



PLANNING EVALUATIONS

LEARNING AND GROWING THROUGH EVALUATION

MODULE 1

Update April 2015

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Module 1

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Chapter 1. Evaluation and Your State Asthma Program

After reading Chapter 1, users should be able to:

- 🌀 Identify the purposes of evaluation for state asthma programs
- 🌀 Specify the evaluation resources that the APRHB has developed to assist state asthma programs in building evaluation capacity
- 🌀 Describe the CDC Framework for Program Evaluation
- 🌀 Identify the types of activities that are common to all state asthma programs
- 🌀 Explain the anticipated short-term, intermediate, and long-term outcomes common to state asthma programs

Over recent decades federal, state, and local governments have become more attuned to the need to be accountable and transparent in their use of public funds. The National Asthma Control Program (NACP) in the Air Pollution and the Respiratory Health Branch (APRHB) at CDC has taken this challenge seriously. Being accountable means keeping accurate records about what we are doing as a national program. Equally important is examining how we carry out our **ACTIVITIES**. We also need a way to judge whether or not these activities are contributing in a meaningful way to improving the health of our nation. **Program evaluation** is a tool we can use to document what we do, learn how well we are doing it, show how our activities contribute to reducing the burden of asthma, and improve our efforts as an asthma community. 

Of the many good reasons to evaluate (Mark et al., 2000), we have chosen two as the primary focus for this manual.

- **Program and organizational improvement.** By providing credible evidence to program managers and staff about which aspects of a program are working well—and which less so—evaluation can inform program improvement efforts.
- **Knowledge development.** By adding to the knowledge base about “what works,” evaluation can identify promising public health approaches that can be adapted for use in a variety of settings.

Additionally, we have created vignettes in which we follow a fictional state asthma program coordinator, Sofia, who is relatively new to evaluation, and her recently hired evaluator, Anthony. The vignettes provide snapshots of how the two work together to plan for evaluation. We follow them as they engage stakeholders, propose evaluation candidates, and set priorities for evaluation. A short review highlighting the evaluation points illustrated in the vignettes follows each one.

The field of program evaluation has a rich history. We have provided a few select resources in the text of the guide and in individual appendices, a longer topical resource list in Appendix G, and a comprehensive alphabetical listing of references in **Appendix H**. If you would like to learn more about a particular aspect of program evaluation, the APRHB will gladly provide information about resources and training opportunities.



Finally, as with any specialized field, evaluation has its own technical vocabulary. We have included an appendix with notes from each chapter. Terms and concepts covered in Appendix A **Chapter Notes** are highlighted in blue bold and marked with a leaf icon in the margin. We have also included a glossary, **Appendix B**; terms included in the **GLOSSARY** are highlighted in green, bold, and small caps. Clicking on either the blue or green highlighted terms will take you directly to the appendices.

Preparing for Successful Evaluation

Since the NACP began funding state asthma programs in 1999, many state programs have developed strong infrastructures and have solid experience implementing and evaluating their programs. Those of you managing or working in state asthma programs can foster continued **support for evaluation** by helping to establish or promote the following organizational conditions, if they do not already exist in your state:

- Leadership support for evaluation
- Personnel, financial, and technological resources that are available and dedicated to evaluation
- Commitment to strategic evaluation planning
- A “culture” where evaluation findings are used to enhance and improve program operations
- Communication to ensure that evaluation results and lessons learned are shared
- Ongoing **evaluation capacity building** activities to ensure that evaluators, staff, and other stakeholders are all able to contribute to the evaluation process (Preskill and Boyle, 2008; Preskill and Porzline, 2008).

One goal of the cooperative agreement is for all of us to grow in our capacity to evaluate our work. Learning about evaluation will help all state asthma program and evaluation staff to work with CDC staff and your program **STAKEHOLDERS** to design and implement the best evaluation strategy for your program. Even though the program has a designated evaluation lead, when all staff understand the basics, they become stronger partners in evaluation and are better able to hire and work effectively with evaluation staff, whether employees or contractors.

(See Appendix D for suggestions on hiring an evaluator.) Conducting evaluations of your program requires both knowledge of evaluation and in-depth understanding of the program and its information needs. Program staff and evaluators (both **INTERNAL EVALUATORS** and **EXTERNAL EVALUATORS**) will need to rely heavily on each other to produce evaluations that best fit your program and answer your evaluation questions.

The Underlying Framework

The CDC Evaluation Framework and the companion self-study guide (US DHHS, 2005) provide generic guidance on developing evaluation strategies that are appropriate to challenges facing the public health field. *Learning and Growing through Evaluation* applies that same framework to the specific context of a state asthma program. The guidance in this document should help you better understand how to evaluate your program and how to use evaluation results to improve your program and learn “what works” in asthma programs.

All of the modules in this guide use the CDC Framework as an organizing principle. The Framework comprises six steps and four **EVALUATION STANDARDS** to guide strategic choices in developing an evaluation approach or plan. Because of its centrality to our guidance, we briefly introduce the CDC Framework in **Figure 1.1** and **Tables 1.1** (Steps) and **1.2** (Standards) below.

Figure 1.1 CDC Framework for Program Evaluation

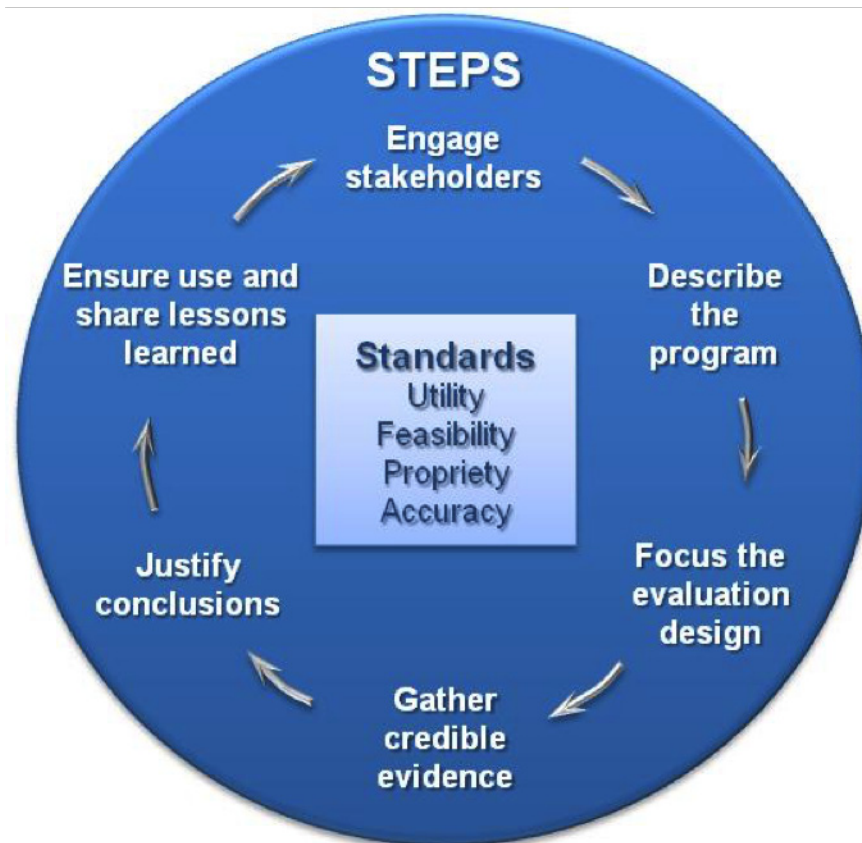


Table 1.1 Six Steps in the CDC Framework for Evaluating Public Health Programs

Step	Description
Step 1 Engage Stakeholders	Evaluation stakeholders are people or organizations that are invested in your program, are interested in the results of the evaluation, and/or have a stake in what will be done with evaluation results. Representing their needs and interests throughout the process is fundamental to good program evaluation.
Step 2 Describe the Program	A comprehensive program description clarifies the need for your program, the activities you are undertaking to address this need, and the program's intended outcomes. This can help you when it is time to focus your evaluation on a limited set of questions of central importance. Note that in this step you are describing the program and not the evaluation. Various tools (e.g., logic and impact models) will be introduced to help you depict your program and the anticipated outcomes. Such models can help stakeholders reach a shared understanding of the program.
Step 3 Focus the Evaluation Design	Focusing the evaluation involves determining the most important evaluation questions and the most appropriate design for an evaluation, given time and resource constraints. An entire program does not need to be evaluated all at once. Rather, the "right" focus for an evaluation will depend on what questions are being asked, who is asking them, and what will be done with the resulting information.
Step 4 Gather Credible Evidence	Once you have described the program and focused the evaluation, the next task is to gather data to answer the evaluation questions. Evidence gathering should include consideration of each of the following: indicators, sources of evidence/methods of data collection, quality, quantity, and logistics.
Step 5 Justify Conclusions	When agencies, communities, and other stakeholders agree that evaluation findings are justified, they will be more inclined to take action on the evaluation results. As stated in the CDC Framework, "Conclusions become justified when analyzed and synthesized evidence is interpreted through the 'prism' of values that stakeholders bring, and then judged accordingly." This step encompasses analyzing the data you have collected, making observations and/or recommendations about the program based on the analysis, and justifying the evaluation findings by comparing the evidence against stakeholder values that have been identified in advance.
Step 6 Ensure Use and Share Lessons Learned	The purpose(s) you identified early in the evaluation process should guide the use of evaluation results (e.g., demonstrating effectiveness of the program, modifying program planning, accountability). To help ensure that evaluation results are used by key stakeholders, it is important to consider the timing, format, and key audiences for sharing information about the evaluation process and findings.

Table 1.2 Standards¹ included in the CDC Framework for Evaluating Public Health Programs

Standard	Description
Utility	Who needs the evaluation results? For what purpose do they need the evaluation results and/or why are they interested in the evaluation? Will the evaluation provide relevant information in a timely manner for them?
Feasibility	Are the planned evaluation activities realistic given the time, resources, and expertise at hand? How can planned evaluation activities be implemented with minimal program disruption?
Propriety	Does the evaluation protect the rights of individuals and protect the welfare of those involved? Does it engage those most directly affected by the program and changes in the program, such as participants or the surrounding community?
Accuracy	Will the evaluation produce findings that are valid and reliable, given the needs of those who will use the results?

A fifth standard, Accountability, was added in the 2011 edition of the standards. This standard encourages evaluators to document the conduct of the evaluation and to take a metaevaluative approach that provides an opportunity for evaluators to reflect on the quality of the evaluation's processes and products.

Evaluations guided by the CDC Framework actively engage a range of stakeholders throughout the entire process, and cultural competence is essential for ensuring truly meaningful engagement. In every evaluation, we have an ethical obligation to create an inclusive climate in which everyone invested in the evaluation—from agency head to program participant—can fully participate. At the same time, significantly engaging stakeholders, particularly in the planning stage, will enhance the evaluation's cultural competence and improve the quality and utility of its findings.

A Common Vision

Each program funded by the NACP is charged with implementing infrastructure, services, and health systems strategies to reduce the burden of asthma. Programs are expected to tailor their activities to the state's particular context and focus on populations disproportionately affected by asthma. Therefore, your program's activities will vary some from those of other state asthma programs. Despite these differences, there are many features state asthma programs may share. In the remainder of this chapter, we focus on describing these similarities.

- **Stakeholders.** All state asthma programs have a broad set of stakeholders. Individuals who have asthma and their families are clearly important stakeholders. For our programs to be successful, we must also collaborate with and influence many other groups who interact with individuals and families. Specifically, health care providers, health systems, state and local governments, schools and workplaces, community organizations, and community members play important roles in achieving our program **OUTCOMES**. It is essential that we keep these stakeholders in mind and consult with them as we develop our programs and plan our evaluation strategies.

¹ These standards were originally developed by the Joint Committee on Standards for Educational Evaluation.

- ***Long-term outcomes or goals.*** All state asthma programs share common **GOALS** of expanding and sustaining the availability of comprehensive asthma control services, improving the level of asthma control among people with asthma, and diminishing disparities in asthma management and health outcomes. Also shared is the desire to use evaluation to contribute to the practice-based evidence available to guide effective asthma programs. These are the goals that drive our programs.
- ***Intermediate program results.*** Milestones of progress in pursuit of these goals are also similar among state asthma programs. These include desired near-term results for people with asthma, such as increased knowledge of appropriate asthma management practices and linkages to guidelines-based care, and system-level outcomes, such as increased coverage for comprehensive asthma control services and systematic efforts to improve the quality of care provided to people with asthma. Somewhat longer term results of state asthma programs include improved asthma self-management practices among people with asthma and public health-health care linkages that support the availability of effective asthma care.
- ***Activities.*** All state asthma programs share a common set of activities that include the maintenance of strong programmatic infrastructure, including leadership, communications, surveillance, evaluation and strategic partnerships; home-or school-based interventions; and health-system activities such as quality improvement and team-based care initiatives. These programmatic activities are carried out as a means to achieve the desired program outcomes.

Program descriptions are an important starting point to generate a common understanding of how a program's activities are expected to lead to one or more long-term programmatic results. Visual models of programs can be invaluable in representing core similarities among diverse programs, as well as in clarifying linkages between activities and outcomes. In the next section of this chapter, we explain the concept of program models, and then introduce the logic model that describes the program supported by this cooperative agreement. First, though, let's pause and read our first **vignette**, where we imagine the initial meeting between the asthma program coordinator and the new state asthma program evaluator. The model referred to in this vignette is Figure 1.2 on page 1-10.

Vignette 1 – Getting to Know You

Sofia is Program Coordinator for a state asthma program. Just 1 week ago, Sofia added a new part-time evaluator to her team (Anthony). Sofia is ready to hold her first meeting with Anthony and is anxious to put Anthony to work on the evaluation tasks that have been languishing on her desk. Anthony, for his part, is eager to get started and learn what he can about the program. Here's a brief synopsis of their conversation:

Sofia: I'm so pleased to have you on board. We're really proud of the program we've developed and have even bigger dreams for the future. One of the first things we need from you is a plan outlining what we should evaluate in the coming five years. Please tell me what I can do to help you.

Anthony: Thanks. I'm looking forward to working with you. I'll rely on your program knowledge and expertise to help me plan an evaluation strategy. In fact, I can't do my job without your input, so I'm relieved you've offered to help.

Sofia: Feel free to chat with me anytime. I see evaluation as a priority and I'll do what I can to help. How should we start?

Anthony: First, I'd like to get your thoughts on the purpose of this program. What do you think the ultimate goal of this program is? Years from now, how will we know whether or not we did our job well?

Sofia: To me, the ultimate goal for this program is to expand and then sustain the availability of comprehensive asthma control services in our state so that people with asthma can control their asthma and have a better quality of life. Reducing asthma disparities is critically important, too.

Anthony: Those are great goals. I love goals, the only problem is they take so long to achieve. How can we tell a little sooner if our program is moving down the path to success? I wonder if there is anything we can look at in the near term to figure out if we're on the right path for the long term. Have you thought about what types of accomplishments may emerge along the way that could tell us if we're headed in the right direction?

Sofia: What a great question! I'm pretty practical so I know that we have to see progress along the way to keep staff morale high and to keep us focused on what makes a difference. One of the documents in this packet I've prepared for you may have some information that can help. CDC included a diagram in the funding announcement we responded to, and it shows at a high level how they envision our work. Before I saw this "model," I mostly thought about how different our program is from those in other states. After all, people in our state have different needs and our program has different partners and, unfortunately, fewer resources than some of these other states. This diagram helped me see that we are all working toward similar goals.

Anthony: This is helpful. It's called a logic model. It'll be good to have this as I work with you and the team to ask the right questions and develop a strategic evaluation plan that will be right for this program. This solidifies it for me! This program is clearly committed to evaluation. I'm going to enjoy being a part of its success!

Did You Notice...?

Vignette 1 – Getting to Know You

1. Sofia is clear about what she needs from Anthony in the near future—a **STRATEGIC EVALUATION PLAN** for the asthma program covering the next five years.
2. Sofia makes clear that evaluation is a priority for her, and she follows up speech with action. She offers to help Anthony and says he should feel free to contact her at any time. She also shares materials with him that she has received from CDC that may help him, including the state asthma program logic model (Figure 1.2).
3. Anthony recognizes that he will need to rely heavily on Sofia’s knowledge of the asthma program. Not only is he new to the program, but his expertise is in evaluation not in public health programming. He is open to materials developed by others that will help him understand the program.
4. During this first meeting, Anthony does not use evaluation jargon. He uses terms like “ultimate goal” (instead of “long-term outcome”), “how will we know we did our job well” (instead of “**PERFORMANCE MEASUREMENT**” or “criteria of merit”), “how can we tell sooner if we’re moving down the path to success” (instead of “short-term and intermediate outcomes”). In later conversations, once he has a better sense of the program staff’s familiarity with evaluation, he can introduce the evaluation jargon as he helps to build evaluation capacity with the state asthma program staff and partners.
5. Both Anthony and Sofia understand that while lofty goals help to motivate people, they also need more achievable milestones along the way to keep up their morale, their interest, and their engagement. Evaluation is one way to identify and celebrate small successes along the way to ultimate goals.

Mapping Out Our Common Vision

Many of you may already be familiar with **LOGIC MODELS**. The *W.K. Kellogg Foundation Evaluation Handbook* (1998), defines a program logic model as:

a picture of how your program works—the theory and assumptions underlying the program. ... [The logic model] provides a roadmap of your program, highlighting how it is expected to work, what activities need to come before others, and how desired outcomes are achieved.”

W.K. Kellogg Foundation Evaluation Handbook, 1998, p. 35.

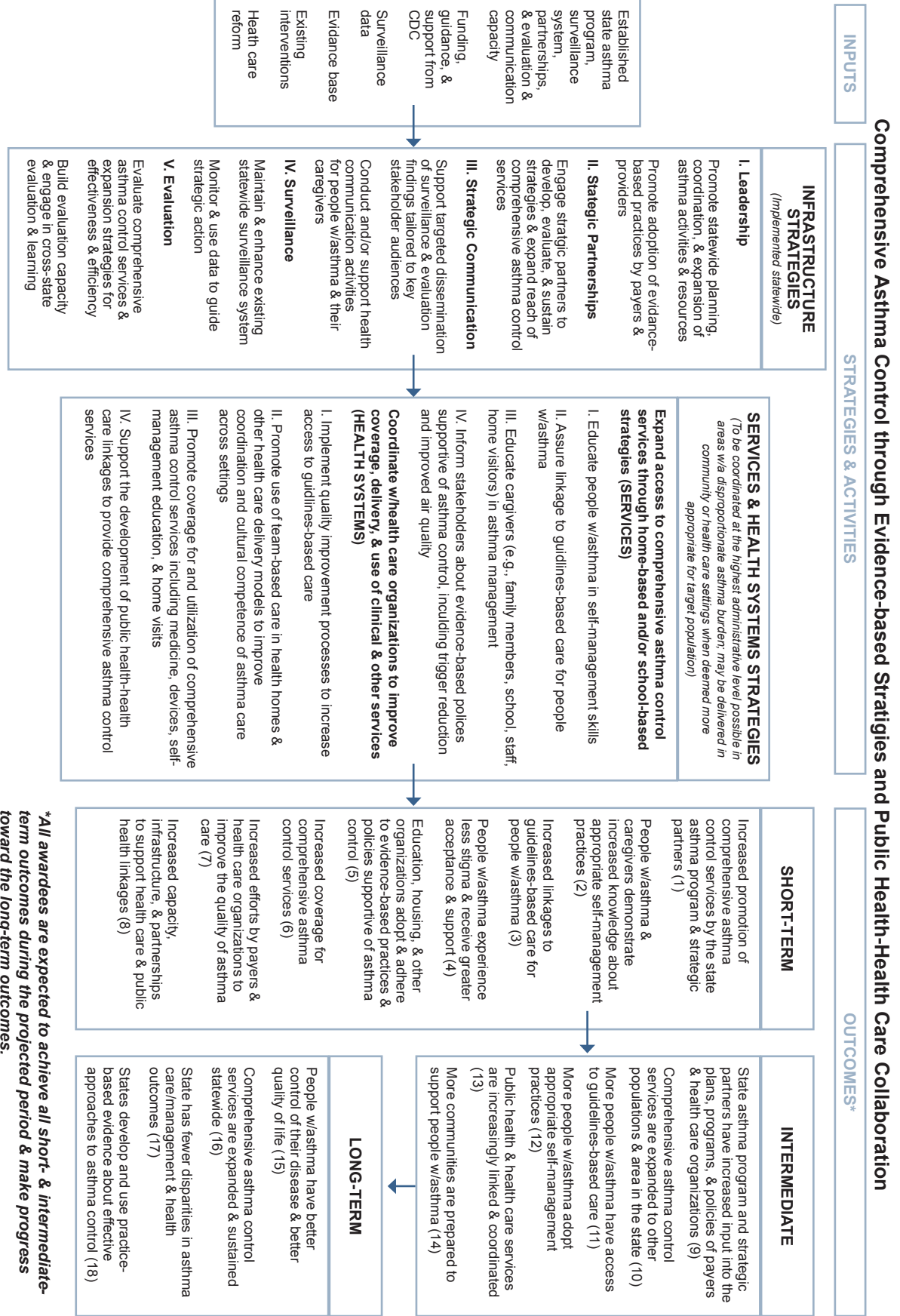
A logic model graphically represents how desired outcomes are achieved based on the theories and assumptions that underpin your program. These models show the expected sequence of activities and consequences that ultimately lead to critical results. A typical logic model depicts what goes into a program (**INPUTS**), what the program does (activities), and what we anticipate will result from the program (often several levels of programmatic outcomes).

What Sofia shows Anthony in Vignette 1 is the model presented in **Figure 1.2**. This model illustrates the program that the NACP is funding states to tailor and implement over the next five years. *Comprehensive Asthma Control through Evidence-based Strategies and Public Health-Health Care Collaboration* builds on the work state program did in earlier funding cycles, focusing it some and making a connection with health care reform.

In addition to depicting a shared vision for state asthma programs, the model can be used to develop a more detailed logic model for a specific state asthma program. As Sofia notes, the diagram helps explain the outcomes that a state asthma program should anticipate in the near term if the program is moving in the “right” direction. Logic models are also helpful in describing how the outcomes of a program link to each other. So rather than waiting several years to see whether we have actually managed to sustain and improve our program, we can examine much earlier whether the outcomes we think will lead to sustainability are already occurring. If the early outcomes are not happening, we can be proactive in making necessary changes.

Comprehensive Asthma Control through Evidence-based Strategies and Public Health-Health Care Collaboration builds further on the model that the NACP and state asthma programs created in 2006, giving the “30,000 foot view” of state asthma programs. This higher-level model, called an impact model, is described in detail in Appendix C.

Figure 1.2 State Asthma Program Logic Model



**All awardees are expected to achieve all short- & intermediate-term outcomes during the projected period & make progress toward the long-term outcomes.*

Let's now turn our attention to the specifics of the state asthma program logic model. As previously noted, as diverse as the state asthma programs are, all may share common goals. These include:

- People with asthma have better control of their disease and better quality of life
- Comprehensive asthma control services are expanded and sustained statewide
- The state has fewer disparities in asthma care, management, and health outcomes
- States asthma programs develop and use practice-based evidence about effective approaches to asthma control.

Evaluators refer to these goals as *long-term program outcomes*. Note that these long-term program outcomes are depicted on the right-hand side of Figure 1.2.

Also shared among asthma programs are the milestones along the way to attaining long-term program outcomes. Desired near-term results of state asthma programs among people with asthma include increased knowledge about appropriate asthma management practices and linkages to guidelines-based care. At a system level, near-term results include increased coverage for comprehensive asthma control services and greater efforts by payers and health care organization to improve the quality of asthma care. Somewhat longer term program results for people with asthma include an increase in appropriate asthma management behaviors and, at the system level, improved linkages between public health and health care services. Evaluators refer to these kinds of program results as *short-term and intermediate program outcomes*. These are depicted in the boxes located toward the center of the logic model.

The logic model also describes some of the activities common to state asthma programs in the current funding cycle, such as activities that build and strengthen the program infrastructure necessary to mount the services and health systems strategies.

By detailing the “pathways” between program outcomes, the graphic representation in Figure 1.2 helps us see how short-term and intermediate outcomes ultimately contribute to achieving long-term program outcomes. By measuring progress in attaining these milestones, an asthma program can make mid-course corrections as necessary to stay on track. Although the pathways in Figure 1.2 generally move from left to right, it is important to acknowledge that a gain in one intermediate outcome may affect another.

Let's check in with Sofia and Anthony to see how they make sense of this model in **Vignette 2**.

Vignette 2 – Where Are We Going?

Anthony: OK, I can see from this model that the longest term results of your program are really those long-range goals you mentioned before, aren't they?

Sofia: Yes. We want to make life better for people with asthma, and we want to reduce the disparities in asthma's impact across various groups.

Anthony: OK. That all makes good sense. But I can also see results you expect to occur sooner. For example, for people with asthma, you'd expect to see increased knowledge of appropriate asthma management practices and linkages to guidelines-based care. Those would be fairly immediate results of your program. They'll help us think about what we could evaluate to tell us if the program is on the right track.

Sofia: Are you saying we could actually start measuring the kinds of things in that first outcome column right now? Do you think we should do a statewide survey about those things? You know we're under a lot of pressure to demonstrate that our program is working. Our funders want to know that, and so do our partners.

Anthony: Well, depending on the activities conducted, you might not see much yet at the state level. An intervention in a specific school district, for example, is not likely to result in change happening outside that district. But, we could look at change within that district to see if the intervention is working.

