Chapter

Introductory Chapter: Evaluation of Health Services

Sandeep Reddy

1. Introduction

While health services intend to address the healthcare needs of their respective populations, many a time, they are unclear as to how to expend their resources to attain optimal outcomes [1]. In times of financial constraints and increasing burden of chronic diseases, it is essential to maximise available resources to ensure sustainable healthcare delivery [2]. As funds will always be scarce in relation to growing need, appropriate choices have to be made [3]. Decision-makers need to prioritise resources for options that derive maximum benefit—public health or economic. With the growth of health service data based on technological improvements in collecting data, availability of information to make these choices has not been an issue [1]. It is rather the need for an appropriate framework, which can guide decision-makers as to what needs to be prioritised. In this regard, evaluation, in particular, evaluation of health outcomes, as a framework has been shown to be useful to guide appropriate health service planning and implementation [1, 4, 5].

2. Evaluation

Program evaluation has been described as a systematic process that examines the value of a program or project in light of its efficiency, effectiveness and appropriateness [4]. Appropriate evaluation supports accountability and enables a robust evidence base to guide health service planning and delivery. While there are various forms of evaluation approaches, commonly, many of these approaches fit under formative, process and summative types depending on the implementation phase. Evaluators need to consider the context of the program they are assessing, stakeholder needs and the resources available and use discretion to choose the type of evaluation approach [5]. In instances, where there is not enough clarity about the link between the interventions and outcomes, other parameters such as appropriateness and progress of the intervention can be considered in the evaluation process [1].

A type of evaluation termed economic evaluation is increasingly becoming popular. It is a technique initially developed by economists but now widely adopted by other practitioners too [3]. Basically, it compares the benefits and costs associated with an intervention and informs options that could be adopted. While there are various forms of economic evaluation including cost-effectiveness analysis, cost-utility analysis and cost-minimisation analysis, the 'cost-benefit' framework is common to all these forms [3]. Economic evaluation, however, assesses only one aspect of a healthcare intervention and should be complemented by other forms of assessment including clinical evaluation. Ideally, economic evaluation should be supported by clinical trials, so appropriate data can inform decision-making.

3. Innovative approaches

Many evaluation types being used to assess healthcare interventions have been in use for many years. However, this does not mean they are appropriate for all the healthcare interventions or programs they are assessing [6]. There may be in certain instances requirement of customised evaluation approaches. One such innovative model is the integrated model of evaluation (IMoE) [6]. This model is a hybrid of traditional evaluation approaches that focus on before-after and input-output aspects of programs and theory-driven evaluation approaches that consider the context in which the program operates and formulates a program theory as to how the intervention leads to anticipated outcomes. While considering both approaches, it also presents a more practical version by utilising realistic elements that can be pursued in a timely manner. Besides, the model aligns with the health program context by measuring quality improvement and change that are critical to many health interventions [6]. The key components of the IMoE are outlined in **Figure 1** and described below.

a. *Program theory* is a causal statement of how the program outcomes are to be achieved as a result of the program intervention in the relevant context presented.

b. *Intervention* comprises the resources and inputs being introduced through the program or project.

c. *Change* considers the variations that emerge as a result of the intervention.

d. *Outcomes* relate to the program objectives or results.

The IMoE implementation approach involves formulating a preliminary program theory and then testing it through collection and analysis of data [6]. The model is a neutral method and favours ways that are appropriate to the context and objectives being assessed. This approach allows for before-after intervention assessment but with a robust theoretical underpinning. Further, the evaluation of

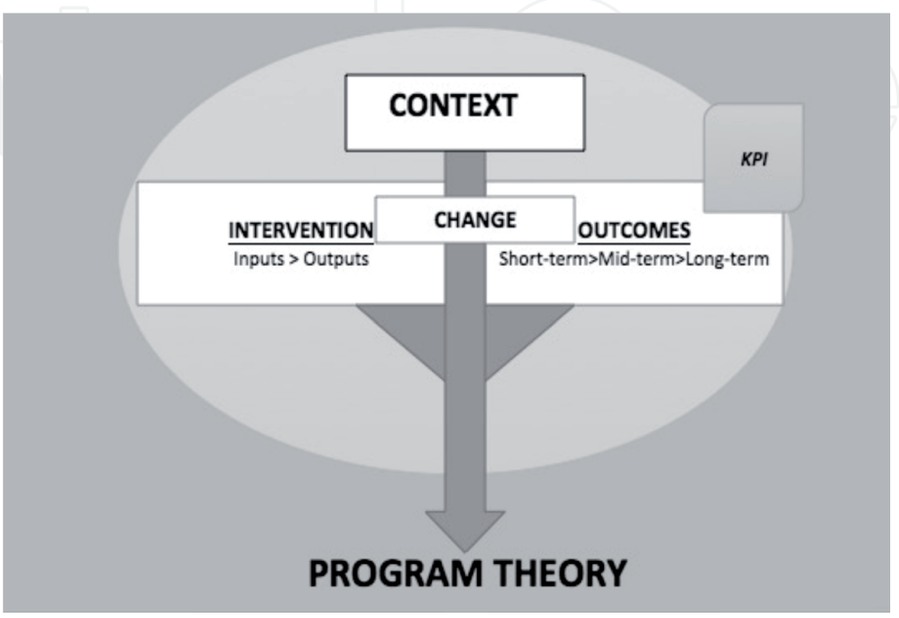

Figure 1.
Integrated model of evaluation. Source: Reddy et al. [6].

change that has occurred provides a comprehensive picture of the effects of the intervention. Thus, the hybrid approach of the IMoE enables stakeholders to gain more value from commissioning evaluation than relying either on traditional or theory-driven approaches alone.

4. Conclusion

In an era of scarce resources, budgetary pressures and increasing burden of diseases, it is crucial that stakeholders plan and implement healthcare programs appropriately [2, 3]. Evaluation is not just for assessment of the efficacy of an intervention or program; it can be used to guide planning too [1, 6]. Appropriate forms of evaluation can benefit not only the funders but also the community by ensuring the sustainability of health programs and realisation of better outcomes.

Author details

Sandeep Reddy
School of Medicine, Deakin University, Victoria, Australia

*Address all correspondence to: sandeep.reddy@deakin.edu.au

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