Logic Models

"The purpose of a logic model is to provide stakeholders with a road map describing the sequence of related events connecting the need for the planned program with the program's desired results." (W.K. Kellogg Foundation, 2004, p. 3)

A logic model can be used for:

- planning a new program or
- describing an existing program
- ensuring the activities of a program link to the expected outcomes
- identifying the outcomes to use to measure success

A logic model details, in a graphical form, how the program is operating, its resources, to whom it targets, and what it intends to accomplish (Daponte, 2008).

A logic model typically includes:

- **goal** – what the program is trying to accomplish
- **assumptions** – what is needed to support the continuation of the program?
- **target population** - who is the program is being delivered to?
- **inputs** – e.g., funding, staff, other resources and infrastructure needed to support the program
- **activities** - "the processes, techniques, tools, events, technology, and actions of the planned program"; the products and services (W.K. Kellogg Foundation, 2004, p. 8)
- **outputs** - "the size and scope of the services delivered or produced by a program" (W.K. Kellogg Foundation, p. 8); for example, number of workshops and number of participants attending
- **outcomes** – the changes in attitudes, behaviors, knowledge, skills, status, or level of functioning expected to result from program activities (W.K. Kellogg Foundation, p. 8)

A logic model may also have an accompanying narrative that describes the model in more detail.

A logic model can be simple or complex depending on the program or service being described. A model can be designed using a number of formats, such as a table or flow-chart. Regardless of the style chosen, the model should link, logically, from inputs, to activities, to outputs to the outcomes.

In its simplest form, a logic model will describe what you do, how you do it, and the results you hope to achieve.

Inputs (what you invest)	Outputs (what you do)	Outcome (what are the results)
Money for groceries	Make lunch	Decrease in hunger

Program Goals	Inputs	Activities	Outputs	Outcomes		
				Short-term	Intermediate	Long-term
	Examples: ▪ money ▪ staff ▪ capital assets ▪ operational ▪ expenses	Examples: ▪ teaching ▪ presentations ▪ counselling ▪ mentoring ▪ treatment	Examples: (usually quantifiable) ▪ materials distributed ▪ clients served ▪ hours of service ▪ sessions taught	Learning: ▪ attitudes ▪ skills ▪ motivation ▪ knowledge ▪ awareness ▪ opinions	Action: ▪ behaviour ▪ practice ▪ decisions ▪ policies	Effect on the participants: ▪ social ▪ economic ▪ civic

A logic model may also include assumptions and external factors that may affect your program.

Assumptions: Beliefs about how a program will work and people involved in the program, as well as conditions believed necessary for the success of the program. For example:

- Beliefs about the target populations
- Beliefs about how clients will response to treatment (e.g., confidence in research and best practice literature)
- Underlying need for the program

External factors: Factors a program has little or no control over but which may affect how a program is implemented, how it operates, and its outcomes. For example:

- Political environment
- Social conditions
- Economic situation
- Geographic constraints
- Outside initiatives or policies

Developing a Logic Model

Who could or should be involved in developing a logic model? It is generally a consultative process to develop a shared understanding. This process may include:

- Program management
- Program staff
- Evaluator
- Funders, stakeholders, program participants

What information is needed to develop a logic model? The information needed and that will available will depend upon the stage of program implementation.

- Research or information on best practice (i.e., best practice information may help you to determine the program's activities based on what has worked in other programs [W.K. Kellogg Foundation, 2004])
- Administrative or program documents
- Consultative meetings or key informant interviews with staff, management or participants

How do you know when the model is accurate?

- There is agreement that the model is reflective of how the program should be (i.e., if it is new) or is currently being delivered (i.e., if it has already been implemented).
- The activities and outputs link logically to the outcomes.
- The outcomes are specific, measurable, achievable, realistic, and time-based (SMART).

The model may change as the program evolves or is improved upon.

To effectively measure success, outcomes should be **SMART** (W.K. Kellogg Foundation, 2004; Centers for Disease Control and Prevention [CDC], 2009):

Specific
- Should be able to determine "who" the outcome relates to and "what" you expect to happen
- Should contain only one action verb (e.g., increased, decreased, improved)
- The more specific the outcome is, the easier it will be to measure.

