



Measuring The Difference: An Outcome Evaluation Resource for the Disability Sector

MODULE 4

How to Develop a Program Logic Model

Prepared for
Alberta Council of Disability Services

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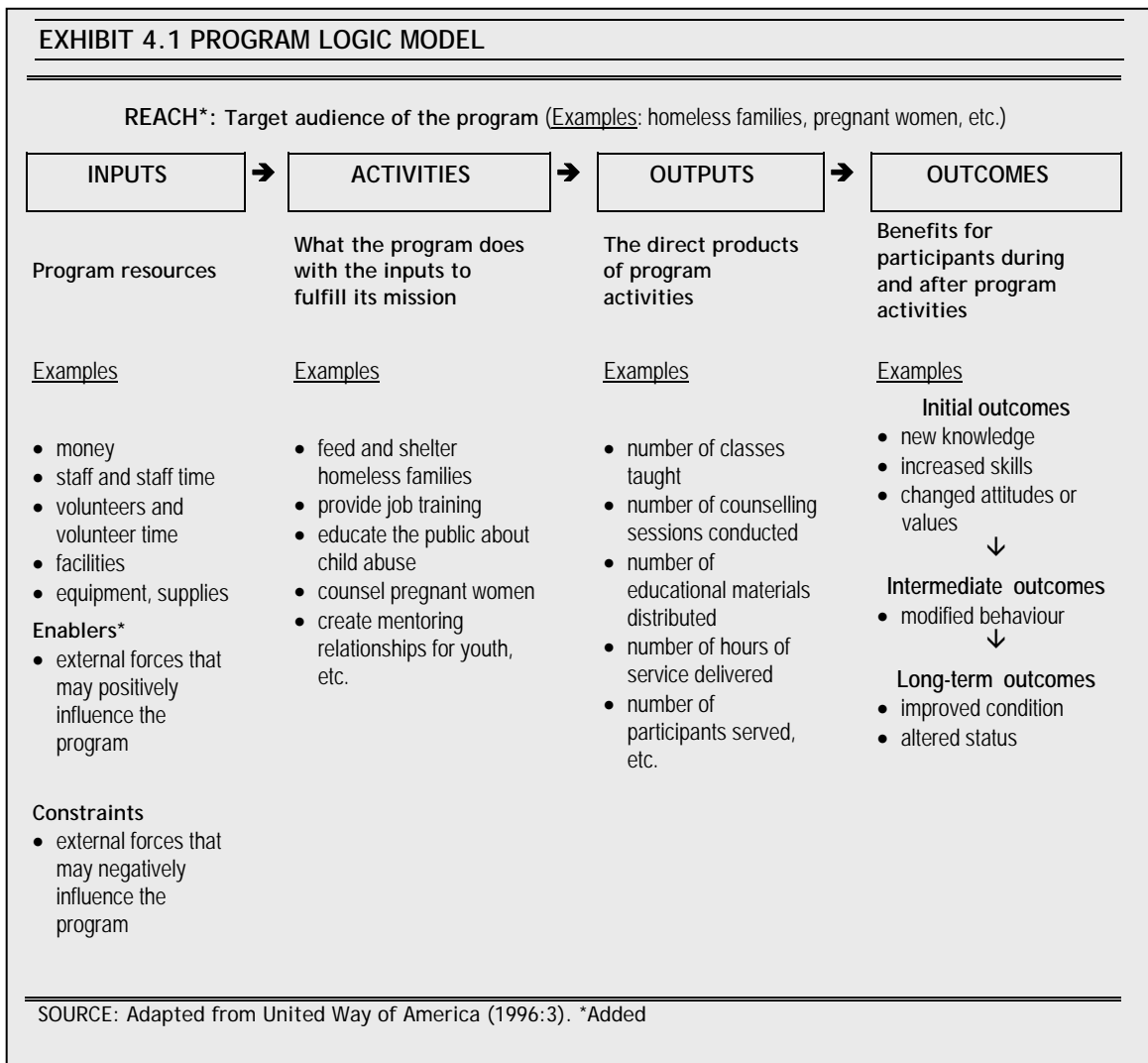
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Module 4

How to Develop a Program Logic Model

A **Program Logic Model** is a flowchart that summarizes and shows the link between program inputs, activities, outputs and the resulting hierarchy of the intended immediate, intermediate and long-term outcomes for program participants. Some logic models may also show external influencing factors (enablers and constraints) that are likely to affect program outcomes. See Exhibit 4.1 for an example.