We can use both the short-term and intermediate outcomes to help us decide what to measure. For example, for those with asthma and their caregivers you want to see the *skills* they have acquired translate into good asthma management *behaviors* – because just having a skill doesn't mean you're going to use it.

Sofia: That makes sense. Basically, right now, I shouldn't think too big. Instead we should use this model to think about what realistic changes we might see based on the actual activities we're conducting.

Anthony: Right. There are a lot of potential things we could start evaluating. I think a good first step would be to sit down with some other partners to think through more details and come up with a clear strategy for what we want to evaluate when. That way we'll feel more confident that we're getting the information we need, when we need it.

Did you Notice...?

Vignette 2 – Where Are We Going?

1. Program logic models are tools that can help an evaluation team determine *what* to measure, *where* to measure, and *when* to measure.
2. Attempting to measure long-term outcomes prematurely can lead to poor or disappointing results.
3. Anthony cautions Sofia about measuring change at the state level if the intervention is more narrowly focused. For example, if your intervention is a clinic- or school-level intervention, then you want to measure change in the clinic or school where the intervention took place, if possible also looking at one or more sites where no intervention occurred by way of comparison. On the other hand, it may be appropriate to measure change at the state level for a statewide media campaign.
4. Anthony suggests obtaining partner input to help decide what to evaluate. While a logic model—and your evaluator—can help show you what might *make sense* to evaluate, figuring out what you *should* evaluate must come from you and your evaluation stakeholders. Only program managers and staff, in consultation with key evaluation stakeholders, can identify the critical information needs that an evaluation will help address.
5. Often when we embark on an evaluation there is a tendency to jump into data collection. Sofia naturally did this by suggesting the use of a statewide survey to measure short-term outcomes. Anthony reinforces the importance of carefully planning evaluations before making any decisions about data collection.

NOTES

Chapter 2. Thinking Strategically: The Strategic Evaluation Plan

After reading Chapter 2, users should be able to:

- 🌀 Describe the purpose of a strategic evaluation plan and how it differs from an individual evaluation plan
- 🌀 List the elements of a strategic evaluation plan
- 🌀 Apply the CDC Framework process to developing a strategic evaluation plan

Before beginning to conduct evaluations of your program, it is helpful to develop an overall evaluation strategy to ensure that the various evaluations will work together to provide a complete picture of your program and answer questions that are important to program stakeholders. In the first year of your cooperative agreement, you will be asked to develop a **strategic evaluation plan** to outline this strategy.

What is a strategic evaluation plan? A strategic evaluation plan can be thought of as your program's evaluation portfolio. It lays out the rationale, general content, scope, and sequence of the evaluations you plan to conduct during your cooperative agreement funding cycle. Over time, the set of evaluations you conduct will show how well your program is working and what changes are needed to make your program work better. For a good sense of how your program is working overall, your strategic evaluation plan should address all major program components.

How is a strategic evaluation plan different from an individual evaluation plan? A strategic evaluation plan is a proposal for how multiple evaluations will be conducted and coordinated over the five-year funding period. As part of the strategic evaluation planning process, you will need to develop some high-level details about what each individual evaluation may look like (e.g., potential evaluation questions, data collection methods) as a way to estimate the scope, timing, and resources. An individual evaluation plan zeroes in on just one of the multiple evaluations proposed in the strategic evaluation plan and provides refined, specific plans for how this evaluation will be implemented. The additional detail required in an individual evaluation plan is addressed in Chapter 3.

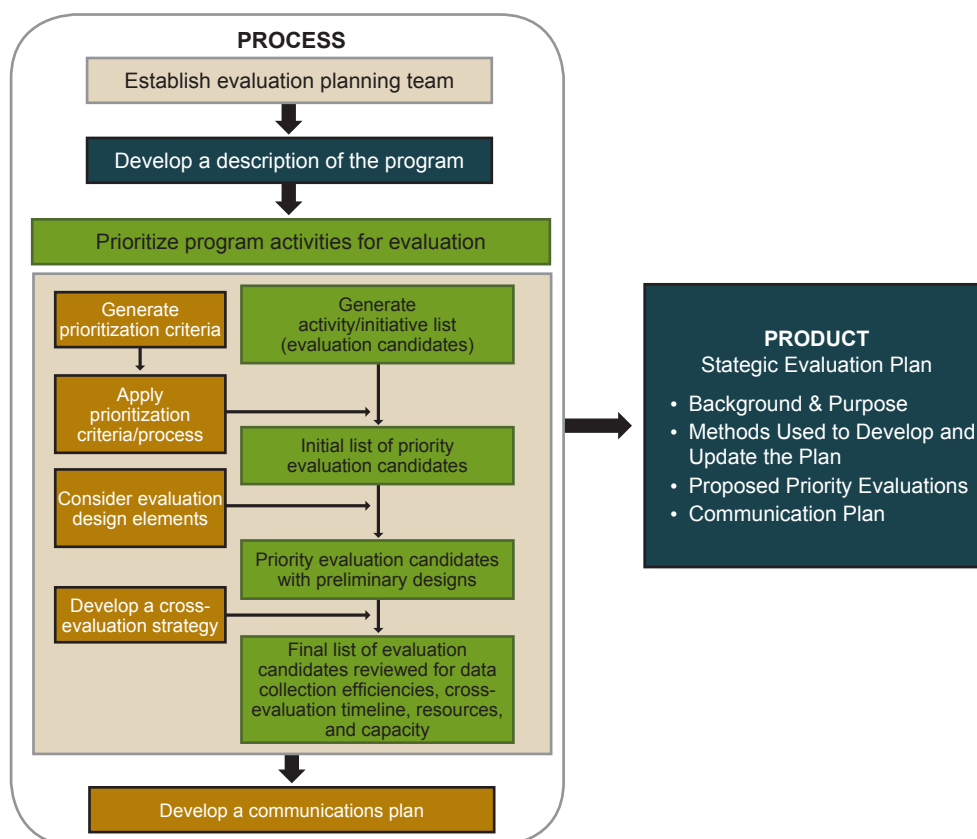
What are the benefits of a strategic evaluation plan? By systematically planning for evaluation, you can make sure that the time and energy you invest in evaluation provides information to support program planning and improvement. The process of developing your strategic evaluation plan will also provide you with the preliminary content for each individual evaluation plan you will develop. Another benefit of preparing the strategic evaluation plan is to help you anticipate the data and resources you will need. If you need to build evaluation capacity within the state asthma program to successfully carry out your plan, your concrete plans for doing this can be included in your strategic evaluation plan.

How do I develop a strategic evaluation plan? Figure 2.1 illustrates a process you can follow to develop a strategic evaluation plan. This process is described in detail in the remainder of the chapter.

Note that steps in the strategic evaluation planning process are similar but not identical to the steps in the CDC Evaluation Framework introduced in Chapter 1. That is because we are dealing here not with a single one-time evaluation, but rather with generating a proposal for how to coordinate multiple evaluations. To underscore this difference, we have assigned letters (A–G) rather than numbers to the steps in the strategic evaluation planning process.

Appendix E contains an annotated outline of a strategic evaluation plan. Throughout this chapter you will find sample tables to support your prioritizing and decision making during the strategic evaluation planning process. Blank Microsoft Word versions of the worksheets will be made available for your use. These worksheets can be used to prepare the tables you will include in the strategic evaluation plan.

Figure 2.1 Strategic Evaluation Planning Process and Product



Let's check in with Sofia and Anthony to see how they are doing on getting organized to develop their strategic evaluation plan.

Vignette 3 – Strategy Matters

Sofia: I guess I thought writing the strategic evaluation plan was something you could do for us. So I was a little surprised when you mentioned needing to convene a planning team to help with that. Everybody's so busy!

Anthony: I can certainly help you with your strategic evaluation plan, and I'll try to keep people's time commitment to a minimum. But this kind of planning isn't something I can do for you. I know evaluation but I don't know much about your program or your partners yet. Even if I were familiar with the program, it would still be important to include you all in the process, since you all likely hold different, and valuable, perspectives about this program.

Sofia: My own experience with evaluation planning comes from an evaluation we did for a school intervention. We planned ahead about when to collect data, what to collect, and who was doing what. We wrote it all down so everyone was on the same page. Is that what you mean?

Anthony: Not exactly. You're right about wanting to plan each evaluation in advance, but I'm talking about an earlier step that involves how you decide what evaluations to do in the first place. It's thinking strategically about what aspects of your program you want to evaluate over the next five years. I'm guessing that you can't afford to do every evaluation that seems like a good idea. So you're going to have to pick and choose.

Sofia: You're right about that. But how do I know today what evaluations will be the most important to do three or four years from now?

Anthony: Great question. We don't have a crystal ball. All we can do is develop a strategic evaluation plan based on what we know now, and what we think is important. We'll revisit this strategic evaluation plan at least once a year as we learn from evaluations we've done and as the program grows and changes.

Sofia: Okay, well I'm certainly willing to give this a try. How do we start?

Anthony: As a first step I'd like to get some documents from you that describe the program goals and activities. I'll look through these and list the surveillance, partnership, and intervention activities that stand out as particularly important to the program. Then we should invite a small group of stakeholders, say half a dozen or so, to help us think through which activities would be best to evaluate over the next five years. They need to be a pretty committed group, as we'll need their input a great deal this year and periodically over the next five years. We want folks who have a broad perspective on the program rather than stakeholders who are interested in only one activity.

Sofia: OK, I can think of some people who should be involved. You and I will clearly be involved, and I'm sure our Epidemiologist will be interested since she's been involved in evaluation in the past and knows our data systems. Maybe someone from the American Lung Association, as they've been a very strong partner from the beginning. Since we have such a big push this year on organizational and public policies related to health care, I think it would also be good to have one of the local medical professional organizations involved.

Anthony: Well, that sounds like a good group of folks. We should have a name for this group to recognize their contributions. How about the evaluation planning team?

Sofia: OK, that makes sense. I'll contact stakeholders who might be willing to help us out and set a time for the first meeting.

Did You Notice...?

Vignette 3 –Strategy Matters

1. As much as Sofia might like to turn everything relating to evaluation over to her evaluator, talking to Anthony helps her recognize that she and other program staff and partners will need to commit time to the strategic evaluation planning process. Sofia (with her program knowledge) and Anthony (with his evaluation knowledge) are both essential to the process.
2. Sofia has specific reasons for each team member she plans to invite. Some are invited because of their past efforts on behalf of the program, others because they represent important new directions.
3. Sofia and Anthony keep the core planning team relatively small so that it will be easier to conduct meetings and make progress on developing the strategic evaluation plan. Others can be called in as needed for their specific expertise.
4. Once the strategic evaluation plan is finished, it should not be considered set in stone. It must be revisited at least annually, and sooner if the program undergoes a major change.

Step A – Establish an Evaluation Planning Team

We suggest you begin your strategic evaluation planning process by forming a small **EVALUATION PLANNING TEAM** of about four to six individuals responsible for developing the strategic evaluation plan document. Ideally, the evaluation planning team will serve as champions for evaluation on an ongoing basis. This team should also monitor progress in implementing the plan and be actively involved in annual reviews and updates.

This section corresponds with
Step 1 of the CDC Framework:
→Engage Stakeholders.

The product of this step is
an evaluation planning team
consisting of individuals with
diverse knowledge and skills and
an interest in evaluation.

The state asthma program evaluator should lead or co-lead this team. Other members should include stakeholders knowledgeable about the program, its history, its goals and objectives, the role of evaluation in program improvement, and resources available for evaluation. You might consider the following: the asthma Program Coordinator, the evaluation lead, the asthma program epidemiologist, and one or two key opinion leaders external to your program or even the state health department. Note that in Vignette 3 Sofia and Anthony, while they may have considered a wide range of program stakeholders, end up selecting a small number that they believe will be of most help to them in developing a strategic evaluation plan. Their selection is guided by their programmatic priorities, previous experience with evaluation, and the strength of their relationships with specific partners. Your NACP Project Officer and Evaluation Technical Advisor can serve as resources in selecting your team.

Although you may decide to keep this team small, you will want to consider how best to communicate with the larger group of asthma stakeholders about the activities of the evaluation planning team. Some individuals will likely become involved when you begin to develop individual evaluation plans (see Chapter 3). However, prior to that, you may wish to consult briefly with a broader group of partners. Input you might want to consider obtaining from partners could include one or more of the following:

- Identifying activities or initiatives that should be considered as candidates for evaluation
- Identifying evaluation questions these partners have about state asthma program activities they are involved in
- Learning what these partners—especially those expected to use the evaluation findings—would consider to be credible evidence (e.g., qualitative or quantitative data; experimental designs or case studies)

However you decide to configure your team, you should establish some ground rules and expectations at the first meeting. Plan to discuss group roles and responsibilities, a schedule for meetings, and a timeline to complete the group's activities. You can find a sample “job description” for your planning team at http://www.cdc.gov/asthma/program_eval/other_resources.htm.

Step B – Describe the Program

The next step in creating a strategic evaluation plan is to develop a description of the state asthma program and its major components. We recommend that the evaluator engage in the following preliminary activities:

1. Review asthma program documents.
2. Share a summary of findings with the evaluation planning team.
3. Work with the team to finalize a description of the key program activities.

This section corresponds with
Step 2 of the CDC Framework:
→Describe the Program.

The product of this step
includes: a set of profiles of
activities conducted by the state
asthma program and both a
written and a graphic description
of the overarching state asthma
program.

Review program documents. The following documents contain a wealth of information about planned activities and anticipated program outcomes: the state asthma plan, progress and performance measurement reports, the most recent asthma surveillance/burden report, other asthma surveillance summary documents (e.g., fact sheets), and the state asthma program funding application(s) and associated work plan(s). Additionally, the evaluator may find it helpful to review information you have received from the APRHB, such as the most recent Funding Opportunity Announcement (FOA) and comments provided on your state asthma program application. If your evaluator is new to the program, conducting a review of program documents is a good way to become familiar with the program.

Summarize findings. The evaluator's next step is to summarize what s/he has learned for the evaluation planning team. Preparing a series of program activity profiles (see **Table 2.1** for an example) may be helpful prior to convening the first team meeting. Individuals on the evaluation planning team have likely played a role in designing or implementing these activities and therefore will be able to help finalize the information in the profiles. The planning team can then reference these profiles as they engage in discussions about which program activities are most important to evaluate over the next five years.

As mentioned previously, you will want to consider how your broader group of stakeholders may be able to contribute to this process, especially those who were engaged in developing the state asthma plan. You may want to share the profiles (or a list of the profiles) with a broader group and invite them to identify additional programs or activities that should be profiled. This will help:

- Fill in knowledge gaps regarding ongoing activities of which the state asthma program may not be aware
- Make your partners feel included in the decision-making process about what will be evaluated
- Familiarize your partners with aspects of the program other than those they are directly working on

With a little additional effort, the activity profiles could even become the basis for an asthma resource directory.

Table 2.1 Program Activity Profile

Program Component	(Infrastructure, services, health systems)
Title of Activity	(title of activity)
Description of Activity	(describe the activity)
Duration of Activity	(start and end date or ongoing)
Partner Involvement	(describe whether partners are involved in the activity and, if so, specify major partners and their roles)
Cost of Activity	(provide a rough or “ballpark” estimate of what the activity costs overall or annually, including funds from all sources; specify what portion, if any, comes from partner contributions)
Contribution to Intended Program Outcomes	(describe what results or “outcomes” you expect to see based on conducting this activity)
Known Challenges in Conducting the Activity	(list any known challenges in conducting the activity)
Performance Measure Data	(list performance measures linked to this activity)
Prior Evaluation	(list any prior evaluations conducted of this activity)

Develop program description. One method for describing a program is to develop a logic model to graphically depict how the program is expected to work. In Chapter 1, we presented a model that portrays critical outcomes the state asthma programs are working toward.

Using this model as a starting point, we recommend that you develop a logic model for your program as a whole. To do this, you will need to add some details about your program—what activities you are doing, what the outputs resulting from those activities are, and which of the outcomes they will contribute toward.

If you already have a logic model for your program that only needs minor revisions, you may want to develop additional logic models that focus on components of the state asthma program. Your Evaluation Technical Advisor can provide you with additional resources on logic model development as needed.

Step C – Prioritize Program Activities for Evaluation

Once you have described your state asthma program, you are ready to start thinking about what you will evaluate. You will not have the resources to evaluate every program activity; therefore, it is important to engage in a *systematic* process to prioritize what you will evaluate. It is also important to document your process so that your stakeholders understand how priorities were selected.

This section corresponds with Step 3 of the CDC Framework: →Focus the Evaluation Design.

The product of this step is a prioritized list of evaluation candidates.

There are many methods for prioritizing. Established techniques vary in terms of how stakeholders are engaged and how criteria are applied. We encourage you to consult Appendix A for more information about **prioritization techniques** that might best suit your program. 

Regardless of the method you select, you will need to:

1. Develop clear **PRIORITIZATION CRITERIA**.
2. Apply the criteria to a list of potential **EVALUATION CANDIDATES**.
3. Generate a rank-ordered list of priority evaluation candidates.

To have a well-rounded set of evaluations for your program, you will want to make sure you evaluate one or more aspects of each major program component at some point during the five-year cooperative agreement cycle. In **Table 2.2** we list additional criteria you may want to consider adopting as part of your prioritization process. Your performance measurement system may also provide useful information. Both objective criteria (e.g., prior evaluation, cost) and subjective criteria (e.g., stakeholder interest, sustainability) are important to consider.

Table 2.2 Potential Criteria for Evaluation Prioritization

Criterion	Information Required for Prioritization
Cost	What financial resources have we invested in this activity?
Labor/time intensive	How much staff time have we invested in this activity?
Prior evaluation	Have we evaluated this activity before?
Performance	Does information from our performance measurement system indicate a need for more in-depth examination of this activity?
Maturity	What is the stage of development or implementation for this activity?
Stakeholder interest	How interested are our stakeholders in this activity?
Sustainability	How much does this activity contribute to the sustainability of the state asthma program?
Centrality	How connected is this activity to our asthma partners across the state?
Plan alignment	How closely aligned is this activity with our state asthma plan?
Plausible outcomes	Can this activity reasonably be expected to lead to relevant outcomes?
Disparities	Will this activity reduce asthma disparities?
Focus	Does this activity affect those most burdened by asthma?
Reach	How many people in our state are (or could be) affected by this activity?
Challenges	Are we (or do we anticipate) struggling with this activity?
Pilot	Do we plan to expand this activity?
Information need	How critical is the evaluation information for making near-term decisions?
Improvements	Would evaluating this activity likely result in recommendations for programmatic improvement?
Use	Is it likely that results or recommendations from this evaluation will be used by the intended audiences?

This list is not intended to be comprehensive, nor does the order imply that one criterion is more important than another. You may also identify criteria not on this list. We leave it up to your team members to decide what is important to you in deciding what to evaluate.

Let's check in with Sofia and Anthony to see how they develop and apply prioritization criteria.

Vignette 4 – Let's Get Picky

Prior to the second meeting of the planning team, Anthony prepared a draft list of criteria. He also distributed a set of Activity Profiles revised after team discussions during the kick-off meeting, followed by subsequent discussions with stakeholders.

Anthony: Remember, our task is to choose activities to evaluate across all program components so that we have a broad picture of the program at the end of five years. In our last meeting, we refined the draft logic model I presented and discussed some of our program's activities in detail, as summarized in the Activity Profiles in your packets. This time, we'll prioritize the activities as possible candidates for evaluation according to criteria we develop together. Any questions?

Epidemiologist: Will we have different criteria for the different components? For example, it seems like criteria that fit infrastructure activities might not apply to services activities.

Anthony: Excellent point. We'll be looking at activities within each of the major program components separately, so there's no reason we need the same criteria for each component. On the first page of your handout is a draft list of criteria I've pulled together. Please take a few minutes to look this over. *(Group members review draft criteria.)*

Anthony: Let's begin with the infrastructure criteria. What's important to consider when deciding which infrastructure activities to evaluate?

Epidemiologist: For an evaluation of our surveillance activities, I'd say Information Need is quite important. There are a number of decisions we're trying to make about what data to analyze in the near term versus the long term so I see Information Need as a criterion that could help us identify surveillance activities that are high priority for evaluation.

Anthony: That makes sense to me. What about activities relating to the services strategies?

American Lung Association Representative: I'd like to make sure we apply the criterion of Sustainability in our prioritization process for our home trigger reduction activities. We really need to think about how to engage payers on this intervention.

Anthony: Are there any criteria we should remove or add? Do some apply to all of the components?

Medical Association Representative: Sure. Cost applies to everything. We could prioritize resource-intensive activities for evaluation. Better yet, we could identify activities that are absolutely essential to our success. I'd vote for dropping Cost as a criterion and adding something like Importance. Information Need and Importance can easily be applied to all our activities.

Sofia: With my program hat on, I'd like to include the criterion Challenges. If there are activities within our program that have faced difficulties getting launched or sustaining themselves, I'd want to pay some attention there. Evaluation could provide information we need to improve the situation.

The group continues until a final list of criteria has been selected and each activity has been ranked as high, medium, or low priority against each criterion. Those activities ranked highest across multiple criteria are the evaluation candidates to be considered for inclusion in the strategic evaluation plan.

Did You Notice...?

Vignette 4 – Let’s Get Picky

1. As the lead evaluator, Anthony does much of the upfront work to prepare for evaluation planning team meetings. This helps him to become familiar with the program, while also making sure the meetings run smoothly and don’t go over the scheduled time limits.
2. An important role Anthony plays is encouraging discussion and facilitating development of consensus among team members. He also offers his opinion and expertise.
3. The activities Anthony plans for the evaluation planning team do not require evaluation expertise, but rather team members’ sound knowledge of the program and its activities. Members of the evaluation planning team do not need to be trained evaluators. They need to be familiar with the state asthma program, willing to learn about evaluation, and ready to commit their time to the strategic evaluation planning process.
4. Anthony gave team members a list of possible criteria to use in choosing which aspects of the asthma program to evaluate. However, he recognizes that only those involved in the program can determine the criteria that are most important to them.
5. The group chose to select a limited number of criteria in order to make the prioritization process more manageable. In a priority-setting process such as this, deciding which criteria *are not* important is just as vital as deciding which ones are important to the team

The end result of the discussions modeled in Vignette 4 will be a table similar to that shown in **Table 2.3**. In this case, the evaluation planning team decided to apply qualitative ratings (high, medium, low) to each activity based upon every criterion kept or added from Anthony's draft list (although these could easily be converted to numerical values to facilitate calculation). They then examined the general pattern of these ratings to identify activities that “rose to the top” for evaluation (indicated by shaded rows in Table 2.3). Those activities rising to the top are their priority evaluation candidates.

Table 2.3 Activities Rank Ordered by Criteria

Activity	Criteria			
	Information Need	Sustainability*	Importance	Challenges
Surveillance				
Identify and fill gaps in existing data	High		High	Medium
Assess data quality	Medium		Medium	Medium
Analyze data	Low		High	High
Disseminate findings	High		Low	Low
Advocate for improvements in data quality	Medium		Low	Low
Respond to data requests	Low		Medium	Medium
Strategic Partnerships				
Coordinate asthma-related activities among partners	Medium	Medium	High	High
Identify membership gaps and recruit	High	Low	High	High
Maintain membership involvement	Low	High	Low	Low
Provide forum for networking and sharing among partners	High	Low	Low	Low
Services and Health Systems				
School and Clinical Care Coordination	High		High	High
Asthma Triggers in Homes	High		Medium	Medium
Allergy and Asthma Essentials for Childcare Providers	Medium		Low	Low
Little Lungs Breathing	Medium		Low	Low
Medicare Policy Change	Low		High	High
Open Airways	Low		Medium	Medium
Provider adherence to guidelines	Low		Medium	Medium

Note that in Table 2.3 it is not immediately clear whether an activity scored high-medium-medium should be ranked higher than one scored low-high-high. Both would total 7 in a quantitative ranking, where high = 3, medium = 2, and low = 1. As you develop your criteria, you may want to consider whether some criteria are more important to you than others or whether you want to establish a threshold for one or more criteria (e.g., to be considered as a

priority candidate an activity must score at least “medium” on the criterion Importance). If you establish some ground rules ahead of time, you will more readily come to agreement as you rank your activities, and you will be in a better position to document your decisions.

At this point you have generated a priority list of evaluation candidates. Consider this list in light of the state asthma program logic model (introduced in Figure 1.2) or a logic model you have developed for your program. What types of activities are you including? What outcomes are represented by those activities? Which pathways are you considering? Viewing your list of evaluation candidates through this “lens” can help you focus on the bigger picture of how your activities map against the “common vision” of state asthma programs.

In the next two steps, you will review and modify the list of evaluation candidates. First, you will consider potential **EVALUATION DESIGNS** and resource requirements for each priority candidate to determine what is feasible. Then you will look across your list to make sure you have a strategy for appropriately sequencing and mixing your proposed evaluations. Your goal at the end of this process is to have an evaluation strategy that yields the most comprehensive and useful information possible while using your evaluation resources wisely.

Step D – Consider Evaluation Design Elements

Now that you have a list of your priority evaluation candidates, it is time to think about how you might evaluate them.

At this stage, there is no need for the detailed information that you will include later in your **INDIVIDUAL EVALUATION PLANS** (see Chapter 3). For now, you need a broad strategy and ballpark estimates of resources required. This information will help the evaluation planning team decide how many evaluations can be conducted in a given year and when it is most appropriate to conduct each.

Specifically, for each priority evaluation candidate, you will need to:

1. Generate **EVALUATION QUESTIONS** of interest.
2. Sketch out possible evaluation designs and data collection methods.
3. Estimate the resource requirements and feasibility of conducting the evaluation.

