Chapter 1

Introduction to Logic Models

Chapter One defines logic models and explains their usefulness to program stakeholders. You will learn the relevance of this state-of-the-art tool to program planning, evaluation, and improvement.

Effective program evaluation does more than collect, analyze, and provide data. It makes it possible for you – program stakeholders – to gather and use information, to learn continually about and improve programs that you operate in or fund. The W.K. Kellogg Foundation believes evaluation – especially program logic model approaches – is a learning and management tool that can be used throughout a program's life – no matter what your stake in the program. Using evaluation and the logic model results in effective programming and offers greater learning opportunities, better documentation of outcomes, and shared knowledge about *what works* and *why*. The logic model is a beneficial evaluation tool that facilitates effective program planning, implementation, and evaluation.

A program logic model is a picture of how your program works – the theory and assumptions underlying the program. ...This model provides a road map of your program, highlighting how it is expected to work, what activities need to come before others, and how desired outcomes are achieved (p. 35).

W.K. Kellogg Foundation Evaluation Handbook (1998)

The *What* and *Why* of the Logic Model

The *WHAT*: Logic Model Definition

Basically, a logic model is a systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve.

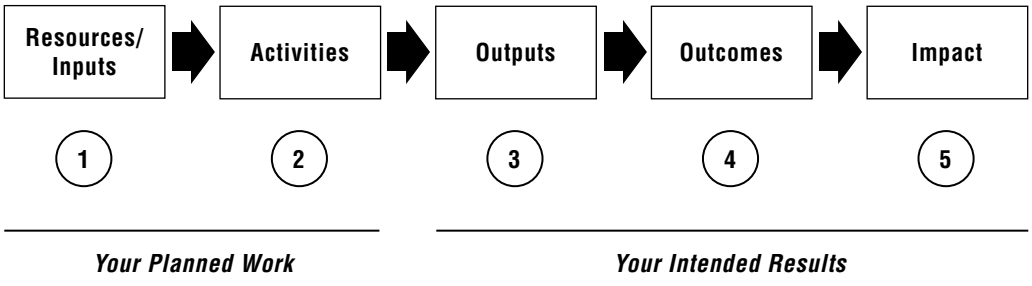

Figure 1. The Basic Logic Model.

The most basic logic model is a picture of how you believe your program will work. It uses words and/or pictures to describe the sequence of activities thought to bring about change and how these activities are linked to the results the program is expected to achieve.

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The Basic Logic Model components shown in Figure 1 above are defined below. These components illustrate the connection between *your planned work* and *your intended results*. They are depicted numerically by steps 1 through 5.

YOUR PLANNED WORK describes what resources you think you need to implement your program and what you intend to do.

Most of the value in a logic model is in the process of creating, validating, and modifying the model … The clarity of thinking that occurs from building the model is critical to the overall success of the program (p. 43).

W.K. Kellogg Foundation Handbook (1998)

1. Resources include the human, financial, organizational, and community resources a program has available to direct toward doing the work. Sometimes this component is referred to as ***Inputs***.

2. Program Activities are what the program does with the resources. **Activities** are the processes, tools, events, technology, and actions that are an intentional part of the program implementation. These interventions are used to bring about the intended program changes or results.

YOUR INTENDED RESULTS include all of the program's desired results (outputs, outcomes, and impact).

3. Outputs are the direct products of program activities and may include types, levels and targets of services to be delivered by the program.

4. Outcomes are the specific changes in program participants' behavior, knowledge, skills, status and level of functioning. Short-term outcomes should be attainable within 1 to 3 years, while longer-term outcomes should be achievable within a 4 to 6 year timeframe. The logical progression from short-term to long-term outcomes should be reflected in impact occurring within about 7 to 10 years.

5. Impact is the fundamental intended or unintended change occurring in organizations, communities or systems as a result of program activities within 7 to 10 years. In the current model of WKKF grantmaking and evaluation, impact often occurs after the conclusion of project funding.

The term *logic model* is frequently used interchangeably with the term *program theory* in the evaluation field. Logic models can alternatively be referred to as *theory* because they describe how a program works and to what end (definitions for each employed by leading evaluation experts are included in the Resources Appendix).

The *What*: How to "Read" a Logic Model

When "read" from left to right, logic models describe program basics over time from planning through results. Reading a logic model means following the chain of reasoning or "***If...then...***" statements which connect the program's parts. The figure below shows how the basic logic model is read.

Sample Factors influencing the trip:

- *Family members' school and work schedules*
- *The holidays*
- *Winter weather*
- *Frequent Flier availability*

Sample Activities:

- *Creating/checking family schedules*
- *Gathering holiday flight and FF information*
- *Getting airport transportation*
- *Notifying Iowa relatives*

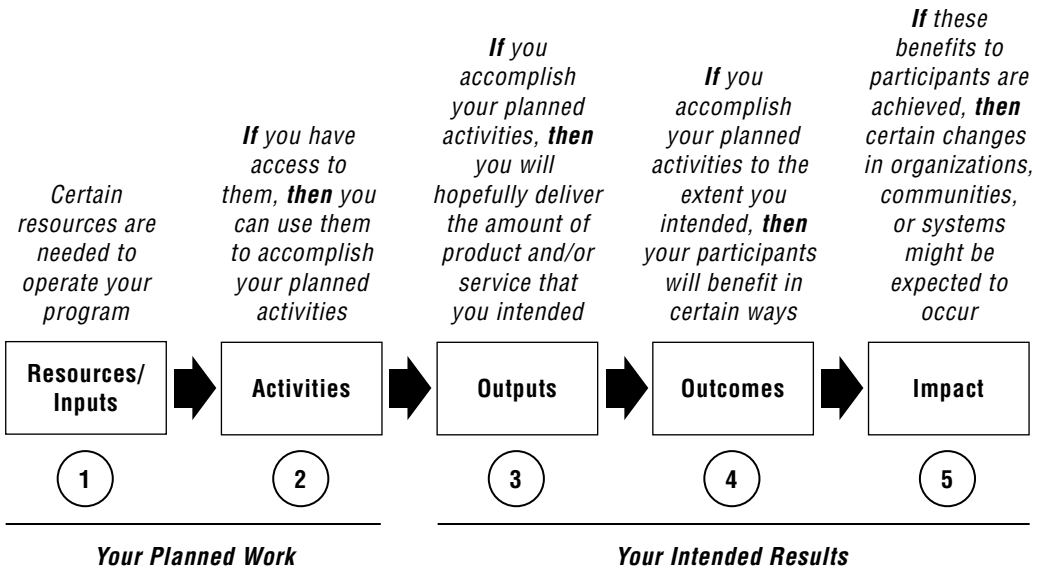


Figure 2. How to Read a Logic Model.

The *WHY*: Logic Model Purpose and Practical Application

The purpose of a logic model is to provide stakeholders with a road map describing the sequence of related events connecting the need for the planned program with the program's desired results. Mapping a proposed program helps you visualize and understand how human and financial investments can contribute to achieving your intended program goals and can lead to program improvements.

A logic model brings program concepts and dreams to life. It lets stakeholders try an idea on for size and apply theories to a model or picture of how the program would function. The following example shows how the logic model approach works. (If you are familiar with logic models, you may wish to skip ahead to the section entitled "Why Use A Logic Model?")

