

## Chapter 5

# Evaluating the Success of Your Counter-Marketing Program

*To ensure accountability and enable future improvements in tobacco control programs, state tobacco control programs must be evaluated and have explicit goals coupled to performance measures.*

— National Cancer Policy Board, 2000

Evaluation plays a critical role in tobacco counter-marketing campaigns. Programs should be evaluated regularly to enable the program manager to build on successes, to switch to new strategies if necessary, and to be accountable to all those with an interest in the program's outcome.

Evaluation can help you to answer questions such as the following:

- What impact is the counter-marketing program having?
- Is the program being implemented as planned?
- Are the audience's attitudes or beliefs about tobacco being changed by the program?
- Is the program helping to improve the health status of the target population?
- How can the program be improved?
- Is the funding level appropriate for accomplishing the program's objectives?

## In This Chapter

- Evaluation and Surveillance
- Types of Evaluation
- What Evaluation Can Do
- When To Conduct an Evaluation
- Scope of the Evaluation
- How To Conduct an Evaluation

Systematic collection of data for evaluation of the counter-marketing program can help to inform decisions of program managers and marketing managers, so the program can be improved and its outcomes demonstrated. However, this process doesn't take place in a vacuum. You'll need to define the purpose of the evaluation and decide which evaluation questions to ask, when evaluation should take place, how to present the questions to obtain the information needed, and how to provide this information to those who need it, in a way that facilitates its use.

An evaluation must be practical and must cover issues related to time, money, and the political context. For example, the more costly and visible the program is, the more comprehensive and rigorous the evaluation may need to be. The design of evaluation should be based on the expected use of the findings. Furthermore, it should be conducted in an ethical and high-quality manner, so results can withstand scientific scrutiny (Joint Committee on Standards for Educational Evaluation 1994; Patton 1997; CDC 2001).

Evaluation efforts should be planned during initial development of the program. Thinking about evaluation early improves both the program and the evaluation. In addition, most outcome evaluation requires a baseline study that must be conducted before any program activities take place. Evaluation should be coordinated with the program's implementation, so the results are timely and useful. If results are given to the program managers as

they are generated, the managers can make adjustments to the program and share results with stakeholders.

CDC offers several resources to help you with evaluation. The Evaluation Working Group's *Framework for Program Evaluation in Public Health* (CDC 1999b) provides general evaluation guidance. The *National Tobacco Control Program: An Introduction to Program Evaluation for Comprehensive Tobacco Control Program Evaluation*, from the Office on Smoking and Health (OSH) (CDC 2001), presents an evaluation approach useful for tobacco control programs. CDC/OSH is preparing a manual that focuses on outcome evaluation specifically for paid counter-advertising campaigns. (Check <http://www.cdc.gov/tobacco> for availability.) States may also contact their CDC project officers for information about how to obtain resources and contact evaluation experts.

This chapter provides the basics of process and outcome evaluation for counter-marketing campaigns. It is consistent with the other CDC evaluation resources. The chapter addresses the difference between evaluation and surveillance, types of evaluation, what evaluation can do for you, and the various steps in conducting an evaluation. Additional guidance specific to each of the counter-marketing components can be found in the chapters on those topics (Chapter 7: Advertising, Chapter 8: Public Relations, Chapter 9: Media Advocacy, Chapter 10: Grassroots Marketing, and Chapter 11: Media Literacy).

## *Evaluation and Surveillance*

The terms *evaluation* and *surveillance* are often used together, but they are distinct concepts. Program evaluation is “the systematic collection of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future program development” (Patton 1997; CDC 2001).

Surveillance is “the continuous monitoring or routine collection of data (e.g., behaviors, attitudes, deaths) over a regular interval of time” (CDC 2001). The Behavioral Risk Factor Surveillance System is an example of surveillance based on state data.

Although you may use surveillance systems and program evaluation methods to collect data on similar items, these data shouldn't be used for the same purpose. Surveillance data can be used to monitor overall trends in a population, but they can't be used to attribute observed improvements to a specific program. If a program is implemented on a sufficiently large scale and consistently across various sites, surveillance data can help to validate findings from the program evaluation. However, states should consider supplementing traditional surveillance systems that regularly monitor smoking behaviors and other tobacco-related variables with additional data collection designed to evaluate state counter-marketing programs.

## *Types of Evaluation*

Several types of evaluation can help you to develop and assess your counter-marketing

program. Three main types—formative, process, and outcome evaluation—form a continuum. Formative research and evaluation are conducted during program planning and development. (See Chapter 3: Gaining and Using Target Audience Insights and Chapter 7: Advertising for further information.) Formative research and evaluation help to answer these questions:

- How should I design my program?
- How well designed is each component of my program?

Formative research and evaluation help you to decide what to do and how to do it. Formative research is used to glean insights about the issue and your target audience(s) and to determine which messages and interventions might be effective. Formative evaluation is used to test concepts, materials, and messages, to determine whether they are communicating the intended messages and having the desired influence on your target audience.

Process and outcome evaluations, the focus of this chapter, are planned during the strategic planning stage and conducted during and after the implementation stage. Process evaluation helps you to answer these questions:

- Are we implementing the program as planned, and is it on schedule?
- What are we doing that was not in our original plan?

Process evaluation examines how your program is working while it is being implemented. It helps you to determine whether you're implementing with “fidelity”—whether

you're sticking to your original program design. For an ad campaign, this evaluation might include assessments of whether the ad was aired at the times you proposed and whether your target group was exposed to the message. In addition, you might record unforeseen obstacles and potentially confounding environmental events to help you interpret findings. For public relations, process evaluation could involve documenting whether targeted key journalists were reached, the content of the pitch, and whether certain planned events took place. For a media literacy program, it might mean counting how many times the program was delivered, finding out if all the curriculum's lessons were implemented, and determining whether participants were satisfied with the content and delivery. Process evaluation enables you to report to stakeholders the plans you are implementing and the progress of your efforts.

Outcome evaluation helps you to answer the question: What effect are we having? It helps you to determine whether you're achieving

the expected short-term, intermediate, and long-term outcomes. Typically, outcomes are expected changes in the audiences targeted for the counter-marketing program. For example, in an ad campaign, the outcome evaluation can show whether there's any change in the target audience's awareness and recall of the message; tobacco-related attitudes, beliefs, and other psychosocial factors; and behavior. For a grassroots marketing initiative, the outcome evaluation can show changes in the community's level of involvement in, and commitment to, the program. For a media advocacy component, the outcome evaluation can assess whether your efforts led to a change in tobacco-related policy. For public relations activities, your assessment might determine whether the target audience was aware of and understood the messages in your stories. In addition to these expected outcomes, unexpected outcomes sometimes arise, and these need to be acknowledged and included in your evaluation analysis.

### *Lesson Learned: Coordination*

**The Mistake:** One state didn't establish a regular working relationship between program staff and evaluation staff. The program staff decided to stop running an ad but didn't tell the evaluation team. The evaluation team didn't check with the program staff to ensure that the ads were continuing to be aired as planned and continued to ask audience members, in subsequent waves of advertising awareness research, if they had seen the ad. Reported awareness of the ad dropped off, and the evaluation team concluded that the ad was ineffective. Fortunately, the mistake was discovered before the research report was widely disseminated.

**The Lesson:** Establish regular communication and coordination between the program management and evaluation teams.

## *What Evaluation Can Do*

Program evaluation has two general purposes. First, it helps program managers to revise and improve their programs. Second, it helps them be accountable to stakeholders, demonstrate the value of the investment, and maintain or increase support and funding for program efforts. Your stakeholders range from state administrators, legislators, policy makers, and taxpayers, to tobacco control and public health decision makers, to your bosses and partners. Well-conducted evaluations can:

- Allow you to compare the program's effect among groups, particularly those most affected by tobacco's harms
- Demonstrate the role of effective counter-marketing campaigns in reducing tobacco use and exposure to second-hand smoke, thereby gaining credibility for the counter-marketing elements of the tobacco control program
- Guide administrative decisions about including counter-marketing efforts in comprehensive tobacco control programs
- Provide concrete results that can be shared with partners and the community
- Support replication, in your state or others, of counter-marketing strategies that work
- Advance the field by publishing results

If you've been working in public health for a while, evaluation won't be new to you. You

evaluate your work all the time when you ask questions, consult partners, make assessments based on feedback, and then use those judgments to improve your work. Those informal processes may be sufficient for regular, ongoing assessment needs, but in a statewide tobacco counter-marketing program, the stakes are usually higher. Most tobacco counter-marketing programs affect many people and involve a good deal of time and money, so you'll need to use evaluation procedures that are more systematic, formal, visible, and justifiable.