Generate evaluation questions. Brainstorm possible evaluation questions by asking the evaluation planning team what is most important to know about each priority evaluation candidate. As you generate questions, consider the entire continuum of the logic model. For example, you may want to know whether the activity is conducted in the manner intended (a process question), or to what extent it is contributing to programmatic outcomes (an outcome question). Following are some examples of evaluation questions you might consider.

This section corresponds with Steps 3–4 of the CDC Framework:
→Focus the Evaluation Design
→Gather Credible Evidence

The product of this step is a table of possible evaluation questions connected to evaluation designs, data collection methods, and resource considerations for each priority candidate.

- **Process/Implementation.** In what ways was the activity implemented as intended? How did implementation differ from the original plan? What were the barriers/facilitators to implementation? How can implementation of the activity be improved? To what extent are there adequate resources (e.g., financial, personnel, expertise, partner relations, etc.) in place to implement the activity?
- **Outcome/Effectiveness.** To what extent did this activity lead to successfully achieving the stated program goals? What types of participant outcomes have been achieved? What types of long-term outcomes can be attributed to this activity? What unintended outcomes (positive or negative) occurred? What did the activity cost in relation to the benefit observed?

Table 2.4 may help you organize your questions. We recommend that you aim for no more than five questions per evaluation candidate at this stage. If you have difficulty narrowing down the list of potential questions, consider the following:

- How would a sound answer to this question help the program?
- How important is this question to program staff and stakeholders?
- Would the answer to this question lead to program improvement?

If you have difficulty reaching agreement among team members, you can start with a longer list and then assign a priority score (high, medium, low) to each evaluation question based on considerations such as the three presented above. Below (in Table 2.4) we provide an example of what a completed evaluation question worksheet would look like for one priority evaluation candidate residing under each major program component from Table 2.3. We acknowledge that narrowing the scope of an evaluation may be challenging. But tackling this issue as a group early on will help you focus your evaluation resources.

Table 2.4 Example Evaluation Question Development Table (partially completed)

Evaluation Candidate	Question Type	Questions	Question Priority (High Med Low)
Surveillance			
Identify and fill gaps in existing data	Outcome	To what extent does existing surveillance data in the state provide information useful for targeting interventions?	High
	Process	What measures have we taken to identify gaps in our asthma surveillance data over the past 2 years? Are these activities sufficient?	High
	Process	What steps have we taken to fill the gaps we have identified in our surveillance data? To what extent have we been able to fill these gaps?	High
	Outcome	To what extent do our major program stakeholders value the information contained in our asthma surveillance databases?	Low

Evaluation Candidate	Question Type	Questions	Question Priority (High Med Low)
Strategic Partnerships			
Engage strategic partners	Process	To what extent does the asthma program interface with health systems and payers in the state?	Low
	Process	To what extent are our partnerships strategically focused on specific outcomes?	Medium
	Outcome	To what extent are resources leveraged among partners to accomplish our goals?	High
Services and Health Systems Strategies			
School and Clinical Care Coordination	Process	How well does the electronic system function?	High
	Process	To what extent is information being exchanged and used in a timely fashion? Where this does not occur, why?	High
	Outcome	To what extent has information exchange improved between clinics and schools?	High
	Outcome	How has our intervention contributed to changes in the percentage of school children with asthma who have seen a primary care provider in the past year for a regular medical exam?	Medium

Define evaluation designs, data collection methods, and timeline. The next step in developing an evaluation strategy is to sketch out possible methods that you can use to answer the potential evaluation questions you’ve identified. Remember, this is rough, preliminary planning at this stage to help you develop an overall strategy. Once you have your evaluation strategy, you will develop much more precise and detailed designs for each individual evaluation (see Chapter 3). At this stage, briefly consider the following:



1. **Evaluation designs.** Many **evaluation designs** are possible, including **EXPERIMENTAL DESIGNS** (e.g., randomized controlled trials), **QUASI-EXPERIMENTAL DESIGNS** (e.g., pre-post test with a comparison group, interrupted time series, regression discontinuity), and non-experimental designs (e.g., case study, post-test only) (Trochim, 2006). We encourage you to consult additional material suggested in Appendix G for more information about evaluation designs. Your Evaluation Technical Advisor is also a good source of advice.
2. **Data collection methods.** Data collection strategies may include: use of existing data (i.e., secondary data collected by your program or by another agency); abstracting information from existing documents; and collecting new data through surveys, interviews, and focus groups. As you and your evaluation planning team members consider alternative evaluation designs and data collection methods, you should keep in mind what the intended users of the evaluation will view as “credible evidence.” For example, some **AUDIENCES** may view **QUANTITATIVE DATA** as more accurate and valid than **QUALITATIVE DATA**, whereas others may place greater weight on stories that come from intensive and focused case studies employing qualitative data collection. **MIXED-METHOD DESIGNS** that combine quantitative and qualitative data collection methods are also an option.

3. **Timelines.** You will need to consider when data collection should occur. The optimal time to collect data will be driven by several factors:

- *Information need.* Are there any programmatic decisions pending (for the state asthma program or your partners) that the evaluation could help to inform?
- *Design.* If you have selected a design that requires **BASELINE DATA** and **FOLLOW-UP DATA**, your data collection schedule will be determined in large part by the timing of the activity.
- *Maturity.* What outcomes are reasonable to expect at different points in time?

Consider resource requirements and feasibility of data collection. After you have identified potential evaluation designs and data collection methods, you need to step back and consider the resource requirements and feasibility of implementing what you have proposed. The following might be helpful to consider:

- What are the resource requirements (personnel and funding) for each design/data collection activity? Detailed budget data are not needed at this stage, but you may want to categorize each as a low-, medium-, or high-level resource activity.
- How feasible are the evaluation design and data collection methods proposed? Will you have the support you need to ensure a high-quality evaluation that meets the standards outlined in the CDC Framework— **UTILITY**, **FEASIBILITY**, **PROPRIETY**, and **ACCURACY**?
- What level of expertise exists within the state asthma program or among your partners to carry out the proposed evaluation design and data collection?
- Do you need to develop data collection instruments or are there existing instruments you can use? What resources will you need to develop and test the instruments?
- Is the existing technological infrastructure in place sufficient to carry out the evaluation? Will you need to purchase access to data collection software or services?

Table 2.5 will assist you and the evaluation planning team in organizing your discussions around possible designs, methods, timelines, and resources. You may want to complete one for each major program component (i.e., infrastructure, services, and health systems).

Table 2.5 Example Evaluation Design and Data Collection Summary (partially completed)

Question	Possible Evaluation Design(s)	Potential Data Collection Methods	Possible Data Sources	Data Collection Begins	Final Results Due	Resources Required
Surveillance What measures have we taken to identify gaps in our asthma surveillance data over the past 2 years? Are these activities sufficient?	Case-study	Document review; Semi-structured interviews; Online survey	Surveillance work plans; Asthma epidemiologists; Surveillance data users	Year 3	Middle of Year 4	Modest
Strategic Partnerships To what extent does the asthma program interface with health systems & payers? To what extent are our partnerships strategically focused on specific outcomes?	Case-study	Document review (meeting logs, agendas); key informant interviews	Staff calendars Meeting notes	Year 2	Year 2	Modest
Health Systems To what extent has information exchange improved between clinics and schools?	Pre-post (with comparison)	Surveys or interviews?	Clinic managers, school nurses	Baseline collection ASAP	End of Year 3	Modest

Vignette 5 – A Balancing Act

The agenda for this fourth meeting is to discuss the feasibility of conducting the proposed evaluations and potential use of the evaluation findings. Prior to the meeting, Anthony prepared a table that lists the evaluation questions the group developed during Meeting 3, as well as some suggested evaluation designs, data collection methods, and data sources that could be used to answer the evaluation questions posed by the group. Additional columns on the table will be completed by the group to capture when data collection would begin, the date evaluation results are needed, and estimates of resources needed and possible partner contributions. We join the group midway in their discussion.

Anthony: As we look at all of the evaluation candidates, we see a number that will be resource-intensive or require that we get going right away. It's probably not feasible to do all of these evaluations. Are there some of our candidates where the available data sources may be problematic and the results less accurate or reliable than we might want? What about proposed evaluations for which the results may not be all that useful, possibly because they'll come too late or because they don't address the complexity of the activity?

American Lung Association Representative: I think we could simplify the outcome evaluation of the Asthma Triggers intervention by not having a control group. That would mean at least one less inspection site. We'll still have pre-post data.

Epidemiologist: We could do this, and I'm right with you when it comes to reducing the workload. But, I'm concerned that eliminating the control group will not provide us with strong enough results to help us answer the causal question we posed.

Sofia: I agree. We'll have to include a control group, otherwise the findings won't be credible to outsiders who are looking to use or fund this intervention. Where else could we scale back, both in terms of cost and effort required right away?

Medical Association Representative: We are charting some new territory with the Clinical Care Coordination intervention, so we definitely could use some information to help fine-tune the intervention itself. I'm not so concerned with doing an outcome evaluation now, as the program itself is too new.

Anthony: That makes sense. A new intervention is likely to go through quite an evolution, which makes outcome data difficult to interpret. At this point focusing the evaluation on implementation issues will provide the most useful information and cut the costs somewhat.

Did You Notice...?

Vignette 5 – A Balancing Act

1. Anthony began the evaluation planning process by using normal language to talk about evaluation concepts, but over time he has introduced the evaluation terms that are a kind of short-hand used in the profession.
2. By this fourth meeting, team members are clearly comfortable using the evaluation jargon—terms such as **CONTROL GROUPS** and **PRE-POST DATA**. This is part of the capacity-building that helps asthma program staff and stakeholders become stronger evaluation partners.
3. Team members balance the feasibility of doing an evaluation with the level of evidence desired by intended users of the evaluation findings. The ALA representative suggests removing a control group from an evaluation to help reduce costs. However, Sofia and the Epidemiologist are concerned that doing so may compromise the likelihood that intended users will consider the evaluation findings credible enough to take action.
4. In balancing feasibility and utility considerations for the evaluation of the Clinical Care Coordination intervention, the group judged the utility of outcome data to be less important than the process data because the intervention is in the early phases of implementation. An evaluation of this intervention focused on implementation issues may then be feasible.

Step E – Develop a Cross-Evaluation Strategy

By now, you and your evaluation planning team have identified and prioritized evaluation candidates. For each candidate you have identified potential evaluation questions, designs, data collection methods, resource needs, and feasibility considerations. Now, it is time to package all the information you have into a coherent evaluation strategy for the next five years of your program. This involves developing a **CROSS-EVALUATION STRATEGY**. You will need to:

1. Check that you have included a good mix of evaluations related to each program component and that you have considered both **PROCESS EVALUATION** and **OUTCOME EVALUATION** questions.
2. Look across your priority evaluation candidates to identify data collection efficiencies.
3. Develop a timeline for carrying out the proposed evaluations and associated data collection activities.
4. Consider whether sufficient resources and skills are present to support all these activities.
5. Develop a plan for enhancing your capacity to carry out your proposed evaluations.

Further detail is provided on each of these topics below. **Table 2.6** summarizes considerations involved in looking across your proposed evaluations for coherence and efficiencies.

Check for a good mix of evaluation activities and questions. This is an excellent time to double check that the mix of evaluations proposed is a good representation of the important elements of your program. Will the proposed evaluations give you the information you need along the way to improve your program? At the end of the five-year cooperative agreement, will you be able to demonstrate what you have accomplished?

Identify data collection efficiencies. Look across all your proposed evaluations to identify areas where you can integrate and synthesize across the priority evaluation candidates. Can you modify data collection activities to collect data to support more than one evaluation question? Pay special attention to your need for baseline data as you consider where you can combine efforts.

Develop a timeline for the entire cooperative agreement cycle. You have already considered the optimal timing of data collection activities for each priority evaluation candidate. Now you need to revisit the timeline in light of all your proposed evaluations. We recommend that you develop a timeline indicating the duration of each proposed evaluation along with key milestones for each. When you place all of the proposed evaluations together on one timeline, you will be better able to assess the feasibility of what you have proposed.

This section corresponds with Steps 3–5 of the CDC Framework:
→Focus the Evaluation Design
→Gather Credible Evidence
→Justify Conclusions.

The product of this step is a strategy that includes a sequence of potential evaluations to conduct over the cooperative agreement lifecycle.

Table 2.6 Issues to Consider When Looking Across Proposed Evaluation Strategies

Area	Definition	Issues to Consider
Evaluation Design	What evaluation designs are proposed?	▪ Will a proposed evaluation design be suitable for answering multiple evaluation questions?
Data Collection: Target Audience	From whom is information being collected?	▪ If several data collection strategies have the same target audience, can you collect information for more than one purpose using a single data collection tool? ▪ Are data collection activities concentrated too heavily on one target audience? ▪ Can burden be shared more equitably?
Data Collection: Timeline	When is information being collected?	▪ How can evaluation data collection needs be integrated into the program timeline? For example, if baseline data need to be collected, program activities may need to be delayed. ▪ If information on different evaluation activities needs to be collected at the same time, do you have the resources to conduct multiple evaluation activities simultaneously?
Data Collection: Source	From where is information being collected?	▪ Can the same data source be used for multiple evaluation activities? ▪ Can a single source be modified or enhanced to support your strategies for the future?
Who	Who will conduct the evaluation activity?	▪ Do you have the personnel and resources to conduct the evaluation strategies you prioritized? ▪ Do they have the necessary skills and expertise or how could they obtain these skills? ▪ Can you leverage additional evaluation assistance from partners?
Analysis	How will the information from the evaluation be analyzed?	▪ Who will do the analysis? ▪ Do they have the necessary skills and expertise or how could they obtain these skills? ▪ Can you leverage additional analytic capability from partners?
Use	How will the information from the evaluation likely be used?	▪ Will the information be provided in time to inform decisions? ▪ Who will use the information provided? ▪ Are there capacity-building activities that need to be conducted with intended users to increase the likelihood that results will be used?

Vignette 6 – Work Less, Reap More

Sofia and Anthony continue discussions with their Evaluation Planning Team to find efficiencies in data collection across evaluations for all components of the state asthma program.

Sofia: It seems we may still be stretched a bit thin conducting all of these evaluations. I'd like to discuss ways to integrate, coordinate, and economize across the entire set.

Anthony: Agreed. Looking at our priority evaluation candidates in surveillance, partnerships, and interventions, can we find ways to increase our efficiency?

Epidemiologist: We definitely want to identify how we're doing on filling gaps in our surveillance data. I originally thought that a survey of data users would contribute helpful information. It could, but I worry that it might not give us specific enough information to know how to respond.

Anthony: Focus groups, either in person or by telephone, might be an efficient way to get this information. You can obtain multiple perspectives about what is needed and how best to respond. Also, you may find that the dialogue among participants raises issues and solutions that may not have come to the surface with a survey.

Epidemiologist: Yes, that's a good point. A few telephone focus groups would be fairly inexpensive and would allow us to clarify respondents' comments.

Sofia: You could tack on a few questions about whether the data are used to target interventions. That would be a way to address some of the other surveillance evaluation questions we had. You know, Melinda on my staff would make an excellent focus group facilitator, especially if she had some focus group training.

Anthony: Let's check on her interest. Maybe we could support her to take a workshop or course on facilitation techniques. What about partnerships? Is there a way to simplify data collection there?

American Lung Association Representative: Yes, I think so. A priority partnership question has to do with how CDC-funded programs leverage additional resources. I think we could make some phone calls to the directors of those programs to find out what they're currently doing to support asthma and what they see as untapped potential.

Medical Association Representative: I confess that I'm not hesitant to request that the School and Clinical Care Coordination intervention monopolize the remaining resources.

Anthony: All of the evaluation questions for that intervention focus on data collected from school nurses and clinic office managers, so that's efficient. I worry about overburdening the school nurses and office managers—we should brainstorm ways to make this as painless as possible for them.

American Lung Association Representative: I'd like us to remain open to the possibility of evaluating the other intervention – Asthma Triggers. The initial walk-thru inspections that are part of the intervention itself serve as baseline data. Some post walk-thru inspections and interviews with the families would be very informative. If we can postpone the decision, there may be some year-end funds we could contribute.

Did You Notice...?

Vignette 6 – Work Less, Reap More

1. The Evaluation Planning Team explores how to economize and leverage resources without sacrificing the utility and accuracy of the evaluation findings. For example, Sofia suggests adding a few questions to an already planned data collection activity (the focus groups) to answer a related evaluation question. The Epidemiologist thinks through what type of information will be most useful for answering the evaluation questions at hand—realizing that too little information could end up being useless (e.g., survey results that lack specificity). He proposes an alternative, more feasible and more cost-effective approach that has the potential to yield more useful information.
2. In recommending focus groups with data users, Anthony points out that, in addition to being efficient in terms of time and expense, stakeholder focus groups have an advantage over surveys in terms of providing both an exchange of ideas and a critique of proposed options.
3. One way to extend your evaluation resources is to build capacity in house. Money that could be spent hiring a professional focus group facilitator to conduct the data user focus groups might better be spent supporting a promising staff member to gain that skill.
4. Paying attention to respondent burden is important. Anthony is conscious that the Clinical Care Coordination intervention itself demands considerable extra time from school nurses and clinic office managers beyond their routine responsibilities. Data collection for the evaluation component of the intervention needs to be efficient, possibly even integrated into the intervention itself through participant forms and checklists, for example.
5. Leveraging partner contributions is a good way to extend your evaluation resources. For example, the ALA Representative identifies an opportunity to evaluate a second intervention. His organization may even be able to contribute if the evaluation timeline can be pushed to year's end.

Do a reality check

- ✓ Will you have the resources—the funds, the people, the technology, and the skills—to properly collect, analyze, and interpret the data you are proposing to collect?
- ✓ Can you put “boundaries” on the breadth and depth of planned evaluations or re-prioritize the order and number of evaluations so that you can carry out your strategy?
- ✓ Will your strategy overall perform well against the evaluation standards in the CDC Framework—utility, feasibility, propriety, and accuracy?
- ✓ Do you have a plan to build evaluation capacity? Earlier, you considered what you might need to do to build or obtain needed evaluation skills and expertise. Look across the entire set of proposed evaluations and identify where and how you can incorporate your evaluation capacity-building activities. Add the capacity-building activities into your timeline.

If you have to make difficult decisions, try to avoid becoming discouraged or disappointed. Remember that you have embarked upon a very thoughtful and systematic process to decide what is most important to evaluate and how you will carry out the evaluations. Ultimately, we believe this strategic approach will lead to well-designed evaluations that produce high-quality findings. This may mean doing fewer evaluations but will also help ensure that those you do are of sound quality and generate information that is available when you need it.

Step F – Promote Use through Communication

Your strategic evaluation plan will help you design and conduct evaluations that collectively have the greatest potential to help your program. To gain maximum benefit from evaluation it is imperative that the results of your efforts are used to support program improvements. Communication is essential to this goal. Thus, an important consideration is how you will communicate with key audiences about the progress being made on your strategic evaluation plan activities. Although this step occurs late in the process of developing a strategic evaluation plan, knowing how new strategic evaluation planning activities and progress will be communicated with the evaluation planning team and beyond will be important for facilitating involvement and use of evaluation findings over the cooperative agreement cycle. Therefore, you may need to at least touch on communications in your early meetings with your evaluation planning team.

This section corresponds with Steps 6 of the CDC Framework:
→ **Ensure Use and Share Lessons Learned.**

The product of this step is a strategy for communicating progress and lessons learned about strategic evaluation activities and products.

We suggest that you develop a **COMMUNICATIONS PLAN**. This plan should link directly to the strategic evaluation plan activities and should be included as part of your written strategic evaluation plan. Multiple audiences will be interested in knowing where you are in the strategic evaluation planning process and, later, what you have learned from conducting your evaluations. These audiences include, but are not limited to: the NACP, the evaluation planning team, other

state asthma programs, sister programs within the state health department, leadership in the state health department. For each activity and product, consider who the audience might be, and challenge yourselves to think outside the box. Who has a need to know? Who might be able to help you act on the results? For each audience, consider the best format for sharing information. Will they respond best to detailed results or high-level overviews? Is a written or oral format better?

We have included **Table 2.7** as an example to help you in creating your own communications plan. It is important to note that this overarching communications strategy should focus on high-level information about the strategic evaluation plan itself—progress on developing, modifying, and implementing the plan—as well as a summary of the findings across all of the evaluations conducted over the entire life of the cooperative agreement.

Table 2.7 Example Communications Plan (partially completed)

Audience 1 (e.g., Evaluation Planning Team)				
	Purpose	Possible Formats	Timing	Notes
✓	Inform about specific upcoming evaluation planning activities	Email	Bi-weekly	
✓	Keep informed about progress of developing the strategic evaluation plan	Email	Monthly	
✓	Present complete/final strategic evaluation plan	Power-point presentation	End-of year meeting	Consider receiving general formative feedback on process to date
✓	Notify of need to update strategic evaluation plan	Email	As need arises	
✓	Share revisions made to strategic evaluation plan	-----	-----	Will already be aware of this.
✓	Provide general update on status of evaluations as proposed in strategic evaluation plan	Email	Quarterly	
		Informal presentations	Bi-monthly meetings	
✓	Document and share synthesis of findings and lessons learned during cooperative agreement lifecycle	Final report	End of cooperative agreement	Use working sessions to generate ideas for specific use of findings in future plans focused on asthma
		Formal presentation		
		Working sessions		
✓	Acknowledge contributions/thank	Formal thank you note	End of cooperative agreement	From division director?
Audience 2 (e.g., Program Staff)				
	Purpose	Possible Formats	Timing	Notes
✓	Inform about specific upcoming evaluation planning activities	Email	Bi-weekly	

Adapted from Russ-Eft and Preskill *Evaluation in Organizations: A Systematic Approach to Enhancing Learning, Performance, and Change*. New York, NY: Basic Books, 2001; pp. 354-357.

Step G – Write and Revise Your Strategic Evaluation Plan

Congratulations! You have now generated all of the information necessary to write your strategic evaluation plan. An outline of the content you should include in this plan is provided in **Appendix E**. We encourage you to share a draft of the plan with your NACP Project Officer and Evaluation Technical Advisor prior to broader dissemination.

The strategic evaluation plan should be considered a living document. As you will have noticed, there is considerable guesswork and uncertainty involved in creating a strategic evaluation plan. Evaluation planning is a dynamic process. New information and unanticipated events are normal. Because of this, it is important to review and revise the plan with the evaluation planning team at regular intervals. You may also expect that the individual evaluation planning teams will refine the planned evaluations as they add their perspectives and expertise to the process.

We recommend that you work with the evaluation planning team to review the strategic evaluation plan at least annually, with consultation from your NACP Project Officer and Evaluation Technical Advisor. By revisiting the plan periodically as your program grows and matures, you can keep the plan working for your program.

What Have We Learned?

The purpose of a strategic evaluation plan is to systematically plan for evaluation. Over time, the set of evaluations you conduct will show how well your program is working and what changes are needed to make your program work better. The better the plan, the better your success in making evaluation work for your program.

Planning strategically for evaluation over a five-year period is different from developing an evaluation plan for an individual evaluation activity. We may look at some of the same things (information needs, evaluation questions, evaluation design options, data sources, data collection methods, timeline, and budget), but the emphasis is different. For strategic evaluation planning, we are looking at which aspects of our program are most important to evaluate given our resource constraints, and how to prioritize and sequence those evaluations we choose to do. Development of an individual evaluation plan is the subject of the next chapter.

NOTES

Chapter 3. Planning for an Evaluation: The Individual Evaluation Plan

After reading Chapter 3, users should be able to:

- 🌀 Describe the purpose of individual evaluation plans
- 🌀 Recognize and understand the content of an individual evaluation plan
- 🌀 Apply the steps of the CDC Framework to developing an individual evaluation plan

Now that the evaluation planning team has developed a strategic evaluation plan, work can begin on developing the details of plans for individual evaluations that will be conducted over the remaining time of the cooperative agreement. As we saw in Chapter 2, the strategic evaluation plan contains preliminary information on a number of proposed evaluations that are considered to be high priorities for the state asthma program. At this stage, more detailed planning is needed.

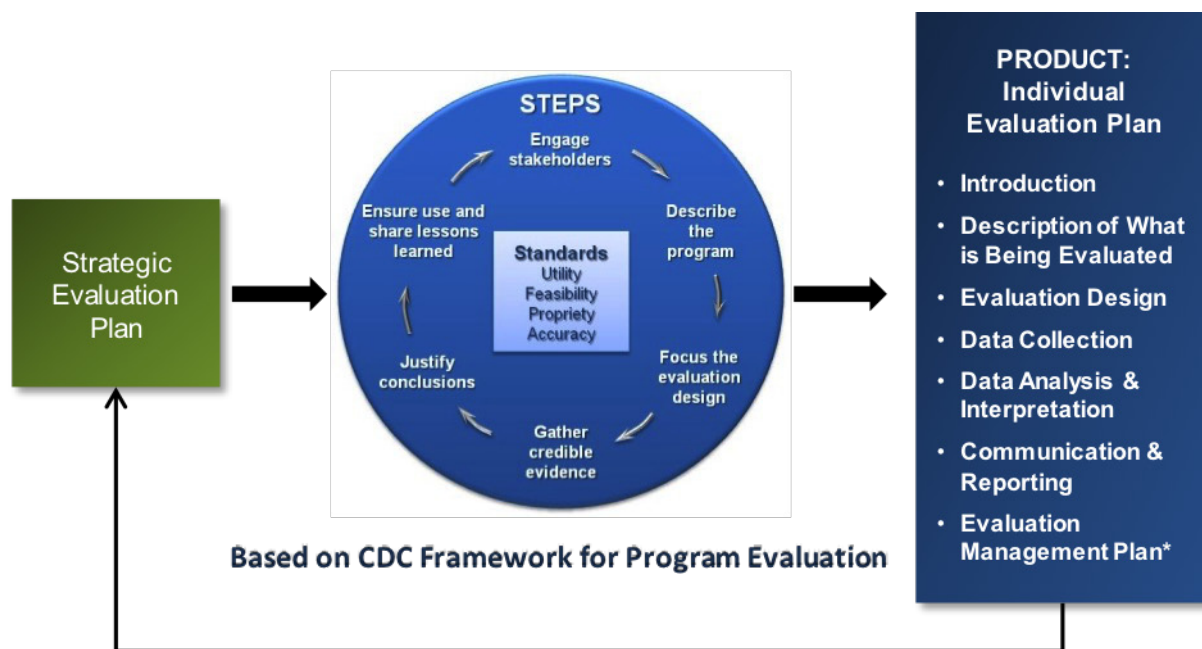
What is an individual evaluation plan? The details for each evaluation proposed in the strategic evaluation plan will be documented in an **individual evaluation plan**—a detailed plan that documents a shared understanding among the members of an evaluation team about the evaluation to be performed. Evaluation plans of this type become a comprehensive roadmap for everyone working on a given evaluation and ensure agreement on the evaluation purpose, questions, design, data collection, data analysis and interpretation, and plans for disseminating the findings. Note that it is not necessary to develop all of the individual evaluation plans at once. Plans can be developed as needed according to the sequence of evaluations outlined in the strategic evaluation plan. You may also have existing individual evaluation plans that should be incorporated into your new strategic evaluation plan.

