td>
</tr>
<tr>
<td>b) Somewhat frequently</td>
<td></td>
</tr>
<tr>
<td>c) Somewhat infrequently</td>
<td></td>
</tr>
<tr>
<td>d) Very infrequently</td>
<td></td>
</tr>
<tr>
<td>How often have you failed to get screened for colorectal cancer after your doctor recommended the procedure?</td>
<td>The question has a judgmental, rather than a neutral, tone. Participants may feel as though they are being criticized for not getting screened. Response choices should also have been provided, so that survey responses could be easily tabulated.</td>
</tr>
<tr>
<td>Have you had a FSIG in the past 5 years?</td>
<td>Survey respondents may or may not know what is meant by “FSIG.” It may be more useful to ask respondents whether they have had a flexible sigmoidoscopy, and include a description of the procedure.</td>
</tr>
<tr>
<td>a) Yes</td>
<td></td>
</tr>
<tr>
<td>b) No</td>
<td></td>
</tr>
<tr>
<td>How many times have you seen a health care provider for gastrointestinal concerns? _____ times</td>
<td>The time frame for this question is unclear. Survey respondents will not know whether this refers only to services recently received through your intervention or to a longer time period, such as their entire lives. Unless the number of appointments was very small, most respondents will have difficulty answering the question accurately. Many will either need to spend a great deal of time reviewing records to answer the question correctly, or may simply guess at the answer. It may be better to obtain this information from agency service records.</td>
</tr>
</tbody>
</table>
**Tips**

**Conducting interviews**  Back to [tips for conducting interviews](#).

**OVERVIEW**: Interviews allow you to gather information from respondents by directly asking them questions. Interviews may be done in-person or over the telephone. Interviews tend to be more time-consuming and expensive (in terms of staff time) to conduct than surveys. However, they can also yield a better response rate. Interviews may be most useful when you need in-depth information about people’s experiences or perspectives or when you want to interact with your respondents, by clarifying questions or providing them with information. This section provides tips for conducting interviews, including probing for more information and avoiding bias.

**TYPES OF INTERVIEWS**

Interviews vary in their degree of structure and formality. Less formal interviews may be useful if you are exploring a broad topic or conducting interviews with very diverse participants. More structured interviews are most useful when it is important to collect consistent information across participants. Interviews generally fall somewhere along the following continuum:

- **Informal, conversational interview** – there is no predetermined order for the questions asked in order to remain as open and adaptable as possible to the respondents’ nature and priorities.

- **Semi-structured interview** – a guide is used to ensure that the same general areas of information are collected from each respondent. This provides more focus than the conversational approach, but still allows a degree of freedom and adaptability in getting information.

- **Structured interview** – all respondents are asked exactly the same questions and provided the same set of response options. This format ensures that the same information is collected from each respondent, making it easier to analyze responses.

When interviews are structured or semi-structured, it is important that they be done consistently each time. If more than one person is going to be conducting the interviews, provide training in advance, including opportunities to conduct practice interviews.
THE INTERVIEW PROCESS

Explaining the project to potential respondents

While people are usually willing to be interviewed, some may refuse. The likelihood that people will agree to an interview is higher when their initial contact with an interviewer is positive. On making initial contact:

▶ Maintain a positive attitude and be enthusiastic.
▶ Explain the purpose of the interview, the kinds of questions you will ask, how long the interview usually takes, and how the information will be used.
▶ Allow the respondent to ask questions before beginning the interview.
▶ If someone seems reluctant to participate, ask about their concern or objection and try to address it – this is more effective than being pushy.

Practice your introduction before contacting respondents. People respond much more favorably when you sound like yourself and not as though you are reading from a script.

Conducting the interview

Interviews provide a chance to establish rapport and help respondents feel comfortable. Before starting an interview, it is perfectly acceptable to engage in small talk to give both yourself and the person you are interviewing a chance to get comfortable. Once you begin the interview:

▶ Ask questions at a reasonable pace.
▶ If the interview is structured, read each question exactly as it is written and in the order given in the interview guide.
▶ Read the entire question before accepting an answer.
▶ When asked to repeat a question, repeat the entire question.
▶ Do not skip a question because the respondent answered the question earlier or because you think you know the answer.
▶ Encourage responses with occasional nods of the head, "uh huh"s, etc.
▶ Provide transition between major topics, e.g., "We've been talking about (some topic) and now I'd like to move on to (another topic)."
Do not count on your memory to recall their answers. Ask for permission to record the interview or bring along someone to take notes. Occasionally verify the tape recorder (if used) is working.

