Learning and Growing through Evaluation

State Asthma Program Evaluation Guide

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

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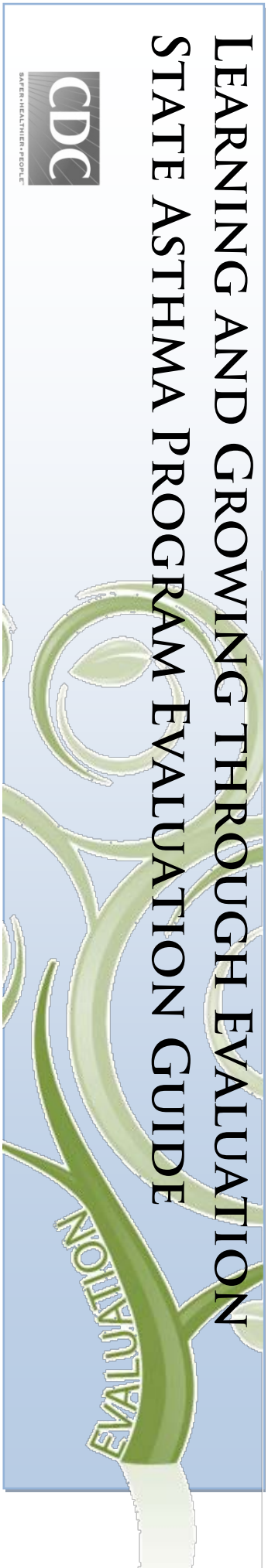

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Copies of *Learning and Growing through Evaluation: State Asthma Program Evaluation Guide* which can be viewed or downloaded from the APRHB website http://www.cdc.gov/asthma/program_eval/guide.htm.

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* International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. *Ann Intern Med* 1988: 108:258–265.

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Introduction and Overview

The Centers for Disease Control and Prevention's (CDC) National Asthma Control Program and state asthma programs across the country are mobilizing their resources to reduce the burden of asthma in our communities. The sound evaluation practices detailed in *Learning and Growing through Evaluation* can help ensure that we use those resources effectively and efficiently; that we have a means of demonstrating the value of our programs; and that we are developing a body of knowledge that tells us "what works."

Learning and Growing is an evaluation guide intended for use by state and territorial public health departments (SHDs) that are receiving CDC funding for state asthma programs. Other groups that focus on improving asthma management practices, whether or not they receive CDC funding, may also find elements of the guide useful in designing and implementing their own program evaluation activities.

CDC's approach to public health program evaluation takes into account the great variety among state programs, offering a framework that can be tailored to specific programs. As diverse as the state programs are, all share common aspirations with each other and with CDC's Air Pollution and Respiratory Health Branch (APRHB). These include:

- Reducing morbidity and mortality from asthma
- Reducing asthma disparities
- Improving quality of life for asthma patients and their families
- Sustaining and improving statewide asthma programs

As its title suggests, this guide focuses on *learning* together how we can reach our goals and on *growing* in our capacity to systematically examine, or evaluate, our efforts.

Organization of the Guide

The guide is comprised of two modules that provide an overview of the *CDC Framework for Evaluating Public Health Programs* (MMWR, 1999) as applied to asthma programs. Fundamental to CDC's approach is an emphasis on generating information or knowledge that will be useful to the many people invested in a program's success. Whether you are new to program evaluation or have years of experience, becoming familiar with this approach will give us a common vocabulary and support our work together on this cooperative agreement.

The first module applies the CDC Framework to evaluation planning. It addresses both the creation of a strategic evaluation plan, which is designed to prioritize the use of scarce evaluation resources over the life of the cooperative agreement, and also planning sound evaluation strategies for use in evaluating specific program activities. A second module covers methods for evaluating the three main components of state asthma programs: surveillance, partnerships, and interventions. The second module is designed to be consulted as needed when considering evaluation strategies and preparing individual evaluation plans.

The three-ring binder format has been chosen to permit the addition of supplemental material as you use the guide over time. Pages are numbered consecutively within chapters. Tables and

figures are also numbered consecutively within chapters to facilitate cross-referencing. We recommend that you print this document in color, if possible, to take full advantage of its design features. The guide is designed for printing one page to a sheet and double-sided.

Tools and Templates

Throughout the guide you will find a number of templates and checklists that should facilitate your evaluation planning and practice, particularly if you are new to evaluation. They can be easily adapted to the particular context in which your program operates. The examples given are provided for illustrative purposes only and are not meant to promote one particular evaluation question or method over another. By following the planning process outlined in the guide, you will arrive at your own conclusions regarding proposed evaluations. Blank templates in MS Word are available from your APRHB Evaluation Technical Advisor.

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.

To encourage you to reflect on what you are reading and how the information can be applied to your program, we have inserted blank "Notes" pages at random intervals throughout the document. Feel free to use these to jot down ideas as they occur to you.

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.

CDC is committed to supporting states as they discover and share "what works" in their asthma programs. By learning and growing together through evaluation, we can contribute to America breathing easier.

MODULE 1

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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

"The question we ask today is not whether our government is too big or too small, but whether it works."

-President Obama, Inaugural Address, January 20, 2009

In his Inaugural Address, President Obama challenged government to answer tough questions about the success of taxpayer-funded 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 Air Pollution and the Respiratory Health Branch (APRHB) in the Division of Environmental Hazards and Health Effects 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.

Preparing for Successful Evaluation

Since CDC began funding state asthma programs in 1999, many state programs have developed a strong infrastructure and have solid experience implementing and evaluating their programs. Now, we are ready to look carefully at which of the various strategies we use work and which do not. Given the rich diversity in our state programs and the people they serve, we also seek to learn about the contexts in which our programs are successful.

To plan and implement evaluations able to provide useful and actionable results that will allow us to learn and grow as an asthma community, we first need to turn our attention to establishing or enhancing our capacity to plan and conduct evaluations. There are many actions that the APRHB and state asthma programs can take as part of **evaluation capacity building** (Preskill and Boyle, 2008; Preskill and Porztline, 2008).

The APRHB will support the evaluation efforts of state asthma programs by:

- ***Providing technical assistance and coaching on evaluation.*** The APRHB has established a core team of evaluators to provide technical assistance to state asthma programs during development and implementation of their evaluation plans. Each state will be assigned an APRHB **EVALUATION TECHNICAL ADVISOR** who can be consulted regularly on evaluation needs that arise.
- ***Offering regular evaluation trainings*** to state asthma program staff via the Internet and in-person meetings. These trainings will be archived on-line for those who cannot attend or who join asthma programs in the future.
- ***Developing and distributing additional written documents*** that provide educational information on key aspects of evaluation practice.
- ***Informing state asthma programs of additional evaluation resources and trainings*** available outside of the APRHB and encouraging engagement in these professional development activities.

Those of you managing or working in state asthma programs can foster **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

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 evaluator (see **Appendix D** for suggestions on hiring an evaluator), understanding the basics will make all staff

stronger partners in evaluation. 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. This guide 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.

Both 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.

Table1.2 Standards[1] 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?

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

A Common Vision

The CDC began awarding funds to SHDs in 1999 to work with partners in establishing state asthma programs. Each program is charged with selecting and conducting activities to reduce the burden of asthma. Programs target pressing issues and populations disproportionately affected by asthma in their state. Therefore, the activities your program conducts likely differ 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/workplaces, community organizations, and community members play important roles in achieving our program **OUTCOMES**. It is important that we keep these stakeholders in mind as we develop our programs and plan our evaluation strategies.
- ***Long-term outcomes or goals.*** All state asthma programs share common **GOALS** of decreasing asthma mortality, morbidity, and disparities and improving quality of life for those with asthma and their families and caregivers. Also shared is the desire to sustain asthma programs and partnerships so the good work accomplished to date can continue. 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 of state asthma programs, such as increased awareness, knowledge, attitudes, and behaviors in relation to asthma management. Somewhat longer term results of state asthma programs include reduction of exposure to triggers and improved medical management of asthma.
- ***Activities.*** All state asthma programs share a common set of activities that include surveillance, partnerships, and interventions. 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 how a program is expected to work. In the next section of this chapter, we explain the concept of program models, and then introduce an *impact model* of state asthma programs. First, though, let's pause and read **Vignette 1**, where we envision the first 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 of this guide.

NOTES

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 reduce the morbidity and mortality of asthma in our state. Reducing asthma disparities is critically important, as well as improving the quality of life for asthma patients and their families. I also want to find resources to sustain our asthma program so we can continue and expand our good work.

***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. There are some diagrams in here that CDC pulled together based on some pretty intensive evaluation workgroups with state asthma programs that explain what we're all trying to do. 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 an impact 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 impact 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.

Brief Introduction to Models and Graphic Representations

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).