How do I develop an individual evaluation plan? In Figure 3.1 we illustrate the overall process for developing an individual evaluation plan. You have already gone through a similar process for developing your strategic evaluation plan. Now you will use your strategic evaluation plan to focus in greater detail on a particular evaluation. The CDC Framework can guide you in refining or developing an individual evaluation plan as shown below. Subheadings tie directly to Steps 1 through 6 in the Framework and boxes to the right of each section indicate what product(s) will result from each step. An annotated outline of an individual evaluation plan is included as **Appendix F**. As you create the plan, and certainly once it is completed, you may wish to recruit an external reviewer—for example, your Evaluation Technical Advisor, a fellow evaluator from another state—to bring an additional perspective to ensure that your evaluation plan is of the highest quality.

Note that we use the phrase “what is being evaluated” to refer to the “subject” of an individual evaluation plan. While you could choose to evaluate your program as a whole, the scope of your evaluations is more likely to be something smaller, such as a program component, activity, process, policy, intervention, or intervention component. For this reason, in Framework Step 2

(and throughout this section) we use the broader phrase “what is being evaluated” rather than “program” to cover these multiple possibilities.

Figure 3.1 Individual Evaluation Planning Process and Products



* The CDC Framework does not address development of an evaluation management plan. However, it is important that your individual evaluation plans include explicit discussion of how the evaluation will be managed. Following our discussion of the Framework steps below, we include a description of the contents of the management plan.

Step 1 – Engage Stakeholders

When a variety of stakeholders are involved in evaluation planning from the outset you can: (a) plan and conduct evaluations that more closely fit your collective needs, (b) have greater buy-in for the use of evaluation results, and (c) avoid later critiques of the evaluation or the program by showing a transparent and open evaluation process.

A small evaluation planning team was engaged in developing the strategic evaluation plan. Now it is time to engage another group of stakeholders in creating each individual evaluation plan. This group of stakeholders includes individuals who are interested in and perhaps affected by the specific evaluation to be carried out.

The product of this step is a list of stakeholders to engage and a rationale for their involvement.

There are three major categories of evaluation stakeholders to consider (Russ-Eft and Preskill, 2001, pp. 141–143):

- **Primary stakeholders.** Individuals who are involved in program operations and who have the ability to use evaluation findings to alter the course of a program. Examples of primary stakeholders include program staff and managers as well as funders.
- **Secondary stakeholders.** Individuals who are served by the program and therefore are likely to be affected by any changes made as a result of the evaluation findings. Examples include program participants (e.g., workshop or training attendees) or others who are directly reached by your program.
- **Tertiary stakeholders.** Individuals who are not directly affected by programmatic changes that might result from the evaluation, but who are generally interested in the results. Examples include legislators and other state asthma programs.

A final set of stakeholders—often overlooked but important to engage—are program critics. These are individuals or groups that may oppose the program based on differing values about how to create change, what changes are necessary, or how best to utilize limited resources. As noted in the CDC Evaluation Framework (*MMWR*, 1999), engaging opponents of the program in evaluation can strengthen the credibility of your results and potentially reduce or mitigate some of the opposition.

Multiple stakeholder perspectives can contribute to rich and comprehensive descriptions of what is being evaluated, while also facilitating a well-balanced and useful evaluation. Your stakeholders may also be engaged in carrying out the evaluation or in implementing its recommendations.

Step 2 – Describe What is Being Evaluated

Developing a clear description of what you are evaluating is critical in developing a useful evaluation as well as in strengthening the program or activity itself. We have found that this step (in particular, developing a logic model) is invaluable for: (a) identifying any gaps in logic about how the program or activity is intended to operate and (b) revealing divergent views between stakeholders about intended results.

Your strategic evaluation plan includes a logic model for your program as a whole. When developing an individual evaluation plan it is important to develop a logic model that specifically describes what is being evaluated in the individual evaluation plan.

The product of this step is a logic model of what is being evaluated accompanied by a text-based description.

We strongly encourage you to develop a text-based description to accompany the logic model. This description should explain how what is being evaluated contributes to accomplishing the intended outcomes. It should also describe important features of what is being evaluated, such

as the context in which it operates, the characteristics of the population it is intended to reach, its stage of development (e.g., a **PILOT** activity versus an activity in place for a number of years). Such descriptions will be valuable for your own records as well as for other state asthma programs that might be interested in implementing activities similar to those you have evaluated. With a clear description of the activity and context in which it resides, other state asthma programs will be better able to determine how likely it is that the evaluation results you obtained relate to what they would see if they chose to implement this same activity in their state.

Step 3 – Focus the Evaluation Design

The selection of an evaluation design is driven by your evaluation questions. Match your design to the questions you need to answer and you are more likely to see use of the results while maximizing your evaluation resources.

When developing an individual evaluation plan, you will work with your stakeholder group to refine or revise the general ideas proposed in your strategic evaluation plan. The task now is to make final decisions about the specific evaluation questions.

The products of this step include a final set of evaluation questions and the evaluation design that will be used to answer the questions.

As you review and discuss the questions and evaluation designs you will use, it is important to ask individuals who are likely to use the information from the evaluation to explain *how* they intend to use the findings and what types of information (e.g., stories, quotes, quantitative measures) will be most valuable to them. Supplying intended users of the evaluation findings with information they do not find credible decreases the likelihood that actions will be taken on the findings. Using the Good Evaluation Questions Checklist can help ensure that your questions will produce actionable information. http://www.cdc.gov/asthma/program_eval/other_resources.htm.

Step 4 – Gather Credible Evidence

In developing your data collection approach, consider stakeholder information needs at varying points in time. Matching the data you are collecting to stakeholder needs will help to ensure that you have the information you need when you need it and that it will be used.

In this step you will work with your stakeholders to identify the data collection methods and sources you will use to answer your evaluation questions. For existing individual evaluation efforts, review your data collection plan in light of the work you did in your strategic evaluation planning process. Are there new data sources you may want to incorporate? Does the performance measurement system have relevant data? Do your methods meet your stakeholders' needs for information? Do you need to adjust your data collection timeline? Are there measures

The products of this step include data collection methods and indicators that will be used to answer your evaluation questions.

you might standardize across evaluations? For new efforts, you may want to build in a pilot test or more small-scale data collection efforts before conducting a more intensive effort. As you develop your data collection approach, it is critical to keep in mind why you are collecting the data and how you will use it. Being explicit about the use of data *before* it is collected helps conserve resources and reduces respondent burden.

Your stakeholders may also help identify **INDICATORS** that will be used to judge success. Let's say you have chosen to evaluate a relatively new intervention designed to educate health care practitioners about appropriate asthma management practices. You want to know to what extent the intended target audience is attending and completing the training. Your stakeholders decide that training attendance logs will be maintained. They recommend including the following specific indicators:

1. Attendance rate
2. Attendance rate by type of health care practitioner (nurses, physician assistants, physicians)
3. Proportion of attendees who complete the training
4. Proportion of attendees who complete the training by type of health care practitioner

You can see from this list of indicators that it will be important to have a question on the attendance sheet that asks attendees what *type* of health practitioner they are. Had you not discussed the indicators that will be used to determine the “success” of this intervention, it is possible this important piece of information would have been left off the attendance log.

Step 5 – Justify Conclusions

*Developing **PERFORMANCE STANDARDS** with your stakeholders can help with evaluation use by: (a) allowing you to have a shared vision as to what constitutes success, (b) making sure you know how to interpret the results of your evaluation (e.g., How successful were we? Where can we improve?), and (c) adding credibility to your results.*

Planning for data analysis and interpretation prior to conducting the evaluation is important to ensure that you collect the “right” data to fully answer your evaluation questions. Think ahead to how you will analyze the data you collect, what methods you will use, and who will be involved in interpreting results.

The products of this step include a set of performance standards and a plan for synthesizing and interpreting evaluation findings.

Part of this process is to establish standards of performance against which you can compare the indicators you identified earlier. You may be familiar with “performance **BENCHMARKS**,” which are one type of standard. In this example, a benchmark for the indicator “proportion of attendees who complete training” may be “More than 60% of attendees complete the training.” Standards often include comparisons over time or with an alternative approach (e.g., no action or a different intervention). It is important to note that the standards established by you and your

stakeholders do not have to be quantitative in nature. Regardless of whether your “indicators” are qualitative or quantitative in nature, it is important to discuss with evaluation stakeholders what will be viewed as a positive finding. The standards you select should be clearly documented in the individual evaluation plan.

Make sure to allow time for synthesis and interpretation in your individual evaluation plan. At the completion of each evaluation, you will want to be able to answer such questions as: Overall, how well does what is being evaluated perform with respect to the standards established in the individual evaluation plan? Are there changes that may need to be made as a result of the evaluation findings?

Let’s check in with Sofia, Anthony, and their Evaluation Planning Team as they tackle the criteria that will be used to measure the performance of the intervention they will be evaluating.

Vignette 7 – The Look of Success

Anthony: I'd like to talk to you about how to rate the success of the School and Clinical Care Coordination Intervention. As a reminder, we've decided to conduct surveys with clinic managers and school nurses before and after this intervention. Also, we decided to add medical record reviews (at participating schools and primary care clinics) at certain time points during the intervention. My question today is on what basis will we decide if the implementation of the intervention has been successful and that we are making a difference for children? Let's begin with the implementation. What are our expectations for the information exchange between schools and clinics? How will we know it is taking place as planned or that it needs fixing?

Medical Association Representative: The plan is to increase the amount of key communications between school nurses and health practitioners and to have the communication exchange occur in a timely manner. Of course we want the information exchanged to be both accurate and complete.

Anthony: Good. You just gave me three indicators of successful information exchange – timeliness, accuracy, and completeness. Let's begin with how we measure "timeliness". How quickly do you expect school nurses to report any asthma episodes or reduced activity to health practitioners? And vice versa, how fast do you want the clinics to notify the schools of any changes in the student's asthma action plan or medications?

American Lung Association Representative: Keep in mind that school nurses move from school to school. They won't be able to update information on a daily basis unless they train parent volunteers.

Anthony: Exactly. What's reasonable to expect? Monthly? Weekly?

Medical Association Representative: I think weekly would be good enough. Clinic staff will also need some time to do their part. Some days are just too crazy for this kind of data extraction and sharing.

Epidemiologist: It will be important to nail down exactly what type of information should be exchanged. Then medical records and clinic records can be cross-checked to make sure that the key information was communicated as intended.

Anthony: Absolutely, great thought. This record cross-check can then assess the time lag when information is shared.

Sofia: In terms of how much of a difference the intervention makes for students in the intervention schools, I know some other state programs have implemented something similar to this. We could find out how well it worked for them – how much did they reduce absenteeism and ER visits, for example? That would give us something to compare against. Also, we should probably find out over what time frame they measured these changes so we know what time frame is reasonable for measuring these outcomes.

Anthony: That's wonderful! The experience of other programs can help us set reasonable expectations or benchmarks for how well our intervention should work.

Did You Notice...?

Vignette 7 – The Look of Success

1. PERFORMANCE CRITERIA are used to judge processes as well as outcomes. Anthony prompts for performance criteria to judge how well the intervention was implemented, as well as to judge whether the intervention is making a difference for students.
2. Detailed definitions are critical. Anthony asks for a detailed definition of “timeliness” and the Epidemiologist points out the need to define “key information”.
3. The exact values selected as the standards (or benchmarks) can be drawn from past experience or research literature. Luckily Sofia is familiar with a similar intervention that was implemented in another state asthma program. Should relevant information be lacking, the evaluation planning team could agree on values that seem reasonable.

Step 6 – Ensure Use of Evaluation Findings and Share Lessons Learned

As we have seen, you can promote the use of evaluation findings by the actions you take throughout the planning process. Building a commitment to using evaluation results both internally and with your stakeholders is important. Sharing what you have learned will also add to our knowledge about what works when addressing asthma from a public health perspective.

Thinking about the use of your evaluation findings does not need to wait until your evaluation is completed and results are ready to be disseminated. Think early and often about how and at what points you can (and need to) make use of evaluation results. Pilot test results can be used to improve program processes. Baseline results can help to better target an intervention. Preliminary findings can help you refine data collection strategies in future rounds. Build in time to your schedule to ensure evaluation use. For example, will you have enough time after results are collected to develop an action plan for program improvement?

The product of this step includes a communication and reporting plan for the evaluation.

Dissemination of results and communication about lessons learned should not be an afterthought. To increase the likelihood that intended audiences will use evaluation findings for program improvement, it is important to think through how and with whom you will communicate as you plan and implement each evaluation, as well as after the evaluation has been completed. Your strategy should consider the purpose, audience, format, frequency, and timing of each communication (Russ-Eft and Preskill, 2001).

As you develop your plan, keep in mind the following considerations:

- Consider what information you want to communicate. What action do you hope each of the audiences will take based on the information you provide? Are you just keeping them informed or do you want them to act in some way? Tailor your communication plan accordingly.
- The audience will likely vary greatly across evaluations and also may change as the evaluation progresses. Think broadly about who to include in communication. For instance, at various points in time you may want to include program managers, individuals participating in planning the evaluation, legislators or funders, individuals affected by the program, or other state asthma programs.
- Formats can be formal or informal and may include a mix of email correspondence, newsletters, written reports, action planning sessions, briefings, and presentations. Formats may differ by audience and may also differ over time for the same audience as information needs change.
- Consider your communication strategies when estimating the resources that will be required to carry out the evaluation. If evaluation resources are limited, we recommend giving the greatest consideration to the information needs of the primary evaluation stakeholders (those who have the ability to use evaluation findings).

Pulling It All Together—How the Evaluation Will Be Managed

Many evaluations have run into difficulties, not because of poor design, but because of insufficient attention to how the evaluation is managed. A well-managed evaluation is more likely to result in usable findings.

You have just used the six steps of the CDC Evaluation Framework to develop an individual evaluation plan. Now it is important to assign responsibility for each major task in conducting the evaluation. An evaluation management plan is similar to a program work plan in that it describes *who* does *what* and *when* they should do it. Key elements to document in the evaluation management plan include:

- **The evaluation team.** The names, roles, and responsibilities for individuals who will implement the evaluation.
- **Data collection tasks.** The type of data that will be collected, the data collection/ compilation activities that need to be conducted, when they need to be completed, and who is responsible for each.
- **Data analysis tasks.** The data analyses that need to be performed and who will conduct them.
- **Communicating and reporting.** The purpose of communications, the audiences of interest, the communication formats, and the time and dates (or frequency with which) the communications will occur.
- **Timeline.** The timeline should include planning and administrative tasks as well as data collection/analysis tasks and information dissemination tasks. Developing a comprehensive timeline gives you the opportunity to check in advance for bottlenecks or sequencing issues.
- **Budget.** The resources that will be required to implement the evaluation (both monetary and staff) including any in-kind or volunteer resources that will be provided. This should be a much more detailed budget than the cost estimates in the strategic evaluation plan. If this budget far exceeds what you budgeted for in the strategic evaluation plan, then you will need to either reduce the scope of the evaluation or figure out other means to cut costs.
- **Capacity building.** Consider the types of skills and competencies that you and your stakeholders may need to implement your evaluation plan. Your CDC Evaluation Technical Advisor may be able to suggest resources to help you with evaluation capacity building.

Each of these items needs to be considered and documented in every individual evaluation plan. Refer to Appendix F for one example of how to document these decisions in your individual evaluation plan.

Module 2 of *Learning and Growing* provides a number of detailed strategies for successfully implementing all aspects of your evaluation, from tips about working with stakeholders to ideas for action planning. In addition to Module 2, you can find more resources on the NACP website: http://www.cdc.gov/asthma/program_eval/other_resources.htm. These include information about how to improve the cultural competence of an evaluation and templates for action plans and evaluation timelines.

Revisiting the Strategic Evaluation Plan

Once several of the individual evaluation plans have been created, you may find it necessary to revisit the strategic evaluation plan with the evaluation planning team. Adjusting the strategic evaluation plan based on specifications in the individual evaluation plans may mean that more or fewer evaluations can be conducted over the lifecycle of the cooperative agreement or that you may decide on a different sequence. We recommend updating the strategic evaluation plan at least annually. The changes you make to the plan, along with the rationale for those changes, should be documented.

What Have We Learned?

The use of evaluation findings is critical. Going through an evaluation process only to have the resulting report sit on a shelf is a waste of valuable time and resources. The process suggested in this chapter for developing an individual evaluation plan can help to strengthen use of evaluation results and keep our programs strong. And by documenting our evaluation processes, we can continue to learn about the best ways to evaluate *our* programs in *our* particular circumstances.

NOTES

Appendix A

Chapter Notes

Notes for Chapter 1

Evaluation and Your State Asthma Program

Program Evaluation (p. 1-1)

PROGRAM EVALUATION is defined as “the systematic collection of information about the activities, characteristics, and results of programs to make judgments about the program, improve or further develop program effectiveness, inform decisions about future programming, and/or increase understanding” (Patton, 2008, p. 39). Although many definitions of program evaluation exist, this definition has been adopted by the APRHB in part because of the emphasis it places on the systematic nature of evaluation as well as the importance of using evaluative information in decision-making.

Evaluation Capacity Building (p. 1-2)

Preskill and Boyle (2008) define **EVALUATION CAPACITY BUILDING** in the following way: “Evaluation capacity building involves the design and implementation of teaching and learning strategies to help individuals, groups, and organizations learn about what constitutes effective, useful, and professional evaluation practice.” The ultimate goal of evaluation capacity building is “sustainable evaluation practice—where members continuously ask questions that matter, collect, analyze, and interpret data, and use evaluation findings for decision-making and action” (Preskill and Boyle, 2008, p. 444).

Support for Evaluation (p. 1-2)

Below we present some of the ways that state asthma programs can support evaluation (Preskill and Boyle, 2008; Preskill and Portzline, 2008).

Showing leadership support for evaluation. It is critical that a program’s leaders are committed to evaluation and communicate this commitment to staff. You can be a leader for evaluation in your program by:

- Serving as a champion for evaluation
- Communicating the importance of evaluation to internal and external audiences
- Ensuring resources are dedicated to evaluation
- Demonstrating the value of evaluation by using findings to make decisions
- Using findings to improve or enhance program operations
- Publicizing how evaluation has helped the program
- Recognizing and rewarding engagement in evaluation activities

To develop leadership around evaluation, consider:

- Engaging staff and stakeholders in discussions about APRHB's and state expectations for evaluation in this program
- Compile stories about the use and value of evaluation results
- Identify information about *existing* evaluation resources, expertise, and data

Ensuring personnel, financial, and technological resources are available and dedicated to evaluation. Programs need dedicated resources to design and implement evaluations effectively. Resources go beyond monetary support to include both personnel (staff time and knowledge) and technology. Consider your program's needs and the availability of the following types of evaluation resources:

- ***State asthma program evaluator.*** This individual is a key source for evaluation expertise in the state asthma program. Each state asthma program is required to have the equivalent of one half-time evaluator.
- ***External evaluator.*** Additional evaluation expertise may be needed to supplement available personnel resources or evaluation expertise available in-house.
- ***Engagement of other state asthma program staff in evaluation.*** Other program staff have important roles to play in evaluation including providing data, engaging partners, participating in selecting an evaluation design, and disseminating findings. Supporting staff time for these activities can help to ensure that evaluation is not an undue staff burden.
- ***Evaluation professional development.*** All personnel involved in evaluation activities should be encouraged to seek out and engage in professional development activities. CDC can assist in identifying evaluation training and information resources of use to state asthma programs.
- ***Using technology for evaluation.*** Consider what technology exists or how it can be adapted to support evaluation. Technology needs may include resources for data collection, data analysis, and dissemination of evaluation findings. Technology can also be used to engage stakeholders who are spread out geographically in discussions or training about evaluation.
- ***Leveraging partners in evaluation.*** Consider assessing what expertise partners have in evaluation. Are there existing activities, personnel, tools, or other resources that you can use for state asthma program evaluation activities? Are there interns, technical assistance, or evaluation references that partners could share?

Demonstrating commitment to strategic evaluation planning. A written evaluation plan can help to ensure that your evaluations stay on track and focused. Planning for evaluation, however, involves a larger process—one that engages evaluation team members and other stakeholders and develops a shared vision of *what* evaluation activities should be done; *when* these activities

should be completed, *who* will conduct these activities; and *how* the activities should be accomplished, used, and shared.

Fostering an evaluation “culture.” Some program staff may view evaluation as a daunting prospect. Developing an evaluation “culture” in your organization means building trust around evaluation, valuing open communication, building evaluation into program activities, and using evaluation findings for program improvement. You cannot expect to change your organizational culture over night, but considering approaches such as the following may help you build evaluation into your organization:

- Brainstorm staff and stakeholder concerns about evaluation and ways to address these concerns.
- Engage staff and stakeholders in evaluation planning to build trust and maintain open lines of communication.
- Consider how evaluation findings will be used from the beginning. Strategic evaluation plans and individual evaluation plans should describe specific expectations for how evaluation findings will be used.

Maintaining communications to share evaluation results and lessons learned.

Communicating about evaluation is critical to ensuring that evaluation findings and lessons learned about “what works” are broadly used. Sharing results internally—with other state asthma programs and the national program office—and beyond has the potential to make an important contribution to public health practice. Internally, you should think early and often about who needs to receive evaluation information, the communication channels you have to share results, and what formats would best reach various evaluation audiences.

Notes for Chapter 2

Thinking Strategically: The Strategic Evaluation Plan



Strategic Evaluation Plan (p. 2-1)

Evaluating all aspects of a state asthma program at once is simply not possible. The cost alone would be prohibitive. Thus, the need for a high-level strategy—covering the lifecycle of your cooperative agreement—that helps you select and prioritize what to evaluate. Thinking strategically about evaluation will help you and your coworkers become more proactive about evaluation. It will help you determine where the greatest evaluation needs lie and the best sequence of evaluation activities to conduct using which methods. A *strategic evaluation plan* documents this long-term, high-level strategy for evaluating your program.

The strategic evaluation plan outlines proposed evaluation activities to be conducted over an extended period of time (such as the cycle of your CDC cooperative agreement). Your strategic evaluation plan will help ensure that your evaluation activities are conducted in an appropriate sequence, on a reasonable timeline, and within existing budget constraints. A well-developed strategic evaluation plan will guarantee that all components of your program receive attention, while also permitting evaluation of emerging issues as they arise. Where possible, work on the strategic evaluation plan should explore ways to institutionalize evaluation by building it into daily programmatic activities.



Prioritization Techniques (p. 2-7)

Of many established methods for conducting a prioritization process, we present several below.

The nominal group technique. A structured small-group discussion approach that uses voting and individual prioritization to arrive at decisions quickly while allowing for full participation of the group. (See *Gaining consensus among stakeholders through the nominal group technique* <http://www.cdc.gov/HealthyYouth/evaluation/pdf/brief7.pdf> for more details on the process.)

Criteria weighting. A decision-making process whereby items are prioritized according to agreed-upon criteria. The relative importance of each selected criterion is determined by assigning a ‘weight’ to each one. This approach can be complex but can be useful when different stakeholders have different views of what is important. The approach modeled in Vignette 4 on page 2-9 of this guide is a modification of this approach (National Association of County and City Health Officials, 1998).

The Simplex Method. Each participant in the process fills out a structured questionnaire to rate the items of interest. Average scores for each item are calculated and then summed across participants to rate the item (National Association of County and City Health Officials, 1998).

The Delphi Method. The Delphi Method is an iterative and systematic approach to developing consensus among a panel of experts (Black et al., 1999).

For a comparison of several of these techniques, additional information can be found at <http://www.cdc.gov/od/ocphp/nphsp/documents/Prioritization.pdf>

Notes for Chapter 3

Planning for an Evaluation: The Individual Evaluation Plan

Individual Evaluation Plan (p. 3.1)



When you are ready to begin evaluating one of the evaluation candidates selected for inclusion in your strategic evaluation plan, the next step is to develop a detailed plan that documents a shared understanding among the members of an evaluation team about the evaluation to be performed. We refer to these as *individual evaluation plans*. If you are working with a professional evaluator, s/he may refer to this type of plan as an *evaluation protocol*.