Do not allow the person you are interviewing to continually get off topic. If the conversation drifts, ask follow-up questions to redirect the conversation to the subject at hand.

Avoid getting into casual conversation or discussing issues, topics, and viewpoints that are related or unrelated to questions on the survey.

Remember that the topic of colorectal cancer screening may be uncomfortable for some people to discuss. Before asking questions related to the subject, ask questions to build trust and rapport. This can include questions related to what they believe the benefits of colorectal cancer screening are or the steps they are taking to maintain their health.

If you plan to conduct the interview in person, be thoughtful about where it will take place. Make sure the location is comfortable for the respondent, such as their home, work place, or other location they prefer. The setting should be quiet and should allow enough privacy to conduct the interview without jeopardizing confidentiality.

**Probing for more information**

Interviews provide the opportunity for you to explain or clarify questions and allow you to explore topics in more depth than you can with a survey. A good technique to use to get more information is to ask a “probe” question. A probe question can obtain more information about answers that are unclear, incomplete, or irrelevant. Common probes include: “Could you be more specific?,” “Could you give me an example?,” or “Could you explain that?” Probes should be asked in a neutral way and should not be used to pester a person or to coerce someone into answering uncomfortable questions. If someone does not want to talk about an issue, you should respect their desire. Other recommendations when using probe questions:

- Never use leading probes. If you are not sure what a respondent means, ask the question again or ask for clarification.

- Probe responses to closed-ended questions if the respondent selects an answer that was not read from the list. Repeat the entire list of response options, instead of trying to guess what the respondent meant.

- Respondents sometimes say “Don’t Know” because they didn’t understand the question, didn’t hear the entire question, or are not sure how to answer. If someone says that they “don’t know” the answer to a question, probe at least once. Reading the question again can be effective.
If someone says that they do not want to answer a question, probe one time. If he or she doesn’t answer the question following the probe, move on to the next question. Sometimes it is helpful to reassure the respondent that all answers are confidential.

Probe for clarification and inconsistencies. Make sure that you understand what the respondent is saying. If you don’t understand what a respondent means, ask.

Probe for details when needed. Use probes to get a complete response that fully answers the question.

Stop probing when you have obtained the necessary information, the respondent becomes annoyed or irritated, or the respondent has nothing more to say.

**Probe examples:**

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Response</th>
<th>Good probe</th>
<th>Wrong!! Leading probe</th>
</tr>
</thead>
<tbody>
<tr>
<td>What did you like best about the program?</td>
<td>I don’t know.</td>
<td>Even if there is only one thing you could tell us, that information will help us make improvements to the program.</td>
<td>Didn’t you like the staff?</td>
</tr>
<tr>
<td>How many meetings did you participate in?</td>
<td>Oh, about 10 or 12 meetings.</td>
<td>Would that be closer to 10 or to 12?</td>
<td>Interviewer writes 11.</td>
</tr>
<tr>
<td>How would you improve the program?</td>
<td>Everything!</td>
<td>Can you provide some specific examples?</td>
<td>You mean you didn’t like anything?</td>
</tr>
<tr>
<td>What is your race or ethnicity?</td>
<td>Well, I’m a mixture.</td>
<td>A mixture?</td>
<td>Are you part Black or Hispanic?</td>
</tr>
<tr>
<td>How much would you agree that the services you received were useful? Would you strongly agree, agree, disagree, or strongly disagree?</td>
<td>I think they were okay.</td>
<td>So . . . would you say you strongly agree, agree, disagree, or strongly agree?</td>
<td>(Interviewer records “agree” without probing further).</td>
</tr>
</tbody>
</table>