An Example:

We are proposing an inexpensive family trip from Charleston, South Carolina, to Des Moines, Iowa, to visit relatives during December school holidays. The seasonal trip we dream of taking from Charleston to Des Moines is the "program." Basic assumptions about our trip "program" are:

- We want to visit relatives between 12/10/00 and 1/5/01 while the children are out of school.
- We will fly from South Carolina to Iowa because it takes less time than driving and because frequent flier (FF) miles are available.
- Using frequent flier miles will reduce travel costs.

We have to determine the factors influencing our trip, including necessary resources, such as, the number of family members, scheduled vacation time, the number of frequent flier miles we have, round trip air reservations for each family member, and transportation to and from our home to the airport. The activities necessary to make this happen are the creation of our own family holiday schedule, securing our Iowa relative's schedule, garnering air line information and reservations and planning for transportation to and from the airport.

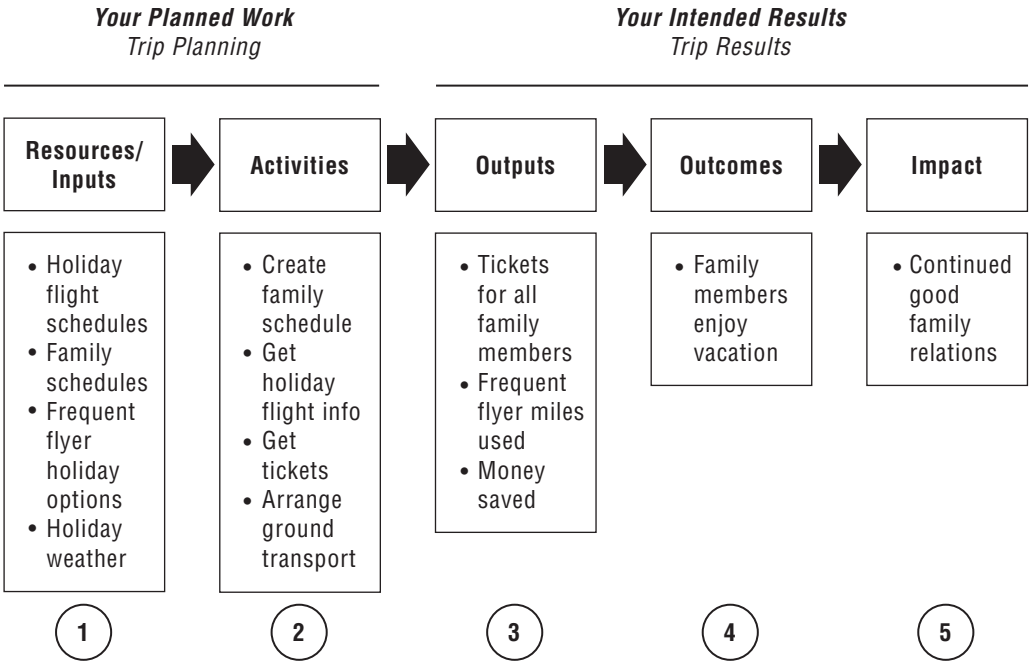
In this example, the results of our activities – or outputs – are mostly information, such as family schedules, flight schedules, and cost information based on the time frame of the trip. This information helps identify outcomes or immediate goals. For instance, if we make reservations as soon as possible, we are able to find flights with available frequent flier slots and probably have more options for flights that fit within the time frame. Knowing this, our outcomes improve – reservations made well in advance result in flight schedules and airline costs that suit our timeline and travel budget. Longer-term impact of our trip is not an issue here, but might be projected as continued good family relationships in 2010.

You can't do "good" evaluation if you have a poorly planned program.

Beverly Anderson Parsons (1999)

Using a simple logic model as a trip-planning tool produced tangible benefits. It helped us gather information to influence our decisions about resources and allowed us to meet our stated goals. Applying this process consistently throughout our trip planning positions us for success by laying out the best course of action and giving us benchmarks for measuring progress – when we touch down in Charlotte and change planes for Cincinnati, we know we're on course for Des Moines.

Typical logic models use table and flow chart formats like those presented here to catalogue program factors, activities, and results and to illustrate a program's dimensions. Most use text and arrows or a graphic representation of program ideas. This is what our trip planning "program" could look like in logic model format.



It was easy to organize travel plans in a flow chart, but we could also choose to organize and display our thinking in other ways. A logic model does not have to be linear. It may appear as a simple image or concept map to describe more complex program concepts. Settling on a single image of a program is sometimes the most difficult step for program stakeholders.

Why Use a Logic Model?

If program planners don't have any hypotheses guiding them, their potential for learning from the initiative is low, and the program is probably in trouble (p. 1).

Everything You Wanted to Know About Logic Models but Were Afraid to Ask,

Connie Schmitz and Beverly Anderson Parsons (1999)

As you can see from the travel plan example, logic models are useful tools in many ways. Because they are pictorial in nature, they require systematic thinking and planning to better describe programs. The visual representation of the master plan in a logic model is flexible, points out areas of strength and/or weakness, and allows stakeholders to run through many possible scenarios to find the best. In a logic model, you can adjust approaches and change courses as program plans are developed. Ongoing assessment, review, and corrections can produce better program design and a system to strategically monitor, manage, and report program outcomes throughout development and implementation.

Effective evaluation and program success rely on the fundamentals of clear stakeholder assumptions and expectations about how and why a program will solve a particular problem, generate new possibilities, and make the most of valuable assets. The logic model approach helps create shared understanding of and focus on program goals and methodology, relating activities to projected outcomes.

Logic Models Better Position Programs For Success

Many evaluation experts agree that use of the logic model is an effective way to ensure program success. Using a logic model throughout your program helps organize and systematize program planning, management, and evaluation functions.

The bane of evaluation is a poorly designed program.

Ricardo Millett, Director, WKKF Evaluation Unit

1. In ***Program Design and Planning,*** a logic model serves as a planning tool to develop program strategy and enhance your ability to clearly explain and illustrate program concepts and approach for key stakeholders, including funders.

Logic models can help craft structure and organization for program design and build in self-evaluation based on shared understanding of what is to take place. During the planning phase, developing a logic model requires stakeholders to examine best practice research and practitioner experience in light of the strategies and activities selected to achieve results.

2. In ***Program Implementation,*** a logic model forms the core for a focused management plan that helps you identify and collect the data needed to monitor and improve programming.

Using the logic model during program implementation and management requires you to focus energies on achieving and documenting results. Logic models help you to consider and prioritize the program aspects most critical for tracking and reporting and make adjustments as necessary.

3. For ***Program Evaluation and Strategic Reporting,*** a logic model presents program information and progress toward goals in ways that inform, advocate for a particular program approach, and teach program stakeholders.

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We all know the importance of reporting results to funders and to community stakeholders alike. Communication is a key component of a program's success and sustainability. Logic models can help strategic marketing efforts in three primary ways:

- ***Describing programs*** in language clear and specific enough to be understood and evaluated.
- ***Focusing attention and resources*** on priority program operations and key results for the purposes of learning and program improvement.
- ***Developing targeted communication*** and marketing strategies.

There are many ways to conduct evaluations, and professional evaluators tend to agree that there is no "one best way" to do any evaluation. Instead, good evaluation requires carefully thinking through the questions that need to be answered, the type of program being evaluated, and the ways in which the information generated will be used. Good evaluation, in our view, should provide useful information about program functioning that can contribute to program improvement.

W.K. Kellogg Foundation Evaluation Unit

The Table below describes the relationship between a successful program and the benefits derived from the use of logic models.