## *When To Conduct an Evaluation*

As noted earlier, evaluation is a continuous activity that needs to be planned along with overall program planning. Too often, evaluation is considered to be an "optional activity" rather than an integral component of counter-marketing that is included in program planning from the start.

In outcome evaluation, the timing of assessments and reports should be coordinated with the changes you expect to see in the target audience. For example, early in the campaign, you should expect changes in awareness and recall of your ads' messages. As the campaign matures, you would expect changes in attitudes and beliefs. Only after building awareness and seeing changes in underlying beliefs should you expect changes in intended behaviors and claimed behaviors. Behavior change, which is reflected by evidence such as reduction in smoking prevalence, is most likely to occur when counter-marketing is part of a more comprehensive tobacco control effort.

It's unrealistic to expect that counter-marketing efforts alone will lead to substantial changes in behavior related to tobacco use.

Some stakeholders will want the first wave of outcome evaluation results within six months of launching the program. In this case, your first wave of evaluation should concentrate on process measures and short-term and intermediate outcome measures (e.g., increases in calls to a quitline, improvements in advertising awareness, or changes in knowledge) rather than longer-term behavior changes.

### *Scope of the Evaluation*

Every state should evaluate its counter-marketing activities as part of the overall evaluation of the tobacco control program. CDC recommends that 10 percent of a state's tobacco control funds be allocated to surveillance and evaluation (CDC 1999a). You'll need to decide the best way to allocate the funds and how rigorously to evaluate each activity.

At a minimum, good process evaluation of each counter-marketing activity will enable the program manager to monitor the scope and quality of activities and to determine

whether the program is being conducted as planned. These results will help you consider the realities of conducting the program and make adjustments in its design.

Outcome evaluation is needed to determine whether your program is having the intended effects. The more rigorous an outcome evaluation is, the more expensive it is, and the more difficult it is to conduct. As a rule of thumb, you should conduct more rigorous evaluation under the following conditions:

- The program is costly, highly visible or controversial, or represents a new and untested approach.
- Sound methods for rigorous evaluation exist.
- Future funding depends on the program's success.

Because many of these characteristics apply to the counter-advertising campaign, you'll probably want to allocate a significant proportion of your evaluation resources to this component of your counter-marketing program. Counter-advertising campaigns are new to

### *Lesson Learned: Planning*

**The Mistake:** One state didn't think about evaluation early enough and didn't do a baseline assessment before launching a paid media campaign. Consequently, the state will never know the results produced by the paid media campaign. Well-funded, paid media campaigns often produce substantial changes in awareness, attitudes, and beliefs shortly after they are run.

**The Lesson:** Start planning your evaluation when you start planning the program. Then you can conduct a baseline assessment before you begin to implement the program.



many states, and there is growing demand for more rigorous outcome evaluations.

The evaluation of the counter-marketing efforts should be coordinated with the evaluation of the whole tobacco control program. Counter-marketing activities are just one component of a complete tobacco control program, and evaluation can help to show whether all activities and components are working together effectively.

### *How To Conduct an Evaluation*

To conduct a systematic evaluation of a tobacco counter-marketing program, you need to consider several steps. This detailed discussion of the steps follows the format

developed by the CDC Evaluation Working Group (CDC 1999b).

#### **Step 1: Identify stakeholders, and establish an evaluation team.**

Like planning and implementation, evaluation can't be done in isolation. It involves partnerships. To identify the stakeholders, ask yourself: Who is the audience for the evaluation? What do they care about? The CDC Evaluation Working Group identified three overlapping groups that are integral to program evaluation (CDC 1999b):

- People involved in the campaign's operation, such as management, program staff, partners, the funding agency, and coalition members

### *Steps for Conducting an Evaluation*

#### **Step 1. Identify stakeholders, and establish an evaluation team.**

Identify and involve those who will use or are affected by the evaluation.

#### **Step 2. Describe your counter-marketing program.**

Establish the need for an intervention, articulate your goals and objectives, and develop a program logic model.

#### **Step 3. Focus the evaluation design.**

Identify the purpose of the evaluation, develop and prioritize evaluation questions, and choose the evaluation study design.

#### **Step 4. Gather credible evidence.**

Develop outcome measures; identify indicators; select data-collection methods that are trustworthy, valid, and reliable; and collect the data.

#### **Step 5. Justify conclusions.**

Analyze and interpret the data, draw conclusions, and make recommendations.

#### **Step 6. Ensure use of results and share lessons learned.**

See that results are disseminated and used to inform decisions.

- People served by the campaign, such as advocacy groups and members of the target audience; elected officials; and any others who would be affected if the campaign were expanded, limited, or ended as a result of the evaluation
- The primary intended users of the evaluation or anyone in a position to make decisions about the counter-marketing efforts, such as health department decision makers, public health officials, and state legislators

In addition, if you're working with an ad agency, a public relations agency, or both,

appropriate staff from these agencies should be involved in the evaluation planning.

Any serious effort to evaluate a program must consider the different values stakeholders have, ensure that their perspectives are understood, and try to respond to their unique information needs (Patton 1997). If stakeholders aren't appropriately involved, it's more likely that evaluation findings will be ignored, criticized, or resisted. If they are involved, they're likely to feel ownership and help you to gain allies who will defend the evaluation and its findings.

### *A Good Evaluator*

To choose a good evaluator, consider whether the person:

- Has experience evaluating health promotion programs, with particular emphasis on tobacco control, marketing campaigns, or health communication programs
- Can provide references (Check all references carefully before you contract with an outside consultant.)
- Can walk you through some of his or her recent research projects, to demonstrate skill and experience
- Can work with a wide variety of people, from representatives of the target audience to high-level public officials
- Develops innovative approaches to evaluation while considering budget limitations and other realities
- Complements the in-house evaluation team and increases its evaluation capacity
- Shares all findings with the program staff regularly
- Demonstrates the ability to include cultural competency in the evaluation



You can involve stakeholders in the evaluation in various ways. The following approach has been adapted from the CDC Evaluation Working Group's *Framework for Program Evaluation in Public Health* (CDC 1999b).

### **1a: Establish an evaluation team.**

An evaluation team should consist of the program manager, external stakeholders, and people with evaluation expertise. The program manager or someone on the counter-marketing staff should act as a liaison with the evaluation team and should be responsible for:

- Budgeting for the evaluation
- Developing and communicating program objectives and the logic model
- Managing evaluation contracts
- Coordinating evaluation activities between program staff and the evaluation team
- Incorporating evaluation findings into program planning and revision

Although the program manager should be able to understand and provide input on evaluation activities, he or she will need to find someone with the technical expertise to design and implement specific evaluation tasks.

If your health department has personnel with technical expertise, they can be part of the evaluation team, but you should also involve outside evaluation experts. Your counter-marketing program—especially the counter-advertising component—will be highly visible

and possibly controversial, and the audience for the evaluation may not view the findings as credible unless they're generated and reported by outside experts. Stakeholders often see outside evaluators as being neutral and objective and without the vested interests of those inside the organization that is implementing the program. Technical expertise may be available through external partners (e.g., organizations, universities, companies, and tobacco control programs in other states) or through CDC and its Prevention Research Centers program. This national network of 24 academic research centers is committed to prevention research (CDC 2001). (Contact information is available at [www.cdc.gov/prc](http://www.cdc.gov/prc).) States may consult with their CDC project officers for advice on finding the appropriate outside experts and working with them.