**Avoiding bias**

One disadvantage of interviews is the possibility of respondents changing their answers to please the interviewer or avoid embarrassment. It is important to avoid bias when conducting interviews. Try to avoid expressing your own attitudes, opinions, prejudices, thoughts, or feelings during the interview. The following tips can help you avoid influencing the respondent’s answers:

- Do not show surprise, approval, or disapproval with your words, gestures, or expressions to anything the respondent says or does.
▶ Do not disagree or argue with someone even if they express opinions you feel are wrong.
▶ Do not provide feedback – if necessary, say something neutral like, “I see” or “I understand.”
▶ Do not become too familiar or casual by sharing personal information.
▶ Do not laugh too much or make the interview seem like a friendly conversation.
▶ Do not seek clarification in such a way that leads the respondent toward one particular answer.
Focus group checklist

OVERVIEW: There are a number of logistical and organizational issues to consider when arranging a focus group. This checklist can be used as a starting point for organizing your focus group.

Name of Project:
__________________________________________________________________________________

Brief Purpose of Focus Group:
__________________________________________________________________________________
__________________________________________________________________________________

Date of Focus Group: __________________________
Number of Participants: _________________________

Focus group checklist
☐ Map and/or address for destination
☐ Name and phone number of local contact
☐ Gift certificates and signature form
☐ Name tags or name tents
☐ Tape recorder, microphone, batteries
☐ Laptop
☐ Extension cord
☐ Blank tape(s)
☐ Interview guide
☐ Demographics forms
☐ Pencils and doodle pads or paper
☐ Sticky dots
☐ Flip chart and stand
☐ Markers
☐ Tape (if flip chart is not self-stick)
☐ Legal pad and pens/pencils for recording
☐ Food, refreshments (consider dietary restrictions)
OVERVIEW: When conducting a focus group, it is helpful to have your protocol ready in advance, so that you can easily facilitate the group and focus on your key questions. This section provides a sample focus group protocol. It is based on Example 2, the Metropolitan Colon Cancer Collaborative. They decided to conduct focus groups with members of their target population, to determine whether their education materials were effective.

At the beginning of the focus group:

As participants enter:
1. There is food available, so please help yourself.
2. The restrooms are located _______________.
3. Your nametags are on this table, please find your name. OR Please use the labels and markers to make a nametag.
4. Please look at and think about the questions on your seat.

Note: The first part of the scripts will not be read verbatim, but all the concepts will be communicated to the participants.

Introduction:
Thank you for attending today’s focus group. We appreciate you taking time out of your day to share your experiences about the colorectal cancer materials provided by the Collaborative. I am [name]. I will be facilitating this focus group. [Name] will be co-facilitating and taking notes. We will also be audio recording this focus group with everyone’s permission. Please let us know at this time if this is OK with everyone, keeping in mind that your names will not be associated to anything that is said in the report.

To help us capture the details of the conversation in our notes and the recording, please do not talk over anyone else. Everyone will be given the opportunity to speak and share their views. I will be asking you a number of questions during our discussion, and I encourage you to speak openly about your perspectives and opinions. There is no right or wrong answer to any of the questions I ask.

Purpose and Confidentiality:
We are here today to learn more about the experiences you have with the educational materials provided by the Collaborative. We appreciate your willingness to share your experiences. Anything you share with us will be kept confidential. All responses will be analyzed and the main themes will be included in our report. Again, we will not report anything in a way that will identify any individual.
Do you have any questions?
If there is nothing further, let’s begin recording and start our discussion.
**Ice Breaker:** Please tell me your name, how you learned about the Collaborative, and describe a brochure or other piece of written material that you saw recently that you really liked. [NOTE: This may help you develop insights as to what is eye-catching to readers and what sorts of things stick out in their mind that may help them remember a message.]

We would like for you to take a look at these written materials.

What is your first impression of them?

What do you feel is the main message?

Are the materials understandable? [PROBE: If no, what could make them more easily understandable to you?]

Who do you think is the target audience? What about the materials made you believe that is the target audience?

Does the message motivate you to get screened for colorectal cancer? What kind of messages would motivate you?

Where would be the best place to distribute the materials in order to reach people in your community?