Program Elements	Criteria for Program Success[1]	Benefits of Program Logic Models[2]
Planning and Design	Program goals and objectives, and important side effects are well defined ahead of time.	Finds "gaps" in the theory or logic of a program and work to resolve them.
	Program goals and objectives are both plausible and possible.	Builds a shared understanding of what the program is all about and how the parts work together.
Program Implementation and Management	Relevant, credible, and useful performance data can be obtained.	Focuses attention of management on the most important connections between action and results.
Evaluation, Communication, and Marketing	The intended users of the evaluation results have agreed on how they will use the information.	Provides a way to involve and engage stakeholders in the design, processes, and use of evaluation.

How Logic Models Better Position Programs Toward Success.

Logic Models Strengthen the Case for Program Investment

Clear ideas about what you plan to do and why – as well as an organized approach to capturing, documenting, and disseminating program results – enhance the case for investment in your program.

[1] Wholey, J. S., Hatry, H. P., & Newcomer, K. E. (Eds.). (1994). *Handbook of Practical Program Evaluation.* San Francisco: Jossey-Bass Publishers.

[2] Barley, Z., Phillips, C., & Jenness, M. (1998). *Decoding Program Logic Models.* Workshop presented at the Annual Meeting of the American Evaluation Association, Chicago, IL, November, 1998.

Developing a Program Logic Model Requires a Simple Image and a Straightforward Approach

A picture IS worth a thousand words. The point of developing a logic model is to come up with a relatively simple image that reflects how and why your program will work. Doing this as a group brings the power of consensus and group examination of values and beliefs about change processes and program results.

LOGIC MODEL
IF… THEN
Assumptions:

- Certain resources are needed to operate your program.
- ***If*** you have access to them, ***then*** you can use them to accomplish your planned activities.
- ***If*** you accomplish your planned activities, ***then,*** you will, it is hoped, deliver the amount of product and/or service that you intended.
- ***If*** you accomplish your planned activities to the extent intended, ***then*** your participants will benefit in specific ways.
- ***If*** these benefits to participants are achieved, ***then*** certain changes in organizations, communities, or systems might occur under specified conditions.

Logic Models Reflect Group Process and Shared Understanding

Frequently, a professional evaluator is charged with developing a logic model for program practitioners. But a logic model developed by all stakeholders – program staff, participants, and evaluators – produces a more useful tool and refines program concepts and plans in the process. We recommend that a logic model be developed collaboratively in an inclusive, collegial process that engages as many key stakeholders as possible. This guide provides a step-by-step process to assist program planners.

Like Programs, Logic Models Can Change Over Time

As a program grows and develops, so does its logic model. A program logic model is merely a snapshot of a program at one point in time; it is not the program with its actual flow of events and outcomes. A logic model is a work in progress, a working draft that can be refined as the program develops.

Simple Logic Model Basics

Creating a logic model: What they look like and what needs to be included

Logic models come in as many sizes and shapes as the programs they represent. A simple model focuses on project-level results and explains five basic program components. The elements outlined below are typical of the model promoted by United Way of America to support an outcomes-based approach to program planning and evaluation.

Developing and Reading a Basic Logic Model

Read from left to right, logic models describe program basics over time, beginning with best practice information or knowledge about "what works" from successful program practitioners and other trusted authorities. Reading a logic model means following the chain of reasoning or "***If...then...***" statements which connect the program's parts. The gray box in the left column defines the assumptions stated in "***If...then...***" terms.

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Building a Logic Model by Basic Program Components

As you conceptualize your program, begin by describing your basic assumptions and then add the following program components in the order that they should occur.

1. ***Factors*** are resources and/or barriers, which potentially enable or limit program effectiveness. Enabling *protective factors* or *resources* may include funding, existing organizations, potential collaborating partners, existing organizational or interpersonal networks, staff and volunteers, time, facilities, equipment, and supplies. Limiting *risk factors* or *barriers* might include such things as attitudes, lack of resources, policies, laws, regulations, and geography.

2. ***Activities*** are the processes, techniques, tools, events, technology, and actions of the planned program. These may include *products* – promotional materials and educational curricula; *services* – education and training, counseling, or health screening; and *infrastructure* – structure, relationships, and capacity used to bring about the desired results.

3. ***Outputs*** are the *direct results* of program activities. They are usually described in terms of the *size and/or scope of the services and products delivered or produced* by the program. They indicate if a program was delivered to the intended audiences at the intended "dose." A program output, for example, might be the *number* of classes taught, meetings held, or materials produced and distributed; program *participation rates* and demography; or *hours of each type of service* provided.

4. ***Outcomes*** are specific *changes in attitudes, behaviors, knowledge, skills, status, or level of functioning* expected to result from program activities and which are most often expressed *at an individual level*.

5. ***Impacts*** are *organizational, community, and/or system level changes* expected to result from program activities, which might include improved conditions, increased capacity, and/or changes in the policy arena.

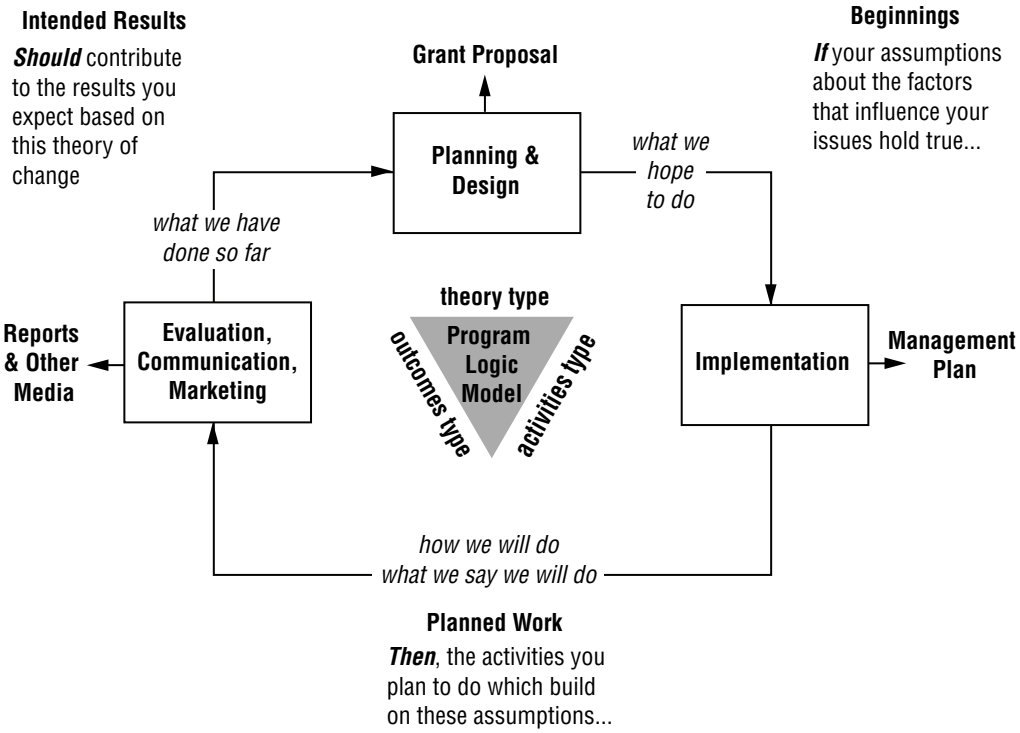
Thinking about a program in logic model terms prompts the clarity and specificity required for success, and often demanded by funders and your community. Using a simple logic model produces (1) an inventory of what you have and what you need to operate your program; (2) a strong case for how and why your program will produce your desired results; and (3) a method for program management and assessment.