There are essentially five steps in building a program logic model:

1. **Collect relevant information.**
2. **Identify the outcomes** that the program hopes to achieve and their context.
3. **Identify the program activities and outputs, and then the resources** that will be required (i.e., the key elements of a program logic model), and put them in a table.
4. **Draw the logic model.**
5. **Verify the logic model.**

TIPS TO CONSIDER BEFORE STARTING

- Think of developing a logic model as a process, a learning opportunity for program staff and administrators.
- Develop the logic model as a workgroup involving, as much as possible, the full range of stakeholders who are directly associated with the program and its results.
- Avoid jargon. Use language and terminology that stakeholders are familiar with.
- Logic modeling should be seen as an iterative process, where the model gets continually reviewed and updated as the program or its contexts change.

SOURCE: Wholey, Hatry, & Newcomer (Eds) (2004:15).

4.1 STEP ONE: COLLECT RELEVANT INFORMATION

1. **Get together a workgroup** of a small number of people who are knowledgeable about or directly associated with the program. This should include at the very least the program manager, key staff and volunteers, and then as far as feasible, program partners, clients and others who may be central to the program.
2. **Interview people associated with the program**, starting with those most closely involved in program design and implementation, and then those who have the most stake in the results, about their perspective on the program's purpose and how they think it operates to achieve its outcomes.
3. **Review program documents**, for example, strategic plans, annual reports, previous evaluation or planning documents, previous logic models (if any), to understand the program's purpose, context and activities.
4. **Review the literature on best practices for this type of program and similar others** to verify if there is support for the program theory and to get insights on possible design modifications.
5. **Synthesize the information** in collaboration with the workgroup, so there is consensus and common understanding on the program's overall purpose and context.

4.2 STEP TWO: IDENTIFY THE OUTCOMES AND THE PROGRAM CONTEXT

1. Interview or have focus groups with people within and outside the program to get their perspective on program outcomes, including potential unintended negative outcomes and factors potentially influencing the program's performance. The people consulted may include program staff and volunteers who work directly with clients, current and past clients, board members or other committee members who may have insight into the program or a perspective on what its outcomes should be given their broader understanding of community needs or problems.
2. Review agency and program documents, for example, annual reports, strategic plans, program funding proposals and reports to funders, to obtain statements of intended outcomes.
3. Obtain information about other similar programs in the community, what their outcomes and influencing factors are and how they compare with the current program.
4. Review records of complaints about the program; they may identify expected but unattained outcomes as well as potential negative outcomes.
5. Consult representatives of programs that are the "next step" for program participants to get their perspective on the outcomes that they expect people coming into their program to have already achieved.
6. Ask someone external to the program to observe the program as it operates. This could provide further insight into how program activities relate to potential outcomes.
7. Synthesize the information in collaboration with the work group, identifying the short-term, intermediate and long-term outcomes (intentional and unintentional), as well as the contextual factors influencing the program.
8. Refine the list of outcomes and contextual factors by eliminating those that are duplicative, overlapping or clearly unimportant. For each outcome, ask if it is reasonable to believe that the program can meaningfully lead to the outcome, and if the program's stakeholders will accept it as a valid outcome of the program.
9. In preparation for measuring program outcomes, flag those outcomes that would be meaningful to measure to assess program performance.

"For the process of building a specific program's logic model, the program's performance ends with the problems it is designed to solve with the resources it has acquired, with recognition of the external forces that could influence its success in solving that problem."