Thank you for your time.
Tips

Conducting focus groups

OVERVIEW: Focus groups are interviews conducted with a small number of people simultaneously. Focus groups also allow you to generate insights based on the interactions among participants. Many of the recommendations for conducting interviews also apply to focus groups. However, there are some additional things to consider when conducting a focus group. This section provides some tips for conducting an effective focus group.

CONDUCTING A FOCUS GROUP

- If possible, find someone trained in group facilitation to conduct the focus group.
- Keep the number of questions reasonable – you can generally expect to thoroughly address 5-7 questions during a 1.5 hour focus group. Have an established protocol and be upfront with participants about the content of the group.
- Make it easy for people to participate by providing transportation and refreshments, as appropriate.
- Establish ground rules to ensure that participants stay focused, feel comfortable, and respect the privacy of others.
- Select participants who are opinionated and comfortable sharing information in a group.
- Limit participation to 6-10 individuals.
- Allow opportunities for each person to share information, rather than letting a few people dominate the conversation.
- Have a second person present to take notes and to help facilitate the focus group if needed.
CASE STUDY QUESTIONS  Back to questions.

Impact of program

► How did you hear about the education program?

► Have you made any changes to your health behaviors since working with the program? If so, what changes have you made? [PROBE: dietary changes, increased physical activity, regular medical appointments, etc]

► What was most beneficial about the education classes you attended through the program?

► Was there information or support you needed that you did not get from the program? If yes, what else did you need?

► In what ways has the program helped you to be healthier? What were the most important lessons you learned through the program/staff? [PROBE: intention to get screened, etc]
OVERVIEW: Once you have identified your key evaluation questions, you need to develop a plan for gathering the required information. This section provides a sample data collection plan, to help you align your needed information with a data collection approach.

Review the list of the outcome goals that you rated as most important to include in the evaluation design. In the first column, make a list of all the information that you will need to collect in your evaluation plan to address these outcome goals. In the second column, identify a potential data collection strategy (e.g., program records, other secondary data sources, questionnaires, interviews, observational data, etc.). In the third column, identify a potential data source for this information (e.g., participant, staff, etc.). In the fourth column, propose a plan for collecting the information, including the procedure to be used and the timing of the data collection.

<table>
<thead>
<tr>
<th>Information to be collected</th>
<th>Data collection strategy</th>
<th>Data source</th>
<th>Data collection procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample: Participant feelings about media campaign</td>
<td>Focus groups</td>
<td>Community members</td>
<td>Will recruit participants at local community center, ideally would like to have three focus groups of 7 people each</td>
</tr>
</tbody>
</table>

Back to templates.
Review your ideas for collecting data from the previous worksheets. Combine these strategies as appropriate to create a list of each data collection effort that would be needed.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Evaluation issues addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample: Focus groups to understand feelings toward media campaign</td>
<td>Participant input on satisfaction with materials (satisfaction)</td>
</tr>
<tr>
<td></td>
<td>Understand best media outlets to use within community (community assessment)</td>
</tr>
</tbody>
</table>
Common layperson definitions of screening tests

OVERVIEW: In creating your evaluation materials, you may need to refer to specific colorectal cancer screening tests. Some of your evaluation participants may not be familiar with these tests, however. In writing your questions, it is advisable to provide layperson definitions, rather than rely on technical definitions. This section provides layperson definitions of common screening tests. These definitions can be used as you create survey, interview, or focus group questions.

Colorectal cancer
Colon or rectal cancer. Since colon cancer and rectal cancer have many features in common, they are often referred to together as colorectal cancer.

Colorectal cancer screening
Testing done to find abnormalities early, before signs and symptoms start. This allows for earlier detection of cancer, when it is most curable. Some types of screening allow doctors to find and remove polyps, which can prevent cancer from developing. See also colonoscopy, fecal occult blood test, fecal immunochemical test, sigmoidoscopy, barium enema, DNA stool test, CT colonography (for virtual colonoscopy) and polyp.

Colonoscopy
A procedure that allows a doctor to see inside the large intestine to find polyps or cancer.