Other Logic Model Examples

In practice, most logic models are more complex and fall into one of three categories: the theory approach model (conceptual), outcome approach model, or activities approach model (applied) – or a blend of several types. It is not unusual for a program to use all three types of logic models for different purposes. No one model fits all needs, so you will

need to decide exactly what you want to achieve with your logic model – and where you are in the life of your program – before deciding on which model to use.

Types of Logic Models: Emphasis and Strengths



Types of Logic Models: Emphasis and Strengths
A program is a theory and an evaluation is its test. In order to organize the evaluation to provide a responsible test, the evaluator needs to understand the theoretical premises on which the program is based (p. 55).

Carol Weiss (1998)

Descriptions of Three Approaches to Logic Models: Which Fits Your Program?

1. ***Theory Approach Models*** emphasize the theory of change that has influenced the design and plan for the program. These logic models provide rich explanation of the reasons for beginning to explore an idea for a given program. Sometimes they have additional parts that specify the problem or issue addressed by the program, describe the reasons for selecting certain types of solution strategies, connect proven strategies to potential activities, and other assumptions the planners hold that influence effectiveness. These models illustrate how and why you think your program will work. They are built from the "big picture" kinds of thoughts and ideas that went into conceptualizing your program. They are coming to be most often used to make the case in grant proposals. Models describing the beginnings of a program in detail are most useful during program planning and design.

2. ***Outcomes Approach Models*** focus on the early aspects of program planning and attempt to connect the resources and/or activities with the desired results in a workable program. These models often subdivide outcomes and impact over time to describe short-term (1 to 3 years), long-term (4 to 6 years), and impact (7 to 10 years) that may result from a given set of activities. Although these models are developed with a theory of change in mind, this aspect is not usually emphasized explicitly. Models that outline the approach and expectations behind a program's intended results are most useful in designing effective evaluation and reporting strategies.

3. ***Activities Approach Models*** pay the most attention to the specifics of the implementation process. A logic model of this type links the various planned activities together in a manner that maps the process of program implementation. These models describe what a program intends to do and as such are most useful for the purposes of program monitoring and management. This type provides the detailed steps you think you will need to follow to implement your program. It shows what you will actually *do* in your community if your proposal is funded. Models that emphasize a program's planned work are most often used to inform management planning activities.

The purpose of using program logic models in WKKF grantmaking is to help internal and external stakeholders understand how the Foundation's investment will contribute to achieving the intended goals. This understanding should help these various stakeholders make informed decisions about program priorities, funding priorities, assistance to grantees, evaluation of programming impact, and marketing, communication, and marketing strategies.

W.K. Kellogg Foundation Evaluation Handbook (1998)

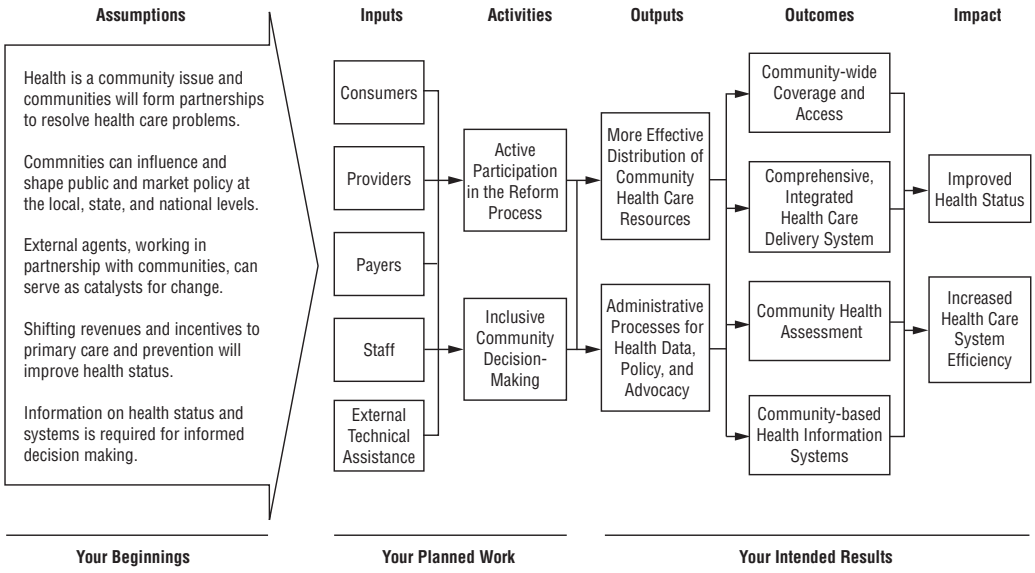
Working Through Theory Approach Logic Models Emphasizes Assumptions

A theory approach logic model links theoretical ideas together to explain underlying program ***assumptions***. The focus here is on the problem or issue and the reasons for proposing the solution suggested in your program's approach. Remember, the theory logic model is broad and about "big ideas," not about specific program "nuts and bolts."

Noted evaluator and program theorist Carol Weiss (1998) explains that for program planning, monitoring, and evaluation, it is important to know not only ***what*** the program expects to achieve but also ***how.*** We must understand the principles on which a program is based, a notion not included in evaluation until recently. Discussions about the *whethers*, *hows*, and *whys* of program success require credible evidence and attention to the paths by which outcomes and impacts are produced.

The theory logic model is suitable for use by funders and grantees. A case example of its use is provided below.

In this case, the model describes a WKKF cluster initiative's (Comprehensive Community Health Models of Michigan) programming strategy or its theory of change. Notice that this model places emphasis on "Your Beginnings" by including the assumptions identified by program planners as the principles behind the design of the initiative.



Example of a Theory Logic model (Adapted from WKKF's Comprehensive Community Health Models of Michigan).

These models help build a common understanding between managers and evaluators.... Such agreement is a prerequisite for evaluation work that is likely to be useful to management. [These models] display the key events (inputs, activities, outcomes) that could be monitored and the assumed causal linkages that could be tested in evaluations of the program.

