Theory of change: a theory-driven approach to the MRC framework for complex interventions

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Introduction

The MRC framework for Complex Interventions

The MRC framework for Complex Interventions (1) has been criticized for not including theory-driven approaches to evaluation (2). Although broad theoretical guidance has been developed (3), the framework contains little practical guidance for implementers and there have been calls to develop a more comprehensive approach to evaluation (4).

We propose an innovative approach to the design and evaluation of complex interventions by integrating an existing tool, Theory of Change, into the MRC framework.

What is Theory of Change?

ToC is “a theory of how and why and initiative works” (5) developed in collaboration with stakeholders. It is visually represented in a causal pathways map which illustrates how an intervention will achieve its impact. The Theory of Change approach has been successfully used to design, implement, and evaluate complex community initiatives which share many of the characteristics of complex health interventions. Recognising its capacity to provide a framework for monitoring, evaluation, and learning throughout a programme cycle (6), ToC is increasingly being used by international donors such as DfID, Comic Relief and Grand Challenges Canada to monitor and evaluate development programs.

ToC expands on the MRC framework by providing all stages of the framework with a coherent theory into which formative and evaluation research methodologies can be inserted.

Results

ToC has not yet been widely used in the evaluation of complex interventions to improve health, and has not been used in conjunction with the MRC framework to design and evaluate interventions in the context of randomised controlled trials (RCTs). However, it has much promise for this. We are piloting the use of ToC to design, implement, and evaluate complex interventions for mental health in a number of different research projects.

Programme for Improving Mental health care (PRIME)

A project developing and evaluating the district level integration of mental health services into primary care in 5 low and middle income countries.

Each country has conducted at least two ToC workshops with stakeholders and developed their own ToC. These ToCs, augmented by the results of other formative work, have informed the development of their district mental health care plans (MHPCs). A cross-country ToC was developed in parallel, drawing together the common elements of each country’s MHCp and the causal pathways through which they are expected to have an effect.

Indicators are now being developed to evaluate each component of the MHPc in each country, and to provide a comprehensive evaluation framework within which a variety of evaluation methodologies including repeat cross-sectional surveys, cohort studies and pilot RCTs will be implemented.

SHARE

The SHARE programme has centred on peer-led counselling for maternal depression evaluated through RCTs in India and Pakistan.

A ToC was developed for a successful intervention for maternal depression delivered by Lady Health Workers in Pakistan (7). This was used as the basis of ToC workshops in India to modify the intervention to be delivered by peer counsellors, to adapt it to the Indian context and to facilitate stakeholder buy-in to the project.

The ToC will be further developed with indicators and used as the framework for the process and impact evaluation of the RCTs.

Using Theory of Change and how it ‘fits’ with MRC (Methods)

How to construct a Theory of Change

ToC uses a participatory approach by bringing together a range of stakeholders (for example health service planners, healthcare workers and service users) in a series of intervention development workshops at the start of the formative phase. The stakeholders agree the real world impact they want the intervention to have, then work through the causal pathways through which this change can be achieved in that context. Further steps identify the evidence for each link in the chain, highlight the key assumptions and barriers that may break the chain and develop indicators to evaluate whether each stage of the pathway leading to the final impact is achieved.

A ToC describes a pathway of change showing the relationship between different outcomes which in themselves are preconditions of project impact.

Indicators are specific enough to measure success.

Implementation

What makes a good Theory of Change?

1. Formulae formative research questions through completing the evidence base for each link in the causal chain to highlight knowledge gaps and exploring barriers to intervention implementation and developing strategies to overcome them.

2. Improves pliability by providing evidence of links between early project activities and short-term outcomes to refine the intervention design.

Evaluation

1. Combines process and effectiveness evaluations into one framework.

2. Helps disentangle which intervention components were most effective by explicitly measuring the impact of each intervention pathway.

Example Theory of Change: SHARE peer-led counselling for maternal depression (7)

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South Asian Hub for Advocacy, Research and Education on mental health (SHARE)

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Conclusion

Using ToC as the theory underpinning the MRC framework may have a number of benefits including:

1. Helping a diverse range of stakeholders reach a realistic consensus on what is to be achieved, how, using what resources and under what constraints.

2. Providing an overarching theoretical framework which highlights knowledge gaps and incorporates formative, process and impact evaluation research questions under one theoretical framework.

3. Increasing the likelihood that the intervention will achieve its intended outcomes through participation and buy-in of stakeholders.

4. Ensuring the intervention is context specific making it more likely that it will be effective and be scaled up.

ToC, used in conjunction with the MRC framework, may be a useful tool to ensure a theory-driven approach to the development, evaluation and implementation of complex interventions.

References


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www.lshtm.ac.uk