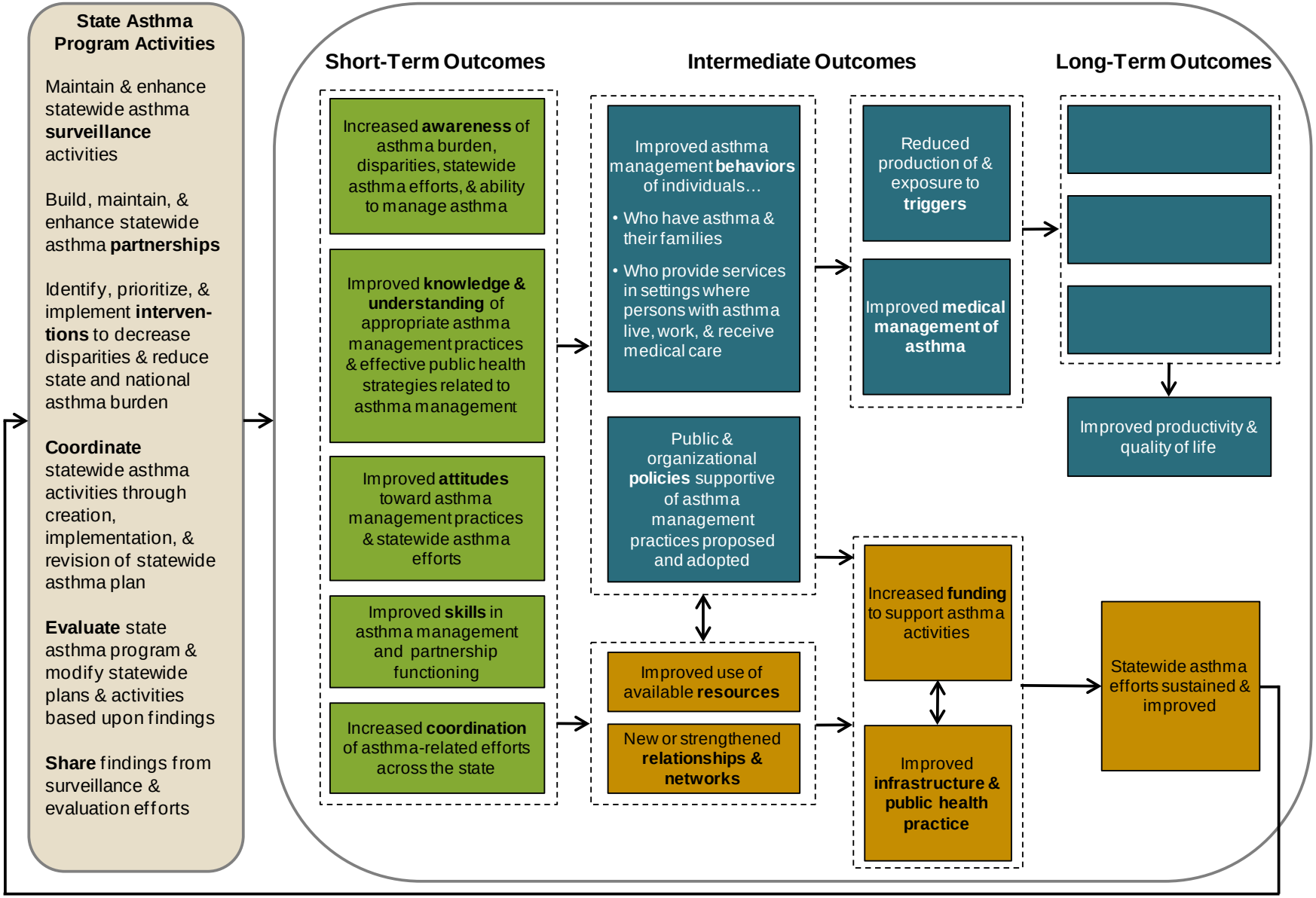
The type of model we will be using to guide this discussion is called a **PROGRAM IMPACT MODEL**. An impact model is similar to a logic model, but does not include some of the categories typically seen on the left-hand side of a logic model (e.g., inputs, detailed and specific activities, and **OUTPUTS**). Rather it focuses specifically on the intended outcomes of a program and the articulation of the connections among these outcomes. For practical purposes, the impact model can be viewed as a truncated logic model. The aim of this type of model is to demonstrate that, no matter how different our state programs are in terms of resources available, activities conducted, and populations served, we nevertheless share much in common.

State Asthma Program Impact Model

What Sofia shows Anthony in Vignette 1 is the model presented in **Figure 1.2.** This model draws upon conversations that took place within three state asthma program evaluation workgroups convened in 2006. Consisting of representatives from the APRHB, evaluation contractors, and state asthma programs, these workgroups contributed extensively to understanding the activities and outcomes state asthma programs have in common. They also produced materials helpful to developing evaluations for surveillance, partnerships, and interventions (specifically those in daycare and school settings). In developing the impact model in Figure 1.2, the authors drew on information articulated by these workgroup members to demonstrate a "common vision" for addressing asthma from a public health perspective.

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. Impact 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.

Figure 1.2 State Asthma Program Impact Model



Let's now turn our attention to the specifics of the state asthma program impact model. In this section we briefly introduce the model. Appendix C contains a more detailed discussion that includes tangible examples of some of its **PROGRAM PATHWAYS**.

As previously noted, as diverse as the state asthma programs are, all may share common goals. These include:

- Reducing morbidity and mortality from asthma
- Reducing asthma disparities
- Improving quality of life for asthma patients and their families
- Sustaining and improving statewide asthma programs

Evaluators refer to these goals as *long-term program outcomes*. Note that these long-term program outcomes are depicted in blue and gold 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 include increased awareness, knowledge, attitudes, and behaviors in relation to asthma management. Somewhat longer term program results include reductions in exposures to triggers and improved medical management of asthma. Evaluators refer to these kinds of program results as *short-term and intermediate program outcomes*. These are depicted in the green, blue, and gold boxes located toward the center of the impact model.

Although not depicted in detail in this model, state asthma programs do have some commonalities in the types of activities they conduct. In particular, all of these programs build, maintain, and enhance state asthma surveillance and partnerships. Additionally, all state asthma programs identify, prioritize, and implement interventions; coordinate statewide asthma activities; evaluate their program; and share findings from surveillance and evaluation efforts.

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. For example, increases in funding can be used to improve the infrastructure and thereby 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.

It is important to recognize that the model depicted in Figure 1.2 is a work in progress. While we have done our best to represent what is shared among state asthma programs, you may be aware of other relationships we do not highlight. Your CDC Evaluation Technical Advisor would be interested in hearing about these. Some may be unique to your program, but others may represent new or different pathways that should be added to this model.

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

NOTES

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 keep doing that for as long as needed.

Anthony: OK. That all makes good sense. But I can also see results you expect to occur sooner. For example, you'd expect to see positive changes in awareness, knowledge, attitudes, and the level of coordination for asthma activities. And for those with asthma and their caregivers, you expect to see increased skills in asthma management. 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 impact models and 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.

In this chapter (and in greater detail in Appendix C), we describe some important connections and influences we see operating in the asthma program impact model. The next chapter of this document will walk you through key considerations in developing a strategic evaluation plan for your program. As you will see, developing and documenting a description of your program, as we have just done here, is an important part of the process of developing a strategic evaluation plan. You will be able to borrow from this model as you develop your own program description and detailed logic model.

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 what a strategic evaluation plan should include
- Apply the CDC Framework process to developing a strategic evaluation plan

Before beginning to evaluate your program, it is helpful to have an overall strategy in mind. In the first year of your cooperative agreement, you will be asked to develop an overall strategy for evaluating your program and to describe this strategy in a **strategic evaluation plan**.

What is a strategic evaluation plan? A strategic plan can be thought of as your program's evaluation portfolio. A strategic evaluation plan 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—surveillance, partnerships, and interventions.

How is a strategic evaluation plan different from an individual evaluation plan? As noted above, a strategic evaluation plan is a proposal for how multiple evaluations will be conducted over the entire cooperative agreement cycle (i.e., 5 years). 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., data collection methods to be used) as a way to approximate scope, timing, and resources likely to be required. 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.