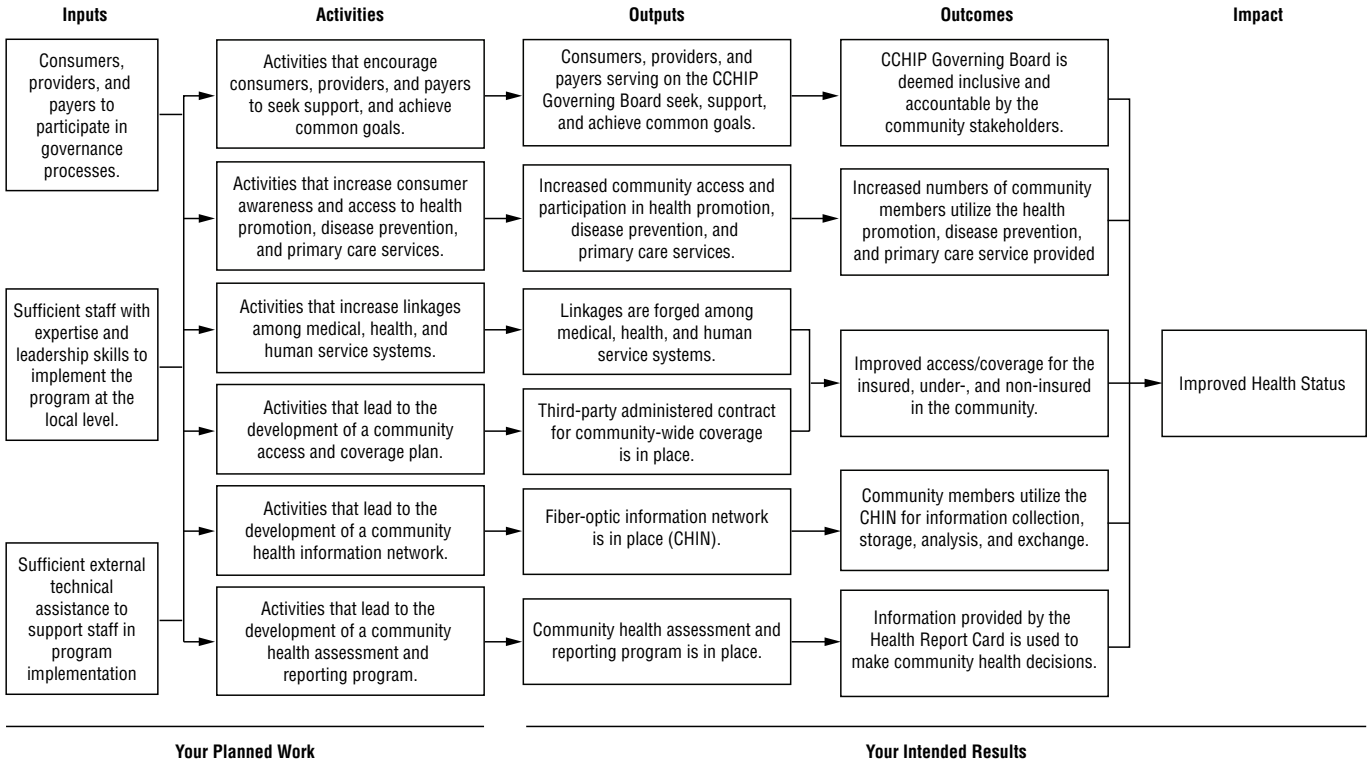
Joseph S. Wholey, Harry P. Hatry, and K.E. Newcomer (1994)

Working with Outcome Approach Models Highlights Activities and Program Implementation

Outcome approach logic models display the interrelationships between specific program activities and their outcomes. On the next page is an example drawn from the Calhoun County Health Improvement Program, funded under the Comprehensive Community Health Models of Michigan initiative.

This linear, columnar model emphasizes the ***causal linkages*** thought to exist among program components. The arrows show which sets of activities program developers believed would contribute to what outcomes. These statements serve as logical assertions about the perceived relationship among program operations and desired results and are the hallmark of the logic model process.

Notice that this model emphasizes "Your Intended Results" in the greatest relative detail and anticipates achievement outside the time allotted for the initiative.



Example of an Outcome Approach model (example drawn from the Calhoun County Health Improvement Program, funded under the Comprehensive Community Health Models of Michigan initiative).

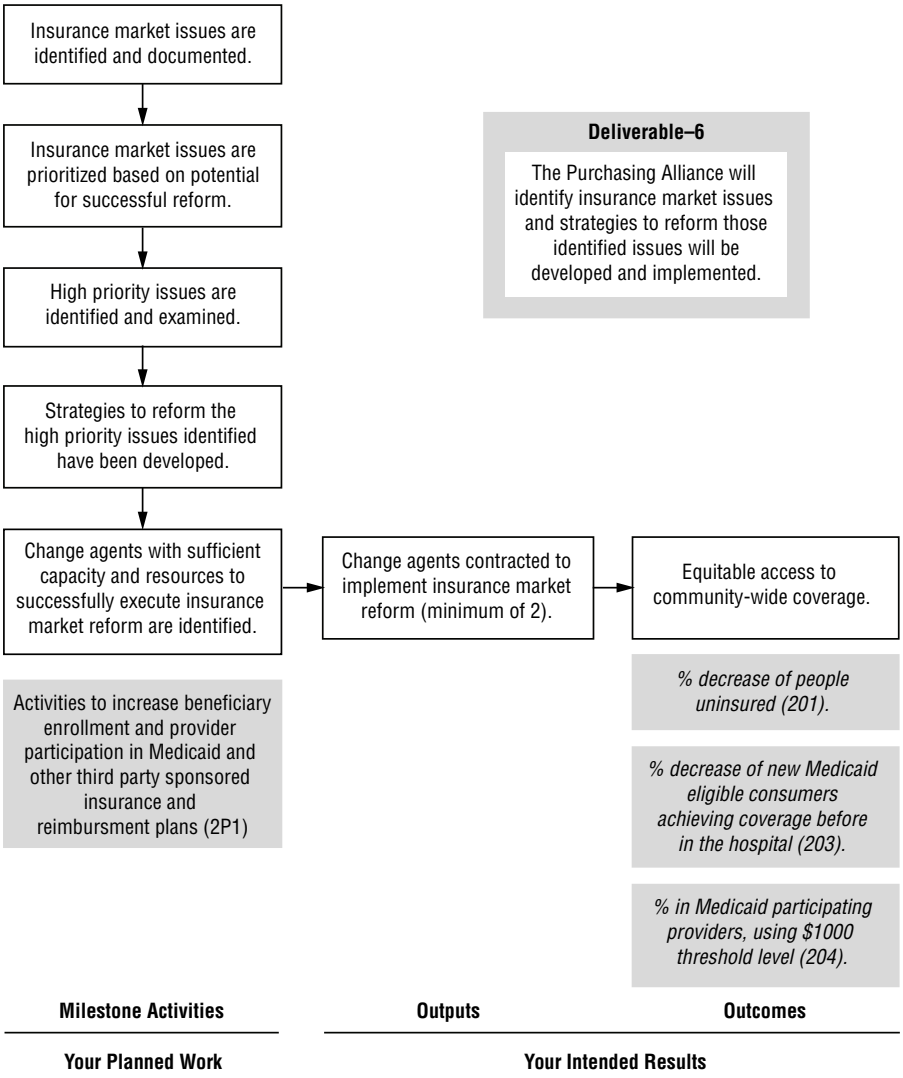
Not only will a logic model clarify each element of your program, it will enable you to respond to the question: "To what do I want to be held accountable?".

The Evaluation Forum (1999)

Using the Activities Approach Models to Track Outcomes

The activities approach logic model also connects program resources and activities to desired results but does so in very great detail. Each outcome is usually dealt with separately by the activities and events that must take place to keep the program on track. The model emphasizing "Your Planned Work" can be used as a work plan or management tool for program components and in conjunction with other models.

Notice how it points out what program activities need to be monitored and what kind of measurements might indicate progress toward results. Below is one model describing the connections between project tasks and outcome achievement for the community coverage strand from the outcome approach example provided earlier.



Adapted from the Calhoun County Health Improvement Program, one site of WKKF's Comprehensive Community Health Models of Michigan initiative

There Is No *Best* Logic Model

Try several on for size. Choose the model that fits your program best and provides the information you need in the format that is most helpful. Like anything else, it takes practice to use logic models as effective program tools. We learn through trial and error to find what works best for what program. Don't hesitate to experiment with program logic model design to determine what works best for your program. And don't be concerned if your model doesn't look like one of the case examples.

The following show how the logic model forms gather information that can be used throughout your program's life – from defining the theory on which your program rests to evaluating program impact.

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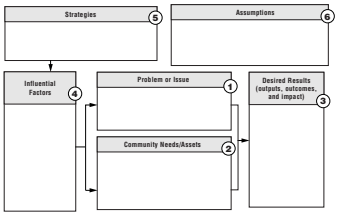
How to use a Logic Model Through the Life of Your Program:

1. Program Planning



For more detail, see the Program Planning Template on p. 57.