### **Step 2: Describe your counter-marketing program.**

To effectively plan the evaluation, you'll need to have a clear description of your counter-marketing program. This description should include background information justifying the need for the program, appropriate program goals and objectives, and a logic model to help define what you hope to achieve and to guide the evaluation. Negotiating with stakeholders about a concise program description will help to gain their support and allow them to provide insights that might be useful for program planning (Patton 1997; CDC 2001).

If you followed the guidance in Chapter 2: Planning Your Counter-Marketing Program,

this step will have already been completed. If you have not described your counter-marketing program, refer to the planning chapter, which offers more information on two of the program planning steps that are essential to planning an evaluation: articulating program goals and objectives and developing a logic model.

### **2a: Articulate program goals and objectives.**

Before an evaluation can be effectively planned, you'll need to determine what your program needs to accomplish and what can be realistically accomplished within the budget and time frame. If your formative research has already been conducted, the findings can be helpful here. These results should have allowed you to identify the populations most in need and the behaviors and behavioral determinants that should be targeted for change. In addition, through pretesting of your messages and program approaches and your review of how similar approaches worked in other states, you should have gauged the amount of change to expect in your target audience.

Formative research results should be used to determine your program's goals and objectives. These goals and objectives are also critical to the evaluation, because they establish how you'll determine whether your program is being implemented as planned and how you'll measure your program's success.

A goal is the overall mission or purpose that helps to guide a program's development. In tobacco counter-marketing, as with all tobacco prevention and control components,

the overall goal is to reduce tobacco-related morbidity and mortality. To fulfill this vision, CDC has identified four more specific goals, one or more of which will be relevant to your program (CDC 2001):

1. Prevent the initiation of tobacco use among young people.
2. Promote quitting among young people and adults.
3. Eliminate exposure to secondhand smoke.
4. Identify and eliminate the disparities related to tobacco use and its effects among different population groups.

Objectives are statements that describe the desired results. Tobacco control and prevention programs are complex and have multiple steps and effects. Select a limited set of objectives that will allow you to focus your evaluation on the most important results that are feasible to obtain. In addition, objectives should be conceptually linked, so that objectives at the local level are logical extensions of national and state objectives. The specific objectives outlined in *Healthy People 2010* are a good starting point for tobacco control efforts (U.S. Department of Health and Human Services 2000, available at <http://www.health.gov/healthypeople/Document/HTML/Volume2/27Tobacco.htm>).

Good objectives are specific and measurable (CDC 2001). Well-written and clearly defined objectives will help you to set your program priorities, aid you in monitoring progress, and serve as targets for accountability. Objectives should be SMART:

- **Specific.** The objective must identify a specific event or action that will take place.
- **Measurable.** The objective must identify the amount of change to be achieved, and there must be a way to measure the change.
- **Achievable.** The objective must be realistic and achievable.
- **Relevant.** The objective must be logical and relate to the program goal.
- **Time-bound.** The objective must provide a time by which the objective will be achieved.

One example of an objective is that, in a certain state, the proportion of restaurants with smoke-free policies will increase from 40 percent to 60 percent by the end of 2005.

This objective is *specific* because it states that restaurants will have smokefree policies in place. It could be made more specific if it identified which types of restaurants and which types of smokefree policies. It's *measurable* because it identifies the current or baseline value and a level of change that is expected. It's *achievable* because it outlines a realistic amount of change, assuming a strong counter-marketing program focused on this objective. The degree to which it's achievable will depend on the context and realities within the state and the resources available. It's *relevant* because having smokefree policies will help to eliminate exposure to secondhand smoke. It's *time-bound* because a specified time frame is given.

There are two general types of objectives: process objectives and outcome objectives. Process objectives describe the scope and quality of the activities that will be implemented and the population and other entities (i.e., individuals and organizations) that will take part in these activities. A process evaluation examines how well you're achieving your process objectives or how well you're implementing your program, compared with the objectives in the original plan. If you're conducting a counter-advertising campaign in the spring to prevent initiation of smoking among youths, process objectives might be:

- By February 2003, pretest an ad countering a tobacco industry message with six focus groups of 12-to-17 year-olds.
- By March 2003, run the youth ad on TV so that 70 percent of the state's 12- to 17-year-olds are potentially exposed to the ad a minimum of three times on average per four-week period.

Outcome objectives describe the results you expect from the program. They quantify anticipated program effects by specifying "the amount of change expected for a given health problem/condition for a specified population within a given time frame" (University of Texas 1998; CDC 2001).

Outcome objectives are often divided into short-term, intermediate, and long-term outcomes (Green and Lewis 1986; Green and Kreuter 1999; Green and Ottoson 1999; CDC 2001). An example of a short-term outcome objective might be: Increase the proportion of

high school youth with confirmed awareness of the youth ad campaign from 5 percent in January 2003 to 50 percent in June 2003.

An example of an intermediate outcome objective might be: Increase the proportion of high school youth who report they believe that the tobacco industry deliberately uses advertising to get young people to start smoking from 40 percent in January 2003 to 60 percent in December 2003.

Examples of long-term objectives might be:

- Decrease the proportion of high school youth who report smoking a cigarette in the past 30 days from 40 percent in 2001 to 30 percent in 2003.
- Decrease the prevalence of high school youth who report smoking five or more cigarettes a day from 25 percent in 2001 to 20 percent in 2003.

## **2b: Develop a logic model.**

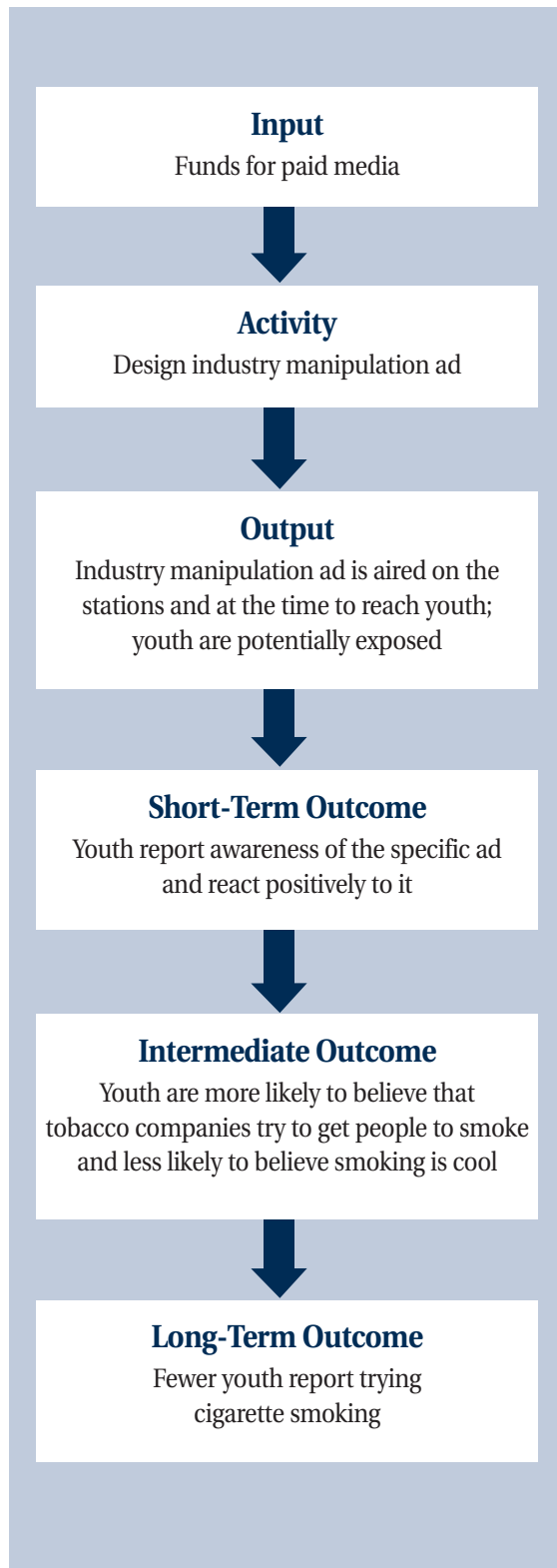
Developing a logic model of your counter-marketing program is a good way to fully explain how the program is supposed to work. (See Chapter 2: Planning Your Counter-Marketing Program for further information on developing a logic model.) A logic model is a flowchart of your program that shows the sequence of events in a chain of causation. Elements of a logic model can vary, but they generally include the following (United Way of America 1996):

- **Inputs**—what is invested in the program to support it
- **Activities**—the actual events or actions that take place
- **Outputs**—the immediate products of these activities
- **Outcomes**—the intended effects of the program, initial, intermediate, and long-term

Some examples of inputs, activities, outputs, and outcomes for various components of a counter-marketing program are shown in Appendix 5.1. The *inputs* are the monetary and human resources needed to do the work and the infrastructure required to support the program. These factors include funding, staff, technical assistance, partner organizations, contracts, equipment, materials, and a sound program design. The type of staff, amount of funding, and program design will often differ for each component of your program.