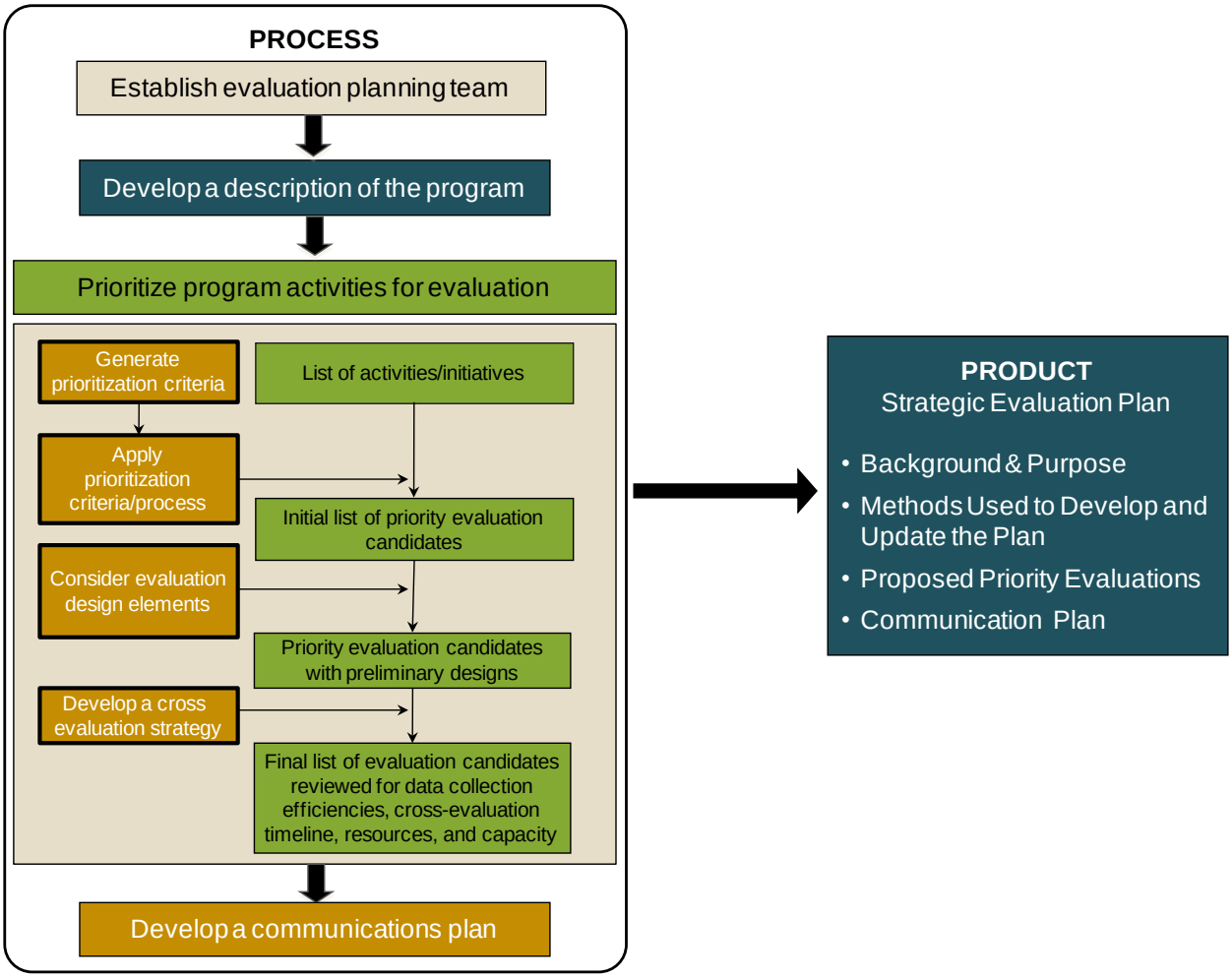
What are the benefits of a strategic evaluation plan? By systematically planning for evaluation, you can make sure that the time and energy you invest in evaluation provides information to support program planning and improvement. The process of developing your strategic evaluation plan will also provide 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 multiple evaluations will be conducted over the entire cooperative agreement cycle. To underscore this difference, we have assigned letters (A–G) rather than numbers to the steps in the strategic evaluation planning process. At each step in the process, where relevant, we reference in a blue box to the right of the text the related step in the Framework. The product(s) of each step in the strategic evaluation planning process are highlighted in a green box to the right of the text.

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 MS 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

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.

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.

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 asthma program evaluator, the asthma program epidemiologist, and one or two key opinion leaders from the statewide partnership. 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 APRHB 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 your larger partnership about the activities of the evaluation planning team. Some individuals in the larger partnership 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 those in the larger partnership. 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
- Determining 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.

Step B – Describe the Program

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.

The next step in creating a strategic evaluation plan is to develop a description of the state asthma program and its major components (surveillance, partnerships, and interventions). 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.

Review program documents. The following documents contain a wealth of information about planned activities and anticipated program outcomes: the state asthma plan, progress 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. If your program has expanded opportunity funding in addition to core funding, make sure that these projects are included in this review.

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 partnership 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 of partners 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	(choose one – Surveillance, Partnerships, Interventions)
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)
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—surveillance, partnerships, and interventions. Your APRHB Evaluation Technical Advisor can provide you with additional resources on logic model development as needed.

Step C – Prioritize Program Activities for Evaluation

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.

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.

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 5-year cooperative agreement cycle—surveillance, partnerships, and interventions. In **Table 2.2** we list additional criteria you may want to consider adopting as part of your prioritization process. 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?
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 one or more activities to evaluate over the course of our funding cycle from each major program component (surveillance, partnerships, and interventions). Last time 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 surveillance than for interventions? It seems like criteria that fit interventions might not apply to surveillance or partnership 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 surveillance criteria. What's important to consider when deciding which surveillance activities to evaluate?

***Epidemiologist**:* 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 partnership activities?

***American Lung Association Representative**:* I'd like to make sure we apply the criterion of Sustainability in our prioritization process for partnership activities. We expend a lot of effort on sustaining partnerships, so any information on how to do this better or more efficiently would be very useful. Partnership activities that can help sustain the program should be high on the list of things to evaluate.

***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 activities in all components, whereas Sustainability is most specific to partnerships.

***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 *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
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
Interventions				
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
NAEPP Clinical Guidelines Distribution	Low		Medium	Medium

*Note that in this example the evaluation planning team did not choose Sustainability as a criterion for evaluation candidates under either Surveillance or Interventions, although they well might have.

Note in Table 2.3 that 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 impact 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.

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

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.

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.

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.

- ***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
Partnerships			
Coordinate asthma-related activities among partners	Process	To what extent does the asthma program interface with other state or federally funded programs or agencies?	Low
	Process	To what extent does the partnership have a clearly articulated vision that is shared?	Medium
	Outcome	To what extent are resources leveraged between CDC funded programs to accomplish the state asthma plan goals?	High
Interventions			
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 your evaluation questions. 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., surveillance, partnerships, and interventions).

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 workplans; Asthma epidemiologists; Surveillance data users	Year 3	Middle of Year 4	Modest
Partnerships To what extent are resources leveraged between state agencies or CDC-funded programs to accomplish the state asthma plan goals?	Case-study	Document review (budgets from grants); partner survey; key informant interviews	State asthma program budgets Partners	Year 2	Year 2	Modest
Interventions How well does the electronic system function in the school and clinical care coordination intervention?	Case study	Observations; Open-ended interviews; Online survey	On-site observations; Purposive sample of users for interviews; All users for online survey	Year 2	Year 2	Low to Modest
Interventions 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

NOTES

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:

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

1. Check that you have included a good mix of evaluations related to each program component (e.g., surveillance, partnerships, interventions) 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.

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

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 5-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.

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?
How: 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?
How: 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?

Let’s check in with Sofia and Anthony and see how they are progressing with their evaluation planning team.

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 (i.e., surveillance, partnerships, and interventions).

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 resources to support the state asthma plan goals. 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

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.

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.

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 APRHB, 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		
Audience 2 (e.g., Program Staff)				
	Purpose	**Possible Formats**	**Timing**	**Notes**
√	Inform about specific upcoming evaluation planning activities	Email	Bi-weekly	
	Etc.			

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 APRHB 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.

