CONSTRUCTING A PROGRAM LOGIC MODEL

**Summary**

The *Constructing a Program Logic Model Tool* provides a set of questions which program coordinators may use as a basic survey to obtain information needed to construct a program logic model. The questionnaire can be used either by distributing it to the project team members and stakeholders, or by utilising the questions to guide a group discussion in a workshop.

**Keywords**

Quantitative data (frequency)
Qualitative data (descriptive, explanatory)
Survey
Planning Template

**Resources**

2+ facilitators

**Group Activity**

**Time**

Set up: 15min
Implementation: Allow at least half a day and up to 2 days depending on complexity of program

**Frequency of use**

Pre/Post
Annually
One-off snapshot
How to Use This Tool

The Constructing a Program Logic Model Tool provides a set of questions which program managers may use as a basic survey to obtain information needed to construct a logic model (based on Gugiu & Rodriguez-Campos 2007). The questions are organised into the following sections:

- Identifying key informants,
- Gathering basic program and contextual information,
- Generating the model elements,
- Eliminating poorly conceived elements,
- Developing a program theory,
- Prioritising logic model elements, and
- Constructing a graphical logic model.

The Constructing a Program Logic Model Tool can be used either by distributing the questionnaire to the project team members and stakeholders, or by utilising the questions to guide a group discussion in a workshop.

Suggested Uses

While program logic models are often used for the development of emerging programs, the purpose of the provided questions is largely focused on refining established programs.

Complementary Tools

The Guide to Developing a Program Logic Model contains additional information and examples of program logic models and may be used as a reference throughout the development of your own logic model.

Implementation Tips

- If not all questions are relevant for a program wishing to use the tool, these may be discarded to address only those aspects that suit the program’s needs.
- Communicating the findings to all staff/volunteers can assist in keeping everyone on track and focused on the intended goals of the program.
- While the questions can be completed by a single person, such as the program coordinator, it is recommended to collect feedback from other staff members in order to create a program logic model that encompasses a more holistic view of the program.
In addition, a number of excellent resources already exist that outline in detail how to construct your personal program logic model. For further information we therefore recommend the following links for youth service providers who are interested in developing their own program logic model:

- The W.K. Kellogg Foundation Logic Model Development Guide provides clear and detailed instructions and contains templates and checklists that assist in the development of a program logic model: [http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf](http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf)
- The article ‘Semi-structured interview protocol for constructing logic models’ by Gugiu and Rodriguez-Campos details a semi-structured interview protocol that evaluators can use to develop a logic model of a program's services and outcomes. The paper also provides an example of how this approach can be used to develop a logic model for a youth mentoring program:
- This brief offers a step-by-step approach for developing and using a logic model as a framework for a program or organisation’s evaluation:
A TOOL TO CONSTRUCT PROGRAM LOGIC MODELS FOR PEER-BASED YOUTH PROGRAMS
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Constructing your own logic model

This tool provides a set of questions which program managers may use as a basic survey to obtain information needed to construct a logic model (based on Gugiu & Rodriguez-Campos 2007). The questionnaire can be used either by distributing it to the project team members and stakeholders, or by utilising the questions to guide a group discussion in a workshop. While logic models are commonly used for the development of emerging programs, the purpose of the provided questions is largely focused on refining established programs. The questions are organised into the following sections:

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- Constructing a graphical logic model.

The ‘Guide to Logic Models for Peer-Based Youth Programs’ contains additional information and examples of program logic models and may be used as a reference throughout the development of your own logic model.

Identifying key informants

Prior to the data collection process it is important to identify the key informants who should provide input to the logic model. Depending on the type of information aimed to be obtained one may involve the target population and their family, program staff/volunteers and/or the community.

Please identify the prospective or actual targets of your program:

- What population is the program designed to serve?
- Do you anticipate that the family and/or friends of this population will benefit from the services provided to the target group?

Please identify the staff that work or will work on the program:

- Who are all the program staff, either paid or volunteer, that work on the project?
- Are there any unfilled positions?
- If so, what are these positions?

