the logic model:
a blueprint for describing programs

Adapted from:

Available online at: www.phac-aspc.gc.ca/php-psp/toolkit.html
What is a Logic Model?

Even though programs are diverse, all programs share common elements. A logic model is a diagram of these common elements, showing what the program is supposed to do, with whom and why.

WHAT?

- **Components** are groups of closely-related activities in a program.
- **Activities** are the things the program does to work toward its desired outcomes.

WHO?

- **Target groups** are the individuals, groups or communities for whom the program’s activities are designed.

WHY?

- **Outcomes** are the changes the program hopes to achieve. These are differentiated between short-term and long-term outcomes.

There are many advantages to creating a logic model for your program. A logic model will:

- summarize the key elements of your program (hopefully on a single piece of paper);
- explain the rationale behind program activities;
- clarify the difference between the activities and the intended outcomes of the program;
- show the cause-and-effect relationships between the activities and the outcomes — that is, which activities are expected to lead to which outcomes;
- help you identify the critical questions for program evaluation; and
- provide the opportunity for program stakeholders to discuss the program and agree upon its description.

Logic models are also a useful means of communicating the elements of your program to policy makers, staff, external funding agencies, the media, and colleagues.
What Does a Logic Model Look Like? An Example

The logic model presented on the next page illustrates the basic elements of a parenting program. The You and Your Toddler Parenting Series has been offered throughout the Kennogauh Falls Region for the past five years. It is designed for parents of children two to four years of age, especially those parents with a high school education or less. The series consists of six two-hour sessions facilitated by a public health nurse (PHN). Discussions include topics such as:

- taking care of a sick child;
- preparing healthy, balanced meals;
- communicating effectively;
- setting limits;
- talking about sexuality with toddlers;
- balancing work and family life; and
- building self-esteem in toddlers.

To recruit parents to the program, the PHNs:

- work with community resource centres and other organizations such as churches and libraries;
- advertise in grocery stores, shopping centers, pharmacies, etc.;
- write articles for community newspapers; and
- send letters to physicians to let them know about the program.

This recruitment activity is intended to increase awareness, knowledge and referrals to the program in order to increase participation in it.

The sessions are offered at a variety of times and places throughout the week and are held in churches and community centres throughout the region in order to be available to as many parents as possible. Sessions are offered in English and French.

The series aims to:

- increase parents’ knowledge about and skills in caring for their young child;
- inform parents about community resources; and
- help parents build an informal support network with other parents in the group.

Ultimately it is hoped that this program will increase the number of parents able to adopt healthy parenting behaviours in order to increase the number of children able to attain their optimal level of physical, mental, emotional and social development.
Parenting Program Logic Model

Components

**Recruitment**

- Work with community resource centres and organizations to recruit parents
- Advertise
- Write articles for community newspapers
- Send letters about program
- Talk about program

**Health Education**

- Organize sessions
- Facilitate discussion among parents based on prepared modules on parenting topics
- Distribute pamphlets on topics
- Distribute pamphlets on other community resources

Activities

**Target Groups**

- Community resource centres and other community organizations
- Physicians
- Parents of children 2 to 4 years of age
- General public

- Parents of children 2 to 4 years of age, in particular parents with high school education or less

**Short-term Outcomes**

- Increased awareness of program
- Increased knowledge about program
- Increased referrals to program

- Increased knowledge about caring for a young child
- Increased ongoing peer support
- Increased knowledge of available services/resources
- Improved parenting skills

**Long-term Outcomes**

- Increased participation in the program

- Increased number of parents able to adopt healthy parenting behaviours

Increased number of children able to attain their optimal level of physical, mental, emotional and social development
Where to Start?

There is no single way to create a logic model. Where you start often depends on the developmental stage of the program.

**An Existing Program**

If your logic model is being developed to describe an existing program start with the activities and progress downward, that is, a top-down approach. Ask yourself, “What is it that we do and why do we think that it will create the change we’re hoping for?” This module will walk you through a top-down approach.

**A New Program**

If you are developing a logic model while planning a program, you may find it easier to start at the bottom of the model, beginning with the desired outcomes and working your way up. Ask yourself, “What is it that we want to change and how are we going to do it?”

Keep in mind that there is no “right” way to create a logic model — you may find that the easiest place to start is in the middle. You may even switch back and forth between approaches. Some people work across a page instead of up and down, starting with program components on the left and long-term outcomes on the far right. It really doesn’t matter — the main point is to begin at the easiest point for you.

Who Should Be Involved?

It is a good idea to get others to help you create a logic model. Consider working with a variety of stakeholders and program staff at all levels. They can help you review your model for accuracy and give you input and advice. There should be agreement on the way the program is depicted in the logic model before proceeding with evaluation.

How is a Logic Model Created?