We recommend that you work with the evaluation planning team to review the strategic evaluation plan at least annually, with consultation from your APRHB 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 5-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

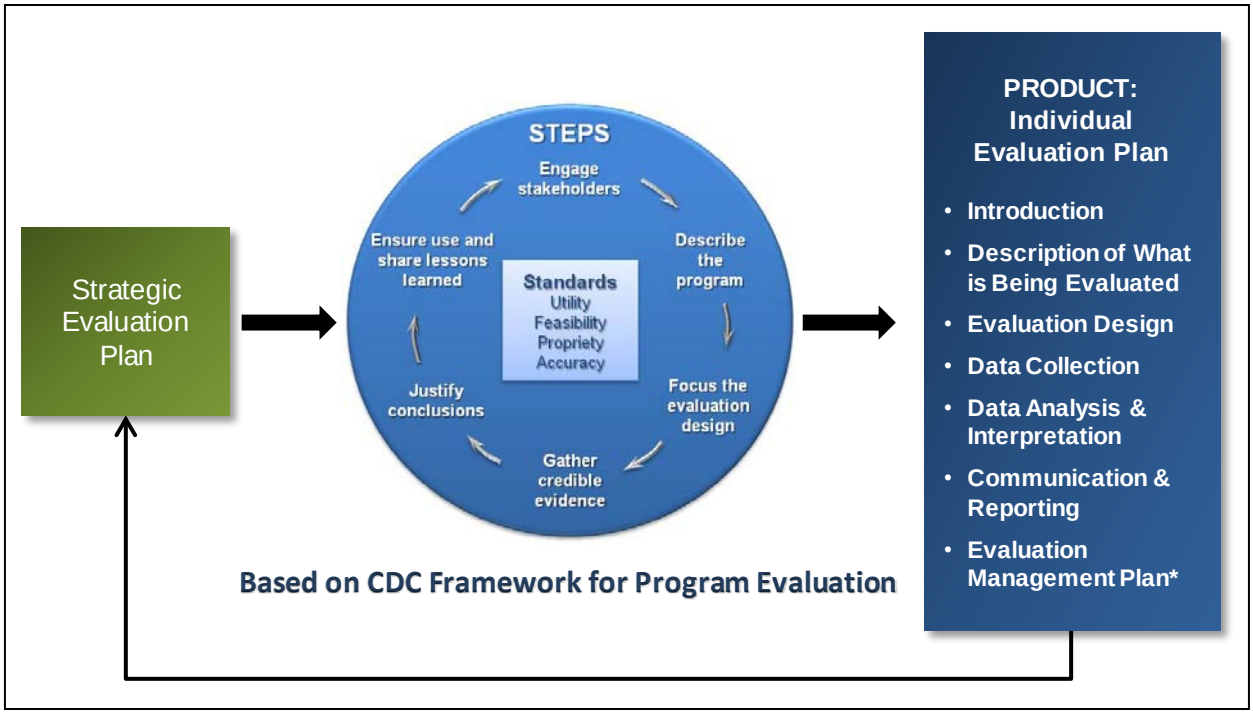
Now that the evaluation planning team has developed a strategic evaluation plan, work can begin on developing the details of plans for individual evaluations that will be conducted over the remaining time of the cooperative agreement. As we saw in Chapter 2, the strategic evaluation plan contains preliminary 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. In addition, you may have existing individual evaluation plans (such as those developed for enhanced opportunities) that you would also want to review again for fit with the overall strategy outlined in 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 the product of the strategic evaluation plan to focus in greater detail on a plan for a particular evaluation you propose to implement. 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**.

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 in scope, 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 so, 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, (c) avoid later critiques of the evaluation or the program by showing a transparent and open evaluation process.

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

A small evaluation planning team was engaged in developing the strategic evaluation plan. Now it is time to engage a group of stakeholders in creating each individual evaluation plan. This group may or may not have overlapping membership with the group you engaged in developing your strategic evaluation plan. The planning team for your individual evaluation plan should include individuals who are interested in and perhaps affected by the specific evaluation to be carried out.

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 revisit and refine the general ideas proposed in your strategic evaluation plan. The task at this point is to make final decisions about what specific evaluation questions will be answered and how.

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.

Step 4 – Gather Credible Evidence

In developing your data collection approach, consider your stakeholders' information needs at varying points in time. Matching the types of 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? Do your methods meet your stakeholders' needs for information? Do you need to adjust your data collection timeline? Are there measures 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.

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

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, physicians' 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.

NOTES

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.

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

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?

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, working 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.

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.

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.

Appendix A
Chapter 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, p. 444).

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/nphpsp/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

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. [7]

Accuracy — One of the program evaluation standards developed by the Joint Committee on Standards for Educational Evaluation. The extent to which an evaluation is truthful or valid in what it says about a program, project, or material. See also **FEASIBILITY**, **PROPRIETY**, and **UTILITY**. [13]

Activities — The actual events or actions that take place as a part of the program. [13]

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. [16]

Benchmarks — Measures of progress toward a **GOAL**, taken at intervals prior to the program's completion or the anticipated attainment of the final goal. [14]

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). [13]

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**). [13]

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**. [14]

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. [6]

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 15]

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)**. [11]

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**, and **UTILITY**]

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. [13]

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 14]

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, PROPRIETY, and UTILITY. [13]

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. [14]

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. [14]

Indicator

A specific, observable, and measurable characteristic or change that shows the progress a program is making toward achieving a specified OUTCOME. [13]

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. [14]

Inputs

Resources that go into a program in order to mount the ACTIVITIES successfully. [13]

Internal Evaluator

Evaluator who is a staff member or unit from within the organization being studied. [14]

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. [13]

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 7]

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. [7]

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). [13]

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. [13]

Outputs

The direct products of program ACTIVITIES; immediate measures of what the program did. [13]

Performance Criteria

The observable aspects of a performance or product that are observed and judged in a performance assessment. [9]

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. [10]

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). [16].

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. [14]

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. [7]

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 14]

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. [13]

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. [13]

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, FEASIBILITY, and UTILITY. [13]

Qualitative Data

Observations that are categorical rather than numerical, and often involve knowledge, attitudes, perceptions, and intentions. [13]

Quantitative Data

Observations that are numerical. [13]

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. [13]

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. [16]
Randomized Controlled Trial	An experimental study of an intervention in which study participants are randomly assigned to treatment or **CONTROL GROUPS**. [Adapted from 12]
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 (*program stakeholders*) or that are interested in the results of the evaluation or what will be done with results of the evaluation (*evaluation stakeholders*). [13]
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. [14]
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. [14]
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**, **FEASIBILITY**, and **PROPRIETY**. [13]

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14 U.S. Environmental Protection Agency. *Program Evaluation Glossary*. Last updated on Thursday, November 1st, 2007. Available at: *http://www.epa.gov/evaluate/glossary/all-esd.htm.* Last accessed December 12, 2009.

15 U.S. Government Accountability Office. *Designing Evaluations*. GAO/PEMD-10.1.4. March 1991. Available at: *http://www.gao.gov/special.pubs/10_1_4.pdf*. Last accessed December 12, 2009.

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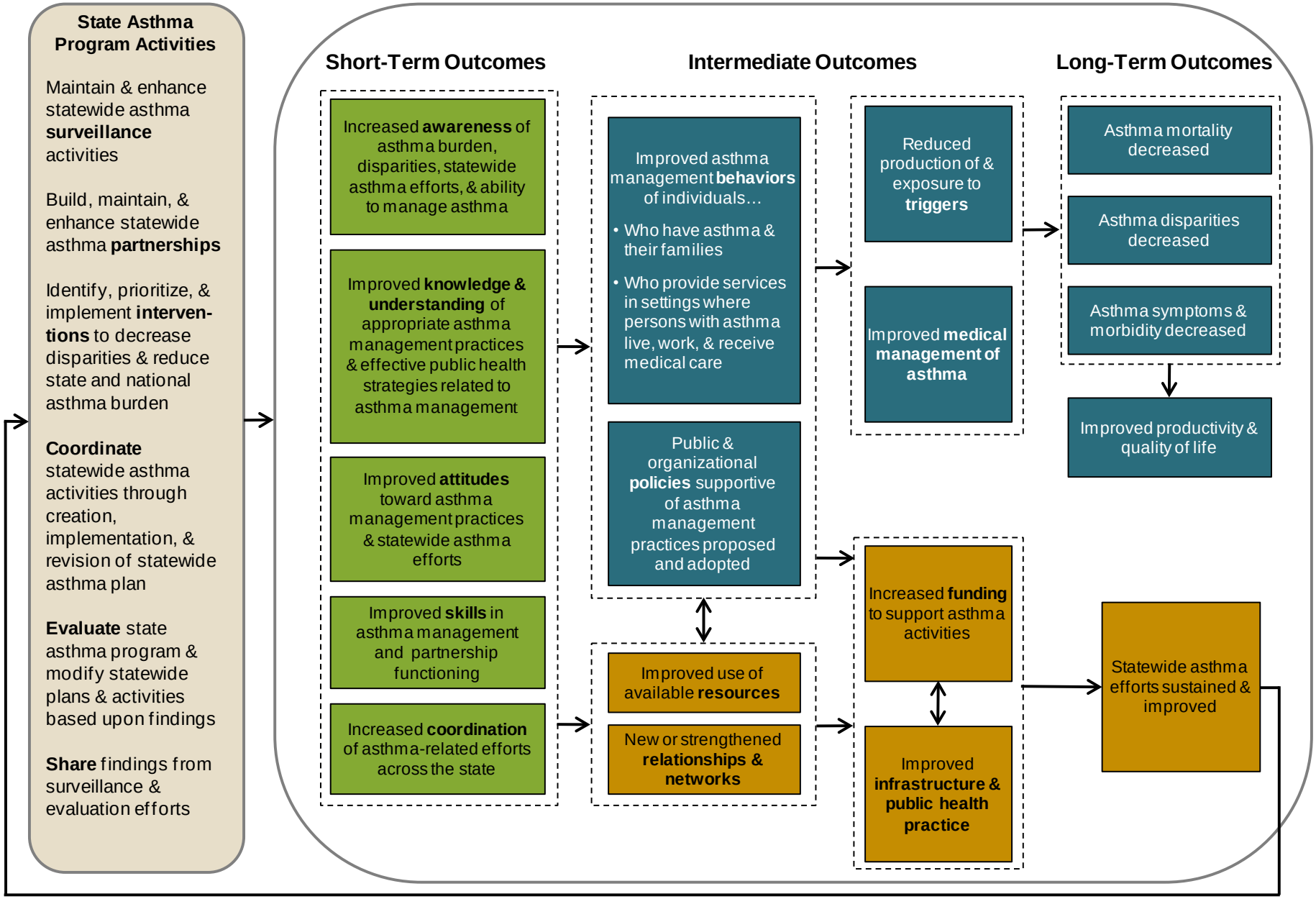
NOTES

Appendix C
The State Asthma Program Impact Model

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.