2. Program Implementation

RESOURCES	ACTIVITIES	OUTPUTS SHORT	SHORT & LONG-TERM OUTCOMES	IMPACT
In order to accomplish our set of activities we will need the following:	*In order to address our problem or asset we will accomplish the following activities:*	*We expect that once accomplished these activities will produce the following evidence or service delivery:*	*We expect that if accomplished these activities will lead to the following changes in 1-3 then 4-6 years:*	*We expect that if accomplished these activities will lead to the following changes in 7-10 years:*

For more detail, see the Program Implementation Template on p. 54.

3. Program Evaluation

Evaluation Focus Area	Audience	Question	Use

For more detail, see the Evaluation Planning Template on p. 59.

Focus Area	Question	Indicators	Technical Assistance Needed

For more detail, see the Indicators Development Template on p. 61.

CLARIFYING PROGRAM THEORY:

1. **PROBLEM OR ISSUE STATEMENT:** Describe the problem(s) your program is attempting to solve or the issue(s) your program will address.
2. **COMMUNITY NEEDS/ASSETS:** Specify the needs and/or assets of your community that led your organization to design a program that addresses the problem.
3. **DESIRED RESULTS (OUTPUTS, OUTCOMES AND IMPACTS):** Identify desired results, or vision of the future, by describing what you expect to achieve near- and long-term.
4. **INFLUENTIAL FACTORS:** List the factors you believe will influence change in your community.
5. **STRATEGIES:** List general successful strategies or "best practices" that have helped communities like yours achieve the kinds of results your program promises.
6. **ASSUMPTIONS:** State the assumptions behind *how* and *why* the change strategies will work in your community.

DEMONSTRATING YOUR PROGRAM'S PROGRESS:

1. **OUTPUTS:** For each program activity, identify what outputs (service delivery/implementation targets) you aim to produce.
2. **OUTCOMES:** Identify the short-term and long-term outcomes you expect to achieve for each activity.
3. **IMPACT:** Describe the impact you anticipate in your community in 7 to 10 years with each activity as a result of your program.
4. **ACTIVITIES:** Describe each of the activities you plan to conduct in your program.
5. **RESOURCES:** Describe the resources or influential factors available to support your program activities.

PROGRAM EVALUATION QUESTIONS AND INDICATORS:

1. **FOCUS AREA:** From your program theory logic model, list the components of the most important aspects of your program.
2. **AUDIENCE:** Identify the key audiences for each focus area. Who has an interest in your program?
3. **QUESTIONS:** For each focus area and audience, list the questions they may have about your program.
4. **INFORMATION USE:** For each audience and question you have identified, identify the ways you will use the evaluation information.
5. **INDICATORS:** Describe what information could be collected that would indicate the status of your program and its participants for each question.
6. **TECHNICAL ASSISTANCE:** Indicate the extent to which your organization has the evaluation and data management expertise to collect and analyze the data that relates to this indicator.

Chapter 2

Developing a Basic Logic Model For Your Program

Drawing a picture of how your program will achieve results

Whether you are a grantseeker developing a proposal for start-up funds or a grantee with a program already in operation, developing a logic model can strengthen your program. Logic models help identify the factors that will affect your program and enable you to anticipate the data and resources you will need to achieve success. As you engage in the process of creating your program logic model, your organization will systematically address these important program planning and evaluation issues:

Over the past few years, I have markedly changed my approach to logic modeling. I have become convinced that it makes a considerable difference if you do the outcomes before planning the activities.

I definitely advocate doing the outcomes first! I find that people come up with much more effective activities when they do. Use the motto, "plan backward, implement forward."

Beverly Anderson Parsons, WKKF Cluster Evaluator

- Cataloguing of the resources and actions you believe you will need to reach intended results.
- Documentation of connections among your available resources, planned activities and the results you expect to achieve.
- Description of the results you are aiming for in terms of specific, measurable, action-oriented, realistic and timed outcomes.

The exercises in this chapter gather the raw material you need to draw a basic logic model that illustrates how and why your program will work *and* what it will accomplish. You can benefit from creating a logic model at any point in the life of any program. The logic model development process helps people inside and outside your organization understand and improve the purpose and process of your work.

Chapter 2 is organized into two sections – Program Implementation, and Program Results. The best recipe for program success is to complete both exercises. (Full-size masters of each exercise and the checklists are provided in the Forms Appendix at the back of the guide for you to photocopy and use with stakeholder groups as you design your program.)

Exercise 1: Program Results. In a series of three steps, you describe the results you plan to achieve with your program.

Exercise 2: Program Resources and Activities by taking you through three steps that connect the program's resources to the actual activities you plan to do.

The Mytown Example
Throughout Exercises 1 and 2 we'll follow an example program to see how the logic model steps can be applied. In our example, the folks in Mytown, USA, are striving to meet the needs of growing numbers of uninsured residents who are turning to Memorial Hospital's Emergency Room for care. Because that care is expensive and not the best way to offer care, the community is working to create a free clinic. Throughout the chapters, Mytown's program information will be dropped into logic model templates for Program Planning, Implementation, and Evaluation.

Chapter 2

Novice logic modelers may want to have copies of the Basic Logic Model Template in front of them and follow along. Those readers with more experience and familiarity may want to explore the text and then skip ahead to the completed Basic Logic Model for the Mytown Example on page 34.

Demonstrating Progress Toward Change

The Importance of Documenting Progress

According to many funders, grant applications frequently lack solid descriptions of how programs will demonstrate their effectiveness. Some grantees think activities are ends unto themselves. They report the numbers of participants they reach or the numbers of training sessions held as though they were results.

Conducting an activity is *not* the same as achieving results from the accomplishment of that activity. For example, being seen by a doctor is different from reducing the number of uninsured emergency room visits. Tracking data like meetings held or patients enrolled *does* monitor your program's implementation and performance, but those data are outputs (activity data), not outcomes (which refer to the results you expect to achieve in future years).

"Do the outcomes first" is sage advice. Most logic models lack specific short- and long-term outcomes that predict what will be achieved several years down the road. Specifying program milestones *as you design the program* builds in ways to gather the data required and allows you to periodically assess the program's progress toward the goals you identify. **For that reason, Exercise 1 isn't filled out from left to right. This exercise asks you to "do the outcomes first." We will focus our attention first on what we have called "*your intended results.*"**

As you implement your program, outcome measures enhance program success by assessing your progress from the beginning and all along the way. That makes it possible to notice problems early on. The elements (Outputs, Outcomes, and Impact) that comprise *your intended results* give you an outline of what is most important to monitor and gauge to determine the effectiveness of your program. You can correct and revise based on your interpretation of the collected data.

Exercise 1 – Describing Results

Describe the results you desire – Outputs, Outcomes and Impact

If you were running the Mytown Free Clinic, how would you show that your desired outcome (a reduction in uninsured emergency care) didn't result from a mass exodus of uninsured residents from Mytown, USA, or a sudden increase in number of employees offered health insurance coverage by local businesses?

How will you demonstrate that *your program* contributed to the change you intend? A well-crafted logic model can assert it is reasonable to claim that your program made a substantive contribution to your intended change. When programs operate in real communities where influences and forces are beyond your control, evaluation is generally more about documenting a program's contribution than about proving something. Community-based initiatives operate in complex environments where the scientific certainty of "proof" is seldom attainable. This is where logic models can be especially helpful.