Fecal occult blood test (also referred to as FOBT or gFOBT)
A test for "hidden" blood in the feces (stool). The presence of such blood could be a sign of cancer or blood from other sources.

Fecal immunochemical test (also referred to as FIT or iFOBT)
A newer test to look for "hidden" blood in the stool, which could be a sign of cancer. The test is not affected by vitamins or foods, though it still requires 2 or 3 specimens.

Sigmoidoscopy (also referred to as flexible sigmoidoscopy)
A procedure in which a doctor can look into the rectum and the descending portion of the colon for polyps or other abnormalities.

Barium enema (also referred to as double-contrast barium enema)
A method used to help diagnose colorectal cancer. Barium sulfate, a chalky substance, is used to enlarge and partly fill the colon (large intestine). When the colon is about half-full of barium, air is pushed in to cause the colon to expand further. This allows good x-ray films to be taken. Also called a double-contrast barium enema.
CT colonography (for virtual colonoscopy)
Examination of the colon for polyps or masses using special computerized tomography (CT scans). The images are combined by a computer to make a 3-D model of the colon, which doctors can “fly-through” on a computer screen.

DNA stool test
A method to detect abnormal DNA in cells that rub off from colorectal cancers and come out in the stool.

Polyp
A growth from a mucous membrane commonly found in organs such as the rectum. Polyps may be non-cancerous (benign) or cancerous (malignant).

Reference: American Cancer Society—Cancer Glossary.
http://www.cancer.org/Cancer/CancerGlossary/index
Tips

Getting a good survey response rate  Back to tips for increasing your survey response rate.

**OVERVIEW:** A significant disadvantage of surveys is the risk of a low response rate. People may choose to not complete surveys for a variety of reasons, such as being too busy, not being interested, or feeling that it is not important. However, there are ways to help overcome this. This section provides recommendations for increasing your response rate.

**Keep it focused** – Review your data collection goals before designing your survey. What is essential to find out? How will the information gained through the survey help you answer key evaluation questions? Make sure that each question appears relevant to the respondent.

**Keep it short** – Make the survey long enough for you to gather needed information, but not so long as to tire or annoy respondents. There is no set rule about how long a survey should be. Many respondents will take the time to complete a survey, so long as it is relevant and easy to answer. If your survey is too long to be easily completed, consider whether all of the information is necessary and whether you could gather some evaluation information using a different strategy.

**Keep it clear** – Provide respondents with clear, brief and easy-to-follow instructions. Some surveys use “skip patterns,” which means that respondents may be asked to skip some questions depending on how they answered other questions. Skip patterns should be used only if necessary. If they are used, they should be easy to follow.

**Encourage participation** – Explain the purpose of the survey, why it is important, and how you will use the information.

**Make it easy to return** – If the survey is being done by mail, provide a stamped addressed envelope for respondents to use to return the survey. If the survey is being done at your agency, provide a clear and easy place to return the survey.

**Allow enough time, but not too long, to complete** – If the deadline is too far away, respondents may be more likely to forget to complete or return it. Depending on your target group, this may range from a few days to a few weeks.

**Provide reminders** – Issuing even a single reminder can increase the likelihood of someone completing a survey. If time allows, two to three reminders are better. Reminders may be given multiple ways: email, phone call, postcards, personal contact, or signs in your agency.
Offer incentives for participation – It does not need to be large or expensive; a small gift certificate or amount of cash can be effective, or, depending on your audience, free participation in an event or a t-shirt may do the trick. If you would like to follow-up with program recipients, you can offer a larger prize and indicate that you plan on contacting winners through email. If you do not have funding, consider seeking donations.

While it is extremely unlikely that you will receive surveys from everyone that you invite to participate, it is important to collect surveys from as many people as possible. The lower your response rate, the more cautious you should be in interpreting your survey results. As your response rate declines, it becomes less likely that the opinions of your respondents will reflect the perceptions of your entire target population.
Entering and managing data  Back to tips for effectively entering data.

OVERVIEW: Data entry is often thought of as a time-consuming process, but there are steps you can take to make the process more efficient. You will save time in the long run if you take time up front to prepare for data entry. This section provides some general steps to help you get started.