Please identify indirect program impactees:

- What groups do you think will indirectly benefit from the services offered to the target population?
- Which political and advocacy groups stand to gain/lose the most from this evaluation?
- What decision makers, advisory committees, administrators, legislators or consumer groups may have a stake in the program?

Please identify the evaluation key stakeholders:

- Who will be the primary consumer of the evaluation?
- Who will see, has a right to see, or should see the evaluation findings?
### Gathering basic program and contextual information

The second step in logic model development constitutes the collection of basic and contextual program information. While background information may also be gathered from existing documents in order to reduce the length of the survey, contextual information is usually best sourced from the research literature and program staff, including managers and directors.

<table>
<thead>
<tr>
<th>Program Background Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Describe the program to be evaluated:</strong></td>
</tr>
<tr>
<td>1. What is the name of the program?</td>
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<tr>
<td>2. When did it start?</td>
</tr>
<tr>
<td>3. Who started it and why?</td>
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<tr>
<td>4. Is it similar to existing programs and how?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Please identify the purpose of the program:</th>
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<tbody>
<tr>
<td>1. What is the purpose or philosophy of the program?</td>
</tr>
<tr>
<td>2. Do you agree with this purpose?</td>
</tr>
<tr>
<td>3. What problem or set of problems is it designed to correct?</td>
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<thead>
<tr>
<th>Describe the financial situation of the program:</th>
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<tbody>
<tr>
<td>1. Who finances the program and why?</td>
</tr>
<tr>
<td>2. What is the total budget for the program?</td>
</tr>
<tr>
<td>3. How long is the program guaranteed funding?</td>
</tr>
<tr>
<td>4. Are financial resources distributed as a lump sum, periodically, on the basis of submissions of deliverables, or reimbursements based on submission of invoices with required documentation?</td>
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<table>
<thead>
<tr>
<th>Describe the capacity of the program:</th>
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<tbody>
<tr>
<td>1. How many clients will the program be able to serve per week, month, quarter, or year?</td>
</tr>
<tr>
<td>2. How long will clients receive services?</td>
</tr>
<tr>
<td>3. What is the capacity for each program component/activity?</td>
</tr>
<tr>
<td>4. What is the anticipated average caseload per service professional?</td>
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<table>
<thead>
<tr>
<th>Contextual Information</th>
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<tbody>
<tr>
<td>Please identify any contextual factors that may affect the program or evaluation:</td>
</tr>
<tr>
<td>1. Are there unique events or circumstances that could affect the program in ways that might distort the evaluation findings?</td>
</tr>
<tr>
<td>2. Under what conditions or circumstances do you think the program will work best?</td>
</tr>
<tr>
<td>3. Worst?</td>
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<table>
<thead>
<tr>
<th>Please identify any social factors that may affect the program or evaluation:</th>
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</thead>
<tbody>
<tr>
<td>1. What organisational or community factors do you think will help or hinder the program achieving its goals?</td>
</tr>
</tbody>
</table>
- Are social attitudes in the community supportive of the program?
- How does the program take into consideration different cultural perspectives of program participants?

Please identify any program settings that may facilitate or impede meeting the needs of clients:
- Do you think program settings such as facilities, event scheduling, location, group size, transportation arrangements, child care etc. will have any effect on the program?
- If so, what effect do you think it will have?

Please identify any pertinent legislature that bears importance on this program or evaluation:
- Is this evaluation part of a broader government evaluation effort?
- If yes, what initiative is this evaluation part of?

Please identify any political factors and forces that could impact the evaluation:
- What is the political climate surrounding the evaluation?
- What community groups or community leaders may contribute to the success or failure of the project?
  - Explain how.
- What type of political pressures could the evaluation team encounter?
- From whom will these pressures come?
- What is their motivation and goal?

Please identify any controversy surrounding the program or evaluation:
- Is there a controversy surrounding the program or evaluation?
- If yes, who are the proponents and opponents of the program and evaluation?
- What sparked the controversy?
  - Have their views been considered by the program and evaluation?
- If no, why not?

