

Health program evaluation – On theory of change and logic model

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This is the second of a series on evaluation of health programs, the first newsletter (2012/2) described the what, why and when of program evaluation. This issue focuses on theory of change and logic models, and how these guide the process of program evaluation.

Fundamental to all program evaluation is a clear definition of effectiveness ("success"): determined by the aim of the program and the hypothesized mechanism of expected effect. This requires theoretical understanding of how the intervention causes change and the links within the causal chain (theory of change). Theory of Change (TOC) and Logic Model (LM) are critical elements in program design and evaluation. TOC is the "theory" that explains how the interventions achieve the outcome and LM is a "roadmap" from actions to outcomes.

What is Theory of Change?

A TOC is the chain of reasoning that explains why you believe your project will make a difference in the problem you want to impact. It draws on research and knowledge of "best practices" to validate each step in a "causal pathway" between the interventions and the final outcomes of the project. (Refer to Fig 1).

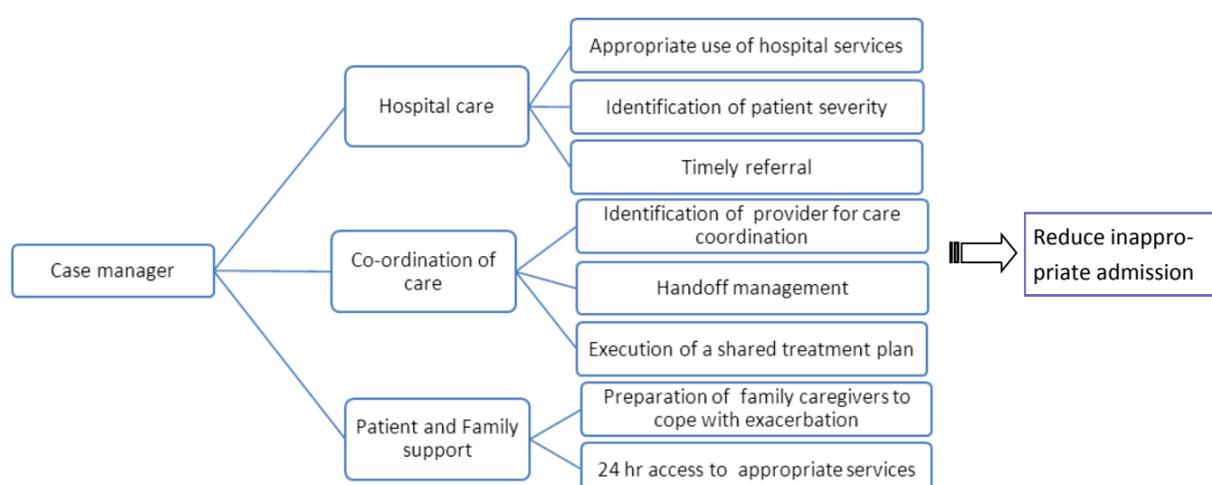


Fig 1 – Case management to reduce re-admissions

What is a Logic Model?

LM is a graphical/textual representation of how a program should work and links outcomes with processes and the theoretical assumptions of the program (See Fig 2). LM is a successful tool for program planning, implementation and performance management. Funding decisions are favorable if we can demonstrate how and why they will succeed.

