

How to Develop a Logic Model

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What is a Logic Model?

Logic models are program planning tools that define the inputs, outputs, outcomes of a program in order to explain the thinking behind program design and show how specific program activities lead to desired results. Inputs include the resources, contributions, and investments that go into a program; outputs are the activities, services, events and products that reach the program's primary audience; and outcomes are the results or changes related to the program's intervention that are experienced by the primary audience.

Identifying inputs, outputs, and outcomes helps to answer questions like:

- What resources are required to successfully carry out the program?
- What is the program manager going to do to make sure the program has an impact on the identified problem?
- Who makes up the primary audience that the program is trying to engage?
- What is the ultimate goal of the program?

Why Develop a Logic Model?

Defining inputs, outputs, and outcomes early in program planning ensures a deliberate flow of activity to results. Logic models are visual tools that can help programs create action plans for activities. They also help program implementers see the way in which the individual pieces fit into larger program objectives and goals.

Logic models are also helpful for keeping track of program activities, including both achievements and issues that arise during the life of the program. Other reasons to create a logic model include:

Program Planning	External Communication	Program Evaluation
<p>Testing logic behind a program to ensure nothing was overlooked</p> <p>Ensuring <u>stakeholder</u> involvement in program planning stages</p>	<p>Explaining what a program will achieve</p> <p>Getting buy-in from stakeholders</p> <p>Explaining steps and time needed to achieve desired results</p>	<p>Defining "success" for a program</p> <p>Tracking program progress</p> <p>Flexibility to revise program based on feedback</p>

Who should develop a logic model?

A logic model should be developed by the research staff in close collaboration with program staff and any government or NGO counterparts who are designing the program and have clear knowledge and understanding of the program goals and objectives.

When should a logic model be developed?

A logic model is developed at the beginning of SBCC programs so it can be used to guide the program and ensure that everyone agrees on and understands the program's objectives prior to beginning any activities. Donors, partners, and program managers need to have the same understanding of the program from the beginning and throughout the program.

Who is this guide for?

This guide is designed primarily for program managers or personnel who are not trained researchers themselves but who need to understand the rationale and process of conducting research. This guide can help managers to support the need for research and ensure that research staff have adequate resources to conduct the research that is needed to be certain that the program is evidence based and that results can be tracked over time and measured at the end of the program.

Learning Objectives

After completing the steps in the logic model guide, the team will:

1. Identify basic elements of a program logic model
2. Understand how to create a simple version of a logic model

Estimated Time Needed

Developing a logic model can often be done in one day if the team has identified and agreed on the problem.

Steps

Step 1: Identify the Problem

The problem being addressed by the program needs to be well defined so that all program staff and stakeholders working on the program have the same definition of the problem. This ensures that everyone agrees on the program's objectives prior to beginning any activities. Existing sources of data such as recent DHS surveys will provide information on key health issues among the population. It is also a good idea to consult key stakeholders, government officials, or refer to the national strategic plan for the health area the program addresses.

The logic model should include a description of the problem and who it affects most. For example:

PROBLEM	High maternal mortality rate (in target country, region, or province)
WHO IS MOST AFFECTED BY PROBLEM	Women of reproductive age (in target country, region, or province)

Step 2: Determine the Key Program Inputs

When determining the resources needed for a successful SBCC program, carefully consider key areas such as human resources, office supplies, and field resources.

It often helps to create two columns of inputs: one that lists things that are *needed* (e.g., office space, computers and other electronic equipment, staff, volunteers) and another that outlines *wish list* items, or things that would be helpful but are not critical for a successful program. Program staff and stakeholders should be consulted for additional suggestions on what inputs will be needed.

Example inputs:

Necessities List	Wish List
<i>Human Resources</i>	
1. Two staff members to manage program 2. Community volunteers	1. One support staff member
<i>Office Supplies</i>	
1. Internet connection 2. Two laptops	1. Well-designed website 2. Camera to take photos in community
<i>Field Resources</i>	
1. Transportation to community sites	1. GPS locator for mapping community

Step 3: Determine Key Program Outputs

Determine the actions program staff will take (outputs) to make sure the program succeeds (e.g. activities, services, events and products created). When determining outputs, keep in mind the primary audience(s) the team identified. The program should take actions based on their characteristics and seek to engage these audiences in its actions.

A good way to identify outputs is to create a list of activities or actions that will take place to achieve program objectives. For example, if the program will conduct trainings or create new materials, think about the resources that might be needed to complete these activities. Then, review the inputs list to make sure it includes the resources needed for each activity on the outputs list.