*Activities* are the actions the counter-marketing staff will take to carry out the program. Examples of such actions are identifying audiences, writing plans, creating and revising materials, contacting individuals and organizations, and organizing events. Program *outputs* (sometimes called process outcomes) are the immediate products of these activities; outputs include ads that are run, stories that are placed, events that are attended, and media literacy sessions that are conducted.

**Figure 5.1: Logic Model for Youth Tobacco Use Prevention Advertising Campaign**



*Outcomes* are the results you hope your efforts will achieve; they are divided into *short-term*, *intermediate*, and *long-term* (Campbell and Stanley 1963). More important than the label for the outcome, however, is the chain of causation linking one outcome logically to another. A logic model shows how you expect change to occur or how the immediate products of your activities will lead to short-term, then intermediate, then long-term outcomes.

As much as possible, the logic model should be tailored to your particular campaign, target audience, strategy for influencing behavior, and specific behavioral objective. Figure 5.1 shows an example of a logic model for a tobacco counter-advertising campaign designed to prevent youth from starting to smoke tobacco. The campaign points out that the tobacco companies try to influence young people to start smoking by convincing them that smoking is cool. Appendix 5.1 provides other examples of logic models for the components of a counter-marketing program.

Although the sample logic models list behavioral outcomes, behavior change typically results only through a combination of interventions. For example, a media literacy program would not be expected to result in a reduction in youth smoking unless other components of the counter-marketing program were also influencing these youth.

The elements of the logic model are linked in a series of if-then statements. If the ad is aired on the selected channels, then audience members who watch the channel can be aware of, comprehend, and react positively to

the ad. If the audience is exposed to, aware of, and recalls the ad, then their attitudes, beliefs, and other psychosocial factors might change. (Psychosocial factors are characteristics such as attitudes, beliefs, perceived norms, and self-efficacy that, according to the major theories of behavior, are the determinants of people's behavior.) If changes in psychosocial factors occur, then one would expect changes in behavior.

This logic model is the model for one type of effort, a youth counter-advertising campaign. You could also develop a logic model for your entire counter-marketing program that shows how each component works individually and is coordinated into an integrated program. Another option is to develop a logic model for the entire state tobacco control program that shows how the various counter-marketing efforts work in combination with the other elements of the tobacco control program. Some good examples of logic models can be found in the CDC/OSH tobacco control evaluation manual, *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs* (CDC 2001).

It's not uncommon for people to have different interpretations of the short-term, intermediate, and long-term outcomes for a particular program. What may be an intermediate outcome to some may be a long-term outcome to others. For example, one person may consider "quitting smoking" to be a long-term outcome for a particular smoking cessation program, while another may consider quitting smoking to be an intermediate outcome and "long-term abstinence from

tobacco use" to be the long-term outcome. The logical sequence of short-term, intermediate, and long-term outcomes, based on your program's theoretical under-pinnings and the types of change that can be expected, is more important than the labels.

There are also different interpretations of how program outputs and short-term outcomes are articulated in program logic models. In a public relations effort, for example, one may consider the public relations activities of identifying and connecting with key journalists to be the program outputs and getting press coverage and audience exposure to be a short-term outcome. Others may consider the PR activities, news coverage, and audience exposure all as outputs and the target audience's actual awareness of the counter-marketing message as the short-term outcome. Here we use the latter interpretation across all counter-marketing programs, so that *program outputs* include multiple "products of activities" that allow the target audience to be exposed to counter-marketing messages and *short-term outcomes* include the target audience's increased awareness of these messages.

### **Step 3: Focus the evaluation design.**

An evaluation can easily become too extensive and complex. In collaboration with stakeholders, the evaluation team will need to decide the evaluation's purpose and how results will be used. The evaluation plan should outline the questions you plan to answer, the process you'll follow, what will be measured, which methods will be used, who will perform various evaluation activities, what you will



do with the information after it's collected, and how the results will be disseminated.

### 3a: Determine the purpose and questions for the evaluation.

You can help to focus the evaluation by determining the information you need and setting priorities for the evaluation questions used to get that information. Because the prioritized questions will guide the methods for gathering the information, decisions about the questions should be made *before* choosing the methods.

To prioritize the evaluation questions, the evaluation team should brainstorm with the stakeholders and intended users. You should use your process and outcome objectives to guide this discussion, so the objectives are linked to the questions you want the evaluation to answer.

Develop evaluation questions for each component of your counter-marketing campaign. One study won't effectively answer all your evaluation questions, so consider conducting several studies that will make up an evaluation portfolio. Put together a table that summarizes the objectives

**Table 5.1: Sample Program Objectives and Corresponding Evaluation Questions**

Objectives	Evaluation Questions
<b>Advertising Component</b>	
<p><b>Process Objective</b> By the end of 2003, an ad for a branded state counter-advertising campaign aimed at youth will have been aired on TV to reach 80 percent of 12- to 17-year-olds an average of six times per four-week period.</p>	<p>Did youth react positively to the ad in the campaign during the formative research?</p> <p>Based on the TV show ratings during which the ad was broadcast and its corresponding reach of the audience, were at least 80 percent of the 12- to 17-year-olds theoretically exposed to the ad at least six times? During which time periods was the ad aired?</p>
<p><b>Outcome Objective</b> By the end of 2003, 60 percent of 12- to 17-year-olds will confirm their awareness of one or more of the TV ads in the state youth advertising campaign, and 50 percent will correctly recall the main message(s).  Decrease the proportion of high school youth who report trying a cigarette from 40 percent in 2001 to 30 percent in 2003.</p>	<p>Among 12- to 17-year olds, were 60 percent or more aware of the ad?</p> <p>Were 50 percent or more able to recall the message? Were there differences in awareness and recall that were based on sex, age, or ethnic background of the youth?</p> <p>Did the proportion of high school youth who initiated cigarette smoking decrease from 40 percent to 30 percent?</p> <p>Were there differences in the decrease of initiation of cigarette smoking that were based on the sex, age, or ethnic background of youth?</p> <p>How does the change in youth initiation of cigarette smoking in the state compare with that in the nation? Can some of the change be confidently attributed to the advertising campaign?</p> <p style="text-align: right;"><i>Continues</i></p>