These plans provide important details about how you will implement specific evaluations cited in your strategic evaluation plan. Evaluation plans of this type become a comprehensive roadmap for everyone working on a given evaluation activity to ensure agreement on key evaluation questions, methodologies to be employed, data collection instruments to be used, procedures to be followed, analyses to be performed, and reporting or dissemination formats proposed. A detailed budget and timeline are critical components of an individual evaluation plan.

Individual evaluation plans also represent a formal documentation of how the evaluation was conducted. This documentation is important for several reasons. Others may wish to replicate your approach and will be appreciative of written documentation. Written documentation also substantiates the evaluation findings, by demonstrating that the evaluation was well-planned and conducted.

NOTES

Appendix B

Glossary

Note: Numbers in square brackets [#] refer to sources from which a given definition has been drawn or adapted, as listed at the end of the Glossary. Words highlighted in **GREEN, BOLD, SMALL CAPS** indicate cross-references to other terms included in the Glossary.

Audience	The individuals (such as your STAKEHOLDERS and other evaluation users) with whom you want to communicate the results of an evaluation. [8]
Accountability	One of the program evaluation standards developed by the Joint Committee on Standards for Educational Evaluation that encourages adequate documentation of evaluations and a metaevaluative perspective focused on improvement and accountability. See also FEASIBILITY, ACCURACY, PROPRIETY , and UTILITY . [16]
Accuracy	One of the program evaluation standards developed by the Joint Committee on Standards for Educational Evaluation that is intended to increase the dependability and truthfulness of evaluation representations, propositions, and findings, especially those that support interpretations and judgments about quality. See also FEASIBILITY, PROPRIETY, ACCOUNTABILITY , and UTILITY . [16]
Activities	The actual events or actions that take place as a part of the program. [12]
Baseline Data	Initial information on a program or program components collected prior to receipt of services or participation in activities. Baseline data are often gathered through intake interviews and observations and are used later for comparing measures that determine changes in a program. [15]
Benchmarks	Measures of progress toward a GOAL , taken at intervals prior to the program's completion or the anticipated attainment of the final goal. [13]
Case Study	A data collection method that involves in-depth studies of specific cases or projects within a program. The method itself is made up of one or more data collection methods (such as interviews and file review). [12]
Communications Plan	A document that describes: the communication needs and expectations for the project; how and in what format information will be communicated; when and where each communication will be made; and who is responsible for providing each type of communication. [2]

Comparison Group	A group not exposed to a program or treatment. Sometimes referred to as a CONTROL GROUP , comparison group is a term used more frequently in QUASI-EXPERIMENTAL DESIGNS (than in EXPERIMENTAL DESIGNS). [12]
Control Group	A group whose characteristics are similar to those of a program's participants but who do not receive the program services, products, or activities being evaluated. Participants are randomly assigned to either the experimental group (those receiving program services) or the control group. A control group is used to assess the effect of program activities on participants who are receiving the services, products, or activities being evaluated. The same information is collected for people in the control group and those in the experimental group. See also RANDOM ASSIGNMENT . [13]
Cross-evaluation Strategy	As used in this guide, this term refers to a strategy for assessing the mix, sequence, timing, and efficiencies across all priority evaluations.
Evaluation Candidate	As used in this guide, this term refers to any program activity, initiative, or product that could be evaluated. A priority evaluation candidate is a program activity, initiative, or product that has been ranked (through a systematic process) as high priority for evaluation.
Evaluation Capacity Building	The design and implementation of teaching and learning strategies to help individuals, groups, and organizations learn about what constitutes effective, useful, and professional evaluation practice. [7]
Evaluation Design	The kinds of information, sampling methods, and comparison base that are used (or proposed) to address the specified EVALUATION QUESTIONS . Evaluation designs may also address information sources, information collection methods, the timing and frequency of information collection, and information analysis plans. Evaluation designs fall into one of three broad categories: EXPERIMENTAL DESIGN , QUASI-EXPERIMENTAL DESIGN , and NON-EXPERIMENTAL DESIGN . [Adapted from 14]
Evaluation Planning Team	As used in this guide, this term refers to a small group of evaluation STAKEHOLDERS convened by a state asthma program to develop and regularly update the STRATEGIC EVALUATION PLAN .
Evaluation Question	A question related to a program's OUTCOMES , OUTPUTS , INDICATORS , or other definition of success. The goal of an evaluation effort is to answer one or more EVALUATION QUESTION(S) . [10]

Evaluation Standards	Developed by the Joint Committee on Standards for Educational Evaluation, evaluation standards are criteria upon which the quality of program evaluations can be judged [see ACCURACY , FEASIBILITY , PROPRIETY , ACCOUNTABILITY , and UTILITY]. [16]
Evaluation Technical Advisor	APRHB staff or contractor assigned responsibility for providing evaluation technical assistance, training, and resource documents with an aim of building evaluation capacity in state asthma programs as cited in CDC-RFA-EH09-901, April 8, 2009.
Experimental Design	Designs that try to ensure the initial equivalence of one or more CONTROL GROUPS to a treatment group by administratively creating the groups through RANDOM ASSIGNMENT , thereby ensuring their mathematical equivalence. Examples of experimental or randomized designs are randomized block designs, Latin square designs, fractional designs, and the Solomon four-group. [12]
External Evaluator	An evaluator not affiliated with the agency prior to the program evaluation. Also known as third-party evaluator or outside evaluator. [Adapted from 13]
Feasibility	One of the program evaluation standards developed by the Joint Committee on Standards for Educational Evaluation. The feasibility standards are intended to ensure that an evaluation will be realistic, prudent, diplomatic, and frugal. See also ACCURACY , ACCOUNTABILITY , PROPRIETY , and UTILITY . [16]
Follow-up Data	As used in this guide, this term refers to data collected at prescribed intervals after the intervention.
Formative Evaluation	Evaluative activities undertaken to furnish information that will guide program improvement. [13]
Goals	A desired state of affairs that outlines the ultimate purpose of a program. This is the end toward which project or program efforts are directed. [13]
Indicator	A specific, observable, and measurable characteristic or change that shows the progress a program is making toward achieving a specified OUTCOME . [12]
Individual Evaluation Plan	As used in this guide, a written document describing the overall approach or design that will be used to guide an evaluation. It includes what will be done, how it will be done, who will do it, when it will be done, why the evaluation is being conducted, and how the findings will likely be used. May also be called an evaluation protocol. [13]

Inputs	Resources that go into a program in order to mount the ACTIVITIES successfully. [12]
Internal Evaluator	Evaluator who is a staff member or unit from within the organization being studied. [13]
Logic Model	A systematic and visual way to present the perceived relationships among the resources you have to operate the program, the ACTIVITIES you plan to do, and the changes or results you hope to achieve. [12]
Mixed-method Design	A methodological approach where you collect data from more than one source and/or through different methods. The advantages of using mixed methods include: increasing the cross-checks on the evaluation findings, examining different facets of the same phenomenon, and increasing STAKEHOLDERS' confidence in the overall evaluation results. An example of mixed methods is using both a focus group and a survey to explore a target population's understanding of asthma triggers. [Adapted from 8]
Non-experimental Design	An EVALUATION DESIGN in which participant information is gathered either before and after the program intervention or only afterwards. A CONTROL GROUP or COMPARISON GROUP is not used. Therefore, this design does not allow you to determine whether the program or other factors are responsible for producing a given change. [8]
Outcomes	The results of program operations or activities; the effects triggered by the program (for example, increased knowledge or skills, changed attitudes, reduced asthma morbidity and mortality). [12]
Outcome Evaluation	The systematic collection of information to assess the impact of a program, present conclusions about the merit or worth of a program, and make recommendations about future program direction or improvement. [12]
Outputs	The direct products of program ACTIVITIES ; immediate measures of what the program did. [12]
Performance Criteria	The observable aspects of a performance or product that are observed and judged in a performance assessment. [5]
Performance Standards	A generally accepted, objective form of measurement that serves as a rule or guideline against which an organization's level of performance can be compared. Frequently referred to as BENCHMARKS . [9]

Performance Measurement	The ongoing monitoring and reporting of program accomplishments, particularly progress toward pre-established GOALS . It is typically conducted by program or agency management. Performance measures may address the type or level of program ACTIVITIES conducted (process), the direct products and services delivered by a program (OUTPUTS), or the results of those products and services (OUTCOMES). [15].
Pilot	A pretest or trial run of a program, evaluation instrument, or sampling procedure for the purpose of correcting any problems before it is implemented or used on a larger scale. [13]
Post-only Design	A NON-EXPERIMENTAL DESIGN in which measures (data collection) are taken from the target population(s) after the activity/intervention. Since this is a non-experimental design, it does not involve COMPARISON GROUPS/CONTROL GROUPS . [8]
Pre-post test Design	This elementary QUASI-EXPERIMENTAL DESIGN involves the measurement of “ OUTCOME ” indicators prior to implementation of the treatment, and subsequent re-measurement after implementation. Any change in the measure is attributed to the treatment. Also known as a Before-After Design. [Adapted from 13]
Prioritization Criteria	As used in this guide, this term refers to criteria used to determine the relative priority of an EVALUATION CANDIDATE .
Process Evaluation	The systematic collection of information to document and assess how a program was implemented and operates. [12]
Program Evaluation	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. [12]
Program Impact Model	A visual representation of a program impact theory, which is the conceptual theory for how a program is presumed to solve a problem or problems of interest. [3]
Program Pathways	Program pathways are the means for accomplishing program OUTCOMES . They comprise two parts. The impact pathway describes how the program is expected to cause change. The process pathway describes how the program is implemented. [Adapted from 1]

Propriety	One of the program evaluation standards developed by the Joint Committee on Standards for Educational Evaluation. The extent to which the evaluation has been conducted in a manner that evidences uncompromising adherence to the highest principles and ideals (including professional ethics, civil law, moral code, and contractual agreements). See also ACCURACY , ACCOUNTABILITY , FEASIBILITY , and UTILITY . [16]
Qualitative Data	Observations that are categorical rather than numerical, and often involve knowledge, attitudes, perceptions, and intentions. [12]
Quantitative Data	Observations that are numerical. [12]
Quasi-experimental Design	Study structures that use COMPARISON GROUPS to draw causal inferences but do not use randomization to create the treatment and CONTROL GROUPS . The treatment group is usually given. The control group is selected to match the treatment group as closely as possible so that inferences on the incremental impacts of the program can be made. [12]
Random Assignment	The assignment of individuals in the pool of all potential participants to either the experimental (treatment) group or the CONTROL GROUP in such a manner that their assignment to a group is determined entirely by chance. [15]
Randomized Controlled Trial	An experimental study of an intervention in which study participants are randomly assigned to treatment or CONTROL GROUPS . [Adapted from 11]
Regression Discontinuity Design	A design that assesses the effect of a treatment condition by looking for a discontinuity in regression lines between individuals who score lower and higher than some predetermined cutoff score. [4]
Stakeholders	People or organizations that are invested in the program (<i>program stakeholders</i>) or that are interested in the results of the evaluation or what will be done with results of the evaluation (<i>evaluation stakeholders</i>). [12]
Strategic Evaluation Plan	As used in this guide, this term refers to a written document describing the rationale, general content, scope, and sequence of the evaluations to be conducted over time.
Summative Evaluation	A type of outcome evaluation that assesses the results or outcomes of a program. This type of evaluation is concerned with a program's overall effectiveness. [13]

Time-Series Design

Research designs that collect data over long time intervals – before, during, and after program implementation. This allows for the analysis of change in key factors over time. [13]

Utility

One of the program evaluation standards developed by the Joint Committee on Standards for Educational Evaluation. The extent to which an evaluation produces and disseminates reports that inform relevant audiences and have beneficial impact on their work. See also **ACCURACY, ACCOUNTABILITY, FEASIBILITY, and PROPRIETY**. [16]

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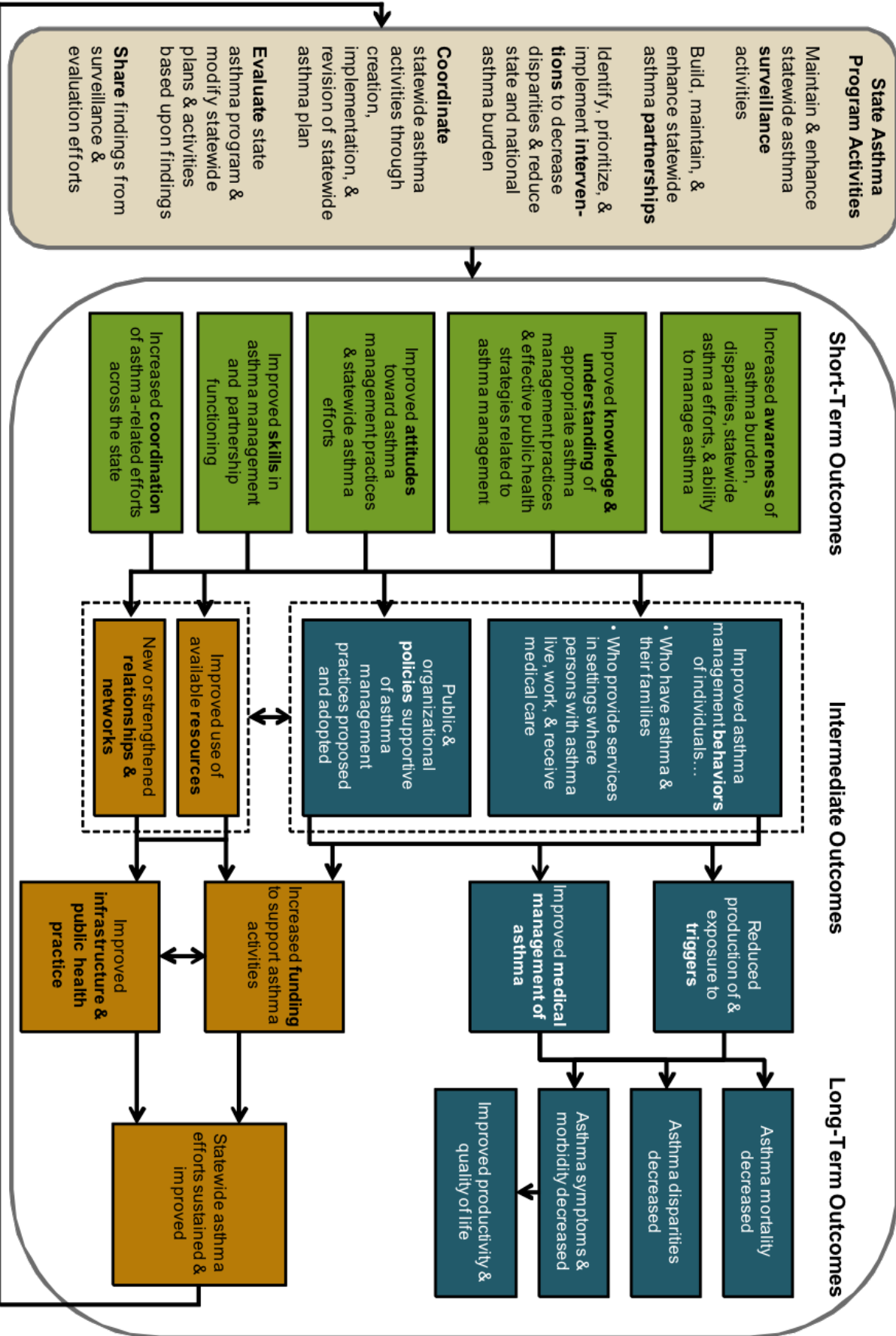
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NOTES

Appendix C

The State Asthma Program Impact Model

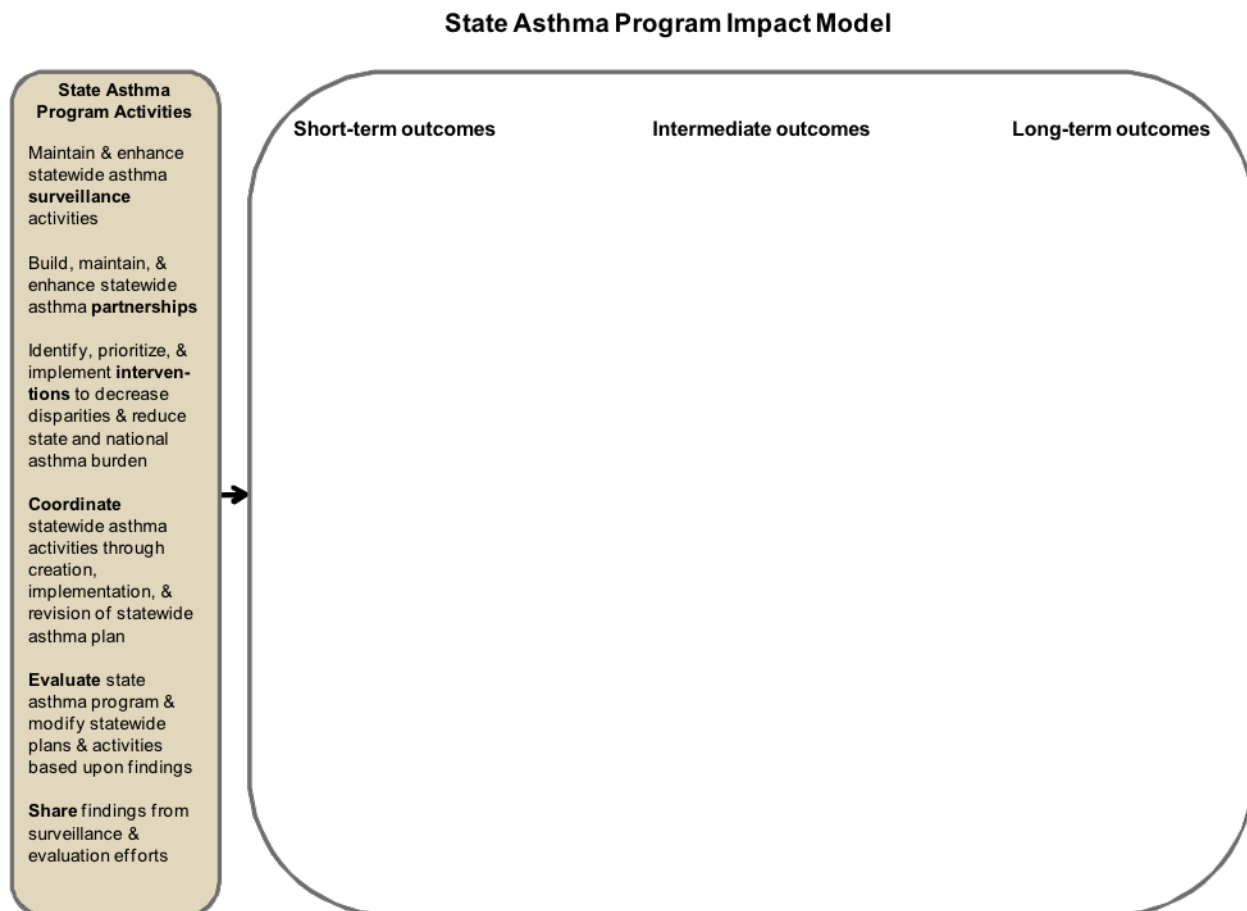
In this appendix, we will walk through the state asthma program model introduced in Chapter 2—reprinted on the following page as Figure C.1—as though we are building it together. We use a series of figures to show how each piece of the model leads to the desired long-term outcomes. In each successive figure, we highlight the part(s) of the model under discussion, and shift the rest of the model to the background. Our presentation begins by filling in the parts of the model that are the most straightforward—the start and end points. We then proceed to build the logic of how we expect to move from the activities of the state asthma program and the short-term outcomes resulting from them to the long-term outcomes of decreased asthma mortality, disparities and symptoms; improved productivity and quality of life; and sustainability of the state asthma program.



State Asthma Program Activities

In the far left-hand box of the impact model we see a list of six overarching activities that all state asthma programs perform on a regular basis (see **Figure C.2**).

Figure C.2 Asthma Program Activities

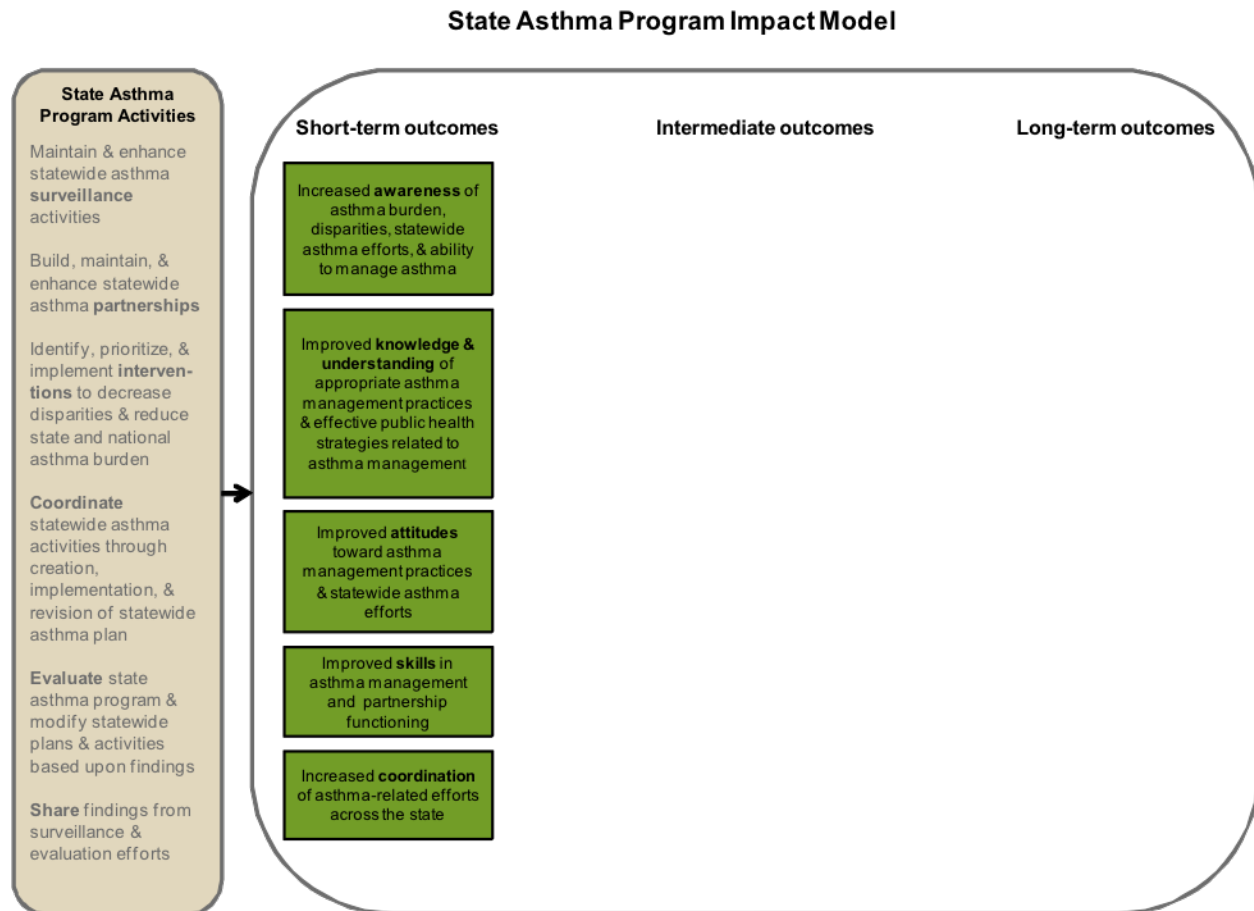


State asthma programs maintain and enhance asthma *surveillance* activities in order to gain a better understanding of the patterns in asthma burden across people, places, and time within a state. Additionally, epidemiologists within state asthma programs *share* findings from the analyses of asthma surveillance data with individuals across the state and nation. State asthma programs also build, maintain, and strive to enhance *partnerships* across the state. These partners help in developing a set of shared statewide goals and objectives related to asthma (documented in the state asthma plan). Information from analyses of surveillance data and conversations with partners lead to development and implementation of a series of *interventions* tailored to meet the specific needs of the state population. Furthermore, state asthma programs coordinate statewide asthma activities by working with partners across the state to create/revise, and implement the state asthma plan. This plan describes a common vision for decreasing the burden of asthma in the state along with the objectives partners agree to work toward in a coordinated manner. State asthma programs also create a plan for evaluating programmatic activities during the course of their funding cycle and *share* the findings of these evaluations so that they can be used to improve current activities and inform future plans.

Short-Term Outcomes

If the activities just described are conducted well, they lead to six short-term outcomes (see **Figure C.3**).