ENTERING DATA

- Assign an ID number to each form or survey to be entered, and write the number at the top of each survey. These can be numbers such as 1, 2, 3, 4, but each number should be used only once, even across different batches of surveys. This will make it much easier to go back and re-enter data if you realize you have made a mistake. In some instances, like surveys you collect on a recurring basis from the same people (such as doctors), you may wish to assign one ID for each respondent. You will need to maintain a master list that you can reference for assigning and tracking these ID numbers in the future.

- Schedule a large enough block of time to enter an entire batch of data at once. The time needed for this will vary depending on the length of the survey and the number of participants, but it is best to enter all of the information at the same time if possible. This will minimize the chance that you enter the same survey twice or forget to enter any remaining surveys.

- Before you begin entering the data, take time to go through each completed survey and identify questionable responses. By taking time up front to identify potential problem areas, you can make consistent decisions about what you plan to enter in each situation, and you will save time once you begin entering the data. See the section on making data entry decisions to identify some common mistakes that survey respondents make, and take note of the tips for working with difficult or confusing surveys.
MAKING DATA ENTRY DECISIONS

No matter how clearly a survey is written, there will be some survey respondents who do unexpected things. For example, respondents may choose multiple answers even when asked to choose only one, they may skip questions, or they may just make it difficult to understand their intended response. The following are some common issues that you may discover and some ideas for navigating those difficult surveys. Once you have made a decision about how to treat a particular issue, make note of it in a separate document, or even in the margin of these instructions, to reference later and build consistency in your decision-making process.

► If data are missing or unintelligible, just leave the space blank in the database. You should not try to guess what the respondent might have been thinking.

► A participant may respond to a numerical question with a range of numbers (e.g., “1 or 2” or “5-7”) or a vague reference (e.g., “a couple” or “several”) instead of a single number. In these cases, the response is too vague to translate into a single representative number, so you will simply leave this cell blank.

► Sometimes respondents will be unable to choose between ‘agree’ and ‘strongly agree,’ and will select both. Unless it is clear that one of the responses was the intended response (e.g., the other is crossed out or one is especially obviously indicated), you are safer to just leave that space blank in the database. We don’t want to try to read our participants’ minds.

► For those surveys in which an ‘other’ category is possible, you will have to decide how to treat these answers. You may enter them into the spreadsheet as described above. However, sometimes respondents choose ‘other,’ but then provide an answer that closely aligns with one of your response categories. See the example below:

In what capacity did you attend this training?

 Nurse
 Physician
 Physician Assistant
 Other: Geriatric doctor

In this situation, you would probably choose to recode the response ‘other’ to ‘physician,’ as a geriatric doctor is a type of physician.
MANAGING YOUR DATA

You have put time and effort into completing data entry. The last thing you want is to lose or misplace your paper versions of surveys. The following tips will help ensure that the data you have entered has integrity and will provide useful information for your projects.

► You or someone else should double check the data that has been entered. Be sure to check a minimum of every 5 cases to make sure the data was entered in your spreadsheet correctly. If there are more than a few discrepancies, you may want to check every case.

► If the surveys contain any identifying information (respondent’s name, social security number, etc.), be sure to keep the surveys in a locked place when not using them. Never leave them laying around, even if you get up for only a moment. Also, if you are sending data that contains identifying information by fax or email, make sure to take the necessary precautions before sending it, such as encryption.

► Save your data often! In fact, it is a good idea to save a back-up copy of the database once all of the data for a particular session has been entered. If anything were to happen to the original, these steps could save a lot of time, energy, and stress.
Tips


OVERVIEW: Quantitative data analysis allows you to make sense of the numerical data collected through surveys. This section provides some basic tips for analyzing your data, with a goal of summarizing the information that you obtained.

Descriptive statistics include frequency distributions, central tendency, and variability. These can be used to summarize the information received from your participants, in order to get a better picture of the population you are reaching through your activities.

1. **Frequency distributions**: counts that show how many of your evaluation participants fall into various categories of interest (e.g., how many said they “strongly agree,” “agree,” “disagree,” and “strongly disagree”). These statistics are only reported when there are defined response options, like in the example. You can find these statistics in the data summary spreadsheets under the columns labeled “#” or “%.”