**Table 5.1: Sample Program Objectives and Corresponding Evaluation Questions (cont.)**

Objectives	Evaluation Questions
<b>Public Relations Component</b>	
<p><b>Process Objective</b> By the end of 2003, representatives from the top 10 print and broadcast media outlets will have been reached with counter-marketing messages at least five times through phone, mail, and press conferences; five of these media outlets will have included these messages in their coverage and 50 percent of the target audience will have been exposed to the messages.</p>	<p>Were the required number of media representatives reached the designated number of times?</p> <p>Did the required number of media outlets cover the counter-marketing messages?</p> <p>How well were the messages covered (e.g., how much space and time for stories with protobacco slant and for stories with antitobacco slant)?</p> <p>Which outlets responded?</p> <p>How many target audience members were exposed to these messages?</p>
<p><b>Outcome Objective</b> Increase the target audience's awareness of counter-marketing messages in media outlets by 25 percent from 2002 to 2003.</p>	<p>Did the target audience increase its awareness of counter-marketing messages by 25 percent?</p>
<b>Media Literacy Component</b>	
<p><b>Process Objective</b> By December 2003, at least 1,000 middle school children will have been reached with media literacy sessions through programs offered in 10 schools and through 10 youth-serving organizations in the state.</p>	<p>Were media literacy sessions offered in the designated number of schools and organizations? Did these sessions reach the required number of children?</p> <p>What were the ages, gender, and race/ethnicity of the children reached?</p>
<p><b>Outcome Objective</b> Increase by 50 percent the number of program participants who can competently deconstruct a tobacco industry ad and produce their own counter-marketing message.</p>	<p>As a result of the program, did participants increase their media literacy skills sufficiently to be able to deconstruct industry ads and develop tobacco counter-marketing messages?</p>

and corresponding evaluation questions for each component (e.g., Table 5.1). This table will help you take the next step of determining the studies that should be in your portfolio.

### **3b: Select the evaluation design.**

The evaluation design is the structure or plan for data collection that specifies which groups will be studied and when. The design you select influences the timing of data collection, how you analyze the data, and the types of conclusions you can draw from your findings.

Choosing the appropriate evaluation design is particularly important if you're planning an outcome evaluation. Outcome evaluation tests the effectiveness of an intervention, and the evaluation design's strength will affect your ability to attribute change to the intervention. Because you may be under considerable pressure to demonstrate the effectiveness of your program—especially the advertising component—your evaluation team needs to be familiar with various designs. This section touches briefly on various designs, but you may also need to consult other resources to help you make decisions about study design (Campbell and Stanley 1963; Spector 1981; Wimmer and Dominick 1987; Fletcher and Bowers 1988; Flay and Cook 2001; Rice and Atkins 2001; Hedrick et al. 1993; Hornik 1997; Rothman and Greenland 1998; Siegel and Doner 1998; Freimuth et al. 2001). Feasibility, scientific appropriateness, and costs must be considered in selecting a design, as well as your immediate and longer-term needs for data collection. You'll also need to know your stakeholders' standards, so you can choose a design that meets those standards.

Evaluation designs can be broadly divided into three types: experimental, quasi-experimental, and observational. As CDC (2001) notes, "*Experimental designs* use random assignment to compare the effect of an intervention in one or more groups with the effect in an otherwise equivalent group or groups that don't receive the intervention." For example, you could identify a set of schools willing to participate in an outcome evaluation of a media literacy curriculum. One-half of the schools could be randomly assigned to begin to use the curriculum immediately (test group) and one-half to use it after the study is completed (control group).

An experimental design is often unrealistic for a counter-advertising campaign, because exposure to the message is widespread and you can't control who gets it. Many times, people have ethical concerns with experimental designs, because interventions are at least temporarily withheld, during the time of the study, from those who need them. To determine whether you need an experimental design for an outcome evaluation of your counter-marketing program, consult an expert and consider issues such as scientific appropriateness and costs.

Many program managers find a *quasi-experimental design* easier to use than an experimental design, but a quasi-experimental design is not as scientifically strong. CDC (2001) comments that "this design makes comparisons between nonequivalent groups and doesn't involve random assignment to intervention or control groups." A simple example of a quasi-experimental design would

be measuring the attitudes, beliefs, and behaviors of two communities, one of which chose to conduct a counter-marketing campaign and the other had no intervention. The community with no intervention would be selected for its similarity to the first community.

According to CDC (2001), “*Observational designs* include, but are not limited to, time-series analysis, cross-sectional surveys, and case studies.” *Case studies* are generally descriptive and exploratory. If your program or your application is unique or you’re working in an unpredictable environment, you might want to consider a case study. Case studies are often used to evaluate media advocacy projects, to provide an in-depth examination of how media coverage on a particular topic was framed and how community advocates were involved in the media advocacy initiatives (Wallack et al. 1999). *Cross-sectional surveys*, such as the Youth Tobacco Survey (YTS) and surveys performed using a time-series analysis, can be conducted with a target audience to help determine whether the desired outcomes of your counter-marketing program (e.g., reduced tobacco use) have been achieved. Cross-sectional surveys are administered to independent samples of the target population. For a *time-series analysis*, the target population is surveyed a number of times both before and during program implementation. Although this type of analysis can require considerable resources and time, the more times the target population can be surveyed and the more closely the timing of the survey can mirror the timing of your intervention (e.g., through ads in a paid media

campaign) the more confident you can be that the changes in program outcomes are to some extent attributable to the program.

#### **Step 4: Gather credible evidence.**

So far, you’ve written measurable objectives, developed a logic model, selected the types of evaluation and the evaluation questions, and determined the study design(s) you’ll use. The next step is to decide on specific outcomes to address and identify the indicators you’ll use to measure progress. Once these are in place, you’ll be ready to figure out which sources of data and data collection methods should be used to obtain the information you need.

#### **4a: Develop outcomes and identify indicators.**

By now, you should have decided what kind of outcome evaluation you’ll conduct and which components of the counter-marketing program will be addressed in the evaluation. Make sure that the outcomes you choose reflect the evaluation’s purpose(s), audience(s), and the intended uses of the results and that they’re relevant to the component(s) you’re studying. If your ad campaign has been running for an extended period and the legislators want to know whether youth smoking has decreased and the campaign is worthy of continued funding, then behavioral outcomes should be the evaluation’s primary focus.

After you’ve selected the outcomes, determine which indicators you can use to show whether you’ve achieved these outcomes. *Indicators* are specific, observable, and measurable

characteristics or changes that show the progress a program is making toward achieving a specified outcome (Campbell and Stanley 1963; CDC 1999b; CDC 2001). Indicators translate general concepts related to the program, its content, and its expected effects into specific measures that can be interpreted. For example, the percentage of high school youth who report that they've tried smoking a cigarette, even a puff or two, is an indicator that can be used to measure the long-term outcome of efforts to decrease smoking among youth. Also, the percentage of high school youth who report that tobacco companies deliberately use advertising to get them to start smoking is an indicator of the short-term outcome of efforts to increase negative beliefs about the tobacco industry.

Each outcome should have at least one indicator, and each indicator should measure an important dimension of the outcome. You must be specific about what each indicator will measure. Indicators define the criteria you'll use to judge your progress in achieving the desired outcomes. You can assess behavior in several ways. Identifying the best indicator depends on the type of behavioral outcome you're addressing. Indicators that may be useful for monitoring long-term trends in smoking prevalence (e.g., "whether a person smoked 100 cigarettes in his or her lifetime") will yield a different estimate of behavior than indicators that are appropriate for evaluating the impact of a counter-advertising campaign on a population (e.g., "on how many of the past 30 days a person smoked").

#### **4b: Collect data.**

Next, you'll need to decide which methods to use to gather data about your outcomes and indicators. Each method has advantages and disadvantages. Some methods are appropriate for process evaluation; others are appropriate for outcome evaluation. A number of common data-collection tools and methods are used for process evaluation, outcome evaluation, or both. (See Appendix 5.2: Key Data Collection Tools and Methods.)

Try to use methods that your stakeholders perceive as credible. Some stakeholders may want you to use an interview method to gather qualitative feedback from the community; others may want you to conduct an extensive population-based survey. Be prepared to explain the value of more rigorous methods to stakeholders less familiar with evaluation.

#### **Consider conducting a custom survey.**

Surveys are likely to be part of every counter-marketing evaluation. They can be roughly divided into two types: (1) primary data surveys (custom surveys), which are designed for your specific needs, and (2) secondary data surveys, which must be used as they are, because they have been developed by other individuals or organizations for particular purposes.