Figure C.3 Short-Term Outcomes

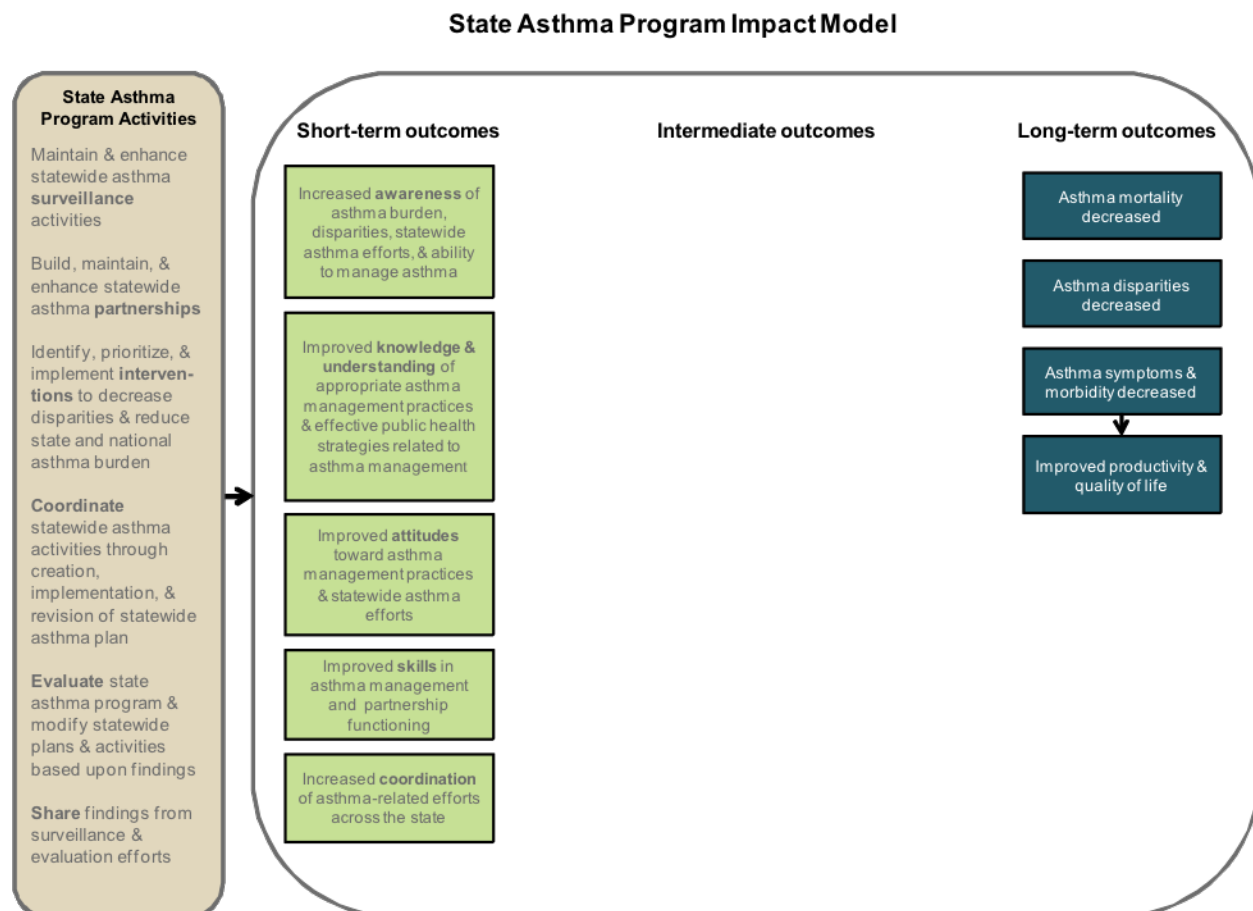


For example, surveillance activities often strive to increase *awareness of asthma* in the state and the burden it places on specific populations. Partnership activities often lead to *improved understanding of effective public health strategies related to asthma management* among key target audiences within the state. This improved understanding might occur as a result of information-sharing between partners about evidence-based practices or from sharing evaluation findings across programs. Asthma interventions often strive to make improvements in *asthma management awareness, knowledge, attitudes, and skills*. These interventions may be geared toward many different types of audiences, including but not limited to people with asthma, their families, health care providers and health systems, state and local governments, managers and staff within schools and workplaces, and other community members who come into contact with or affect the lives of individuals who have asthma. Finally, we might also anticipate an *increase in the coordination of asthma-related efforts across the state* through the enhanced partnerships and through the collaborative development of a state asthma plan.

Long-Term Outcomes

All of the short-term outcomes contribute to achieving a set of long-term outcomes (see **Figure C.4**).

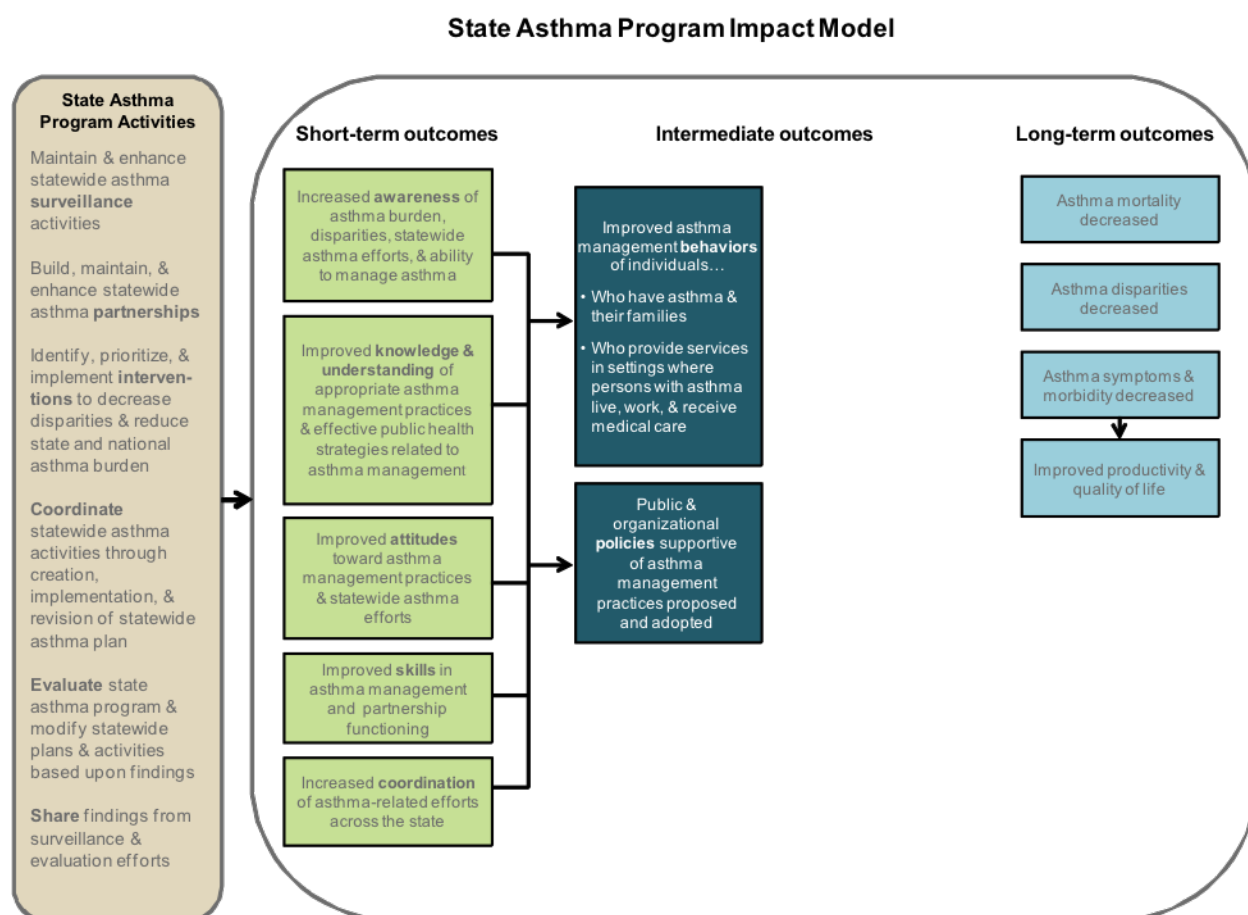
Figure C.4 Long-Term Outcomes



As shown in the blue boxes on the far right-hand side of the impact model, state asthma programs strive to decrease *asthma mortality* as well as the *disparities* that exist between age, gender, racial/ethnic, and other subgroups affected by asthma. Programs also strive to decrease *asthma symptoms* as well as other indicators of *asthma morbidity* (e.g., hospitalizations, emergency department visits, urgent care visits). It is anticipated that decreases in symptoms and morbidity will lead to changes in the lives of persons who have asthma (and their families)—directly improving their *productivity and quality of life*.

Pathways between Intermediate Outcomes and Long-Term Health Outcomes

A number of changes occur between the short-term outcomes and the long-term outcomes depicted in blue in **Figure C.4**. Let's now turn our attention to the **intermediate outcomes** that connect the short-term to the long-term outcomes.

Figure C.5 Some Early Intermediate Outcomes

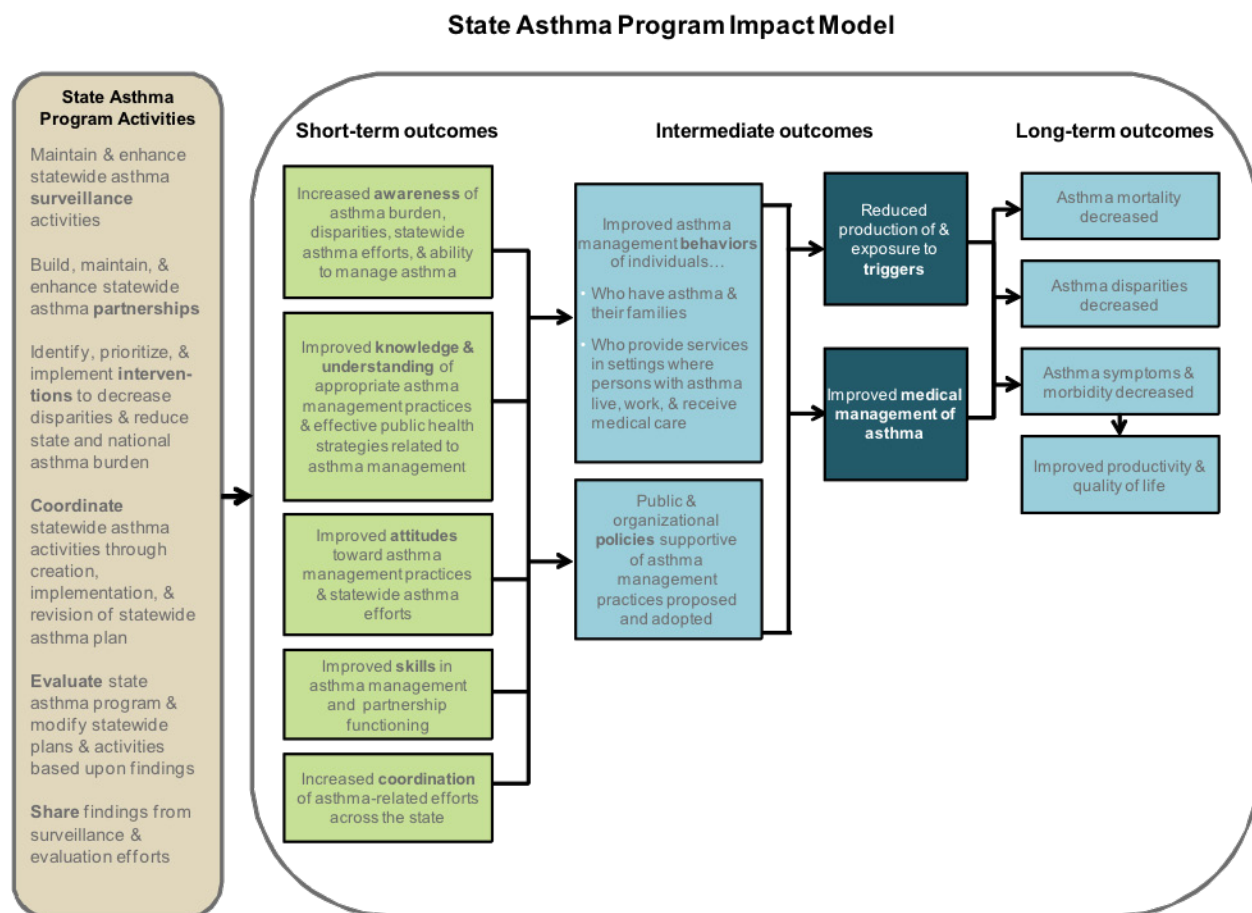
As shown in **Figure C.5** above, an increased level of awareness among audiences in the state with respect to important asthma-related messages combined with improvements in knowledge, attitudes, and skills lead to two overarching intermediate outcomes. One is *improved asthma management behaviors in individuals* who have asthma and their families, as well as among persons who provide services in settings where persons with asthma live, work, and receive medical care. Examples of persons in the latter category include building developers and landlords; school nurses, janitorial staff; occupational health clinics; and health care providers, insurance providers, and pharmacists. Changes in behaviors may be more likely when there is effective coordination among partners.

A second intermediate outcome is the proposal and adoption of *public and organizational policies that are supportive of asthma management practices*. Raised awareness, positive attitudes, and sufficient knowledge and skills are standard precursors of effective behavioral change and easily translate into how individuals and their families learn to manage asthma effectively. Yet these are also precursors of policy change. Groups as well as individuals must recognize the need for change, be motivated to advocate for change (i.e., political will), and have the knowledge and skills needed to achieve a desired change. Common goals for program partnerships include changes in partners' respective organizations as well as collective action to change broader public policies. Changes in public and organizational policies that actually

support asthma management may be more likely when there is an understanding of effective public health strategies and effective coordination among partners.

Improved asthma management behaviors of individuals coupled with new public and organizational policies supportive of asthma management can lead to *reduced production of and exposure to triggers of asthma and improved medical management of asthma* (see **Figure C.6**).

Figure C.6 Some Additional Intermediate Outcomes



Examples of behavior changes and policies that might lead to *reduced production of and exposure to triggers* are presented below.

- Behavior changes leading to reduced exposures.*** Learning about ways to reduce exposures is a common goal of interventions targeted toward increasing awareness and knowledge, as well as improving attitudes and skills regarding asthma management. Thus, as individuals who have asthma and their families act on this knowledge, we would expect to see modifications to indoor environments such as removal of carpet and rugs, smoking cessation (either completely or within the home environment), and keeping pets away from sleeping areas.

- ***Policies to reduce exposure.*** Public and organizational policies can also reduce the production of and therefore the exposure to irritants and/or allergens that can trigger asthma attacks. Public policies that have this effect might include anti-idling laws, regulations on vehicle and industry emissions to the ambient air, smoke-free indoor air laws, and building regulations requiring the use of specific asthma-friendly materials. Organizational policies that may lead to a reduction in the production of or exposure to triggers include those requiring maintenance of ventilation systems in workplace areas and those that expand smoke-free policies to outdoor corridors through which persons enter and exit workplaces.

Examples of behavior changes and policies that might lead to improved medical management of asthma are presented below.

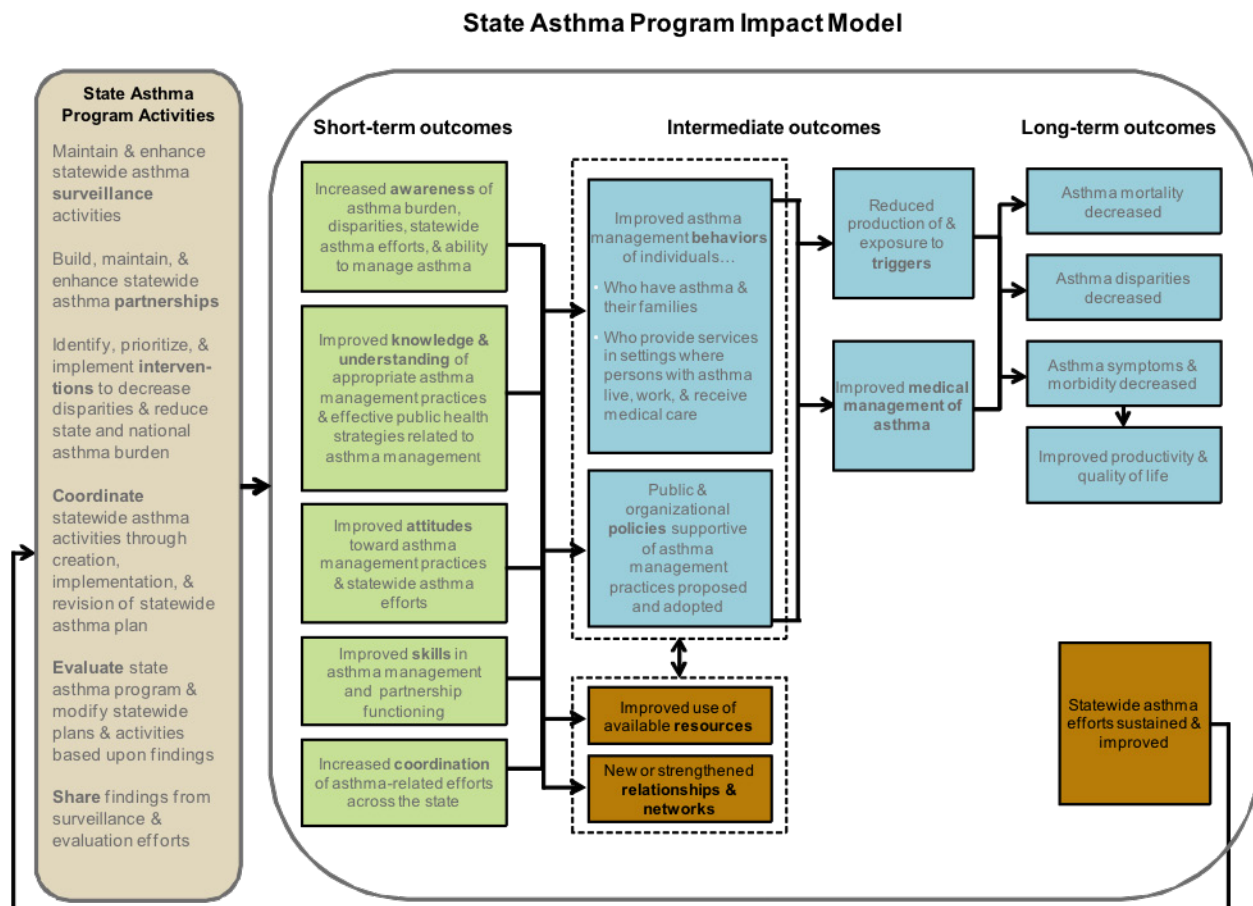
- ***Behavior changes leading to increased compliance with medical regimens.*** As a result of acquiring greater awareness, enhanced knowledge, improved attitudes, and new skills relating to asthma, individuals may increase their compliance with medical regimens and attend regularly scheduled asthma-related medical appointments. To the extent this happens, changes in the medical management of asthma may result. Likewise, as a result of an intervention to increase awareness of the updated National Asthma Education and Prevention Program (NAEPP) guidelines, health care providers may change their behaviors by providing their patients with asthma action plans, diagnosing and treating asthma in accordance with the guidelines, and providing appropriate asthma management education to their patients.
- ***Policies to improve medical management of asthma.*** Public and organizational policies that aim to improve the medical management of asthma include but are not limited to Medicare or Medicaid policies that reimburse costs associated with providing asthma education via certified asthma educators and policies that require that students who have asthma be able to readily access their asthma inhalers. Examples of organizational policies intended to promote improvements in the medical management of asthma include those that require health care practitioners to update their skills through professional development trainings about asthma and those that put into place free or low-cost asthma education classes for HMO members who have asthma.

By reducing the production of and exposure to triggers, and by improving the medical management of asthma, it is expected that the long-term health outcomes associated with asthma will improve. These improvements may appear as a decrease in asthma mortality, a decrease in asthma disparities, a reduction in asthma symptoms and morbidity, or improvements in the productivity and quality of life among persons who have asthma.

Pathways between Intermediate Outcomes and Program Sustainability

The pathway to improved productivity and quality of life among persons who have asthma is not easy, nor is it quick. Thus, *sustaining and improving statewide asthma efforts* to achieve these ultimate goals is another important long-term outcome (see **Figure C.7**).

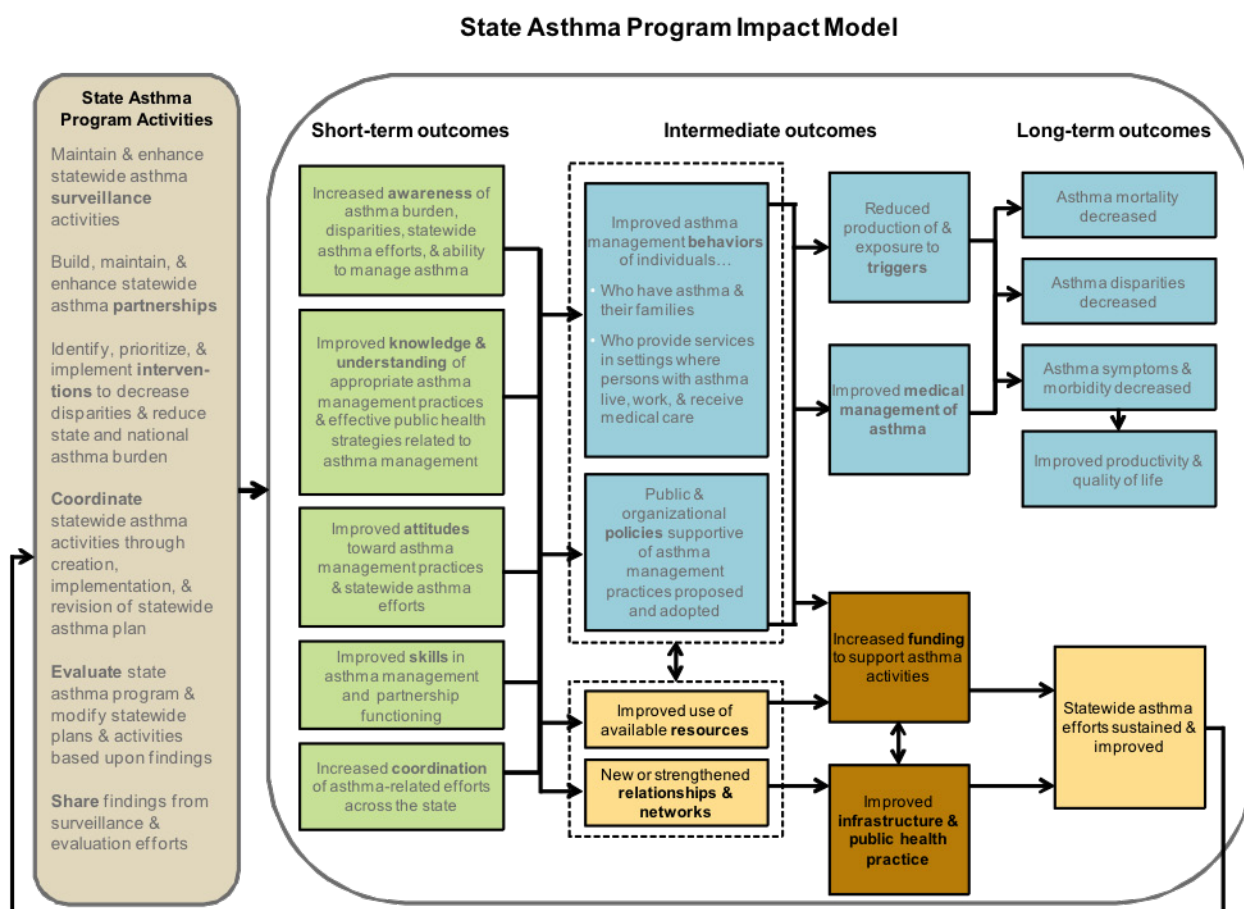
Figure C.7 Sustaining and Improving Statewide Asthma Efforts



In this section we step through the gold boxes of the model to trace the pathways that lead to sustainability and improvement of the state asthma program. We then discuss how the intermediate-term outcomes discussed previously (blue boxes) also influence state asthma program efforts.

The intermediate outcomes of *improved use of available resources* to address asthma and *new or strengthened relationships* and networks are important links for sustaining statewide efforts. Some examples of better resource utilization include channeling resources to subpopulations that are disproportionately affected by asthma, helping partners to avoid duplication of effort, identifying areas where resources can be leveraged, and adopting more effective public health practices. *New or strengthened relationships and networks* may result as partners work together to identify effective public health strategies to address asthma-related issues. Partners' ability to effectively coordinate activities also adds to their willingness to engage. Additionally, as partners share their own networks and identify and recruit new partners, new relationships and networks are fostered.

The final link to program sustainability occurs through *increases in funding and improvements in asthma public health infrastructure* (see **Figure C.8**).

Figure C.8 Funding and Infrastructural Improvements in Relation to Sustainability

Effective partnerships that result in new or strengthened relationships and networks should be in a better position to identify and/or secure funding. Funding agencies may be more likely to judge applications favorably if there is broad-based support and a high level of talent behind the request. Funders also value efficiency and may respond to evidence of improved use of available resources or the contribution of in-kind services.

Although the model pathways in Figure C.1 move from left to right, it is important to acknowledge that a gain in one intermediate outcome may affect another. For example, increases in funding can be used to improve the infrastructure and therein improve practice; and a stronger public health infrastructure and practice may, in turn, increase the likelihood of receiving funding through competitive and non-competitive processes. It is anticipated that an improved infrastructure and public health practice coupled with increased funding to support asthma activities contributes to the long-term outcome of sustaining and improving asthma-related efforts across the state.

Other short-term and intermediate outcomes shown in the top (blue) pathway are also thought to contribute to sustaining and improving asthma efforts across the state. Evidence that behaviors are changing as a result of program activities may well lead to an increase in ability to secure funding. And policies may directly support infrastructure enhancements or interventions to improve asthma management practices.

Thus, we can see that all of the short-term outcomes depicted in Figure C.1 can be expected to contribute to sustaining and improving statewide asthma efforts. Sustaining and improving statewide asthma efforts then feeds back into state asthma program activities by providing additional resources and ideas for modifying program planning and implementation efforts.