2. **Central tendency**: the number that best represents the “typical score,” such as the average. The average is calculated by adding up all the numbers and then dividing by the number of numbers. The "median" is the "middle" value in the list of numbers. The "mode" is the value that occurs most often. The "range" is the difference between the lowest and highest values. Central tendency is usually only reported when the responses are numerical and continuous (e.g., number of months of participation, ages, number of people in a household).
3. **Variability**: amount of variation or disagreement in your results. Common measures of variability include reporting minimum and maximum scores, range (difference between the highest and lowest scores) and standard deviation (a more complicated calculation based on a comparison of the each score to the average). Variability is also only reported when the responses are numerical and continuous (e.g., number of months of participation, ages, number of people in a household).

Make sure you check your data entry work and your analysis thoroughly. If something in your analyses looks strange to you, first go back and make sure there are not any errors in your data entry.
Writing the report

OVERVIEW: Once your evaluation data are collected and analyzed, you will usually want to prepare a report of the findings. This section provides a sample outline for an evaluation report, and provides tips for organizing and summarizing your information.

SAMPLE REPORT OUTLINE

No one approach fits all written evaluation reports. Remember to tailor the report to your audience. Most reports should include, at a minimum, the Who, What, Where, When, Why and How of the evaluation. How you present that information, and the level of detail and technicality, will depend on your audience. The following outline provides a common framework for presenting evaluation results.

<table>
<thead>
<tr>
<th>Report example</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Executive summary</td>
</tr>
<tr>
<td>II. Program background</td>
</tr>
<tr>
<td>a. Participants (who)</td>
</tr>
<tr>
<td>b. History</td>
</tr>
<tr>
<td>III. Review of evaluation questions (what)</td>
</tr>
<tr>
<td>a. Goals of evaluation (why)</td>
</tr>
<tr>
<td>b. List questions and why each was addressed</td>
</tr>
<tr>
<td>IV. Methods (when, where, and how)</td>
</tr>
<tr>
<td>a. Evaluation design</td>
</tr>
<tr>
<td>b. Participant criteria</td>
</tr>
<tr>
<td>c. Data collection approaches</td>
</tr>
<tr>
<td>d. Data analysis procedures</td>
</tr>
<tr>
<td>V. Strengths and limitations of methods</td>
</tr>
<tr>
<td>VI. Key findings</td>
</tr>
<tr>
<td>a. Characteristics of evaluation participants (demographics, etc.)</td>
</tr>
<tr>
<td>b. Services provided by program</td>
</tr>
<tr>
<td>c. Results for each evaluation question</td>
</tr>
<tr>
<td>VII. Conclusions</td>
</tr>
<tr>
<td>a. Strengths of program as identified by evaluation</td>
</tr>
</tbody>
</table>
REPORT WRITING TIPS

Organize your information

Organization can be one of the main challenges in preparing an evaluation report. Your readers should be able to easily understand the structure of the report and find the information that interests them. Consider the following recommendations:

- List each of your key evaluation questions and then attempt to answer them with the available information.
- Provide an introduction that summarizes the format and content of the report.
- Use headings/subheadings consistently to help readers follow your organization.

Key findings

If you have a lot of information to report, it can be easy for readers to lose track of your main findings and conclusions. Make your key findings stand out, so that your stakeholders can easily find them and determine their significance and usefulness. Consider the following suggestions:

- Within each section, start with the most important information.
- Present key findings both in text and in tables.
- Consider using a bold font or section subheading to present key statements of findings.
- Restate your key findings in your executive summary and/or in your conclusions.
Formatting

Formatting is a relatively easy strategy for making reports easy to read and understand. Keeping the report visually interesting, but not too “busy” can help keep readers engaged in the report. Consider the following tips when formatting your report:

- Leave “white space” – do not crowd the page.
- Avoid using more than 2-3 fonts within one document.
- Use an 11-12 point font size – make sure that it is legible and easy to read.
- Use features such as bold, italic, and underline sparingly and consistently throughout the report.
- Consider using bullets or sidebars to emphasize key information.