**Primary data surveys.** In most states, some form of primary data collection will be needed to evaluate the specific outcomes of the counter-marketing efforts, particularly the advertising component. Although surveys for collection of primary data can be expensive, they have many advantages. These surveys can



be customized with specific items, sampling plans, and timing of administration to fit your counter-marketing campaign. You can track awareness of your specific ads and themes, the attitudes and beliefs relevant to your campaign, and behaviors in your target population. These data can be used to help you make decisions about how to improve and when to change the campaign. Many states have used custom surveys to demonstrate the effectiveness of their counter-advertising efforts.

Depending on your resources, you should consider custom surveys for each of the large components of your counter-marketing program. Alternatively, one way to integrate the outcome evaluation of several components is by conducting a customized survey to assess the full range of audience outcomes for all components of your counter-marketing (advertising, news articles and stories, grassroots events, media literacy, and media advocacy). This approach may appear to be more efficient, but it may not yield the same quality of data that could be generated from conducting an individual survey on each component.

In most cases, you should contract with an outside expert to design a customized survey for use in collecting these primary data. For assistance in finding and working with an appropriate contractor, states may consult with their CDC project officers. A good way to start work on a survey is to discuss with your evaluation expert questions associated with design, sampling and sample size, measurement, and data collection and analysis. (See Table 5.2 for sample questions.) Your survey

probably will measure variables such as the target audience's awareness and recall of the counter-marketing messages and the attitudes, beliefs, intentions, and behaviors related to tobacco use. (See Appendix 5.3 for sample survey items.) Another resource is primary surveys that have been developed to evaluate other state counter-marketing campaigns.

Some research methods require Institutional Review Board (IRB) approval. Nearly all government agencies, academic institutions, and other organizations require an assessment of the impact on human subjects involved in qualitative and quantitative research, including the protection of collected data. Some data-collection efforts are exempt from IRB approval. For each research project undertaken, it is recommended that you consult the IRB expert in your organization.

**Secondary data surveys and data collection systems.** All states have access to secondary data, particularly on behavior. Several secondary data sets are described in CDC's *Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs* (Yee and Schooley 2001). These sources may include data that can be disaggregated at your state's level. Sources include the following:

- Adult Tobacco Survey
- Behavioral Risk Factor Surveillance System
- Current Population Survey Tobacco Use Supplements
- Monitoring the Future



**Table 5.2: Questions To Ask in Designing a Survey To Evaluate Counter-Marketing Efforts**

<b>Design: How should I structure the study?</b>
<ul style="list-style-type: none"> <li>• How should I establish control or comparison points against which I can assess impact?</li> <li>• When and how many times do I want to survey people?</li> <li>• Should I survey the same or different people each time?</li> </ul>
<b>Sampling: Whom should I study, and how should I select the study participants?</b>
<ul style="list-style-type: none"> <li>• Whom should I survey?</li> <li>• What sampling plan should I use?</li> <li>• How many people should I survey?</li> <li>• How large a sample do I need to make the comparisons I want to make with sufficient statistical power?</li> </ul>
<b>Measurement: What questions should I ask, and how should I ask them?</b>
<ul style="list-style-type: none"> <li>• What variables do I need to measure?</li> <li>• How many items do I need for each variable?</li> <li>• How do I ensure that my measures are reliable and valid?</li> <li>• Do I create my own items, or can I use someone else's items?</li> </ul>
<b>Data collection: How should I collect the data?</b>
<ul style="list-style-type: none"> <li>• Should I collect custom data or use existing data?</li> <li>• How should I administer my survey?</li> <li>• How can I ensure a high response rate?</li> <li>• What data do I need in addition to survey data?</li> </ul>
<b>Analysis: How should I analyze the data to answer the evaluation questions?</b>
<ul style="list-style-type: none"> <li>• Which descriptive statistics should I use to help describe and summarize the data (e.g., frequency data, raw numbers, and percentages)?</li> <li>• Which inferential statistics should I use to allow generalization from my sample to a wider population and to enable me to test hypotheses that the data are consistent with research predictions?</li> <li>• What analyses can I conduct to determine whether the program is effective?</li> </ul>

- National Health Interview Survey
- National Household Survey on Drug Abuse
- Pregnancy Risk Assessment Monitoring System
- State Tobacco Activities Tracking and Evaluation System
- Youth Risk Behavior Surveillance System
- Youth Tobacco Survey

Although these secondary sources are unlikely to be ideal for evaluating your counter-marketing program, they can provide important information on trends, especially for attitudes, intentions, and behaviors. In many states, current studies can be modified to make them more relevant to the counter-marketing component. It might be possible to add items or modules, modify the sampling plan, increase the sample size of some segments, or adjust the timing. Alternatively, you could time the launch of your program to fit the timing of the routine collection of data.

Early in the planning of your evaluation, review what secondary sources are available in your state and see if they would improve your evaluation. For example, many states conduct the Youth Risk Behavior Survey (YRBS), a school-based survey of youth risk behaviors. The instrument includes several items on

smoking behavior that can be used to track long-term trends and provide state-level estimates of students in grades 9 through 12. National data are available for comparison, and data from nearby states also might be available. Disadvantages of these data are that they are collected only every two years, in the spring, and that the instrument assesses only behavior. The YRBS could be and has been enhanced in many states by adding questions. Vermont, for example, has added items that help (1) to measure how easy it is for youth to get cigarettes and (2) to assess youths' opinions of their parents' attitudes toward their own cigarette use. Alabama has added an item that helps to determine whether a youth's health care provider addresses tobacco use prevention. For some states, the YRBS might prove to be a useful data source to include in portfolios.

### **Step 5: Justify conclusions.**

Once the data are gathered, you'll need to analyze and interpret the data and formulate conclusions and recommendations. Your analysis and interpretation should be related to the evaluation questions. Essentially, analysis and interpretation are a matter of tracking what happens along each step of the logic model. (See Table 5.3 for the key evaluation questions in tobacco counter-marketing and examples of data analysis approaches for each question.)

Table 5.3: Evaluation Analysis

Evaluation Questions	Data Analysis Approach
<b>Process Evaluation: Is the state's counter-marketing program being implemented as planned?</b>	
Are the program activities being conducted at the planned level (quantity and quality)?	<ul style="list-style-type: none"> <li>• Summary of data on the number and quality of media literacy sessions conducted</li> </ul>
Are members of the target population exposed to the ad and participating in the program?	<ul style="list-style-type: none"> <li>• Summary of ratings of TV shows during which paid counter-advertisements were aired</li> <li>• Summary of data on the number of participants in a youth summit</li> </ul>
<b>Short-Term Outcome Evaluation: Is the state's counter-marketing program having the intended effects?</b>	
Who is aware of the ad? Who is aware of the program?  Are all segments of the target population aware of the ad? Are all segments aware of the program?	<ul style="list-style-type: none"> <li>• Collecting data on the percentage of the state's adult voters who recalled seeing a story or article about tobacco in a newspaper or magazine in the past month</li> <li>• Obtaining data on the percentage of 12- to 17-year-olds who reported seeing one of the state's counter-marketing ads in the past month</li> <li>• Acquiring data on the level of awareness of the campaign's brand among youth by gender, age, race/ethnicity, and community</li> <li>• Collecting data on the percentage of restaurant owners who reported knowing about the state's policies on secondhand smoke</li> </ul>
Is the right message getting across?	<ul style="list-style-type: none"> <li>• Obtaining data on the percentage of participants who were aware of the advertising campaign and could correctly recall the intended message</li> <li>• Acquiring data on the percentage of the articles on the counter-marketing theme that conveyed the intended message</li> </ul>
How is the target population's awareness of the program changing over time?  How is it changing in relation to specific counter-marketing efforts?	<ul style="list-style-type: none"> <li>• Tracking data at several points over time to indicate (1) the percentage of the state's population that is aware of the counter-advertising campaign; (2) whether the percentage is higher immediately after the counter-marketing efforts; and (3) when the percentage starts to decrease, suggesting that the effects of the state's ads have peaked or that the state has reduced its media buying</li> </ul> <p style="text-align: right;"><i>Continues</i></p>