Figure C.1 State Asthma Program Impact Model



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**).

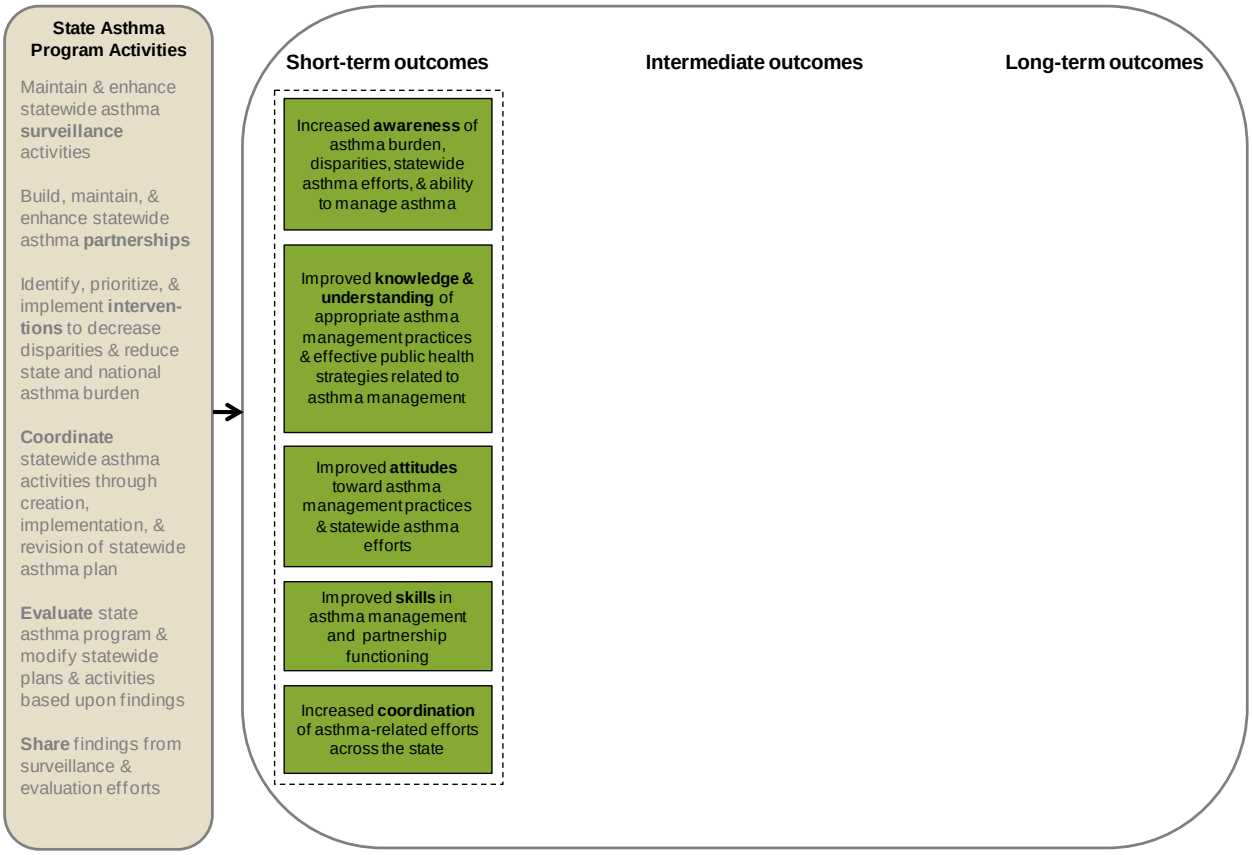
Figure C.2 Asthma Program Activities

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

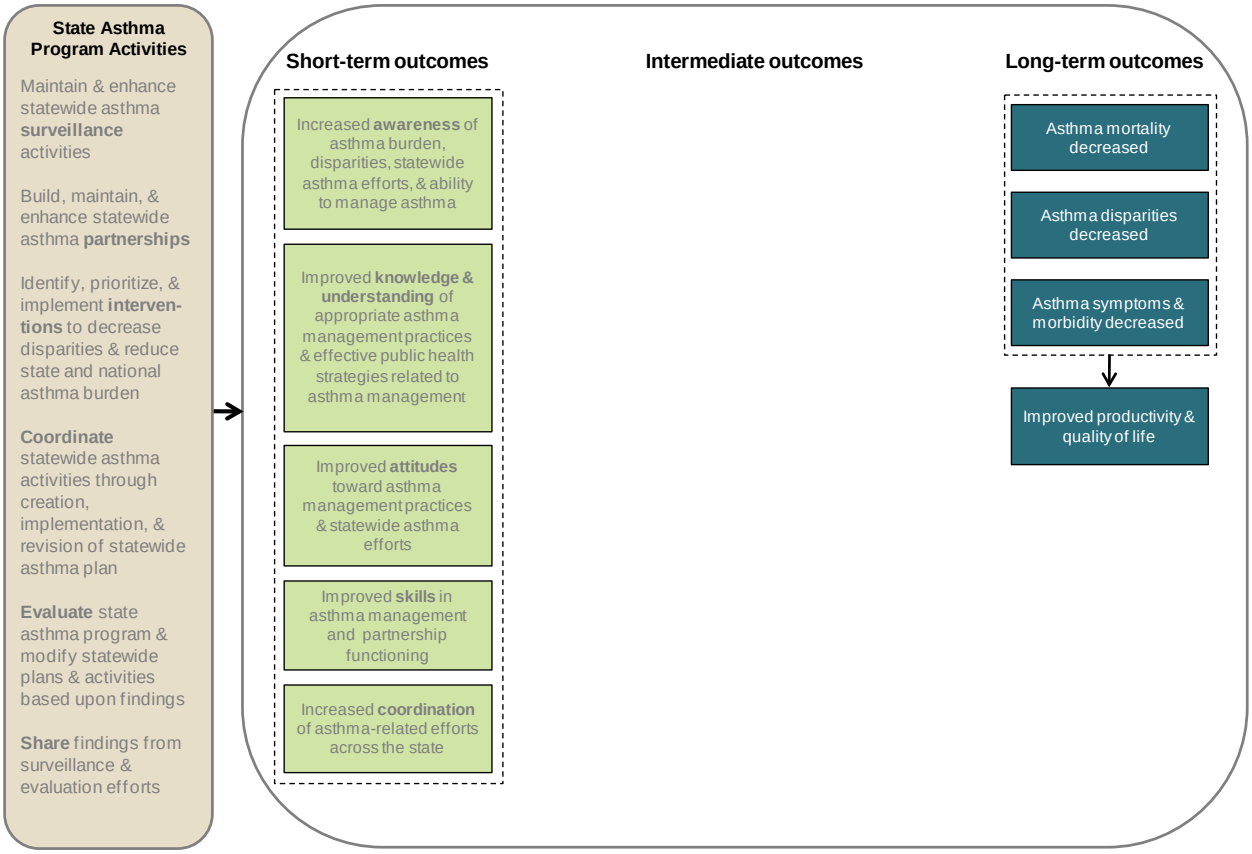


For example, surveillance activities often strive to *increase awareness of asthma* in the state and the burden it places on specific populations. Partnership activities often lead to *improved understanding of effective public health strategies related to asthma management* among key target audiences 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