First, fill in a CAT Worksheet for your program. CAT is short for components, activities and target groups, the first three elements of a logic model. These elements are explained on the next page. Also provided are some examples of words you might use to express these elements of your program. As an example, the Worksheet has been completed for the Parenting Program.
<table>
<thead>
<tr>
<th>Elements of the Logic Model</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Components</strong></td>
<td></td>
</tr>
<tr>
<td>Concentrate on themes or sets of activities.</td>
<td>Components are closely-related groups of activities in your program. The number of components depends on the size of your program and how you conceptualize or administer it. For a large program, there could be several components in the logic model. Smaller programs, on the other hand, may consist of just one component.</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td></td>
</tr>
<tr>
<td>Don’t include the administrative aspects of your program such as payroll or performance appraisals. Use an action verb.</td>
<td>Activities are the things the staff in your program do or the services your program delivers. Activities are the means by which the desired outcomes will be achieved. To help think about activities, pull together all of the documentation that you have for the program. It may be a short paragraph describing the program’s various activities, staff workplans or program operational plans.</td>
</tr>
<tr>
<td><strong>Target Groups</strong></td>
<td></td>
</tr>
<tr>
<td>Be as specific as possible.</td>
<td>Target groups are the individuals, groups, organizations or communities for whom the program’s services are designed. These are your priority populations, or the intended “reach” of your program. Target groups can be specified in terms of sociodemographic characteristics (such as age, income, occupation, education, sex, languages, ethnicity) or by behaviours.</td>
</tr>
</tbody>
</table>

- advocacy
- case management
- clinical services
- coalition building
- communication
- community development
- education
- emergency response
- policy development
- skill development
- social marketing
- surveillance
- training
- operate
- organize
- prepare
- present
- promote
- provide
- refer
- represent
- review
- seek
- set up
- share
- teach
- train
- write
- adults
- anglophones
- francophones
- infants
- men
- parents of children aged 2 to 4 years
- people living below the poverty line
- people living in rural areas
- politicians
- seniors
- smokers
- women
- youth
## CAT Worksheet

<table>
<thead>
<tr>
<th>Components</th>
<th>Activities</th>
<th>Target Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the main sets of activities?</td>
<td>What things are done?</td>
<td>At whom are activities directed?</td>
</tr>
<tr>
<td><strong>Health education</strong></td>
<td>• organize series</td>
<td>• parents of children 2 to 4 years, especially parents with high school or less education</td>
</tr>
<tr>
<td></td>
<td>• facilitate sessions</td>
<td></td>
</tr>
<tr>
<td><strong>Recruitment</strong></td>
<td>• advertise in stores, libraries, churches, community resource centres and other public places</td>
<td>• general public</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• parents of children 2 to 4 years, especially parents with high school or less education</td>
</tr>
<tr>
<td></td>
<td>• write articles for community newspapers</td>
<td>• general public</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• parents of children 2 to 4 years</td>
</tr>
<tr>
<td></td>
<td>• send letters</td>
<td>• physicians</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• community resource centres</td>
</tr>
<tr>
<td></td>
<td>• talk about the program</td>
<td>• other community organizations</td>
</tr>
<tr>
<td><strong>Health education</strong></td>
<td>• distribute pamphlets on topics</td>
<td>• parents of children 2 to 4 years, especially parents with high school or less education</td>
</tr>
<tr>
<td></td>
<td>• distribute pamphlets on other community resources</td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td>Activities</td>
<td>Target Groups</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td>What are the main sets of activities?</td>
<td>What things are done? What services are delivered?</td>
<td>At whom are activities directed?</td>
</tr>
</tbody>
</table>
Next, fill in the SOLO Worksheet for your program. SOLO is short for short-term outcomes and long-term outcomes. Once again, the Worksheet has been completed for the Parenting Program.

Outcomes

Outcomes are the changes the program hopes to achieve with each target group. They are the reasons why you are doing your program. Outcomes focus on what the program makes happen rather than what it does. They are the intended results of the program, not the process of achieving them. Outcomes are usually differentiated between short-term and long-term outcomes. This distinction helps illustrate the sequential nature of change.

**Short-term outcomes** are the direct results of the program on its participants. They show why the program activities will lead to the long-term outcomes. In some programs, short-term outcomes may be increased awareness or concern, increased knowledge, or improved skills. Program staff are accountable for the achievement of short-term outcomes.

**Long-term outcomes** reflect the consequences of your program in the broader community. They tend to be the ultimate goals of the program. Long-term outcomes sometimes take a long time to occur, but occasionally they are observed soon after a program is implemented, as in the case of an immunization program reducing rates of communicable disease. There will probably be only a few long-term outcomes for any given program.

Although it is essential to include the long-term outcomes of a program in the logic model, program staff are rarely held accountable for their achievement because there are so many other forces which influence your program’s target group. You can, however, assume that if short-term outcomes are achieved, then it is likely that long-term outcomes will follow. It is crucial that these assumptions are based on solid evidence.

For both short-term and long-term outcomes, be sure to include the direction of change (that is increase or decrease) and what it is that is intended to change. Although programs generally aim to increase or decrease something, there may be different ways of expressing outcomes. Some examples are provided below.