**Table 5.3: Evaluation Analysis (cont.)**

Evaluation Questions	Data Analysis Approach
<b>Short-Term Outcome Evaluation: Is the state's counter-marketing program having the intended effects?</b>	
Are attitudes, beliefs, and other psychosocial factors moving in the desired direction?	<ul style="list-style-type: none"> <li>• Pretest and posttest tracking of data (1) on restaurant owners' belief that secondhand smoke is harmful to health and (2) on the public's attitudes toward policies on exposure to secondhand smoke</li> </ul>
Is behavior changing?	<ul style="list-style-type: none"> <li>• Tracking data at several points over time that indicate the percentage of high school students who reported trying a cigarette or using chewing tobacco</li> <li>• Tracking data at several points over time that indicate the percentage of smokers who reported trying to quit smoking</li> </ul>
Are the counter-marketing efforts contributing to the changes in attitudes, beliefs, policies, and behavior?	<ul style="list-style-type: none"> <li>• Collecting data to address whether change can be attributed to the intervention: (1) the percentage of participants who believe in negative health consequences of smoking, among those who are aware of the state's ads on health consequences versus those who are not aware and (2) the percentage who understand the tactics of tobacco advertising, among those who participated in the media literacy workshop versus those who did not participate</li> <li>• Monitoring data on tobacco-related policies to document their stage of development, implementation, and enforcement, and comparing the timing of these stages with the timing of activities in the tobacco counter-marketing campaign</li> </ul>
<b>Long-Term Outcome Evaluation: Is the state counter-marketing program achieving its long-term goals?</b>	
As part of the state's entire tobacco control program, do the state surveillance data indicate progress toward goal(s)?	<ul style="list-style-type: none"> <li>• Monitoring surveillance data on the prevalence of smoking or public exposure to secondhand smoke and comparing these data with data from the tobacco control program (customized survey)</li> </ul>

**Descriptive Analyses**

Analysis and interpretation of your process evaluation data will be descriptive. The data will consist of raw numbers and percentages (e.g., frequency data) that simply describe the level of activities and outputs that have taken place. As a manager, you'll want to review

monthly reports on each component, to ensure that the activities are being implemented as planned. Relevant questions include the following:

- Is the public relations specialist conducting all the planned press activities?

- Have quitline operators been trained appropriately?
- Are all the media literacy sessions being held?
- Have the ads been designed, tested, and produced?
- Is the state on target in its media buying?

If the expected level of activity isn't being achieved, you need to determine what needs to be done to ensure that the necessary resources and support are available.

As another descriptive analysis, you'll want to determine whether the program is reaching enough people. Are audience members aware of the advertising campaign? Are enough articles and editorials being published? Look at the quality of the reach as well as the quantity. You'll need to know not only the column inches and placement of the ad coverage, but also its content and slant. (See Chapter 7: Advertising and Chapter 8: Public Relations for more information.) If the intended message isn't getting across, you may need to modify your materials or your approach.

Although this type of tracking of the campaign's reach is more a matter of management than evaluation, it's a critical step. If the outcomes of intervention are not ultimately achieved, it may be simply because the intervention was not implemented as planned. The regular review of these descriptive data will help you to monitor your implementation efforts.

**Comparative Analyses.** Beyond descriptive analyses, you'll also want to perform comparative analyses to determine whether your program is successful. In conducting comparative analyses, you'll need to use inferential statistics to determine whether the differences you observe are great enough to be statistically significant. Consider at least four types of comparisons: over segments of your target population, over time, over regions, and over levels of awareness of the counter-marketing effort.

**Analyses by segments.** Comparisons of levels of awareness, attitudes, beliefs, and behaviors by segments of your target population will tell you whether you're reaching a substantial proportion of each segment and how your efforts are influencing each segment. Consider analyzing the data by gender, age, and race/ethnicity. Counter-advertising programs with youth, for example, sometimes have been found to be more effective with those younger than 16 than with those 16 or older. Early analyses by race/ethnicity demonstrated to some states that they weren't influencing some segments of their target population. The media buys, media outlets, and messages needed to be adjusted.

**Analyses by time.** Comparisons over time will show you how the awareness, reach, and effect of your program are increasing with time, the level of your program activities, or both. Some variables should change gradually, and others should change abruptly. For example, the proportion of the population that is smoking or

the percentage of youth that has tried a cigarette should decline gradually and smoothly. This result is most likely when, at the onset of the program, there is a large pool of “susceptibles” made up of individuals who have not been reached by similar interventions. Levels of exposure to the activities of your counter-marketing campaign increase as the program gradually scales up. After you run articles and ads about industry manipulation in your state, there should be sudden increases in awareness of the ads and a subsequent increase in the belief that the industry is trying to influence consumers to buy cigarettes. Examine the pattern of results with respect to time and the timing of your program activities. After the most receptive members of the population have been influenced by program messages, leaving the more resistant ones, results will show a slowdown in measurable improvement.

**Analyses by region.** You can also examine the pattern of awareness, beliefs, attitudes, and behaviors by region. If the different regions of your state have different amounts of program activity, this difference should show up in the findings. In Texas, for example, counter-marketing managers purposely implemented different patterns of programs in different communities, to evaluate the programs’ effects. In 14 areas across the state, they implemented a mix of three levels of media activity (no campaign, low-level campaign, or high-level campaign) and five community program options (no programs, cessation programs, law enforcement programs, school-community programs, or all three programs combined). Their evaluation found a significant relative reduction in the prevalence of daily smoking

in the areas where a high-level media campaign was conducted in combination with either school-community or multiple programs (Texas Tobacco Prevention Initiative 2001).

**Analyses by level of awareness of the counter-marketing effort.** A common approach for analysis to evaluate counter-marketing efforts, particularly counter-advertising, is to compare attitudes, beliefs, and behaviors in different groups by level of awareness of advertising. Such analysis can help you determine whether there have been more positive changes in attitudes, beliefs, and behaviors among those who are aware of the program than among those who aren’t aware.

### **Attribution in Outcome Evaluation**

Finding change is not conclusive evidence that the change is attributable to the effectiveness of your program. To demonstrate that a program is effective, you need data that show (1) a change or difference, and (2) that your program was to some extent responsible for that change or difference.

The first part is relatively simple. By conducting surveys before and after your programs, you can show increases in awareness and desirable changes in attitudes, beliefs, and behaviors over time. By comparing levels of attitudes, beliefs, and behaviors across levels of exposure to a program, you can show that people exposed to the program have better outcomes. By comparing people in regions where programs were implemented to those in regions where they weren’t implemented, you can show better attitudes, beliefs, and behaviors in areas with the programs.



The second part is difficult. Methodologically sophisticated stakeholders can and do criticize each of the analyses described and claim the changes or differences observed could have resulted from factors *other than* the counter-marketing program. Critics can correctly claim that the differences or changes result from factors such as general trends in smoking, policy and pricing changes in the state, national media campaigns, or changes in the activities of the tobacco industry.

As noted earlier, it's usually not feasible to use a true experimental design with random assignment to evaluate your counter-advertising component, because it's difficult to control who is exposed to what. But there are some things you can do to avoid criticism of the evaluation. From a process perspective, you can:

- Find out early if your stakeholders want a rigorous assessment of the degree to which the counter-marketing program was responsible for changes or differences
- Allocate additional resources for that assessment
- Alert your evaluation experts, and discuss the alternative methods with them
- Find out what other states have done
- Arm yourself with high-quality studies from a variety of sources showing that strong counter-marketing efforts generally can lead to better outcomes
- Be prepared to answer questions about attribution when you present your results

From a technical or analytic perspective, your evaluation team can:

- **Conduct several types of analyses to demonstrate change.** For example, (1) show change from time A to time B; (2) show better outcomes among people who are exposed to counter-marketing activities than among those who aren't exposed; and (3) compare results for your state with those for areas of the country that have fewer or different counter-marketing programs.
- **Perform complex multivariate analyses.** For example, you can determine the effects of multiple independent variables (e.g., timing of the ads and changes in awareness, attitudes, and beliefs) on the dependent variable (e.g., change in smoking behavior), controlling for the effects of other variables (e.g., gender, age, and race/ethnicity).
- **Measure attitudes, beliefs, and behaviors that you expect to be influenced by your program, as well as those that you do not expect to be changed.** Then show that the differences for the items specific to your program are greater than the differences for the other items.
- **Conduct a longitudinal study that follows a cohort across time in order to show the causal chain of effects.** This approach allows you to conduct more complex analyses to determine whether the degree of program exposure is associated with changes in attitudes and beliefs, and whether the changes in

attitudes and beliefs are associated with changes in behavior.

