

## **Guidelines for Logic Model**

### **Purpose**

Applicants for Implementation Grants must submit a logic model. Designing a logic model will enable applicants to define their program, pinpoint their approach, identify resources and consider outcomes. The purpose of a logic model is to build a foundation for program development, ensure consensus among stakeholders and provide a framework for program evaluation. Each site is responsible for completing an evaluation of their project. A logic model provides a common “map” to be used by program staff and evaluators to design a useful evaluation. Designing an evaluation, before completing a logic model, may lead to collecting information on irrelevant outcomes. Conversely, programs may fail to collect information regarding individuals or services that may contribute to the success of a program. The creation of thoughtful logic model is the first step in designing an effective Local Health Connections Pilot Project.

Applicants are encouraged to use the guidelines that follow, although other forms of logic models are acceptable.

### **Overview**

The development of logic models is a useful tool for establishing dialogue between evaluation and system development efforts. Logic modeling is a method of articulating a program's theory or beliefs about how and why services are expected to produce particular results. In its simplest form, a logic model describes the clients that a system of care intends to serve, the services and supports that will be offered, and the short and long term outcomes that are expected to be achieved.

Kumpfer, et al. (1993) believe that logic models are useful tools for local stakeholders for several reasons. First, logic models can elicit consensus among staff and other system stakeholders regarding the service strategies and outcomes for a particular program. Second, they serve as a model to compare the intended program approach with what actually occurred. Third, they facilitate the articulation of specific beliefs about what services and strategies are related to the achievement of outcomes. Finally, logic models provide a framework for evaluation efforts through the linkage of action to results. Overall, logic models provide a framework through which both program and evaluation staff can view the linkages between conditions, services and outcomes.

The first step for stakeholders in developing a logic model is to clearly articulate their service delivery strategy. This means that stakeholders throughout a service system, including administrators, service providers, and inter-agency collaborators, should be able to describe the target population they intend to serve, the services they expect to provide along with the supporting collaborative infrastructures, and the results they expect to achieve (Usher, 1998 ; Hernandez, Hodges, & Cascardi, 1998). When these basic questions are answered, stakeholders will be in a better position to complete their logic model.

Logic models depicting a program's approach can be compared to maps with guideposts that help keep program strategies on course (Alter & Murty, 1997). This approach takes into account the slippage or shifts that often occur in service delivery and uses the logic model as a stabilizer for a program or services during times of change. By knowing what changed in a program and when it changed, outcome information can be better interpreted and utilized. In this regard, the logic model becomes the ongoing documentation of changes in a program and enables stakeholders to track them.

Evaluators have the important role of eliciting the underlying service delivery theory by asking service personnel, managers, interagency stakeholders key questions about the target population served, the service approach employed and the goals that the service approach hopes to accomplish. If there is not agreement among program staff and stakeholders in their answers to these questions, then the evaluator helps the group reach consensus through further discussion. This process makes the results of evaluation more relevant to the service strategy under study, and hence more useful toward improving services.

### **Components of a Logic Model**

It seems that there is a different vocabulary used for each type of logic model. Although logic models may vary slightly in their purpose (i.e., program logic model vs. evaluation logic model), most models include the same types of components described in slightly different ways. In general, a logic model can be broken down into five (5) basic components: 1) Target Population 2) Program Theory 3) Program Activities 4) Outcomes and 5) Impact/Goals. A logic model template is shown in chart 1.

#### *Target Population*

Consider the target population carefully. Ethnicity, race, age, gender, geographic location, primary language spoken, housing status, and medical conditions contribute to the definition of the target population.

#### *Program Theory*

This component should discuss the “theory” or the basis of the program or intervention. The “program theory” refers to the underlying assumptions that guide program planning and service delivery. These assumptions are critical to producing change and improvement in the target population. For example, a program theory regarding disease case management for diabetics may state:

“case management services for CMSP diabetics should include local coordination of all health and social service providers to address needs in a timely and efficient manner that conserves resources and eliminates duplication”.

The program theory assumes that local coordination across service providers is important for serving an indigent population. Several theories may be combined to define an overall approach to serving the target population. For example, a program to serve children with severe emotional disturbances and their families had the following program theories:

- Family involvement in program design and implementation

## ATTACHMENT C

- Incentive-oriented for providers
- Wide array of services to address needs in multiple areas
- Broad network of local providers
- Collaboration with multiple sectors
- Collaboration with existing local systems of care

It is important to note that these are theories and approaches, *not* activities. Activities are the actual services offered or the formation of a collaborative body with family members, or the linking of regional providers through a formal referral system. Program theories shape the creation of activities. The formation of program theories is one of the most difficult components of logic model development, however, clearly developed theories will ensure consensus among stakeholders.

### *Activities*

Activities are the specific processes and/or events that comprise the program. Some examples of activities are:

- Mental health counseling
- Case management
- Community forums
- Creation of a new health service
- Dental referral mechanism

Activities are the interventions focused on the target population that are intended to impact individual health or community health outcomes. Activities are often measured by process outcomes. For example, 35 individuals received case management services for 6 months....20 individuals received preventative dental care.... 10 injury prevention classes were held during 6 months....12 men and 23 women attended the diabetes self-management workshop.

### *Outcomes*

Outcomes are the results of the activities provided by the program. Outcomes may be measured on an individual or group level. Outcomes provide a way to measure change in participants' lives and/or community conditions. Outcomes may be short-term, intermediate or long-term depending on how far in to the future they are measured. For example, a diabetes case management program may not expect to see differences in kidney disease among diabetics for several years (long-term outcome), however, the program may see decreases in hospitalizations due to hypoglycemia during the first year of the program (short-term).

Identifying short-, intermediate- and long-term outcomes also will enable programs to define indicators. Indicators describe outcomes in specific and measurable terms. For example, a disease case management program may target fewer health complications due to diabetes as an outcome. Several indicators may include, a 10% reduction in hypoglycemic episodes among diabetics whom are case managed. Another example may be a substance abuse program that seeks to reduce drug use by 50% among participants. An indicator variable would be the number of clients who tested negative for drug use over a 6-month period. Defining outcomes and indicators will contribute to the development of useful program evaluations.

### *Impacts*

Impacts are the long-term changes that the program expects to make. They provide direction and focus to the program and should be consistent with the larger mission and vision of the organization. Impacts are often closely influenced by many other factors in addition to the program such as economic conditions, and cultural values. Some examples of impacts are:

- Improved mental health among program participants
- Better health outcomes for the medically under served in the community

### **Completing a Logic Model**

Use the categories above to create a logic model for your Implementation Grant project. Begin with the overall impacts of the program and then jump to the target population and move forward. As you fill in the program theory, activities and outcomes for your model always go back to the target population and make sure the activities you plan are effecting the appropriate people. Use a flowchart, like the one provided in chart 1, to help visualize the flow of the program as you are constructing the different components.

The logic model should provide your program with a clear map that can be used as a reference for program design, implementation and evaluation.

### *References*

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### *Source*

Modified from original source. Originally prepared by Dennis Rose & Associates for the County Medical Services Program's Wellness & Prevention Program (2001)

# Chart 1: Logic Model Template