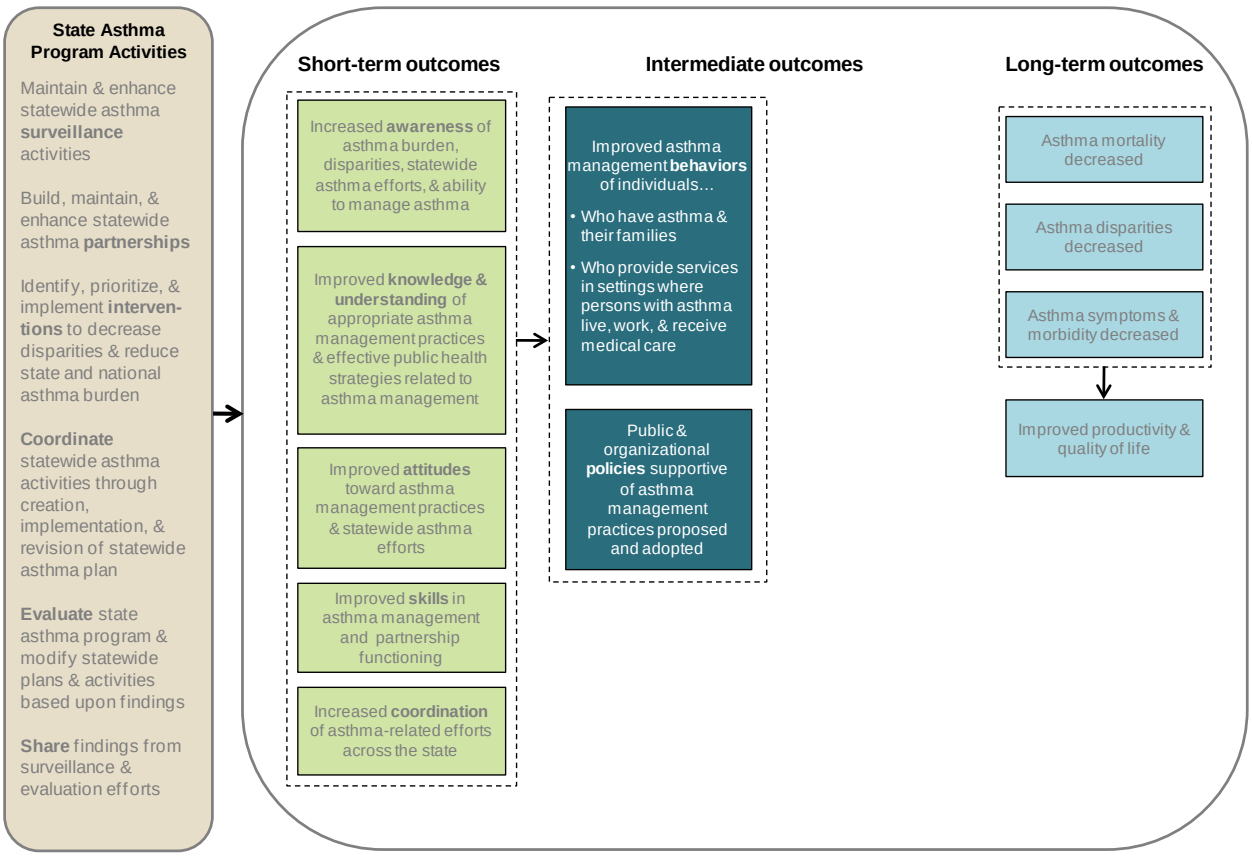


As shown in the blue boxes on the far right-hand side of the impact model, state asthma programs strive to decrease *asthma mortality* as well as the *disparities* that exist between age, gender, racial/ethnic, and other subgroups affected by asthma. Programs also strive to decrease *asthma symptoms* 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

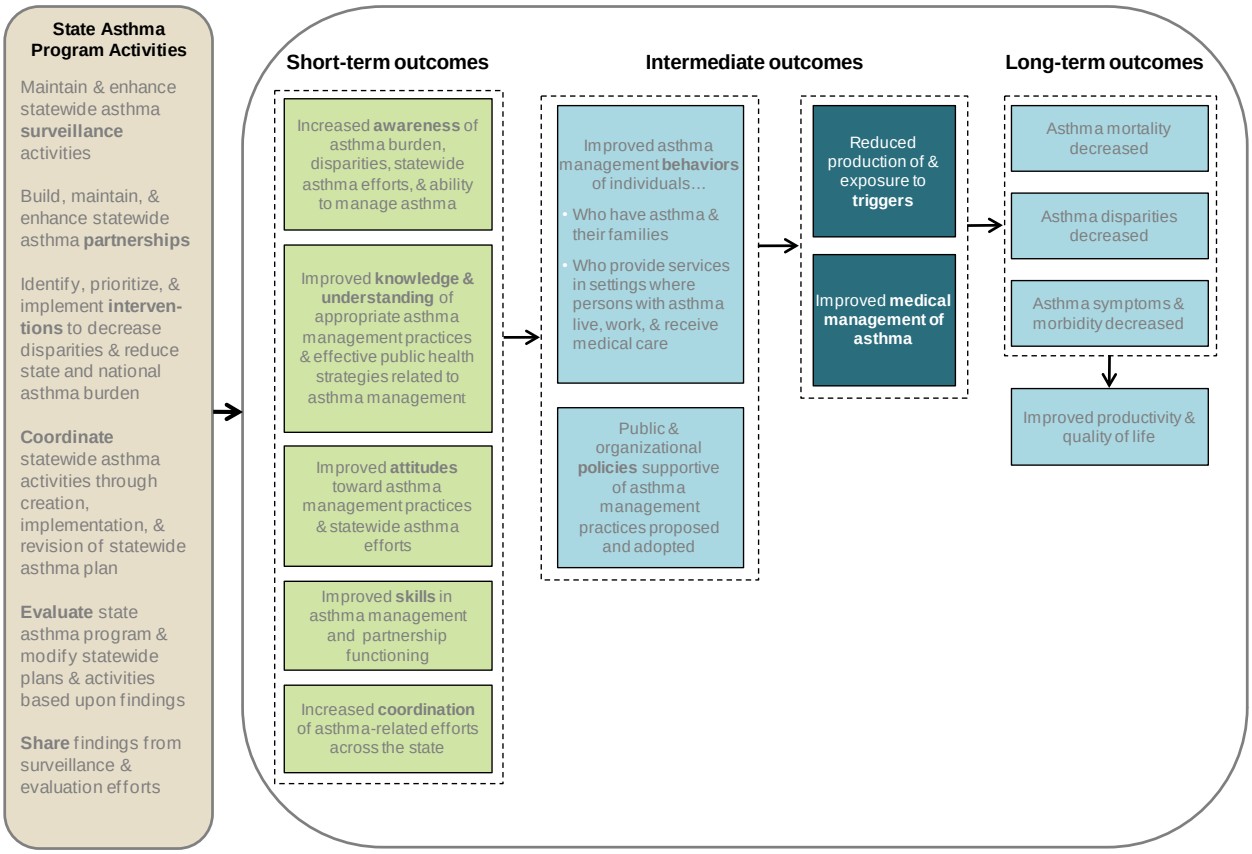


As shown in **Figure C.5** above, an increased level of awareness among audiences in the state with respect to important asthma-related messages combined with improvements in knowledge, attitudes, and skills lead to two overarching intermediate outcomes. One is *improved asthma management behaviors in 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.