SOURCE: Wholey, Hatry, & Newcomer (Eds) (2004:17).

4.3 STEP THREE: IDENTIFY PROGRAM ACTIVITIES, OUTPUTS AND RESOURCES

1. Categorise the information gathered and synthesized in Step One and Step Two into "resource/input", "activity", "output", "short-term outcome", "intermediate outcome", "long-term outcome", "enabler" or "constraint". The information gathered may also clarify the target group for the program, and show if there is a potential secondary target group (e.g., in the Example Program Outcome Model in Module 3, the primary (and obvious) target group of the employment program was adults with developmental disabilities seeking paid employment in the community; secondary target groups were employers and coworkers).

2. Sequence the information into a logical flow by placing the items in the appropriate column in a Program Logic Model. If it is not clear where a particular item fits, ask "how might this occur?" to identify potential antecedents for the item, or "why is this here?" to identify potential items that follow it. Similarly, it may be helpful to ask where in the "If ____, then ____" statement the item fits best.
3. Collapse the number of activities to about five to seven by grouping highly related activities under a common category. *Each activity must lead to at least one immediate measurable outcome* for the target population. Any more than these would make the program difficult to track.
4. Review the table for accuracy, completeness and logical placement of items. Accuracy: Did we capture the information correctly? Completeness: Is anything that should be here missing? Logical placement: Is everything in the right place? Do the review first in collaboration with the work group and then by asking someone else not involved in the process to review the information to see if it makes sense.
5. Revise and finalise the table based on the feedback from the review.

4.4 STEP FOUR: DRAW THE LOGIC MODEL

1. Construct a diagram to best represent the information in the table. Most logic models use the table format to represent the information, with the sequence flowing from left to right. More complex programs with highly inter-related or concurrent items may be better represented as webs, networks, "Z" patterns (where the last item on one chain is the first item on the chain below it), etc. Software tools such as Microsoft PowerPoint, Microsoft Visio and Inspiration all lend themselves to creating logic model diagrams). It is not important *what* type of diagram is used, as long as it makes sense for the people involved to follow and understand. See Exhibit 4.2 for examples of diagram types.
2. Insert all the elements from the table into the diagram, connecting relevant items with arrows to show the logical sequence. Complex logic models may have items with arrows going in multiple directions; this is fine, as long as the logical sequence of "If ____, then ____" is accurate for every arrow.

TIPS ON CONSTRUCTING THE LOGIC MODEL

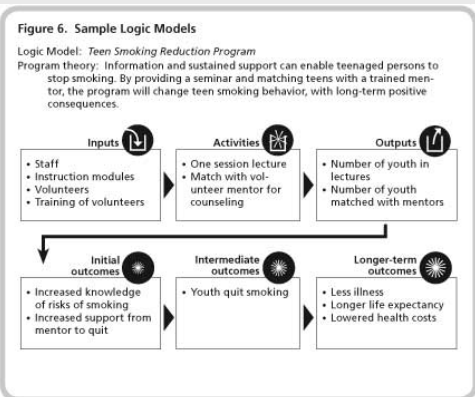
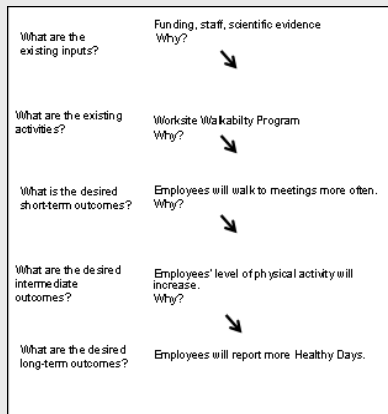
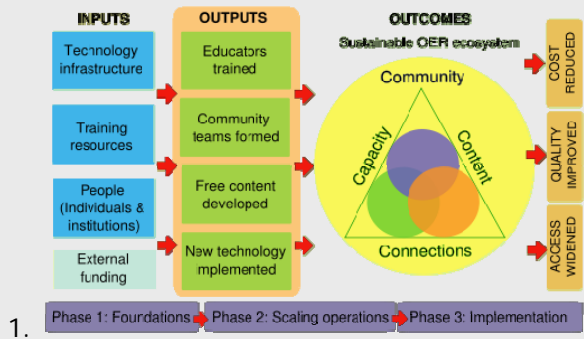
- Start with a simple diagram and then move to a more complex one if needed.
- Be prepared to create many drafts before being able to represent the essence of the program accurately.
- If a program is quite complex, consider having more than one representation of the program logic model, each suited to the needs of the audience. A program logic model for clients may be as simple as listing each activity they are involved in, followed by the expected benefits they are likely to gain with respect to their own goals for participating in that activity.
- Limit the words in the diagram. Create a supplementary narrative for details.
- Limit the number of arrows; show only the most critical relationships.