- alleviated
- augmented
- decreased
- diminished
- eliminated
- enlarged
- expanded
- extended
- improved
- increased
- lessened
- lowered
- prevented
- shortened
- shrunk
- reduced
- raised
### SOLO Worksheet

<table>
<thead>
<tr>
<th>What is the direction of change (↑ or ↓)?</th>
<th>What is the program intending to change?</th>
<th>Is it short-term or long-term?</th>
<th>Which components contribute to this outcome?</th>
</tr>
</thead>
<tbody>
<tr>
<td>increased</td>
<td>awareness of the program</td>
<td>S</td>
<td>recruitment</td>
</tr>
<tr>
<td>increased</td>
<td>knowledge about the program</td>
<td>S</td>
<td>recruitment</td>
</tr>
<tr>
<td>increased</td>
<td>referrals to the program</td>
<td>S</td>
<td>recruitment</td>
</tr>
<tr>
<td>increased</td>
<td>knowledge about caring for a young child</td>
<td>S</td>
<td>health education</td>
</tr>
<tr>
<td>increased</td>
<td>participation in the program</td>
<td>L</td>
<td>recruitment</td>
</tr>
<tr>
<td>increased</td>
<td>number of parents able to adopt healthy parenting behaviours</td>
<td>L</td>
<td>health education</td>
</tr>
<tr>
<td>increased</td>
<td>ongoing peer support</td>
<td>S</td>
<td>health education</td>
</tr>
<tr>
<td>increased</td>
<td>knowledge of resources</td>
<td>S</td>
<td>health education</td>
</tr>
<tr>
<td>improved</td>
<td>parenting skills</td>
<td>S</td>
<td>health education</td>
</tr>
<tr>
<td>increased</td>
<td>number of children able to attain their optimal level of physical, mental, emotional and social development</td>
<td>L</td>
<td>health education</td>
</tr>
<tr>
<td>What is the <em>direction</em> of change (↑ or ↓)?</td>
<td>What is the program intending to change?</td>
<td>Is it short-term or long-term?</td>
<td>Which components contribute to this outcome?</td>
</tr>
<tr>
<td>-----------------------------------------</td>
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</tbody>
</table>
Once both the CAT and SOLO Worksheets are complete, you are ready to start putting all of the program elements together into a logic model.

At the top of a blank piece of paper, write the name of your program.

Side-by-side write each of the components identified in the first column of the CAT Worksheet. Draw a box around each one of them. Label these boxes as components.

Then, below each box of components draw another box. In each box, write the activities listed in the second column of the CAT Worksheet that correspond to the component above it. Label these boxes as activities.

Below each of these boxes of activities, write each target group listed in the third column of the CAT Worksheet. Even if the target group is listed more than once on the Worksheet, only write it once on your logic model. Label these boxes as target groups.

Below the target groups, write all of the short-term outcomes from the SOLO Worksheet that are from the specific component. Put a box around each outcome. Label these boxes as short-term outcomes.

Then write the long-term outcomes from the SOLO Worksheet below the short-term outcomes to which they relate. Put a box around each outcome. Label these boxes as long-term outcomes.

This is just an example. You may not have the same number of boxes in your logic model.
Lines and/or arrows in a logic model demonstrate the cause-and-effect relationship between activities and outcomes. This represents the sequence or chain of events in your program, or in other words, the logic or theory behind your program. The next step is to draw lines to show these causal relationships between the elements in your logic model.

First, draw a line from each component to the corresponding box(es) of activities. Then draw a line linking the activities to the target groups for which the activities are designed. Next, draw a line linking each target group to the short-term outcomes the target group should achieve. Finally, draw a line between each short-term outcome and the long-term outcomes to which they will contribute.

Now check that each of the components will lead to one or more outcomes through the activities and target groups. Also, make sure you identify and remove anything that is mentioned more than once. Before moving on to the next step, review the elements to see if you have left out any aspects of your program. If you have, add them in the right spot.

Remember, a logic model is supposed to demonstrate the logic behind your program. The final step in developing a logic model is to check the logic of the program. Ask yourself: Is it reasonable to expect that the program’s activities will actually lead to both the program’s short-term and long-term outcomes?
Logic Model Tips

- Practice makes perfect! The first time is always the hardest... it will get easier!
- Concentrate on how the program is currently being implemented (not how it was planned, or how it was implemented last year).
- To get started be sure to look at any available documentation and files — budgets, workplans, strategic and operational plans, manuals, training materials, organizational charts, statements of goals and objectives, previous evaluation reports, committee reports, etc.
- If you’re finding this too difficult, it may be because your program is complex. Ask a colleague in another program or call in an outside facilitator to help you get started.
- Strive for simplicity and don’t be over-inclusive in your logic model. Don’t include all of the implementation details. Try to fit the whole logic model on one page. Remember — you’ll want to use the logic model to describe the program to others. Append to the logic model any additional details about the program that you think might be useful.
- Discuss the logic model with stakeholders and staff involved at all levels in the program.

Quiz Yourself

- Describe the five basic elements of a program logic model.
- List the advantages of creating a logic model.
- Explain when you might use a bottom-up approach to constructing a logic model.
- Identify which of the words below express activities and which express outcomes:
  - Provide
  - Improved
  - Facilitate
  - Counsel
  - Decreased
  - Teach
  - Reduced
FURTHER READING


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