NOTES

Appendix D.1

Sample Evaluator Position Description

We are providing this sample position description to assist you with preparations in hiring your Asthma Program Evaluator. This document should be particularly useful to grantee organizations that do not have specific position descriptions tailored for evaluators. Our position description is organized around the six steps of the CDC Evaluation Framework and outlines some of the knowledge, skills, and abilities an evaluator needs to complete each step of the process. Please note this sample position description does not address formal educational requirements. Evaluation practitioners come from many academic disciplines, and many evaluators have learned the field by experience, rather than formal educational programs.

This list is not all-inclusive, nor are we “endorsing” this as the **only** list of appropriate attributes to look for in an evaluator. In addition, it is likely you will be unable to hire an evaluator who possesses **all** the skills listed; however, we feel it is appropriate that you fill this position with someone with many of these skills and a willingness to learn those skills they do not currently possess. Our goal with this document, as well as the competencies document, is to provide useful guidance for your consideration.

Principal Duties

- Work with stakeholders to develop a comprehensive five-year program evaluation plan as well as individual evaluation plans of prioritized program areas.
- Implement evaluations in all three areas of the state asthma program—infrastructure, services strategies, and health systems strategies. This includes data collection, analysis, and effective communication of results.
- Ensure that evaluation activities are complementary to state program operations and activities and consistent with the state asthma plan.

Knowledge, Skills, and Abilities

Overarching Items

- Knowledge of or familiarity with the CDC Framework for Program Evaluation in Public Health.
- Working knowledge of the Joint Committee on Standards for Educational Evaluation’s program evaluation standards (e.g., utility, feasibility, propriety, accuracy).
- Knowledge of or familiarity with the American Evaluation Association’s Guiding Principles for Evaluators.
- Ability to apply a culturally competent perspective and approaches to evaluation practice.
- Ability to identify limitations of knowledge and methods for acquiring additional evaluation knowledge to supplement personal expertise when necessary.
- Knowledge of the differences between evaluation and research.

Step 1 – Engage Stakeholders

- Ability to educate program staff and partners about evaluation concepts and methods.
- Ability to engage stakeholders based on shared priorities.
 - Meeting facilitation, presentation, conflict resolution, and negotiation skills
 - Knowledge of strategies to engage stakeholders in an evaluation process.
- Ability to work as part of an interdisciplinary team to plan and execute evaluations of prioritized aspects of the state asthma program.

Step 2 – Describe the Program

- Ability to organize and summarize information in a clear and concise manner.
- Ability to understand the context of a program and how it affects program planning, implementation, outcomes and can influence evaluation.
- Ability or experience in the development and use of logic models to describe complex programs.
- Ability to provide leadership in a team setting, move members forward and build consensus.
- Skill in developing and articulating program goals and objectives in a structure supporting evaluation (i.e., SMART objectives).

Step 3 – Focus the Evaluation Design

- Knowledge of various evaluation designs (e.g., experimental, quasi-experimental, non-experimental).
- Experience with evaluations using mixed method approaches.
- Knowledge or experience with approaches for generating, revising, and prioritizing evaluation questions.
- Knowledge in the development of evaluation plans.
- Knowledge of methods for designing evaluations so as to increase the likelihood that the findings will be used by primary evaluation stakeholders.

Step 4 – Gather Credible Evidence

- Ability to lead the asthma program's staff in developing and testing data collection instruments.
- Ability to identify and assess existing data sources for their potential use in program evaluation.
- Ability to gather data using qualitative and quantitative approaches such as interviews, group processes, participant observation, surveys, electronic data files, or other methods.
- Ability to manage databases, construct data files, conduct and supervise data entry, and perform data edits/cleaning.
- Knowledge of methods for protecting confidential data.

Step 5 – Justify Conclusions

- Knowledge of appropriate quantitative and qualitative data analysis methods.
- Ability to conduct analyses using appropriate analytic tools for quantitative data (e.g., SAS, SPSS, Minitab) and/or qualitative data (NVivo 8, Atlas.ti, MaxQDA).
- Ability to develop criteria and standards reflective of the values held by key evaluation stakeholders.
- Experience with synthesizing information generated through an evaluation to produce findings that are clearly linked to the data collected.
- Skill in working with stakeholders to develop feasible recommendations.

Step 6 – Ensure Use and Share Lessons Learned

- Ability to prepare and present evaluation results in a manner that increases the likelihood that they will be used and accepted by a diverse group of stakeholders.
- Ability to develop action plans and systems to facilitate and track implementation of evaluation findings and recommendations.
- Ability to work with stakeholders to present analyses, find common themes and identify relevant and actionable findings from evaluations.
- Skill in developing and implementing a communications and dissemination plan.

Appendix D.2

Working with an External Evaluator

You may want to consider hiring an experienced evaluator to support your evaluation efforts. We say experienced, because there is no standard training or credential for professional evaluators. Instead, if you decide to seek outside help, you will be selecting an evaluator based on their experience rather than their education. Here are a few tips for helping you decide whether to seek outside help, how to work with an evaluator to make sure your needs are met, and what to look for when selecting an evaluator.

Need for an External Evaluator

In certain situations, an external evaluator may be desired or needed. Table D.1 lists some of the factors to consider when deciding whether to hire an external evaluation consultant.

Table D.1 Deciding Whether to Hire an External Evaluation Consultant

Pros*	Cons
▪ Less work for you ▪ Consultants have the relevant skills and experience ▪ Consultants bring an impartial point of view ▪ Results might be seen as more objective to other members of the community	▪ You give up some control over the process ▪ You may not build evaluation skills among program staff ▪ It may be expensive – you need to find the funds ▪ Consultant may not completely understand the program, and you are paying for their learning curve!

* Adapted from Government of the Northwest Territories, Financial Management Board Secretariat. *Working Well with Evaluation Consultants: A Guide*. 1999. Available at: <http://www.fin.gov.nt.ca/documents/forms-documents/consultantguide.pdf>.

Working with an External Evaluator

Although hiring an external evaluator may lessen the work involved for you and your staff, managing an evaluation contract is demanding and time-consuming. You will not be able to turn over all responsibility for the evaluation to a third party. Using the CDC Framework as a guide, consider what the evaluation consultant can do and what you will need to do. Suggested roles are listed in **Table D.2** below. You might find that you prefer a different mix of “control” or “involvement” or that this evolves over time if you develop a good working relationship with an evaluator. Regardless, you will want to be clear about what tasks you are asking the evaluator to do and how you plan to interact with him/her throughout the evaluation.

Table D.2 Suggested Role-Sharing between Program Staff and an External Evaluator

Evaluation Step	Program Staff	External Evaluator
1. Engage Stakeholders	Lead Role You know your stakeholders best and who should be engaged in the evaluation.	Support Role The evaluator should demonstrate an interest in engaging stakeholders and have sufficient skills and experience to engage stakeholders effectively (e.g., facilitation skills, conflict resolution skills, etc.).
2. Describe the Program	Shared Role You will need to share your knowledge of the program with the evaluator.	Shared Role The evaluator should engage program staff and possibly stakeholders in the process of describing the program. The evaluator should take the lead on developing a program description (logic model, program theory, etc.).
3. Focus the Evaluation	Shared Role Identifying the most important evaluation questions is not an activity you can delegate to an outsider, although the evaluator may well be able to help you refine the questions.	Shared Role A skilled evaluator will help you focus the evaluation, design good evaluation questions, and develop an evaluation design.
4. Gather Credible Evidence	Support Role Program staff may need to assist the evaluator in gaining access to existing data or in soliciting participation (e.g., invites or distribution lists for focus groups, interviews, surveys, etc.).	Lead Role An outside evaluator should be the lead on all data collection activities with oversight by program staff.
5. Justify Conclusions	Shared Role Program staff should help the evaluator interpret evidence and develop recommendations.	Shared Role An outside evaluator can be the lead on all data analysis activities with oversight by program staff.
6. Ensure Use and Share Lessons Learned	Lead Role Only you can ensure that the results are used to inform your program.	Support Role A skilled evaluator can present evaluation results (interim and final) in a way that promotes use.

Selecting an Evaluator

Your decision about the right evaluator for your program will depend on what you are looking for in terms of the mix of technical skills, familiarity with the program or context, and personal characteristics. Qualities that you should consider in an evaluator include:

- Experience with program evaluation
- Ability to communicate effectively
- Basic knowledge of asthma or other chronic disease programs
- Experience with the range of data collection strategies and evaluation designs that will best serve your program or the particular evaluation activity(ies) you are planning
- Good references (from sources you trust)

You should provide prospective evaluation consultants with a clear description of the project, including the goals, expectations, available data and resources, and a timeline, to enable the consultant to prepare a formal proposal. Formal proposals from each consultant should be reviewed and you should ask questions of the candidates. If there are things you do not understand – ask! If you cannot clearly communicate with the prospective evaluator during this phase of the process, you might want to consider finding another evaluator. Ask the evaluator whether there are other things you should consider or ask about the planned evaluation; after all, they are the “expert” on this topic.

Managing an External Evaluator

Once you have chosen your evaluator it is essential that you draw up a contract to cover the work. This will ensure there is clarity of expectations by both the evaluator and the program. The contract will set out the main terms and conditions and may include the following:

- Who “owns” the data collected and the material that is produced
- How issues such as protection of confidentiality and conflicts of interest are to be addressed
- A detailed description of deliverables (e.g., presentations of work to stakeholders and others; frequency of communication; etc.)
- Timelines for all work and work products
- Budget and a payment schedule (periodic billing of actual hours, etc.)
- Discussion of sanctions and contract termination

Contract language should ensure that the deliverables and timeline are clearly described and that program staff has an opportunity to review major deliverables and request modifications if they do not meet expected quality. The terms of the agreement should be tight enough to ensure that you get what you want, but flexible enough to ensure that mid-course changes are possible.

To ensure that you get what you want and need from the evaluation, it is important to designate a key member of your staff to manage the consultant and the evaluation process. This person will have responsibility for:

- Communicating with the evaluator
- Making sure the evaluator has access to the information required
- Troubleshooting problems that arise
- Ensuring that products are delivered and payments are made

Careful planning is the key to a successful evaluation experience. Once a plan is in place, all parties should attempt to adhere to it to the extent possible. While small changes are normal in the course of implementing a plan, substantial changes can affect both the cost and timing of an evaluation.

Web Resources

1. Government of the Northwest Territories, Financial Management Board Secretariat. *Working Well with Evaluation Consultants: A Guide*. 1999. Available at: <http://www.fin.gov.nt.ca/documents/forms-documents/consultantguide.pdf>.
2. International Development Research Center. Selecting and managing an evaluation consultant or team. 2004. Available on the Evaluation Unit's website at: http://web.idrc.ca/en/ev-32492-201-1-DO_TOPIC.html.
3. Evaluation Support Scotland. *ESS Support Guide 7: Getting the Best from an External Evaluation*. 2007. Available at: <http://www.evaluationsupportscotland.org.uk/article.asp?id=24&node=consultants>.
4. Bruner Foundation. Commissioning evaluation: Tips for grantmakers and grant seekers. Available at: <http://www.brunerfoundation.org/ei/index.php>.
5. Rutnik T and Campbell M. When and how to use external evaluators. Association of Baltimore Area Grantmakers, 2002. Available at: http://www.irvine.org/assets/pdf/evaluation/when_how_external_evaluator.pdf.

Appendix D.3

Competencies to Look for in an Evaluator

Evaluator competencies are defined as, “the essential knowledge, skills, and dispositions that evaluators need to conduct program evaluations effectively.”¹ Several lists of evaluator competencies have been created to date,²⁻⁵ though none have been formally endorsed or accepted by professional associations of evaluators such as the American Evaluation Association (AEA). However, we believe that the evaluator competencies proposed below will be helpful to you when considering the qualities and skills you would like your program evaluator to possess.

For discussion purposes we are highlighting the list developed by the International Board for Standards in Training, Performance and Instruction (IBSTPI). The IBSTPI competencies are arranged under four headings: professional foundations, planning and designing the evaluation, implementing the evaluation plan, and managing the evaluation. An expanded version of the IBSTPI competencies and their related performance standards are outlined in the book *Evaluator Competencies: Standards for the Practice of Evaluation in Organizations*.⁶ Additionally, we also encourage you to look through the other competency lists provided in the references for additional ideas.

Professional Foundations

1. Communicate effectively in written, oral and visual form
2. Establish and maintain professional credibility
3. Demonstrate effective interpersonal skills
4. Observe ethical and legal standards (i.e., AEA)
5. Demonstrate awareness of the politics of evaluation

Planning and Designing the Evaluation

6. Develop an effective evaluation plan
7. Develop a management plan for the evaluation
8. Devise data collection strategies to support the evaluation questions and design
9. Pilot test the evaluation design and procedures

Implementing the Evaluation Plan

10. Collect data
11. Analyze and interpret the data
12. Disseminate and follow up on the findings and recommendations

Managing the Evaluation

13. Monitor the management plan

14. Work effectively with personnel and stakeholders

It is highly unlikely that any one evaluator will have all of the skills associated with these competencies; therefore, it is important to carefully consider what characteristics and skills will be a good match for your program. For example, if working with your asthma coalition requires exceptional facilitation skills, you may want to look for an evaluator with strong interpersonal and facilitation skills. Or if the evaluator you feel is a good match for your needs has undeveloped skills in quantitative analysis, another person on your asthma team may be able to fill this gap.

Also keep in mind that there are a number of resources for evaluators to improve their skill set. Good evaluators regularly assess their skill levels and consider areas for improvement. Your Evaluation Technical Advisor (ETA) will work closely with your evaluator to provide any needed evaluation technical assistance. ETAs will provide technical assistance based on the CDC's *Framework for Program Evaluation in Public Health*.⁷ They will also provide trainings on particular evaluation topics, assist state programs in the development of their evaluation plans, or develop educational material and resources on program evaluation. ETAs will also be available to offer suggestions about opportunities for further professional development.

References (Competency Lists)

1. Ghere G, King J, Stevahn L, and Minneman J. A professional development unit for reflecting on program evaluator competencies. *American Journal of Evaluation* 2006;27:108–123.
2. *Crosswalk of Evaluator Competencies* – Version 10. Canadian Evaluation Society. September 10, 2009, available at: http://www.evaluationcanada.ca/distribution/20080312_ces_professional_designation_core_committee.pdf
3. *Evaluator Competencies*. International Board for Standards in Training, Performance and Instruction (IBSTPI). September 10, 2009, available at: <http://www.ibstpi.org/Competencies/evaluatorcompetencies.htm>
4. King J, Stevahn L, Ghere G, and Minneman J. Toward a taxonomy of essential evaluator competencies. *American Journal of Evaluation* 2001;22:229–247.
5. Stevahn L, King J, Ghere G, and Minneman J. Establishing essential competencies for program evaluators. *American Journal of Evaluation* 2005;26:43–59.
6. Russ-Eft D, Bober M, de la Teja I, Foxon M, and Koszalka T. *Evaluator Competencies: Standards for the Practice of Evaluation in Organizations*. San Francisco: John Wiley & Sons, Inc., 2008.
7. Centers for Disease Control and Prevention. *Framework for Program Evaluation in Public Health*. *MMWR* 1999;48(No. RR–11).

NOTES

Appendix E

Strategic Evaluation Plan Outline

{Insert State Program Name}

Strategic Evaluation Plan for {Insert Years Covered}

Prepared by:

{Insert Names}

{Insert Affiliation}

{Insert Date}

This template is based on Learning and Growing through Evaluation: State Asthma Program Evaluation Guide. Throughout, textboxes refer you to additional information in the guide, which you can find at http://www.cdc.gov/asthma/program_eval/guide.htm

Program Background and Purpose of Strategic Evaluation Plan

This section provides background information on your state asthma program and explains how a strategic approach to evaluation, as documented in this plan, will assist your program in meeting its aims.

Program Background

- Provide an overview of your program and your primary goals for the five-year grant period.
- Provide an overarching logic model for your program with narrative text describing it (this section can be adapted from Module 1, Chapter 1 and Appendix C).

This section corresponds with
Module 1, Chapter 2, Step B

Purpose of Plan

- What is the role of evaluation in achieving the program's purpose?
- How will evaluation help tell the program's story?
- What are your expectations for how program staff and stakeholders will use this plan?

Methods for Developing and Updating the Strategic Evaluation Plan

This section provides information about the methods you used to develop the strategic evaluation plan, who was involved, how decisions were made, and how the plan will be kept up to date.

Stakeholders

- Who is the program's evaluation lead?
- Who are the stakeholders involved in developing the strategic evaluation plan?
 - Ensure that the planning team includes a diversity of perspectives and is appropriate for the local context.
- What role did they play in developing the strategic evaluation plan?
- What role will these stakeholders play in implementing the evaluations?

This section corresponds with
Module 1, Chapter 2, Step B

Table E.1. Evaluation Planning Team – Contributions, Roles, and Future Involvement

Stakeholder Name	Title and Affiliation	Contribution to Evaluation Planning	Role in Implementing Evaluations

Methods Used to Develop the Strategic Evaluation Plan

- What process did you use to identify candidates for evaluation? (Narrative description)
- How are diverse stakeholder perspectives represented in the criteria?
- How were the criteria applied to establish priority evaluation candidates?
- What information sources did you use to support assessment of criteria? Include performance measurement information where appropriate.

**This section corresponds with
Module 1, Chapter 2, Step C**

Table E.2. Prioritization Criteria

Criteria Used	How Criteria Were Applied	Information Supporting Criteria Determination
E.g., Cost	Higher cost activities supported by state funds were a higher priority for evaluation	Program Budgets

Proposed Methods for Updating the Strategic Evaluation Plan

- How often will you update the strategic evaluation plan?
- What process will you use to update the strategic evaluation plan?
- How will performance measurement data be used to update the plan?
- Who will be involved in strategic evaluation plan updates?
- How will you document revisions to the strategic evaluation plan?

**This section corresponds with
Module 1, Chapter 2, Step H**

Proposed Priority Evaluations

This section provides information on each of the prioritized evaluation candidates along with a comprehensive evaluation timeline and details of evaluation capacity-building activities you plan to conduct. As you implement this plan, you will likely refine or revise the details included in this section based on the expertise of your individual evaluation planning teams and on the program's evolving information needs and evaluation resources.

Priority Evaluation Candidates

- Provide a rank ordered list of priority evaluation candidates.

**This section corresponds with
Module 1, Chapter 2, Step C**

Table E.3. Rank-ordered List of Priority Evaluation Candidates

Infrastructure	Services	Health Systems

Overarching Timeline

- Provide a timeline for conducting evaluations over the five-year cooperative agreement cycle. Include program milestones, or “anchors”, for which evaluation findings should be available. Also note any capacity building activities or resources that will be required to successfully implement the evaluations (you can elaborate on these in the section below). Finally, consider where you may be able to leverage stakeholder participation or data from one evaluation for use in another and account for potential participant burden.

Table E.4. Sample Timeline with Sequencing of Proposed Evaluation Activities

	Year 1	Year 2	Year 3	Year 4	Year 5
Program Milestones					
Evaluations					

Table E.4. Sample Timeline with Sequencing of Proposed Evaluation Activities

	Year 1	Year 2	Year 3	Year 4	Year 5
Capacity Building					

Summarize Each Prioritized Activity and Proposed Evaluation

This section provides the rationale for including each activity in the strategic evaluation plan. Include enough context and detail so that the selection can be adequately evaluated with each strategic evaluation plan revision, but not so much detail that you or your team becomes too invested in an evaluation that may no longer be appropriate in several years. This prioritization process will also be useful as the individual evaluation planning team begins its work to refine or revise the evaluation questions.

**This section corresponds with
Module 1, Chapter 2, Step D**

*In addition to the narrative, you may choose to complete **Table E.5** to present an abbreviated version of the information, useful in looking across all the proposed evaluations*

- What is the purpose of the evaluation and what evaluation questions would it address?
- Why is it a priority?
- Which performance measures do the questions relate to?
- What evaluation design would be appropriate for answering these questions?
- What data collection method(s) and data sources would be appropriate?
- What contextual factors should be considered in the evaluation's design and implementation?
- Who are the potential audiences for the evaluation?
- When would the evaluation be conducted?
- How would stakeholders use the information produced by the evaluation?
- What would the evaluation cost, roughly?

Table E.5. Evaluation Profile (create one for each prioritized evaluation)

Activity Name	(Identify the activity you have prioritized.)
Program Component	(Choose one – Infrastructure, Services, Health Systems.)
Evaluation Justification	(Note relevant factors the planning team considered in prioritizing this activity for evaluation.)
Evaluation Purpose and Use	(Identify the evaluation's purpose and potential uses of its findings, including decisions the findings should inform.)
Possible Evaluation Questions	(List the potential evaluation questions to be addressed.)
Relevant Performance Measures	(List the relevant performance measures.)
Timing of Evaluation	(List the proposed/anticipated start and end dates.)
Suggested Evaluation Design	(Describe potential evaluation design(s) for answering these questions.)
Potential Data Sources	(List data sources that could be used, noting any barriers to obtaining them or concerns about their quality.)
Potential Data Collection Methods	(Describe potential data collection methods and frequency of collection, and identify the staff who would be responsible for collecting the data.)
Cultural or Contextual Factors	(Describe how contextual factors and/or culture would be accounted for in your design and implementation strategies.)
Potential Audiences	(Describe potential audiences for the evaluation findings.)
Possible Uses of Information	(Describe how the anticipated information could be used.)
Estimated Evaluation Cost	(Provide a rough or “ballpark” estimate of evaluation costs overall or annually, including funds from all sources; specify what portion, if any, comes from partner contributions.)

Capacity-building activities to support evaluation

- What additional evaluation capacity will be required to successfully complete these evaluations? (Maps to the evaluation timeline in **Table E.4.**)
- How will you obtain or build that capacity? For example, what sorts of training, conferences, technical assistance, or group facilitation might be needed?
- Who are the audiences for this capacity-building support?
- When will the capacity-building activities occur?

**This section corresponds with
Module 1, Chapter 2, Step E**

Communication Plan

This section provides guidance about how information on the strategic evaluation plan process and results will be shared.

Communicating

- What information about the strategic evaluation planning process will you share? For what purposes?
- How often will you share information about planning and implementation?
- With whom will you share the information?
- What formats/methods (e.g., in-person meetings, emails, newsletters, etc.) will you use to share information?
- Who is responsible for information sharing?
- How will you summarize and share the results of the overall process?

**This section corresponds with
Module 1, Chapter 2, Step F**

Table E.6. Communication Plan Summary Matrix

Information and Purpose	Audience(s)	Possible Formats	Possible Messengers	Timing	Person Responsible

Wrapping Up

This section provides guidance on closing out the evaluation activities at the end of the cooperative agreement.

- At the end of the cooperative agreement, how will you acknowledge the contributions of planning team members and others who contributed to the successful implementation of the plan?
- How will you document evaluation lessons learned in the course of implementing the strategic evaluation plan?

This evaluation plan template can also serve as tool to document revisions to your strategic evaluation plan. Inserting the following brief checklist after each section may help with this process.

___ Implemented as planned

___ Changes made (describe changes as well as the rationale for changes)

Appendix F

Individual Evaluation Plan Outline

{State Program Name}

Individual Evaluation Plan

{Evaluation Name}

Prepared by:

{Names}

{Affiliation}

{Date}

This template is based on *Learning and Growing through Evaluation: State Asthma Program Evaluation Guide*. Throughout, textboxes refer you to additional information in the guide, which you can find at http://www.cdc.gov/asthma/program_eval/guide.htm

Introduction and Stakeholder Engagement

This section provides information about the purpose of the evaluation and identifies stakeholders who are—or need to be—involved in the evaluation.

Evaluation Purpose

- What is the purpose of this evaluation?
- How will findings from the evaluation be used?
- How does this evaluation “fit” with the overall strategic evaluation plan for the program?

Stakeholders

- What individuals and groups have an interest in the outcomes of this evaluation? Examples include program participants, staff, and critics.
- What perspective of the evaluation are they most interested in? For example, are they interested in the evaluation from a cost angle, effectiveness of the program, a critic, etc.?
- What role will they play in developing or implementing this evaluation plan? Examples include serving on planning team or as external reviewer, collecting data, interpreting findings, receiving results.

This section corresponds with
Module 1, Chapter 3, Step 1

Table F.1. Stakeholder Assessment and Engagement Plan (* indicates member of planning team)

Stakeholder Name	Stakeholder Category	Interest or Perspective	Role in the Evaluation
{May be an individual or a group}	{primary, secondary, tertiary}	{program participant, staff, etc.}	{planning team, external reviewer, etc.}

Table F.1. Stakeholder Assessment and Engagement Plan (* indicates member of planning team)

Stakeholder Name	Stakeholder Category	Interest or Perspective	Role in the Evaluation

Cultural Competence

- How will you engage stakeholders who reflect the diversity of those who may be affected by the evaluation's findings? For suggestions, see Strategies for Enhancing Cultural Competence: Why it's important for evaluating public health programs at http://www.cdc.gov/asthma/program_eval/other_resources.htm.
- How will you ensure that you successfully elicit and incorporate the various perspectives?
- How will you account for the influence of context and culture in your evaluation design, implementation, and reporting?

Description Of {Insert Name of What You Are Evaluating}

This section provides detailed information about what you are evaluating, for example, your program's strategies, processes, policies, etc. For ease of reference, we use the term "program" below to refer to "what you are evaluating," though you may be evaluating something other than a program.

**This section corresponds with
Module 1, Chapter 3, Step 2**

In this section describe the need for the program, its context, intended audience, and stage of development. You will also provide information about its inputs, activities, outputs, and outcomes and will develop a logic model. In the narrative portion, include information that might not be obvious when using the "shorthand" of the logic model.

Need

- What need is your program designed to meet?

Context

- What is the program's context? That is, what contextual or cultural factors may affect its implementation or effectiveness?

Population Addressed

- Who is included in the population for whom activities are intended?