SOURCE: Wholey, Hatry, & Newcomer (Eds) (2004:23).

4.5 STEP FIVE: VERIFY THE LOGIC MODEL

1. Obtain feedback from key stakeholders. This would include people who are able to comment on the model insightfully because of their knowledge or expertise (agency directors, managers of other similar programs, program staff, etc.), as well as people whose support and engagement are important for the program’s success (agency directors, program managers, funders, accreditation or professional associations, etc.).
2. Revise and finalise the logic model based on the feedback from the review.

EXHIBIT 4.2 EXAMPLES OF DIAGRAM TYPES FOR LOGIC MODELS



SOURCES:

1. <http://wikieducator.org/images/thumb/c/cb/WikiEdLogicModel.svg/500px-WikiEdLogicModel.svg.png>
2. http://www.cdc.gov/nccdphp/dnpa/hwi/program_design/images/logic_model2.gif
3. http://www.fieldstonealliance.org/client/book_excerpts/069385-fig_6.jpg

4.6 USEFUL ONLINE RESOURCES

Center for Civic Partnerships. *Tips and Tools for Logic Models.*

http://www.civicpartnerships.org/docs/tools_resources/Logic%20Models%209.07.htm.

Links to online tools and how-to guides on logic models.

Duigan, P. (2008). Thirteen Tips for Building Great Outcome Models.

<http://easyoutcomes.org/files/13tipsa4-205.pdf>.

A one-page tip sheet on building an outcome model.

The rest of the website contains a host of resources and links on the topic, including the DoView outcomes software (not reviewed by The VRRRI).

<http://www.easyoutcomes.org/resources.html>

Harvard Family Research Project. (1999). *Learning from Logic Models. An Example of a Family/School Partnership Program.*

<http://www.hfrp.org/publications-resources/publications-series/reaching-results/learning-from-logic-models-an-example-of-a-family-school-partnership-program>.

Step-by-step approach to developing a logic model as a framework for an evaluation, written with program practitioners in mind.

University of Missouri Extension Program. (2008). *Program Planning and Development - Program Logic Model.*

<http://extension.missouri.edu/staff/programdev/plm/>.

Short summary explaining a logic model, together with a sample template.

University of Wisconsin. (2002). *Enhancing Program Performance with Logic Models.*

<http://www.uwex.edu/ces/lmcourse/#>.

A free web-based course on how to develop logic models. Although targeted for education and outreach programs, it is a useful site to learn and practice the basics of logic model development.

W. K. Kellogg Foundation.

<http://wkkf.org/Default.aspx?LanguageID=0>.

A number of tools and links related to logic model development and evaluation.

REFERENCES

United Way of America. (1996). *Measuring Program Outcomes: A Practical Approach*, 13th Edition. United Way of America: Alexandria, VA.

W. K. Kellogg Foundation. *Guiding Program Direction with Logic Models*. Author: Battle Creek, MI.

Wholey, J., Hatry, H., & Newcomer, K. (Eds) (2004). *Handbook of Practical Program Evaluation, 2nd Edition*. Jossey-Bass: San Francisco, CA.