INSTRUCTIONS: Exercise 1 will use the Basic Logic Model Development Template. In particular, you will use the information presented in the gray text boxes that follow about the Mytown example program to determine what results are intended for this program. Example information about outcomes, impacts, and outputs are provided. You will fill in the blank Basic Logic Model Development Template to illustrate first the outcomes and impacts sought and then the outputs. You can then look at the completed template on page 25 to see compare your interpretation with that produced by the Mytown folks.

Exercise 1 uses the Basic Logic Model Development Template

Resources	Activities	Outputs	Short- & Long-Term Outcomes	Impact
In order to accomplish our set of activities we will need the following:	*In order to address our problem or asset we will conduct the following activities:*	*We expect that once completed or under way these activities will produce the following evidence of service delivery:*	*We expect that if completed or ongoing these activities will lead to the following changes in 1–3 then 4–6 years:*	*We expect that if completed these activities will lead to the following changes in 7–10 years:*

Outcomes and Impacts should be SMART:

- Specific
- Measurable
- Action-oriented
- Realistic
- Timed

Some logic models number the lists within a column to aid discussion. Some tabular logic models use rows to order and show the relationships among components. Some logic models, like the outcome and activity examples provided in Chapter One, use a box and arrow format to illustrate the "causal linkages" demonstrating how your resources, activities, outputs, outcomes, and impact connect to form chains. These depictions add to the clarity of your logic model/evaluation plan. However, for the most basic of logic models, the inventory approach we illustrate is sufficient to capture your thinking about how a program will work. The other techniques will improve its utility, but the most important task is to first get the component parts categorized and described. Once you have completed the inventory table for this and Exercise 2 feel free to experiment with identifying the relationships among the items across columns.

Short-term outcomes are results you expect to achieve one to three years after a program activity is under way.

Short-term outcomes are specific changes in things like attitudes, behaviors, knowledge, skills, status, or level of functioning expected to result from program activities. These usually are expressed at an individual level among program participants.

EXAMPLES: Signed Memorandum of Agreement from the local technical college donating clinic space, change in participants' attitudes about the need for a medical home, increase in numbers of scheduled annual physicals, increased patient follow-up visits, change in staff's awareness of patient scheduling challenges, increased appropriate referrals from ER's.

Insert Mytown's short-term outcomes in the Short- and Long-Term Outcomes Column of the Basic Logic Model Development Template.

Long-term outcomes are results you expect to achieve in four to six years.

Long-term outcomes are also specific changes in things like attitudes, behaviors, knowledge, skills, status, or level of functioning expected to result from program activities. These usually build on the progress expected by the short-term outcomes.

EXAMPLES: The clinic serves as a medical home for 500 uninsured patients. The clinic has sustained funding sources: patient co-payments ($10/visit) provide 20% of the Clinic's operating costs, United Way provides 20%, Memorial Hospital donates 20%, the Medical Society contributes 20% and an endowment established at the Community Foundation provides the final 20%. An annual golf tournament organized by the Kiwanis Club funds special clinic projects. There has been a 25% reduction in uninsured emergency care since Mytown Free Clinic opened five years ago. In the Clinic's fifth year there is a 15% reduction in uninsured ER visits. Seventy-five volunteer administrators and 300 volunteer medical professionals regularly serve at the clinic each year. Five companies donate all necessary medical supplies. Grant funds purchase the computers and software needed to create electronic patient records. For five years patient satisfaction ratings have been 90%.

Insert Mytown's long-term outcomes in the Short- and Long-Term Outcomes column of the Basic Logic Model Development Template.

Impact refers to the results expected seven to ten years after an activity is under way – the future social change your program is working to create.

Impacts are the kinds of organizational, community, or system level changes expected to result from program activities and which might include improved conditions, increased capacity, and/or changes in the policy arena.

EXAMPLES: Specific reduction in inappropriate emergency room use, increased donations of clinic supplies to meet identified needs, a stable supply of medical volunteers, an endowment supporting 35% of the clinic's operating funds, 900 patients served/year.

Insert Mytown's impacts in the Impact Column of the Basic Logic Model Development Template.

Outputs are data about activities.

They are the direct results of program activities. They are usually described in terms of size and scope of the services or products delivered or produced by the program. They indicate whether or not a program was delivered to the intended audiences at the intended "dose." A program output, for example, might include the number of classes taught, meetings held, materials distributed, program participation rates, or total service delivery hours.

EXAMPLES: Number of patients referred to the Free Clinic from Memorial ER/year, the number of patients screened/year, the number of qualified patients enrolled in the Free Clinic/year, the average number of patient visits/day, the total number of patient visits/year, the number and specialties of medical volunteers, the number of volunteer administrators trained, the number and locations of clinic posters distributed, the number of potential patients calling for information/ month.

Insert Mytown's outputs in the Outputs Column of the Basic Logic Model Development Template.

Exercise 1 Checklist:

Review what you have created using the checklist below to assess the quality of your draft.

	Progress Toward Results Quality Criteria	Yes	Not Yet	Comments Revisions
1.	A variety of audiences are taken into consideration when specifying credible outputs, outcomes, and impacts.	☐	☐	
2.	Target participants and/or partners are described and quantified as outputs (e.g. 100 teachers from 5 rural high schools).	☐	☐	
3.	Events, products, or services listed are described as outputs in terms of a treatment or dose (e.g. 30 farmers will participate in at least 3 sessions of program, or curriculum will be distributed to at least 12 agencies).	☐	☐	
4.	The intensity of the intervention or treatment is appropriate for the type of participant targeted (e.g. higher-risk participants warrant higher intensities).	☐	☐	
5.	The duration of the intervention or treatment is appropriate for the type of participant targeted (e.g. higher-risk participants warrant longer duration).	☐	☐	
6.	Outcomes reflect reasonable, progressive steps that participants can make toward longer-term results.	☐	☐	
7.	Outcomes address awareness, attitudes, perceptions, knowledge, skills, and/ or behavior of participants.	☐	☐	
8.	Outcomes are within the scope of the program's control or sphere of reasonable influence.	☐	☐	
9.	It seems fair or reasonable to hold the program accountable for the outcomes specified.	☐	☐	
10.	The outcomes are specific, measurable, action-oriented, realistic, and timed.	☐	☐	
11.	The outcomes are written as change statements (e.g. things increase, decrease, or stay the same).	☐	☐	
12.	The outcomes are achievable within the funding and reporting periods specified.	☐	☐	
13.	The impact, as specified, is not beyond the scope of the program to achieve.	☐	☐	

Exercise 2 – Describing Actions

Linking It All Together

Exercise 2 illustrates exactly how you plan to put your program theory to work. It leads you to identify the resources and activities your program will need to achieve your intended results. This exercise documents your knowledge of the community resources you have available and specific activities your program will implement.

I would emphasize that people may well change their minds about the activities that are the most useful after having done the results work.

Beverly Anderson Parsons, WKKF Cluster Evaluator

Program rationales in grant proposals are usually strong. Grantees tend to have a very good sense of *what* they want to do. However, they frequently fail to make specific connections between their program and related best practice literature and practitioner wisdom that could *and should* support their approach and their work.

To connect actions to program results, this exercise links your knowledge of what works with specific descriptions of what your program will do. It requires you to anticipate what will be needed to support program activities. The elements that comprise your program implementation act as a game plan for the program you propose.