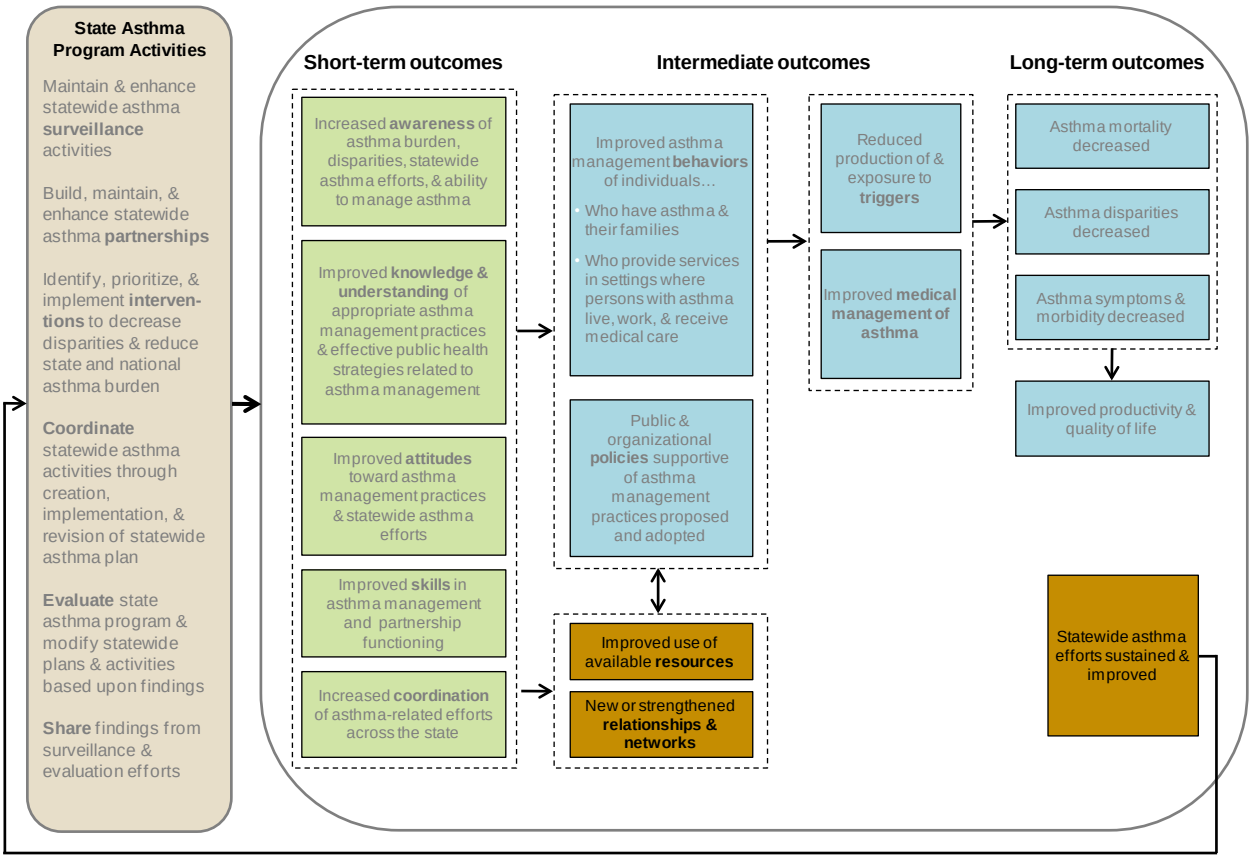
- ***Policies to improve medical management of asthma*.** Public and organizational policies that aim to improve the medical management of asthma include but are not limited to Medicare or Medicaid policies that reimburse costs associated with providing asthma education via certified asthma educators 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

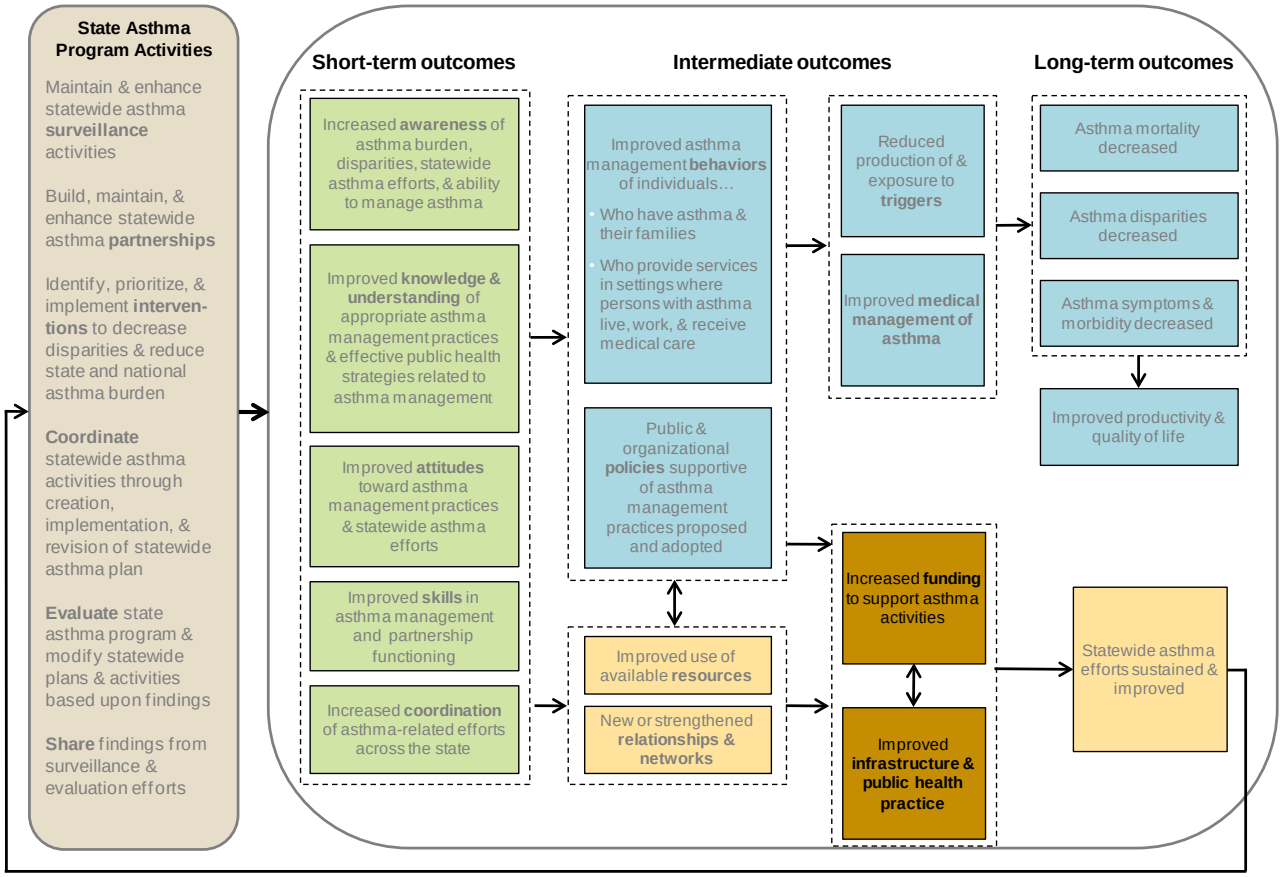


In this section we step through the gold boxes of the model to trace the pathways that lead to sustainability and improvement of the state asthma program. We then discuss how the intermediate-term outcomes discussed previously (blue boxes) also influence state asthma program efforts.

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
Hiring an Evaluator

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.

Principle 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—partnerships, surveillance, and interventions. 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 Evaluation.
- 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 identify limitations of knowledge and methods for acquiring additional evaluation knowledge to supplement personal expertise when necessary.
- Knowledge of how evaluation is different from 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

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}

1. 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 Chapter 1 and Appendix C of the *State Asthma Program Evaluation Guide*).

This section of the plan corresponds with Step B of Chapter 2 in the CDC *State Asthma Program Evaluation Guide.*

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?

2. 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 are the stakeholders involved in developing the strategic evaluation plan?
- What role did they play in developing the strategic evaluation plan?
- What role will these stakeholders play in implementing future evaluations?

This section of the plan corresponds with Step A of Chapter 2 in the CDC *State Asthma Program Evaluation Guide.*

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

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

Methods Used to Develop the Strategic Evaluation Plan

- What process was used to determine candidates for evaluation? (Narrative description)
- What information sources were used to support assessment of criteria?
- What criteria were used and how were they applied to establish priority evaluation candidates?

This section of the plan corresponds with Step C of Chapter 2 in the CDC *State Asthma Program Evaluation Guide.*

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 the strategic evaluation plan be updated?
- What process will be used to update the strategic evaluation plan?
- Who will be involved in strategic evaluation plan updates?

This section of the plan corresponds with Step H of Chapter 2 in the CDC *State Asthma Program Evaluation Guide.*

3. Proposed Priority Evaluations

This section provides information on each of the priority evaluation candidates; a five-year comprehensive evaluation timeline; details of each evaluation you plan to conduct during the five-year period, and details of any evaluation capacity-building activities you plan to conduct.

Priority Evaluation Candidates

- Provide a rank ordered list of priority evaluation candidates

This section of the plan corresponds with Step C of Chapter 2 in the CDC *State Asthma Program Evaluation Guide.*

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

Surveillance	Partnerships	Interventions
1.	1.	1.
2.	2.	2.

Overarching Timeline

- Provide a timeline for conducting evaluations over the five-year cooperative agreement cycle.

Table E.4. Sample Timeline to Show Sequencing of Proposed Evaluation Activities (2009-2014)

	2009 2010	2010 2011	2011 2012	2012 2013	2013 2014
Evaluations					
Capacity Building Activities					

Summarize Each Priority Evaluation

This section of the plan corresponds with Step D Chapter 2 in the CDC *State Asthma Program Evaluation Guide.*

- What evaluations will be conducted? What program component do they represent?
- What evaluation questions are to be addressed in each evaluation?
- What is (are) the proposed evaluation design(s) to be used?
- What is (are) the proposed data collection method(s) to be used?
- Who is (are) the target audience(s) for the evaluation?
- What data source(s) will be used?
- When will the evaluation be conducted?
- What is the evaluation anticipated to cost (rough estimate only)?