**Generating the model elements**

**a. Modeling program outcomes**

When composing the intended program outcomes it can be useful to consider the multiple levels at which they can occur. Depending on the program’s size and scope these may range from micro- to macro levels. These questions may be addressed to program management and staff.

**Individual- and familial level:**
- What are the individual- or familial-level changes that may occur because of the program?
- What skills or knowledge will participants learn from the program?
- What changes in behaviour or performance might one expect to see in program participants?
- What secondary benefits may family members derive?
### Organisational level:
- What organisational level changes may occur because of the program?
- What directions, career options, enhanced perception or improved skills may staff acquire?
- What service capacity may the organisation develop or enhance?

### Community-level:
- What community changes may occur because of the program activities?
- What social changes might one expect to observe because of the program?
- What economic outcomes could the program have on the local community?

### System-level:
- What specific system-level changes could the program have?
- What policies or legislative impact could this program have at the local or state level?
- What political impact could the program have if it is successful?
- Unsuccessful?

### Statewide-, regional-, national-, and international-level:
- What are the statewide, regional, national, or international changes that may occur because of the program?

### Modeling program activities and outputs
Following the identification of the program’s intended outcomes is the step of identifying the activities the program intends to perform to achieve these outcomes. This step can be done in a similar way to the outcomes identification process.

### Individual- and familial level:
- What activities does the program provide to program clients or families?
- When and where do these activities take place?
- Who conducts these activities?
- Are clients being referred for any services?
- What client needs are these activities designed to meet?

### Organisational level:
- What activities does the program provide to staff?
- When and where do these activities occur?
- Who conducts these activities?
- What staff needs are these activities designed to meet?

### Community-level:
- What activities does the program provide to the community?
- When and where do these activities occur?
- Who conducts these activities?
- What community needs are these activities designed to meet?

**System-level:**
- What activities does the program provide to the policy-makers?
- When and where do these activities occur?
- Who conducts these activities?
- What policy needs are these activities designed to meet?

**Statewide-, regional-, national-, and international-level:**
- What activities does the program provide to the broader statewide-, regional-, national-, or international community?
- When and where do these activities occur?
- Who conducts these activities?
- What needs are these activities designed to meet?

### c. Modeling program inputs

The next step in logic model construction is determining the resources needed to generate and support program activities. Because the following questions generally require intimate knowledge of the program activities and resources required to implement them, it is recommended that these are addressed to program directors and managers.

**Resources:**
- What resources (facilities, equipment, materials, personnel, money, and other resources) are available to generate or support each of the aforementioned activities?
- May the evaluation team obtain a copy of the program’s budget plan?
- What type of volunteer and in-kind services are donated to the program?
- How much unpaid overtime is worked by staff?

**Resource gap:**
- Is there a gap between the resources necessary to operate the program and the available resources?
- What is the size and the nature of the gap?
- How will this gap be filled?
- If the gap cannot be filled, which program activities or components are in danger of being cut or curtailed?
**Eliminating poorly conceived elements**

In order for a program model to be ‘logical’ all previously identified items need to be consistent with a set of measurement standards which allow the development of outcomes that are realistic, meaningful, timely and measurable and thus facilitate program evaluation. It is recommended that outcomes that do not meet these criteria should be revised or receive less attention in the evaluation process. Besides conducting a review of the literature to filter out poorly described outcomes the following questions may be useful to ask of stakeholders who are familiar with the respective content.