- **Perform a quasi-experimental study to assess the impact of different program components that have been implemented in different communities in your state.** This approach can help you determine how much different program components have changed attitudes, beliefs, and behaviors.

### **Step 6: Ensure use of results and share lessons learned.**

The main purpose of your evaluation is to produce findings that will help to inform your decision making and help you to be accountable to stakeholders. Despite the potential usefulness of an evaluation, however, its findings, conclusions, and recommendations don't automatically translate into informed decision making and appropriate action. You must have a plan for making sure that the evaluation results are disseminated in a timely and understandable fashion and that they are used to improve programs and to help ensure support and funding for future programs. Each of the steps in the evaluation process must be executed in a way that ensures use.

#### **6a: Develop a clear and focused evaluation plan.**

The first step in using results is to have a clear evaluation plan that links the program objectives, the evaluation questions, and the

methods. Linking the data source to the question not only helps you to keep your data collection pared down to the essentials, it also keeps you aware of the data's value in decision making.

#### **6b: Consider the implications of different results.**

In collaboration with your stakeholders, consider the decisions that would be made on the bases of specific patterns of results. During different stages of evaluation planning, pose various hypothetical results and discuss their implications for modifying the program. If no action would be taken, you might need to rethink the proposed evaluation plan to make sure you're asking the right questions. Consideration of the possible results also allows stakeholders to explore the positive and negative implications of those results and gives them time to develop options.

#### **6c: Communicate with stakeholders during each step of the evaluation process.**

Let all interested parties know how the evaluation is going. Involve them in the evaluation planning, in an effort to manage their expectations about what questions the evaluation will answer and when. Keep them informed, and hold periodic discussions about interim results, early interpretations, draft reports, and the final report.

**6d: Follow up with stakeholders to ensure that results are used in decision making.**

Efforts to make sure that results are used don't end with a final report that reaches conclusions and makes recommendations. Follow-up by

the evaluation team is needed to remind stakeholders of the intended uses for the results and to help prevent results from being lost or ignored when complex, politically sensitive decisions are being made.

*Tips for an Effective Evaluation Report*

- Include an executive summary.
- Describe the stakeholders and how they were involved.
- Describe the essential features of the program, including the logic model.
- Outline the key evaluation questions.
- Include a description of the methods.
- List methodological strengths and weaknesses. No study is perfect; don't pretend yours has no flaws.
- Present results and conclusions.
- Put results into context. (Help readers to understand what is reasonable at this point and how the results should be interpreted.)
- Translate findings into recommendations.
- Organize the report logically.
- Minimize technical jargon.
- Provide detailed information in appendices.
- Use examples, illustrations, graphics, and stories.
- Involve stakeholders in preparation of the report.
- Consider how the findings might affect others.
- Develop additional communication products suited to a variety of audiences, for sharing the results.

## **6e: Use a variety of channels and approaches in disseminating results.**

Dissemination is a form of communication. As with any communication, you should consider the target audience and purpose when deciding how to disseminate the results. Some people connect with numbers, some with text, some with graphs and pictures, and some with stories.

You should also think about the timing of the release of your results:

- Who should receive results first?
- When should the media be notified?
- How often should each set of stakeholders receive results?
- Who should release results to which audiences?

In addition, consider the potential criticisms that your results may receive. You may present a certain percentage decline in tobacco use as a success, but others may see that same decline as a failure. You should prepare responses to any potential criticisms you foresee and train your spokespeople to respond to attacks on your campaign. Stakeholders can be especially valuable in defending your results. For more information on preparing for and responding to media inquiries, see Chapter 9: Media Advocacy and Chapter 8: Public Relations.

A formal evaluation report shouldn't be the only product you disseminate. Work with various stakeholders to develop other products and to make sure the products' timing, style, tone, message, and format are appropriate for their audience(s). For example:

- Consider providing a briefing sheet that public health officials can use in presentations to state legislatures.
- Work with the public relations staff to develop materials for the news media.
- Consider a press conference to release results.
- Hold a community forum.
- Provide materials with more details, containing statistics and other data for technical audiences.
- Arrange to summarize key findings or complete reports and instruments on Web sites.
- Make your findings, reports, and materials available to other states and other people involved in tobacco control and prevention.

These ideas can help to ensure that your evaluation efforts don't go to waste. Again, your evaluation is useless if the results aren't understood and used to make decisions about the program.

### *Points To Remember*

- **Consider evaluation early and often.** Evaluation shouldn't be left until the end of the program. Considering evaluation while the program is being planned helps to ensure that the plan is specific and clear about what the program is trying to achieve. Developing a logic model that links inputs to activities to outputs and, finally, to outcomes forces planners to articulate their assumptions about how the program will work. These assumptions can be reviewed to determine whether they're consistent with available evidence. Considering evaluation before you begin to implement your program also helps to ensure that baseline data are collected.

Although you may be pressured to roll out your program quickly, if you don't collect baseline data, you'll never be able to clearly measure the changes caused by your intervention. Regular monitoring of activities and outputs helps the counter-marketing manager to troubleshoot and make adjustments in the program. Assessing short-term outcomes helps in modifying the program, and assessing long-term outcomes is necessary for accountability and to ensure continued funding for the program.

- **Build an effective evaluation team.** The evaluation team should include counter-marketing staff, evaluation expertise, and stakeholder input. At the state level, the program manager should be responsible for putting the team together. Make sure the team has sufficient expertise in technical evaluation and that it includes an external evaluator who is perceived by stakeholders as objective and capable. Many states have found it helpful to have a mix of experts from different backgrounds, such as a market researcher from the corporate sector, a public health epidemiologist, and a university-based communication researcher. Stakeholders are important to program evaluation, because their support of the process, results, and recommendations will help to ensure that the evaluation is accepted and used. Without stakeholder involvement, the evaluation may lack credibility, and the findings may be ignored.
- **Develop and follow an evaluation plan that is appropriate to your state in terms of context, timing, cost, and rigor.** In evaluation, one size doesn't fit all. There's no one best evaluation plan. Different states will face different marketing challenges, will have different resources, and will be working in a different context. The evaluation plan should reflect these factors. As a general rule, you should allocate 10 percent of your resources to evaluation. Evaluate as rigorously as your resources allow, and be sure to use more rigorous evaluation methods when the programs are more costly, visible, or controversial.
- **Make sure findings are shared and used.** Evaluation that ends as a report sitting on a shelf is wasted. Evaluation findings must be shared in such a way that they inform program decisions. Ensuring the use of results begins in the early stages of planning, as you ask what the program's objectives are, what questions need to be answered, and how the results will affect decisions. The evaluation report is a communication, so it must be appropriate for the audience.
- **Build on what others have learned.** In conducting outcome evaluation for your counter-marketing program, you may encounter a number of challenges. Fortunately, you're not alone. Others, such as CDC, the American Legacy Foundation, and other states, have faced the same issues and have begun to develop solutions. Talk to others, read the literature and reports, and share your experiences.
- **Consult other CDC resources.** This chapter provides a brief overview of what you should consider in evaluating a counter-marketing program. Consider reviewing other CDC resources and consulting your CDC project officer for specific advice. Seeking these resources and specific advice is especially important if you're conducting an outcome evaluation of a paid media campaign.

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