The Use of Logic Models in Health Promotion Practice

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1. Introduction
A review of recent professional literature related to health promotion practice and research indicates that the use of logic models is growing in popularity for the planning and evaluating health promotion initiatives (i.e., programs, policies, or services).

Although, it is common to refer to an initiative’s “conceptual framework”, rather than to its “logic model”, logic models and conceptual frameworks are both concerned with the “theoretical” and/or “action” components of interventions, and their expected outcomes.

For simplicity, our discussion will refer to “logic models”, but it should be understood that our discussion applies in a similar fashion to the nature and use or “conceptual frameworks”.

2. Definition of “logic model”
The general purpose of logic models is exactly what their name implies, that is, to provide a summary of the underlying "logical flow" related to the planning, development, implementation, and/or evaluation of an initiative.

A general and comprehensive definition of logic models is the following:

“A program logic model is a picture of how your program works—the theory and assumptions underlying the program. … This model provides a roadmap of your program, highlighting how it is expected to work, what activities need to come before others, and how desired outcomes are archived” (W.K. Kellogg Foundation Logic Model Development Guide, 2001; www.wkkf.org).

As this definition indicates, logic models are most commonly employed in program planning and evaluation: they identify an intervention’s conceptual and operational elements, and its intended outcomes.

3. Four functions of logic models: four kinds of logic models
Logic models differ in the extent to which they focus on an initiative’s “theoretical” versus its “action” components.

We can identify four broad perspectives that logic models can take:

1. Explanatory factors logic model: this logic model (or conceptual framework) focuses on our understanding of the nature and origins of an issue/problem

2. Change/influence process(es) logic model: this logic model (or conceptual framework) focuses on our understanding of processes of
change or influence that will be employed in our initiative (e.g., theories and concepts related to “stages of behavioural change”)

3. **Program/action logic model**: this logic model integrates our explanatory factors logic model with our change/influence process(es) logic model to form the plan for action for our initiative. This program logic model answers the questions: who will do what, with whom, how, when, with what resources, with what expected outcomes, etc.?

4. **Outcomes/evaluation logic model**: this logic model focuses on our initiative’s expected outcomes (both shorter-term and longer-term) and the relationships among these objectives.

The particular focus and form that a logic model takes depends on its intended use. However, as shown in Figure 1, the four possible functions of logic models are not only not independent, they are inherently inter-related. That is, there is a logical flow:

1. **from** the use of logic models to specify the factors that explain or describe our issue/problem
2. **through** a logic model that specifies our proposed processes of change/influence
3. **to** a logic model that identifies the components of our initiative’s action plan
4. **arriving ultimately to** a logic model that specifies our initiative’s expected outcomes.

There is also a feedback relationship from outcomes to our original assumed relationships among the “explanatory” factors, change/influence processes and program elements.

As will be apparent from the examples provided in Section 8 below, in practice, some logic models incorporate elements related to more than one of the four functions outlined above. In addition, some of the studies referenced in Section 8 employ more than one logic model (Lafferty, C. K., & Mahoney, C. A. (2003) is an outstanding example of this use of multiple logic models).

**Figure 1**

*Relationships among four kinds (functions) of logic models*
4. Relationship between planning and evaluation

Program evaluation is so closely related to program planning that evaluation can be viewed as the "flip side" of program planning. That is, program evaluation should directly follow the program logic model that underlies the planning of our initiative, assessing success in achieving the initiative’s goals and objectives, its constituent activities and processes, and the inter-relationships among an initiative's elements, as specified in its program logic model.

5. Components of logic models

There is no single or uniform template for developing logic models. Some are templates are simple, involving relatively few components. Others are more complex, involving a larger number of inter-related components.

Ultimately, the appropriate content of logic models depends on their intended purposes, and the contexts in which they are being used. In practice, for any initiative, there exists an array of possible logic models, reflecting different levels of conceptual analyses and different stages in planning and evaluating an initiative.

The most common template for developing logic models involves identifying a logical flow such as is shown in Figure 2.

**Figure 2**

General components of a logic model

![Diagram of logic model](image)
A more complex template for developing logic models is provided in the elaborated logic model in Figure 3.

**Figure 3**

Components of an elaborated logic model

The different components of this logic model should be spelled out in greater detail, often in the form of their own logic models.

Thus, our understanding of the “assumptions” component underlying our initiative could (and should) be represented by its own elaborated logic model (or “conceptual framework”) (see discussion of “explanatory factors logic model” and “change/influence process(es) logic model,” above).

Similarly, the broad components of our initiative, and their required resources/inputs and associated activities, would be specified in greater detail in our “program/action logic model” (see above).