<table>
<thead>
<tr>
<th>Outcome is realistic:</th>
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<tbody>
<tr>
<td>• What evidence is there to support that this outcome is attainable?</td>
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<tr>
<td>• Are you aware of any research that links program activities with this type of outcome?</td>
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<table>
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<tr>
<th>Outcome is meaningful:</th>
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<tbody>
<tr>
<td>• What difference will this outcome make in the lives of those who are impacted?</td>
</tr>
<tr>
<td>• How will this improve the life of clients, the community, etc.?</td>
</tr>
<tr>
<td>• Why is this outcome important?</td>
</tr>
<tr>
<td>• Will the outcome be worth the cost of the program?</td>
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<tr>
<th>Outcome is timely:</th>
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<tbody>
<tr>
<td>• How long after having received program services is it reasonable to expect to observe the desired outcome?</td>
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<tr>
<th>Outcome is measurable:</th>
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<tbody>
<tr>
<td>• Are there any existing instruments or methods for recording this outcome?</td>
</tr>
<tr>
<td>• Have they been used before to measure this outcome?</td>
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<tr>
<td>• If yes, what instrument or method was used?</td>
</tr>
<tr>
<td>• How successful was it in measuring the outcome?</td>
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**Developing a program theory**

Developing a ‘program theory’ helps to give meaning to a logic model by defining the relationships among the identified elements. Here one can distinguish between process and outcome theory. Process theory illustrates whether the program has taken the required steps to implement its planned services and activities, while outcome theory focuses on why selected program activities offered to the target group are sensible.

<table>
<thead>
<tr>
<th>Process theory:</th>
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<tbody>
<tr>
<td>• Has a target population been identified?</td>
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<td>• Are there adequate procedures for determining eligibility?</td>
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</table>
• Does the organisation have adequate resources for supporting planned activities?

• Does the organisation have the capacity to implement and operate the program?

• Do all staff have educational credential, training, work experience and supervision to perform the tasks that are expected from them?

• Is the current implementation plan adequate to meet future needs?

Is there a monitoring system in place to assess the degree to which planned activities are implemented in accordance with expectations and needs?

Outcome theory:

• Have the needs that underlie the problem of interest for the target population been identified?

• Do the planned activities meet the underlying needs of the target population?

• Are these activities offered in a high enough dosage to produce and sustain change in the desired outcomes?

• How will program activities produce the desired outcomes?

• What is the association between program activities and desired outcomes?

• Which program activities are most critical for attaining the desired results?

Result association:

• For each logic model element, please indicate all the preceding and succeeding elements with which it is most likely associated and why. (In some instances an element may be linked to more than a single element)

Prioritising logic model elements

Program managers also need to consider the importance of each of the identified outcomes. This helps to prioritise evaluation resources but also allows program managers to check whether sufficient attention is given to activities that are hoped to produce the most important outcomes.

Importance of result:

• How important is each of the outcomes on a scale ranging from ‘critically important’ to ‘not very important’?
Constructing a graphical logic model

Once all the program elements, their connections with each other and the critically important elements have been identified, the collected information is ready to be organised in a graphical format. Generally, graphical models can be constructed by inserting brief descriptions of each element into flowchart shapes that are positioned in a sequential order and are linked by arrows that represent the causal links between elements. Figure 1 below provides a template that may be used to insert your collected information. However, the template provides only an example of how a logic model can be constructed. You may display your information using different shapes or in a different order that is more meaningful to you and your organisation. Please refer to the ‘Guide to Logic Models for Peer-Based Youth Programs’ for a completed template containing essential components for peer-based youth programs in general, as well as an application of the logic model to a peer educator training program for teenage mothers.
Figure 1: TEMPLATE FOR A LOGIC MODEL FOR PEER-BASED YOUTH PROGRAMS

- **INPUTS**
- **ACTIVITIES**
- **OUTPUTS**
- **OUTCOMES/IMPACT**
  - SHORT TO INTERMEDIATE TERM
  - LONG TERM

**SITUATION**
- Health Problem

**EXTERNAL FACTORS**
Links
A number of excellent resources already exist that outline in detail how to construct your personal program logic model. For further information we therefore recommend the following links for youth peer support program stakeholders interested in developing their own model:

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References

The My-Peer Toolkit [1.0] was developed by Western Australian Centre for Health Promotion Research and is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 2.5 Australia License. It can be accessed at [www.mypeer.org.au](http://www.mypeer.org.au).