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

Title of Evaluation	(title of evaluation)
Title of Activity	(title of activity)
Program Component	(choose one – Surveillance, Partnership, Interventions)
Evaluation Questions	(list the evaluation questions to be addressed)
Timing of Evaluation	(when will the evaluation take place; start/end)
Evaluation Design	(describe evaluation design(s) to be used)
Data Sources	(list data sources that will be used in this evaluation with indication of availability status)
Data Collection Methods	(describe data collection methods to be used; who is responsible; and frequency of collection)
Audience(s)	(describe the target audiences for data collection)
Cost of Evaluation	(provide a rough or "ballpark" estimate of what the evaluation costs overall or annually, including funds from all sources; specify what portion, if any, comes from partner contributions)

Table E.5 can also be later in the individual evaluation plan, as one will be created for each priority evaluation.

Capacity-building activities to support evaluation

- What capacity building activities are planned to support evaluation (e.g., training, conferences, technical assistance, group facilitation, etc.)?
- What need(s) will these capacity-building activities fulfill?
- Who is intended to receive capacity-building support?
- When are capacity-building activities planned to occur?

This section of the plan corresponds with Step E of Chapter 2 of the CDC *State Asthma Program Evaluation Guide.*

4. Communication Plan

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

Communicating

- What information will be shared? For what purposes?
- At what intervals will information be shared?
- With whom will information be shared?
- What formats/methods (e.g., in-person meetings, emails, newsletters, etc.) will be used to share information?
- Who is responsible for information sharing?

This section of the plan corresponds with Step F of Chapter 2 of the CDC *State Asthma Program Evaluation Guide.*

Table E.6. Communication Plan Summary Matrix*)*

Information and Purpose	Audience(s)	Possible Formats	Timing	Who Responsible

Appendix F
Individual Evaluation Plan Outline

Appendix F
Individual Evaluation Plan Outline

{State Program Name}

Individual Evaluation Plan

{Name of evaluation candidate}

Prepared by:

{Names}
{Affiliation}

{Date}

1. Introduction

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

Evaluation Purpose

- What does this evaluation strive to achieve?
- What is the purpose of this evaluation?
- How will findings from the evaluation be used?

Stakeholders

- Who are the stakeholders for this evaluation?
- What role did they play in developing this individual evaluation plan?
- How do you plan to engage these stakeholders when implementing the individual evaluation plan (e.g., participate in collecting data, help to interpret findings)?

This section of the plan corresponds with Chapter 3, Step 1, of the *State Asthma Program Evaluation Guide*

Table F.1. Stakeholder Assessment and Engagement Plan

Stakeholder Name	Stakeholder Category	Interest or Perspective	Role in the Evaluation	How and When to Engage
	{Primary, secondary, tertiary}			

2. Description of What is Being Evaluated

This section provides detailed information about what you are evaluating. In this section describe the need, context, target population, and stage of development of what is being evaluated. You will also provide information on inputs, activities, outputs, and outcomes and will develop a logic model (graphical depiction) of what you are evaluating.

This section of the plan corresponds with Chapter 3, Step 2 of the *State Asthma Program Evaluation Guide*

Need

- What is the need for what you are evaluating?

Context

- What context/environment exists for what is being evaluated?
  (i.e., what environmental factors may affect the performance of what is being evaluated)

Target Population

- Who is the target population? (if applicable)

Stage of Development

- How long has what is being evaluated been in place?
- Is it in the planning or implementation stage?

Resources/Inputs

- What resources are available to support what is being evaluated (e.g., staff, money, space, time, partnerships, technology, etc.)?

Activities

- What specific activities are undertaken (or planned) to achieve the outcomes?

Outputs

- What products (e.g., materials, units of services delivered) are produced by your staff as a result of the activities performed?

Outcomes

- What are the program's intended outcomes (intended outcomes are short-term, intermediate, or long-term)?

- 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)?

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 what is being evaluated.

3. Evaluation Design

This section provides information on how you will design your evaluation. Provide information on evaluation questions, stakeholder information needs emerging from the evaluation, and the evaluation design.

This section of the plan corresponds with Chapter 3, Step 3 of the *State Asthma Program Evaluation Guide*

Evaluation Questions

- What specific questions do you intend to answer through this evaluation?

Stakeholder Needs

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

Evaluation Design

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

4. Data Collection

This section provides information on how you will collect/compile data for your evaluation. Provide information on methods by which you will collect/compile data, and how those methods are related to the evaluation questions you identified.

This section of the plan corresponds with Chapter 3, Step 4 of the *State Asthma Program Evaluation Guide*

Data Collection Methods

- Will new data be collected/compiled to answer the evaluation questions or will secondary data be used?
- What methods will be used to collect or acquire the data?
- Will a sample be used? If so, how will the sample be selected?
- How will data collection instruments be identified and tested?
- How will the quality and utility of existing data be determined?
- From whom or from what will data be collected (source of data)?
- How will the data be protected?

Data Collection Method – Evaluation Question Link

- How does each data collection method relate to the evaluation questions proposed?

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

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

5. Data Analysis and Interpretation

In this section provide information on what indicators and standards you will use to judge success, how you will analyze your evaluation findings, and how you will interpret and justify your conclusions.

This section of the plan corresponds with Chapter 3, Steps 4 and 5 of the *State Asthma Program Evaluation Guide*

Indicators and Standards

- What are some measurable or observable elements that can tell you about the performance of what is being evaluated?
- What constitutes "success"? (i.e., by 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 will you use to analyze your data (e.g., descriptive statistics, inferential statistics, content analysis)?
- Provide example table shells, if applicable.

Interpretation

- Who will you involve in drawing, interpreting, and justifying conclusions?
- What are your plans to involve them in this process?

6. Communication and Reporting

This section provides information about how information from the individual evaluation plan process and results will be used and shared.

This section of the plan corresponds with Chapter 3, Step 6 of the CDC *State Asthma Program Evaluation Guide*

Use

- What actions will be taken to promote evaluation use?
- How will evaluation findings be used?
- Who is responsible for implementing evaluation recommendations?

Communication

- Which evaluation stakeholders will you communicate with and why (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, presentations) will you use to communicate with evaluation stakeholders?
- Why are these methods appropriate for the specific evaluation stakeholder audience of interest?

7. Evaluation Management

This section provides information about how the individual evaluation will be managed and implemented and who will participate in what capacity. It will also provide a timeline for conducting activities related to this evaluation. You may find that some of the tables suggested here fit better in other sections of the plan. Regardless of how you structure your plan, it is important that you carefully think about each of these implementation steps and who is responsible for doing what by when.

This section of the plan corresponds with Chapter 3 of the CDC *State Asthma Program Evaluation Guide* (section on Pulling It All Together)

- Develop several tables that summarize the major activities included in implementing the evaluation, the persons involved in this implementation, and associated timelines.

Evaluation Team

- Who will implement this evaluation?

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

Individual	Title or Role	Responsibilities

Data Collection Management

- What data will be collected?
- 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?

Table F.6. Data Collection Plan

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

Data Analysis Management

- What data will be analyzed, how, and when?
- Who is responsible for conducting the analyses?

Table F.7. Data Analysis Plan

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

Communicating and Reporting Management

- What are the target audiences for reporting the progress made on the evaluation and/or evaluation findings?
- 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?
- When will the communication take place?

Table F.8. Communication and Reporting Plan

Audience 1: *{insert name of audience}*				
Applicable?	**Purpose of Communication**	**Possible Formats**	**Timing/Dates**	**Notes**
Yes/No	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			

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

Timeline

- When will planning and administrative tasks occur?
- When will any pilot testing occur?
- When will formal data collection and analysis 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 cost for this evaluation?
- Where will the monetary resources come from to support the evaluation?

Are any in-kind, volunteer, or partner resources being contributed?

NOTES

Appendix G
Evaluation Training Resources

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 list serve!

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.*

[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*.

- Patton MQ. *Utilization-Focused Evaluation.* 4th edition.
- 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 of the standards (click on "Program Evaluation Standards" on left)
  http://www.wmich.edu/evalctr/jc/

CDC FRAMEWORK

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

  The Air Pollution and Respiratory Health Branch at CDC has collaborated with the Indoor Environments Division at EPA to conduct a series of program evaluation webinars based on the CDC Framework. The first set of webinars covered the steps of the CDC Framework. More recent webinars focus on special topics, such as evaluating school-based asthma programs, the science and value of targeted home environmental interventions, and economic evaluation. Webinars are posted to the Asthma Community Network website (*www.asthmacommunitynetwork.org*) after they have been presented. Webinars conducted to date may be viewed online at:
  http://www.asthmacommunitynetwork.org/webinars/program_evaluation_basics.aspx

- ***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*

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/nphpsp/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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Appendix H
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