Outputs may sound like the results of programmatic work, but they actually represent a sign of progress. Outputs describe the process that will help the program achieve its goals.

For example, the program goal might be to increase pregnant women’s opinions of delivering in a health facility. To reach that goal, the program can hold trainings for leaders of women’s organizations (as in the example below). Training the leaders is the process and the number of trained leaders who engage successfully in the community is an indicator of progress towards that goal. Indicators that measure progress are often called process indicators. More information about process indicators can be found in Step 7.

Example Outputs:

Activities	Audience(s)
Conduct workshops with doctors, midwives, and nurses on the use and importance of life-saving commodities like oxytocin and misoprostol	Doctors, nurses, and midwives
Contact women’s organizations in the area and schedule trainings for community educators	Women’s organizations
Distribute pamphlets and brochures on the warning signs of pregnancy that require attention from a health facility	Women of reproductive age, traditional birth attendants

Step 4: Identify Program Outcomes

Determine the ultimate program goals, or outcomes. In other words, what is the program going to change or achieve?

It is helpful to split outcomes into short-term, mid-term, and long-term so that it is easier to recognize progress over time. It is unrealistic to expect immediate success changing a particular behavior over a few months, but fast progress can be made when training community leaders or increasing interest in the program among community members.

Long-term outcomes should closely mirror the ultimate solution to the problem described in Step 1. The short-term and mid-term outcomes should follow logically from the resources that were described as inputs (Step 2) in addition to the primary audiences and actions described as outputs (Step 3).

If program inputs and outputs will not result in the desired outcomes, then it may be necessary to rethink the *logic* behind the program. However, the program manager might be too involved in the program to see that a step is missing in the program logic. For this reason, it is important to have several other staff members contribute to the development of the logic model. Additionally, defining external or outside factors as described below in **Step 6** might help restructure the logic and account for changes in the program design.

Example Outcomes:

Short-term	Mid-term	Long-term
Increased number of women in the community are aware that giving birth in a health facility increases their chances of a positive birth outcome.	Increased proportion of women give birth in a facility with a trained health provider.	Decreased maternal mortality rate.

To track the progress of outcomes, there should be a starting point or a baseline (e.g. baseline survey data) for the areas that need to be improved. For example, if the program is trying to decrease maternal mortality, it is important to know what the current maternal mortality rate is for the region or country in which activities will be implemented. More discussion of tracking outcomes can be found in **Step 7** and the [How to Develop Indicators guide](#).

Step 5: Create a Logic Model Outline

After all of the inputs, outputs, and outcomes have been defined, they can be put together to form an outline of the logic model. The example below shows how this can be arranged.

	Inputs	Outputs		Outcomes
	Program Investment	Activities	Audience	Short-, Mid-, and Long-term Goals
Question	What resources are needed for the program to be successful?	What do program staff need to do?	What population needs to be engaged?	What problem is the program trying to address? What is the ultimate goal?

	Inputs	Outputs		Outcomes
Example	Staff, office space, technology, volunteers, materials	Conduct trainings, recruit volunteers	Women of reproductive age, their husbands, community elders, midwives, doctors, TBAs	<p><i>Short-term:</i> Increase awareness of benefits of giving birth in a facility</p> <p><i>Mid-term:</i> More women give birth with a trained provider</p> <p><i>Long-term:</i> Reduce maternal mortality rate</p>

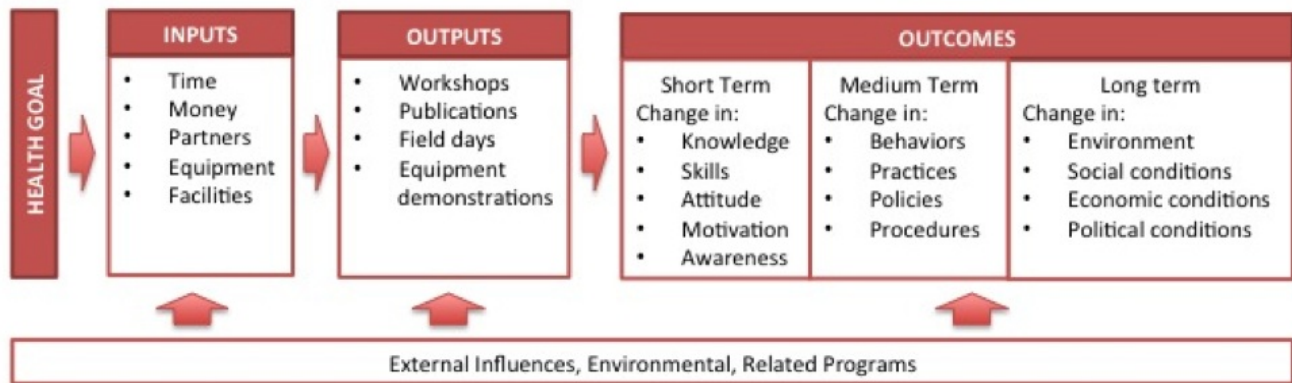
Step 6: Identify External Influencing Factors