Stage of Development

- How long has the program been in place?
- Is it in the planning or implementation stage?

Resources/Inputs

- What resources are available to support the program (e.g., staff, money, space, time, partnerships, technology, etc.)?

Activities

- What specific activities are conducted (or planned) to achieve the program's outcomes?

Outputs

- What do the activities produce (e.g., materials, units of services delivered)?

Outcomes

- What are the program's intended outcomes? (Intended outcomes may be short-term, intermediate, or long-term and are changes that occur in something outside of your program.)
- What do you ultimately want to change as a result of your activities (long-term outcomes)?
- What occurs between your activities and the point at which you see these ultimate outcomes (short-term and intermediate outcomes)?

Organizing information about your program in a table can be a useful first step in creating a logic model. You may choose to use only a table; you may choose to use a table and a logic model; or you may choose to include only a logic model in your plan.

Table F.2. Program Description Template

Resources/Inputs	Activities		Outputs	Outcomes	
	Initial	Subsequent		Short-Term/ Intermediate	Long-Term

Logic Model

- Provide a logic model for your program.

Evaluation Design

This section describes your evaluation design. Provide information about stakeholder information needs, your evaluation questions, and the evaluation design you will use to answer those questions.

**This section corresponds with
Module 1, Chapter 3, Step 3**

Stakeholder Needs

- Who will use the evaluation findings?
- What do they need to learn from the evaluation?
- What do intended users view as credible information?
- How will the findings be used?
- What evaluation capacity will need to be built to engage these stakeholders throughout the evaluation?

Evaluation Questions

- What three to five major questions do you intend to answer through this evaluation?
- Do the questions align with the Good Evaluation Questions Checklist? (http://www.cdc.gov/asthma/program_eval/AssessingEvaluationQuestionChecklist.pdf.)

Evaluation Design

- What is the design for this evaluation? (e.g., experimental, pre-post with comparison group, time-series, case study, post-test only)
- What is the rationale for using this design?

Gather Credible Evidence

This section describes how you will gather data for your evaluation. Provide information on methods you will use to compile data and how those methods are related to the evaluation questions you identified.

**This section corresponds with
Module 1, Chapter 3, Step 4**

Data Collection Methods

- Will new data be collected to answer the evaluation questions and/or will secondary data be used? Can you use data from the performance measurement system?
- What methods will you use to collect or acquire the data?
- Will you use a sample? If so, how will you select it?
- How will you identify or create your data collection instruments?
- How will you test instruments for readability, reliability, validity, and cultural appropriateness?
- How will you determine the quality and utility of existing data?
- From whom or from what will you collect data (source of data)?

Table F.3: Evaluation Questions and Associated Data Collection Methods

Evaluation Question	Data Collection Method	Source of Data
1.		
2.		

Data Analysis And Interpretation

In this section provide information on the indicators and standards you will use to judge the success of your program (or policy, etc.); how you will analyze your evaluation data; and how you will interpret and justify your conclusions.

**This section corresponds with
Module 1, Chapter 3, Steps 4
and 5**

Indicators and Standards

- What are some measurable or observable elements that can serve as markers of your program's performance?
- What constitutes "success"? That is, to what standards will you compare your evaluation findings?

Table F.4. Indicators and Success

Evaluation Question	Criteria or Indicator	Standards (What Constitutes “Success”?)
1.		
2.		

Analysis

- What method(s) will you use to analyze your data (e.g., descriptive statistics, inferential statistics, qualitative analysis, such as content or thematic analysis)?
- Provide example table shells, templates, or qualitative codebook that specifies the output for each type of analysis you plan to conduct.

Interpretation

- Who will you involve in drawing, interpreting, and justifying conclusions? Does this group include program participants or others affected by the program?
- What are your plans, including evaluation capacity building activities, to involve them in this process?

Use and Communication of Evaluation Findings

This section provides information about how information from the individual evaluation plan process and results will be used and shared. Sample action plans will be available at http://www.cdc.gov/asthma/program_eval/other_resources.htm

**This section corresponds with
Module 1, Chapter 3, Step 6**

Use

- How will evaluation findings be used? By whom?
- How does the timeline for reporting findings and potential recommendations align with key events for which you will need information from the evaluation (e.g., grant application, partner meeting)?
- Who is responsible for creating and monitoring an action plan to guide the implementation of evaluation recommendations? What follow up is needed?
- What lessons learned, including those about evaluation and evaluation capacity building, should be shared? How will they be documented?

Communication

- Which evaluation stakeholders will you communicate with and for what purpose (e.g., update on status of evaluation, invite to meetings, share interim or final findings)?
- What methods (e.g., in-person meetings, emails, written reports, newsletter article, presentations) will you use to communicate with evaluation stakeholders?
- Who is best suited to deliver the information (e.g., evaluator, program manager, coalition leader)?
- Why are these methods appropriate for the specific evaluation stakeholder audience of interest?

Evaluation Management

This section provides information about how the evaluation will be managed and implemented and includes a timeline for evaluation activities. You may find that some of the tables suggested here fit better in other sections of your plan.

Regardless of how you structure your plan, it is important that you carefully think about each of these implementation steps, noting the individual(s) responsible and deadlines for each task.

**This section corresponds with
Module 1, Chapter 3
Pulling It All Together**

Evaluation Team

- Who will manage and implement this evaluation?
- What evaluation skills or approaches are needed to successfully conduct this evaluation?
- Have you identified an external reviewer to provide feedback on the evaluation plan?

Table F.5. Roles and Responsibilities of the Evaluation Team Members

Individual	Title or Role	Responsibilities

Data Collection Management

- What data will be collected? {From **Table F.3**}
- What activities are needed to carry out the data collection successfully? When should each of these activities be completed?
- Who is responsible for conducting each activity?
- Who will oversee the conduct of the evaluation to assure appropriate implementation?

Table F.6. Data Collection Plan

Evaluation Question	Data Collection Method	Activities Needed	Person(s) Responsible	Due Date
1.				
2.				

Data Analysis Management and Interpretation

- How will you ensure the security of the data?
- What data will be analyzed, how, and when? {Taken From Step 5, above.}
- Who is responsible for conducting the analyses?
- How will you engage stakeholders in confirming analysis results and interpreting them?

Table F.7. Data Analysis Plan

Analysis to Be Performed	Data to Be Analyzed	Person(s) Responsible	Due Date

Communicating and Reporting Management

- Who are the audiences for reporting the progress made on the evaluation and/or evaluation findings? {Taken from Step 6, above.}
- What is the purpose of the communications with this audience?
- What is the most appropriate type of communication method to use with this audience, for this purpose? Who is the most suitable “messenger”?
- When will the communication take place?

Table F.8. Communication and Reporting Plan

Applicable? (√)	Audience 1: {insert name of audience}				
	Purpose of Communication	Possible Formats	Possible Messenger	Timing/ Dates	Notes
	Include in decision making about evaluation design/activities				
	Inform about specific upcoming evaluation activities				
	Keep informed about progress of the evaluation				
	Present initial/interim findings				
	Present complete/final findings				
	Document the evaluation and its findings				
	Document implementation of actions taken because of the evaluation				

Adapted from Russ-Eft and Preskill, 2001, pp. 354–357.

Timeline

- When will planning and administrative tasks occur?
- When will training for data collectors occur?
- When will you pilot test data collection instruments?
- When will formal data collection, analysis, and interpretation tasks occur?
- When will information dissemination tasks occur?
- Upon mapping all of the above on a single timeline, are there any foreseeable bottlenecks or sequencing issues?

Evaluation Budget

- What is the anticipated cost for this evaluation?
- Where will the funding come from to support the evaluation?
- Are any in-kind, volunteer, or partner resources being contributed?

Wrapping Up

- At the end of the evaluation, how will you acknowledge the contributions of planning team members and others who contributed to the successful implementation of the plan?
- How will you document evaluation lessons learned in the course of implementing the evaluation?
- How/where will you archive relevant documents, instruments, and data?

This evaluation plan template can also serve as a tool to document evaluation implementation (as required by Evaluation Accountability Standard E1) and can also provide information to internal or external people conducting meta-evaluations (Standards E2 and E3). Inserting the following after each section may help with this process.

___ Evaluation was implemented as planned

___ Changes were made to the plan (describe changes as well as the rationale for changes)

Appendix G

Evaluation Training Resources

Evaluation is a very diverse field. A wide range of skill sets support the planning and implementation of evaluations, yet it is unlikely that any one evaluator will have mastered them all. As professional evaluators we need to regularly reflect upon our work to identify areas where we can enhance our practice.

Below is a list of resources to help you identify ways to broaden your skill set. We have highlighted with an asterisk (*) resources we view as particularly accessible to those new to evaluation. All websites cited were active as of December 22, 2009, when last accessed. A reference list is included at the end of the appendix with full citations for print works cited.

This is by no means an exhaustive list. We suggest you continue to learn about additional resources from your Evaluation Technical Advisor (ETA) and other evaluators involved in the state asthma program (e.g., other states, other evaluators in your health department or organization). Also, please feel free to share any additional resources you find on the state asthma program evaluator listserve!

In the sections below we first present sources of general information about evaluation (Section A), followed by a list of resources grouped by specific topics (Section B) and, finally, professional development opportunities for evaluators and others interested in learning more about evaluation (Section C).

A. General Information

INTRODUCTORY TEXTS AND HANDBOOKS*

Having one or two primary resources to turn to can be helpful in understanding some of the basic principles of evaluation, looking up definitions for common terms, and identifying additional resources. Below we list several books and online resources that provide a helpful overview of program evaluation (see reference list for full citations of print materials).

- CDC *Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide*. Available at: <http://www.cdc.gov/eval/evalguide.pdf>.
- W.K. Kellogg Foundation: Evaluation Handbook. Available at: <http://www.wkkf.org/Pubs/Tools/Evaluation/Pub770.pdf>.¹
- Chen HT. *Practical Program Evaluation: Assessing and Improving Planning, Implementation, and Effectiveness*.
- Russ-Eft DR and Preskill H. *Evaluation in Organizations: A Systematic Approach to Enhancing Learning, Performance, and Change*.
- Patton MQ. *Utilization-Focused Evaluation*. 4th edition.

1 Numerous additional evaluation resources, including tools and templates, may be downloaded from the RESOURCES tab of the Kellogg Foundation website <http://www.wkkf.org>.

- Rossi PH, Lipsey MW, and Freeman HE. *Evaluation: A Systematic Approach*. 7th edition.
- Wholey JS, Hatry HP, and Newcomer KE, eds. *Handbook of Practical Program Evaluation*. 2nd edition.
- Fitzpatrick JL, Sanders JR, and Worthen BR. *Program Evaluation: Alternative Approaches and Practical Guidelines*. 3rd edition.

Please note that the authors' individual views about evaluation practice are reflected in the structure and content of their writings. Thus, what is emphasized in Rossi, Lipsey, and Freeman (2004), for example, will be different from the emphasis you see in Patton (2008). Yet any of the approaches presented will provide you with a good basis on which to plan and conduct evaluations, although some may resonate more strongly with you and your stakeholders than others.

EVALUATION ORGANIZATIONS AND WORK GROUPS

Further sources of general information are the websites of major organizations, centers, and working groups that focus on evaluation. We list several of these below.

- ***American Evaluation Association****

www.eval.org

Regional affiliates available at: <http://www.eval.org/aboutus/organization/affiliates.asp>

The American Evaluation Association (AEA) is the professional association for evaluators in the U.S. AEA's annual conference is typically held in early to mid November. The association's website is an excellent resource for those looking for evaluators, trainings, hot topics in evaluation, or regional affiliates to join. We highly recommend the two publications that come with AEA membership: *The American Journal of Evaluation* and *New Directions for Evaluation*. These are among the journals recognized in the evaluation profession.

- ***CDC Evaluation Working Group****

www.cdc.gov/eval

This website includes a large number of evaluation resources (click on the RESOURCES link on left-hand side of the screen). Two helpful documents published by CDC are located on this website: (1) *The Framework for Program Evaluation in Public Health* and (2) a study guide that follows the steps of this framework entitled, *Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide*. The ETAs within the Air Pollution and Respiratory Health Branch closely subscribe to this framework and use these documents as the foundation for all materials they develop.

- ***CDC's Division of Adolescent and School Health (DASH)****

<http://www.cdc.gov/healthyYouth/evaluation/resources.htm>

This DASH website contains links to a number of resources, including short briefs on topics of common interest to evaluators. Additionally, this group has posted a number

of tutorials, one on “Writing good goals and SMART objectives” and another on logic modeling (currently being updated). The Evaluation Briefs, a number of which are mentioned below under specific topics, are particularly helpful. A list of the briefs can be accessed from the BRIEFS link at the right-hand side of the page.

- ***University of Wisconsin – Extension; Program Development and Evaluation****
<http://www.uwex.edu/ces/pdande/evaluation/index.html>

This website includes a number of helpful resources and tutorials that pertain to program planning and evaluation. The tutorial on logic modeling is quite helpful. Although the authors have a slightly different “take” on the elements of a logic model than is outlined in the CDC Framework, they communicate the information in a well thought out way.

- ***Western Michigan University – The Evaluation Center***
<http://www.wmich.edu/evalctr/>

The Evaluation Center is located within Western Michigan University, one of only several universities in the U.S. that is heavily engaged in training future evaluators. This website includes a number of resources you may find helpful, including the famous “evaluation checklists” that can be accessed by selecting CHECKLISTS from the TOOLS AND RESOURCES drop-down menu.

B. Topic-Specific Resources

Below we list a number of resources on specific evaluation topics that may be of interest to you.

EVALUATION APPROACHES, MODELS, OR THEORIES

There is no one accepted way of conducting an evaluation. Rather evaluation plans and implementation strategies tend to vary based on an evaluator’s background and training, as well as the context in which an evaluation is being conducted. You may have heard some general theories or approaches being recommended, such as theory-driven evaluation, utilization-focused evaluation, participatory evaluation, empowerment evaluation, fourth-generation evaluation, to name a few. While we are not aware of an online resource covering all of these various approaches, a book entitled *Evaluation Roots: Tracing Theorist’s Views and Influences* edited by Marvin C. Alkin (2004) covers many of these models if you are interested in learning more.

PROFESSIONAL STANDARDS FOR EVALUATION PRACTICE*

Information on evaluation principles and standards is available at the websites listed below.

- American Evaluation Association's Guiding Principles for Evaluators
Principles document, available at:
<http://www.eval.org/GPTraining/GP%20Training%20Final/gp.principles.pdf>
Training package, available at:
<http://www.eval.org/GPTraining/GPTrainingOverview.asp>
- Joint Committee on Standards for Educational Evaluation: Program Evaluation Standards
Summary: <http://www.jcsee.org/program-evaluation-standards-statements>
- American Evaluation Association Statement on Cultural Competence in Evaluation
Summary: <http://www.eval.org/p/cm/ld/fid=92>

CDC FRAMEWORK

- ***CDC/EPA Evaluation Webinars****

The National Asthma Control Program, in partnership with the Environmental Protection Agency, has created a webinar series on program evaluation basics. Nationally recognized experts present a general introduction to program evaluation; note challenges in conducting useful evaluations as well as methods for overcoming those challenges; and introduce the six steps of the CDC Framework for Program Evaluation.

http://www.cdc.gov/asthma/program_eval/evaluation_webinar.htm

- ***CDC Framework for Program Evaluation in Public Health****

CDC has published two main documents that outline the steps of *The Framework for Program Evaluation in Public Health*. Direct links to these resources are provided below

Morbidity and Mortality Weekly Report (MMWR) available at:

<ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4811.pdf>

Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide available at: <http://www.cdc.gov/eval/evalguide.pdf>

- ***Practical Strategies for Culturally Competent Evaluation***

This guide is an introduction and resource to promote cultural competence in the evaluation of public health programs and initiatives using the CDC Framework.

<http://www.cdc.gov/asthma/links.htm>

LOGIC MODELING AND OTHER PICTORIAL PROGRAM DEPICTIONS

Many resources available on the web provide information about how to develop logic models. These include:

- ***Developing a Logic Model and Focusing Your Evaluation.*** * This is a webinar presented by Tom Chapel, available online at: http://www.asthmacommunitynetwork.org/webinars/program_evaluation_basics.aspx
- ***DASH Evaluation Briefs,*** * available from the BRIEFS link at: <http://www.cdc.gov/healthyYouth/evaluation/resources.htm>
 - Brief #2 – Logic Model Basics
 - Brief #5 – Integrating the Strategic Plan, Logic Model, & Workplan
 - Brief #8 – Aligning a Logic Model with a Strategic Plan
- ***University of Wisconsin Extension – Logic Model Website.*** * This website includes many materials on logic modeling, such as templates for creating a logic model, examples of logic models, and a self-study online module (interactive) that provides valuable information about logic modeling. Available at: <http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>.
- ***W.M. Kellogg Foundation Logic Model Development Guide.*** * This is a wonderful resource that covers a broad range of issues in logic modeling. Available at: <http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf>.

Logic modeling resonates with some, but not all programs and stakeholders. If you are interested in learning more about other approaches available for describing your program, you may be interested in the following topics: concept mapping, program theory, systems thinking/modeling.

Bill Trochim has done a great deal of work in the area of *concept mapping*, publishing widely on this topic and developing a website with many materials about it, available at <http://www.socialresearchmethods.net/mapping/mapping.htm>.

Program theory development has been covered in detail in works by Peter Rossi, Huey Chen, and Stewart Donaldson among others (see reference list for examples).

Systems thinking/modeling is a new area of exploration for evaluators. In the event that this topic interests you, a good starting point for learning more is the webpage of Bob Williams, an expert in the area of systems thinking and evaluation. His webpage includes direct links to a variety of resource documents: <http://users.actrix.co.nz/bobwill/>. Additionally, there is an AEA Topical Interest Group, the Systems in Evaluation Topical Interest Group, with an associated website available at: <http://www.eval.org/aboutus/organization/tigs.asp>.

PRIORITIZATION PROCEDURES*

A variety of techniques are available for working with stakeholders to prioritize evaluation candidates or evaluation questions, as well as for setting priorities in other areas of program planning. These techniques include, but are not limited to, the Nominal Group Planning Method, the Simplex Method, and the Criteria Weighting Method. Here are two online resources that describe various prioritization procedures:

- Brief #7 – *Gaining Consensus among Stakeholders through the Nominal Group Technique*. Available from the BRIEFS link on the right-hand side of the page at: <http://www.cdc.gov/HealthyYouth/evaluation/resources.htm>
- *Assessment Protocol for Excellence in Public Health*, “Prioritization” chapter: <http://www.cdc.gov/od/ocphp/nphsp/documents/Prioritization%20section%20from%20APEXPH%20in%20Practice.pdf>

EVALUATION DESIGNS

There are three overarching types of evaluation design: experimental, quasi-experimental, and non-experimental. Experimental designs differ from the other two types in that they include random assignment of participants into treatment and control conditions. Quasi-experimental designs do not include random assignment as a feature; rather they include multiple measures over time (as in a pre-post) or a comparison group. Non-experimental designs include (but are not limited to) case studies and post-test only designs, in which there is no randomization of participants to conditions, no comparison group, no multiple measurements of the same factors over time. Many resources explore these various types of evaluation designs. One extensive online resource that explains these designs and associated issues (e.g., threats to internal validity) is the *Research Methods Knowledge Base* by William Trochim, which can be found at: <http://www.socialresearchmethods.net/kb/>. One well-recognized resource on experimental and quasi-experimental designs is *Experimental and Quasi-Experimental Designs for Generalized Causal Inference* by Shadish, Cook, and Campbell (2002).

If you have a particular interest in case-studies, Robert K. Yin and Robert Stake have produced a number of publications that may be helpful. Additionally if you are interested in “mixing” evaluation designs, you may wish to identify resources authored by Jennifer C. Greene, Valerie J. Caracelli, Abbas Tashakkori, and Charles Teddlie. (See reference list for examples.)

DATA COLLECTION

The Division of Adolescent and School Health has produced a variety of *Evaluation Briefs* that cover some of the most common data collection methods used in evaluation. These are available from the BRIEFS link on the right-hand side of the page at: <http://www.cdc.gov/HealthyYouth/evaluation/resources.htm>. Specifically you may be interested in:

- Brief #13 – *Data Collection Methods for Program Evaluation: Focus Groups**
- Brief #14 – *Data Collection Methods for Program Evaluation: Questionnaires**

- *Brief #15 – Checklist to Evaluation the Quality of Questions**
- *Brief #16 – Data Collection Methods for Program Evaluation: Observation**
- *Brief #17 – Data Collection Methods for Program Evaluation: Interviews**
- *Brief #18 – Data Collection Methods for Program Evaluation: Document Review**

Evaluations often use multiple data collection methods (both qualitative and quantitative) to answer questions of interest (see reference list for books on mixed-method evaluation by Greene, Caracelli, Tashakkori, and Teddlie).

Online (Internet) surveys have become a popular method for collecting data. As with other modes of survey delivery, online surveys have associated strengths and weaknesses. To learn more about online surveys, you may find helpful the recent work of Don A. Dillman* (widely recognized for his writings on survey design). Additionally, a new publication by the RAND Corporation entitled *Conducting Research Surveys via E-Mail and the Web* may be of interest to you. This publication discusses the strengths and weaknesses of conducting online surveys for research. However much of the information is directly applicable when considering the use of online surveys for the purpose of *program evaluation*. This RAND publication is available for free download (pdf) at: http://www.rand.org/pubs/monograph_reports/MR1480/.

DATA ANALYSIS

Skills for analyzing both qualitative and quantitative data can be important for evaluators. Yet many of us may receive training in only one or the other approach during our academic training. Fortunately, there are many good resources available for learning more about how to analyze both types of data. Some helpful hints for analyzing qualitative and quantitative data for evaluative purposes are presented in the following publications from the Division of Adolescent and School Health, available from the BRIEFS link at <http://www.cdc.gov/HealthyYouth/evaluation/resources.htm>:

- *Brief #19 – Analyzing Qualitative Data for Evaluation**
- *Brief #20 – Analyzing Quantitative Data for Evaluation**

More detailed resources about qualitative data analysis in evaluation include, but are not limited to: a chapter entitled “Qualitative Data Analysis” by Sharon L. Caudle in Wholey, Hatry, and Newcomer (2004)*; a book by Miles and Huberman (1994) entitled *Qualitative Data Analysis: An Expanded Sourcebook*; and *Qualitative Research and Evaluation Methods* by M.Q. Patton (2002). Other authors known for their use of qualitative methods include Egon Guba, Yvonna Lincoln, and Robert Stake.

With regard to analyzing quantitative data, a succinct and practical treatment of using statistics in evaluation is provided in Chapter 16 of Wholey, Hatry, and Newcomer (2004)*. You may also want to consider speaking with a statistician in your health department to learn of additional relevant resources.

If you have an interest in cost-effectiveness or cost-benefit analysis, another chapter in Wholey, Hatry, and Newcome (2004) provides a good overview of these techniques (Chapter 18, “Cost-Effectiveness and Cost-Benefit Analysis” by James Edwin Kee).^{*} Levin and McEwan (2001) also have a text on cost analysis that provides a number of helpful examples for conducting cost-utility, cost-effectiveness, and cost-benefit analyses. If you have a health economist on staff, we recommend consulting them for additional resources.

COMMUNICATING AND REPORTING EVALUATION FINDINGS

Many methods can be employed to communicate and report evaluation findings. A good treatment of communicating and reporting evaluation findings is provided in *Evaluation Strategies for Communicating and Reporting: Enhancing Learning in Organizations* by Torres, Preskill, and Piontek (2005).^{*} Additionally, the Division of Adolescent and School Health has a number of Evaluation Briefs that relate to this topic, available from the BRIEFS link at: <http://www.cdc.gov/HealthyYouth/evaluation/resources.htm>.

- *Brief #9 – Disseminating Program Achievements and Evaluation Findings to Garner Support*^{*}
- *Brief #11 – Preparing an Evaluation Report*^{*}
- *Brief #12 – Using Graphs and Charts to Illustrate Quantitative Data*^{*}

For those of you interested in and/or responsible for graphical presentation as a visual aid in communicating surveillance data and/or evaluation results, the works of Edward R. Tufte are considered classic treatments of this topic.

C. Professional Development Opportunities

Professional development training in evaluation is offered through some of the venues suggested below.

- **American Evaluation Association Annual Conference**

AEA typically offers a number of professional development sessions in the days adjoining their annual conference (www.eval.org)

- **The Evaluator’s Institute**

Located at George Washington University, but with courses also held elsewhere, this institute offers a variety of well-developed evaluation courses. Instructors of these courses are well known in the evaluation community. Information about The Evaluator’s Institute course offerings can be found at: <http://tei.gwu.edu>.

- **CDC/AEA Summer Evaluation Institute**

This training occurs annually in Atlanta, GA. Courses are offered at beginning, intermediate, and advanced levels on a variety of topics by numerous evaluation professionals. Information about this training is posted on the AEA website each year under the TRAINING tab at www.eval.org.

- **Claremont Graduate University (CGU)**

The School of Behavioral and Organizational Sciences at Claremont Graduate University offers a number of professional development opportunities throughout the year. Regular offerings include an annual professional development workshop series in evaluation, which typically occurs at the end of August (<http://www.cgu.edu/pages/465.asp>). Recently, many workshops have been made available for a nominal fee. CGU also offers a number of other professional development opportunities, including a certificate that can be earned through distance learning. These can be found described at: <http://www.cgu.edu/pages/6468.asp>.

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Numerous additional evaluation resources, including tools and templates, may be downloaded from the RESOURCES tab of the Kellogg Foundation website <http://www.wkkf.org>.

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