Tables and graphs

Tables and graphs can be a valuable supplement to your written text. When presenting your key findings, consider whether the information will be best communicated using a table or graph, written text, or both. If you use tables or graphs, keep them as clear and simple as possible.

Language

The language used in the report not only sets the tone for the report, but also determines how understandable the report will be to your readers. Consider the following tips:

- Use familiar words rather than jargon.
- Use active verbs as much as possible.
- Delete unnecessary words and phrases.
- Keep sentences and paragraphs short.
- Avoid using expressions that may not be familiar across cultural communities.
Objectivity

It is crucial that you report your evaluation findings objectively, including both positive and negative findings. Here are some tips for ensuring your objectivity and increasing credibility with stakeholders:

- Use disappointing results to guide recommendations for enhancing services or addressing implementation barriers, rather than dismissing or hiding them.

- Discuss limitations in terms of how information was collected, so that audiences can judge the degree of confidence to place in the results. Every evaluation study has limitations, making it more difficult for stakeholders to reach definitive conclusions.

- Be clear about what is a statistical finding versus what is your interpretation. Unless you use hypothesis testing and statistics, avoid the use of the word ‘significance’ as this implies a statistical finding that your evaluation findings may or may not support.

- Do not use emotionally charged language when describing your program or findings, like ‘very’ or ‘extremely.’ This can make you sound like a program advocate, thus reducing your objectivity and credibility.
Worksheet

Identifying research implications

OVERVIEW: The main value of evaluation comes when you have the results and can use them to improve or expand services, inform education/advocacy efforts, etc. This worksheet can be used to help you identify key findings, implications, and recommendations using what you learned from your evaluation.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Evaluation</th>
<th>Findings</th>
<th>Implications</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do we want to know?</td>
<td>What was done?</td>
<td>What was learned?</td>
<td>What does this mean?</td>
<td>Where do we go from here?</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Back to identifying research implications.
**OVERVIEW:** The most important outcome of any evaluation is putting findings into action. This worksheet can be used to create a plan for action, using the results from your evaluation.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Finding</th>
<th>Follow-up action</th>
<th>Person responsible</th>
<th>Targeted completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome evaluation</td>
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<tr>
<td>Outcome evaluation</td>
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</tr>
<tr>
<td>Stakeholder satisfaction</td>
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</tr>
<tr>
<td>Stakeholder satisfaction</td>
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<td></td>
</tr>
<tr>
<td>Client background/characteristics</td>
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</tr>
<tr>
<td>Service delivery</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
The model lacks an “inputs” column (typically the first column in the model). An “inputs” column is important for best identifying, defining, understanding, organizing/budgeting, and coordinating the available resources for engaging in successful program activities. It is also helpful in identifying key stakeholders involved with your program.

For example, the “inputs” in this model may include staff, vehicles, and telephones.

- The “outputs” column does not adequately address or measure the activities impact on the outcomes as well as it could. It would be best to include additional outputs, such as the number of clients that actually use the driving services, not only just those who are scheduled to use it.

  The phrase “number of clients scheduled” is also rather vague, leaving too much room for misinterpreting what “scheduled” is referring to (i.e. scheduled appointments; scheduled driving service appointments; etc.). It is important to be more specific and accurate with the language used in a logic model in order to have more precise measurements for evaluation.

- The short-term outcome “patients schedule screenings” is also too vague. It is important to define the types of patients being scheduled (i.e. new patients vs. existing patients), as well as the type of change in scheduled screenings (i.e. increase in screenings).

  Additionally, the other short-term outcome (“Potential patients in targeted community learn about available driving services”) is not adequately addressed in the “activities” column in order to be able to logically and sequentially claim that as the necessary subsequent “outcome”. It would be best to add some type of activity which would logically result in that outcome.

- The long-term outcome should include something additional which shows the overall goals of the program. Although the goal is to increase CRC screenings, the goal of the increased screenings is to decrease CRC mortality and incidence. It is important to include that in the long-term outcomes column as well in order to show interested stakeholders, potential donors, and staff how the activities directly result in achieving the organization’s long-term goals (in this case, reducing CRC mortality and incidence).