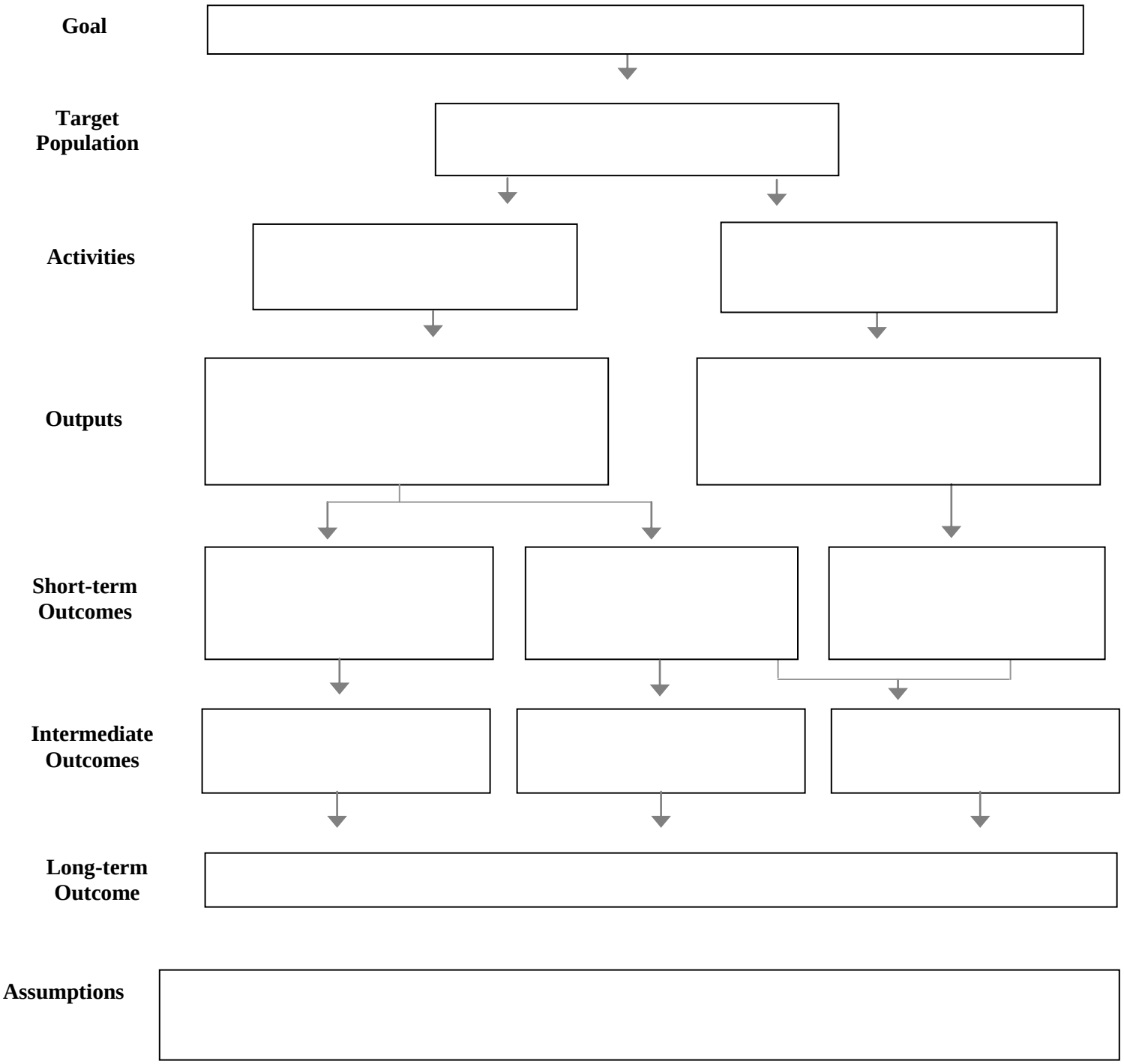
Measurable
- Should be able to clearly measure the change you are expecting to observe in your target population
- Should be able to determine the extent to which change has occurred (i.e., how much)

Achievable
- The results you hope to achieve should be attainable within the timeframe you have to spend with your target population.

Realistic
- Should be able to link the change you hope to achieve in your population to the overall goals and activities of the program.
- The changes you hope to achieve should be realistically attainable through the activities in your program and within the specified time allotted.

Time-limited
- Should be able to determine when the goals of the program will be measured.

Logic Model Template



References

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Daponte, Beth (2008). *Evaluation Essentials: Methods for Conducting Sound Research.* San Francisco, CA: Jossey-Bass.

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