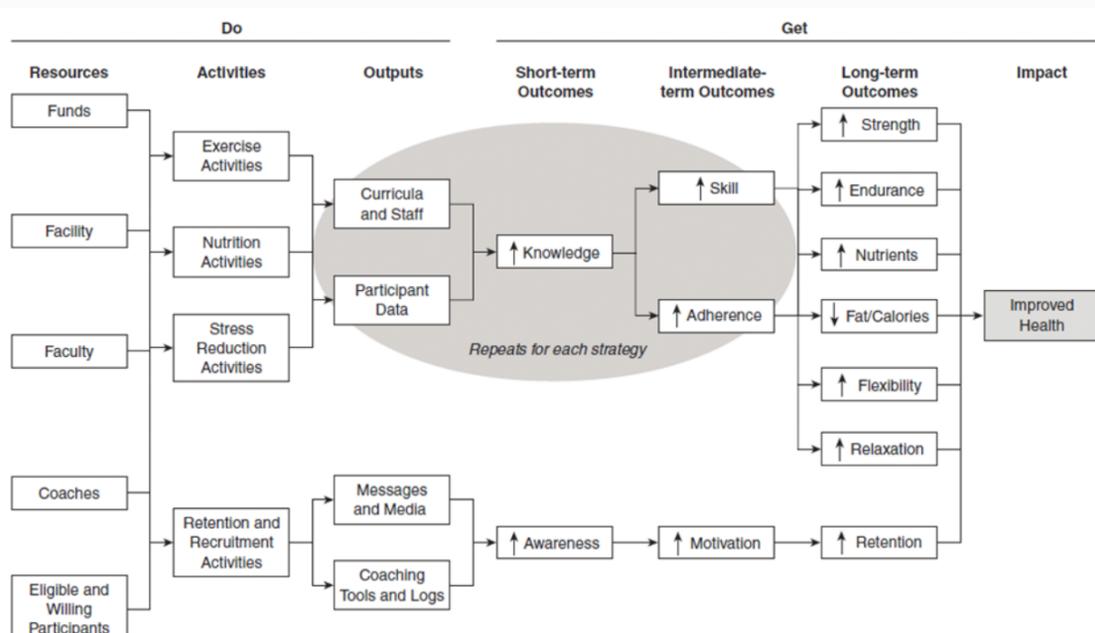


Fig 2 – LM Example: Health Improvement program

TOC and LM Sequence

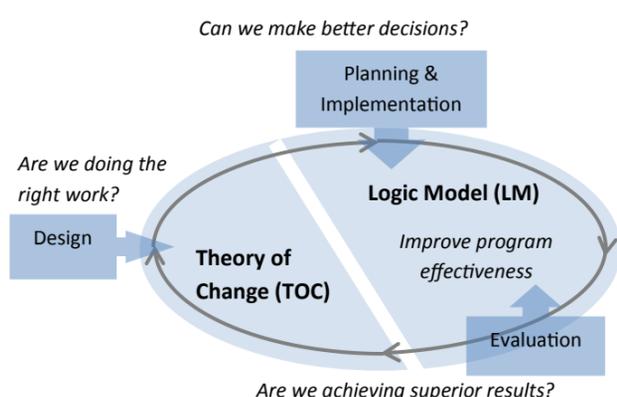


Fig 3 – Effectiveness & Logic Models

TOC is necessary in design stage and LM in implementation planning stage. Both form a continuous loop that can provide feedback about a program throughout its lifecycle. Figure 3 demonstrates key points of the design, planning, implementation, and evaluation that the two types of models can support.

Developing a TOC model is time consuming, and LMs used without a clear TOC are often too simplistic. In a LM without a distinct TOC we would not

- know which processes are critical to achieve intended outcome
- be able to identify processes which lead to a program failure/success
- be able to identify if the program failure is due to failure in theory or implementation

Developing a LM with a TOC

- ◇ Identify the program objectives and the intended outcomes
- ◇ List activities that would help achieve the outcomes, document TOC and the assumptions. Review and clarify the links between activities and outcomes.
- ◇ Add inputs (resources e.g. manpower) and outputs (quantify services e.g. clinic sessions) for each activity. Note that outcomes are different: they are the ultimate clinical impact.
- ◇ Construct a draft model, use arrows to show the connections between inputs and activities, between activities

and outputs and between outputs and each sequence of outcomes. Specify the assumption and TOC in each link.

- ◇ Check if the activities are comprehensive, outcomes are significant and understandable and connections are evidence based.

Conduct a TOC within a manageable program scope and stakeholder buy-in. Then summarize TOC alongside the LM in ways that serve stakeholders' purpose. A logic model that is a summary of an underlying theory is a much more powerful tool than just being a graphical road map.

Guide to Program evaluation

Successful programs often have a sound TOC and LM. For example, a program with faulty TOC and sound LM indicates causal logic problem.

		Theory of change (TOC)	
		Sound	Faulty
Logic Model (LM)	Sound	Program success	Causal logic problem
	Faulty	Implementation problem	Program failure

References

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