Programs and interventions are always influenced by external or outside factors. When creating a logic model it is important to identify factors that might help or prevent the program from becoming a success.

What to consider:

- **Environment/Setting** - The setting in which the program will operate is very important. For example, for a campaign encouraging women to seek prenatal care, will rural residents be able to get to health facilities or do midwives need to travel directly to women? This will affect the resources needed and the audiences that should be targeted to achieve short- and long-term program goals. Information about the environment in which the program will be implemented can be gathered through a rapid assessment or formative research before the program begins.
- **Other programs** - If there are other organizations/programs currently operating in the program area, someone from that program might be able to help identify these external influences. An added benefit is that building relationships with other organizations can help to identify future collaboration opportunities.
- **Influences** - Consider the influences needed to achieve the desired impact. Are there particular people in the community/region/country that should be engaged? Who would be most helpful in getting program messages across? Is there stigma associated with the activities that are planned?

After identifying all of these individual components, the inputs, outputs, and outcomes can be visually organized in a diagram like the one below, shown as an example only.



Step 7: Identify Program Indicators

While other guides such as [How to Develop Indicators](#) will explain how to develop more detailed program indicators, it is important to start thinking about them now. Partners in the community and key stakeholders can help design a program, but the program manager is ultimately responsible for its success and for reporting results to the donor.

As the basic outline for the program's logic model is developed, it is important to ask "how many?" for each output. For example, how many training workshops will be held in the next 6 months? How many community connections will be made? How many volunteers will be recruited? Once realistic and achievable numbers are decided on for each item, these numbers will become the program's **process indicators**.

The goals set for **short-, mid- and long-term outcomes** will serve as **outcome indicators**. These indicators will focus more on *what* the program is trying to achieve rather than *how* it is being achieved. For example, how many more health providers have used a life-saving maternal health commodity such as misoprostol or oxytocin in the past year? How many more women are coming to a health facility for prenatal care or childbirth than before the program started?

Conclusion

Logic models are a useful visual tool that can help outline the intended activities and results of a program. They clarify program goals and objectives and help stakeholders and program staff see how program inputs will lead to the overall strategic objective. The logic model also provides a platform for discussing external factors that can affect a program's success and helps guide the creation of monitoring indicators. See below for an example of a completed logic model and a blank template that can be printed and put to use.

For more related information on logic models and other monitoring and evaluation activities

for SBCC programming, please see [How to Develop Indicators](#) and [How to Develop a Monitoring and Evaluation Plan](#). The Health COMpass also has other related resources that can provide more help in designing social and behavior change communication programs.

Templates

[Logic Model Template](#)

[Program Inputs and Outputs Template](#)

Samples

[Logic Model for Maternal Mortality](#)

Tips & Recommendations

- The steps made towards achieving program goals are not only important to the program manager and staff, they are also important to donors, the community the program serves, and those who might want to work on similar programs in the future. So, make sure to document program steps as they occur during implementation. It is much easier to document them as the program progresses than to try to remember them all after it is finished!
- The wish list created in Step 1 might include connections programs need to make with important people in the community, region, or country.

Glossary & Concepts

- **Inputs** include the resources, contributions, and investments that go into a program
- **Outputs** are the activities, services, events and products that reach the program's primary audience
- **Outcomes** are the results or changes related to the program's intervention that are experienced by the primary audience
- **Stakeholders** are those who are affected by, have a direct interest in or are somehow involved with the health problem.
- **Process Indicators** track how the implementation of the program is progressing. They help to answer the question, "Are activities being implemented as planned?"

- **Outcome Indicators** track how successful program activities have been at achieving program goals. They help to answer the question, “Have program activities made a difference?”

Resources and References

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SBC How-to Guides are short guides that provide step-by-step instructions on how to perform core social and behavior change tasks. From formative research through monitoring and evaluation, these guides cover each step of the SBC process, offer useful hints, and include important resources and references.



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