Finally, the components related to outcome/process objectives and outcomes should reflect the elements of the fully specified “outcomes/evaluation logic model” (see above).
## 6. Using logic models in health promotion

Using logic models in planning and evaluating health promotion initiatives requires a further elaboration of the generic logic models identified above. Health promotion, as understood by the *Ottawa Charter for Health Promotion*, is expected to give attention to a particular set of goals, values, and strategies (see, for example, [www.bestpractices-healthpromotion.com/coursereadings/id1.html](http://www.bestpractices-healthpromotion.com/coursereadings/id1.html)). To accommodate this particular perspective, the generic logic model in Figure 4 is suggested for the planning and evaluation of health promotion initiatives.

**Figure 4**

**GENERIC LOGIC MODEL FOR PLANNING AND EVALUATING HEALTH PROMOTION (Goodstadt, 1999)**

<table>
<thead>
<tr>
<th>Overall impacts</th>
<th>Reduced health &amp; social costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HP Goals</strong></td>
<td><strong>Improved health &amp; well-being</strong></td>
</tr>
<tr>
<td><strong>Reduced mortality &amp; morbidity</strong></td>
<td></td>
</tr>
</tbody>
</table>

**CORE HEALTH PROMOTION PERSPECTIVES**

- Positive health, holistic health, social justice, equity, participation
- **CORE HP MECHANISM**
  - Empowerment: Enhancing capacities of individuals & communities to exercise control over the determinants of health

**PRE-REQUISITES (DETERMINANTS) OF HEALTH**

- Income inequity, social status, social support networks, education, employment & working conditions, physical environments, biology & genetics, personal health practices & coping skills, healthy child development, health services

**MICRO LEVEL OBJECTIVES**

- Enhanced individual capacities
- Enhanced organizational capacity
- Increased community capacity & participation
- Increased health promoting policies
- Increased equity in access to health care
- Increased focus on prevention & health promotion, health service system

**Meso Level Objectives**

- Enhanced community capacities
- Improved awareness, knowledge, skills, decision-making & behaviours
- Enhanced health promoting policies
- Increased equity in access to health care
- Increased focus on prevention & health promotion, health service system

**Instrumental objectives, processes & outcomes**

- Health Education
- Health communication
- Organizational development
- Community development
- Policy development
- Advocacy
- Intersectoral collaboration

**Resource inputs**

- Health Education
- Health communication
- Organizational development
- Community development
- Policy development
- Advocacy
- Intersectoral collaboration

**The foundations of health promotion (Ottawa Charter for Health Promotion)**

- Positive health, holistic health, social justice, equity, participation
- **Core HP values**
  - Empowerment: Enhancing capacities of individuals & communities to exercise control over the determinants of health

**Instruments, communities & societies achieve/approach their potentials**

- Health promotional perspectives
- Positive health, holistic health, social justice, equity, participation

**Core HP mechanisms**

- Empowerment: Enhancing capacities of individuals & communities to exercise control over the determinants of health

**Pre-requisites (determinants) of health**

- Income inequity, social status, social support networks, education, employment & working conditions, physical environments, biology & genetics, personal health practices & coping skills, healthy child development, health services

This logic model contains all the generic elements related to the planning and evaluation of health promotion initiatives, as guided by the *Ottawa Charter for Health Promotion*. A full discussion of the model can be found at: “A Generic Model for Planning and Evaluating Health Promotion”
7. **Examples of the use of logic models in health promotion practice**

Figure 5 provides an example of the use of a logic model in planning a broad strategy related to the prevention of eating disorders. This model includes components related to:

1. the assumed etiology of eating disorders
2. the continuum of risk associated with the assumed risk factors for eating disorders, domains of prevention strategies
3. an array of available strategies associated with health promotion
4. the relationships between the outcomes of these strategies and the those at different levels of risk for eating disorders
5. impact on the risk factors themselves.

(A PowerPoint presentation related to the development of this logic model is available by clicking here).
Figure 5

Logic Model for a “Continuum of Care” in Responding to Eating Disorders
Michael Goodstadt Ph.D., C.Psych. November, 2004

This logic model builds on those developed in the fields of alcohol/drug abuse and gambling (see, for example, Ontario Problem Gambling Research Centre Framework at <http://www.gamblingresearch.org/contentdetail.sz?cid=2007>)
7.1. Examples of explanatory factors logic models


7.2. Examples of change/influence process(es) logic models


7.3. **Examples of program/action logic models**


7.4. Examples of outcome/evaluation logic models


8. Additional selected references related to logic models