Most logic models list activity items and resources (like planning meetings, curriculum purchase or design, training workshops, and service delivery). Depending on the nature of your effort, other types of products and processes may be included. Management-oriented logic models also include program and evaluation development, staff and volunteer training, recruitment of partners and participants, and the publicity needed to support your work along the way.

As mentioned earlier, if your program addresses multiple issues you may find it helpful to go through the exercises for each issue in turn and then aggregate them into a larger model that highlights the relationships among issues.

We recommend referring to a literature review on the problem your program is designed to address when you specify program activities. From this explicit knowledge of what works, you can more clearly connect the abstract strategies supporting the program to its concrete activities.

When Exercise 2 is complete and you are satisfied that you have an accurate inventory of the Mytown program's component parts, transfer the information to the **Basic Logic Model Development Template.** Remember you have already filled in the three columns on the right with what you have learned about the intended results for the Mytown program example.

What activities are planned? Based on what you know about effective ways to solve problems or build assets, what specific activities have you planned?

EXAMPLES: Personnel Committee launches and completes search for full-time director. Director is hired and oriented to the board and the community. Board and staff visit the Anywhere Free Clinic to learn from its experience and to select documents to replicate (i.e., policies and procedures, job descriptions, equipment needs, budgets, funding strategies, volunteer and patient records). Board and staff conduct program-planning retreat. Based upon Anywhere's funding plan, board secures Free Clinic's first-year funding. Marketing Committee creates public relations campaign in collaboration with Volunteer Committee to secure volunteers and patients. Facility Committee creates and completes MOA with technical college to secure a clinic facility. Quality Assurance Committee creates evaluation plan in cooperation with Memorial Hospital's Emergency Room staff and the local Chamber of Commerce.

Summarize Mytown's activities in the Activities column of the Basic Logic Model Development Template

What resources are needed? Once you have specified what you plan to do, determine the resources you will need to support the solutions your program proposes. For some types of programs, it may also be helpful to describe the influential factors you are counting on to support your efforts in the community.

EXAMPLES: Medical Society/Memorial Hospital Task Force for the Uninsured will become a Free Clinic Board of Directors and secure a 501(c)(3) status from the IRS. The Board will recruit 7–10 additional representatives from drug companies, the local technical school, Mytown's United Way, the Chamber of Commerce, the Community Foundation, the Volunteer Center, the Nurses Association, etc. During a 6-month planning period, board committees will be launched; staff will be recruited/hired/oriented; a site visit will be conducted; and the Clinic's first-year's funding ($150,000/year) will be secured. Committees will create an MOA with Memorial Hospital and the Medical Society to secure equipment required: 5 exam tables, 7 desks, 5 blood pressure cuffs, 5 otoscopes, 5 stethoscopes, 5 PDR's, 1 set of scales, 10 thermometers, three computers, one first aid emergency kit.

Summarize Mytown's resources in the Resources column of the Basic Logic Model Development Template.

Exercise 2 Checklist:

Review what you have created using the checklist below to assess the quality of your draft.

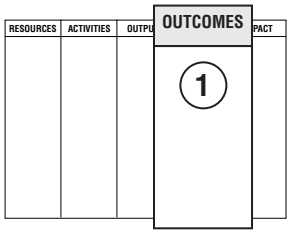
Theory into Action Quality Criteria	Yes	Not Yet	Comments/Revisions
1. Major activities needed to implement the program are listed.	☐	☐	
2. Activities are clearly connected to the specified program theory.	☐	☐	
3. Major resources needed to implement the program are listed.	☐	☐	
4. Resources match the type of program.			
5. All activities have sufficient and appropriate resources.	☐	☐	

Chapter 2

Here we include a flowchart that summarizes the steps to complete your basic logic model. Keep in mind that you could use this inventory style template to then further describe the relationships among the components using numbered items, rows, or boxes and arrows as we mentioned earlier.

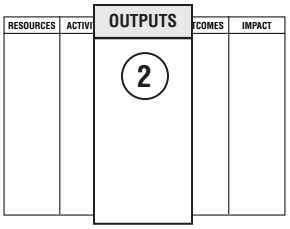
Flowchart for Exercises 1 & 2 – Describing Results, Resources, and Activities

Exercise 1 Describing Results



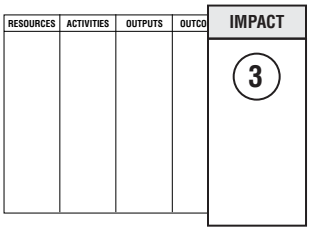
Step 1.1

For each of the specific activities you have planned to do, what short-term and then long-term outcomes do you expect to achieve as indicators of the progress made by your program toward its desired results?



Step 1.2

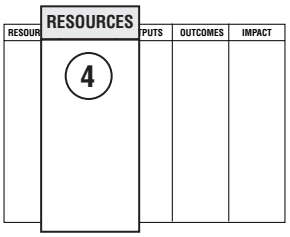
For each of the specific activities that you have planned to do, what outputs (service delivery or implementation targets) do you hope to reach through the operation of your program?



Step 1.3

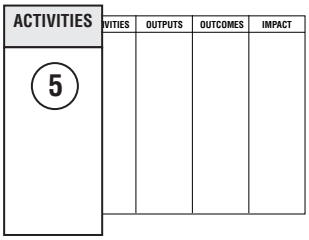
For each of the specific activities you have planned to do, what impact do you expect to achieve in your community?

Exercise 2 Describing Resources and Activities



Step 2.1

Knowing what you know about what works to solve problems or build assets as specified in the theory of change for your program, what specific activities have you planned to do?



Step 2.2

What resources are available to your program to support the specific activities you have planned to do (for some programs, it may also be important to state those influential factors you are counting on to support your work)?

Logic Model Development
Program Implementation Template – Exercise 1 & 2

RESOURCES	ACTIVITIES	OUTPUTS	SHORT- AND LONG-TERM OUTCOMES	IMPACT
In order to accomplish our set of activities we will need the following:	*In order to address our problem or asset we will accomplish the following activities:*	*We expect that once accomplished these activities will produce the following evidence or service delivery:*	*We expect that if accomplished these activities will lead to the following changes in 1–3 then 4–6 years:*	*We expect that if accomplished these activities will lead to the following changes in 7–10 years:*
• IRS 501(c)(3) status • Diverse, dedicated board of directors representing potential partners • Endorsement from Memorial Hospital, Mytown Medical Society, and United Way • Donated clinic facility • Job descriptions for board and staff • First year's funding ($150,000) • Clinic equipment • Board & staff orientation process • Clinic budget	• Launch/complete search for executive director • Board & staff conduct Anywhere Free Clinic site visit • Board & staff conduct planning retreat • Design and implement funding strategy • Design and implement volunteer recruitment and training • Secure facility for clinic • Create an evaluation plan • Design and implement PR campaign	• # of patients referred from ER to the clinic/year • # of qualified patients enrolled in the clinic/year • # of patient visits/year • # of medical volunteers serving/year • # of patient flyers distributed • # of calls/month seeking info about clinic	• Memorandum of Agreement for free clinic space • Change in patient attitude about need for medical home • Change in # of scheduled annual physicals/follow-ups • Increased # of ER/physician referrals • Decreased volume of un-reimbursed emergencies treated in Memorial ER	• Patient co-payments supply 20% of clinic operating costs • 25% reduction in # of uninsured ER visits/year • 300 medical volunteers serving regularly each year • Clinic is a United Way Agency • Clinic endowment established • 90% patient satisfaction for 5 years. • 900 patients served/year