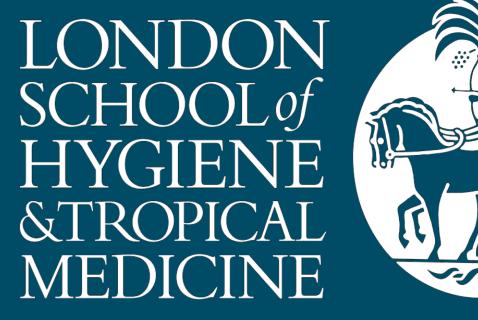
# Theory of change: a theory-driven approach to the MRC framework for complex interventions





Mary De Silva<sup>1,</sup> Erica Breuer<sup>2</sup>, Lucy Lee<sup>1</sup>, Crick Lund<sup>2</sup>, Vikram Patel<sup>1,3</sup>

<sup>1</sup>London School of Hygiene and Tropical Medicine, London <sup>2</sup> University of Cape Town, South Africa, <sup>3</sup> Sangath, Goa, India

# Introduction

#### The MRC framework for Complex Interventions

The MRC framework for complex interventions (1) has been criticised 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 programmes.

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 holds 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 (MHCPs). 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 MHCP 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

### South Asian Hub for Advocacy, Research and Education on mental health (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.

# References:

- MRC (2008). Developing and evaluating complex interventions: new guidance. UK, Medical Research Council.
- Anderson, R. (2008) New MRC guidance on evaluating complex interventions. BMJ, 337, a1937 Craig, P., et al. (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. BMJ, 337, a1655.
- Ling, T. (2012). Evaluating complex and unfolding interventions in real time. Evaluation 18: 79-91.
- Weiss, CH. (1995). "Nothing as Practical as Good Theory: Exploring Theory-based Evaluation for Comprehensive Community Initiatives for Children and Families." In New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts, ed. James Connell et al. Washington, DC: Aspen Institute.
- Connell, J., Kubisch, A.(1998) Applying a Theory of Change Approach to the Evaluation of Comprehensive Community Initiatives: Progress, Prospects, and Problems, The Aspen
- James, C. (2011) Theory of Change Review. A report commissioned by Comic Relief, Comic Relief
  - Rahman, A. Et al. (2008) Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: a cluster-

# 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 using the available resources. 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.

# Example Theory of Change: SHARE peer-led counselling for maternal depression (7) A ToC describes a pathway of change showing the relationship between different outcomes which in themselves are preconditions for the project impact. **Indicators** are specific enough to measure success **KEY**

**Interventions** are used to bring about each of the preconditions on the pathway

Rationale explains why interventions lead to preconditions

**Assumptions** state the limits of the context

### What makes a good Theory of Change?

### **Plausible**

Do evidence and common sense suggest that the activities, if implemented, will lead to desired outcomes?

Challenges: Illustrates tenuous causal links and forces us to change or strengthen them; difficult to predict future causal pathways

#### Doable

Will the economic, technical, political, institutional, and human resources be available to carry out the initiative?

Challenges: Designing an intervention that is likely to work, taking into consideration the constraints of the context and available resources

#### **Testable**

Is the ToC specific and complete enough for an evaluator to track its progress in credible and useful ways?

Challenges: Evaluation using ToC may be more complex as it involves measuring indicators at all stages of the causal pathway, not just the outcome.

# How does Theory of Change strengthen the MRC framework?

PRIMARY AND

SECONDARY

# **Development**

Improves design of intervention through: consensus building with stakeholders; designing interventions that aim to cause real world change; embedding intervention within the context; highlighting barriers to implementation early on and developing strategies to overcome them

OUTCOME Higher level of healthcare

OUTCOME

**Primary Health Care** 

OUTCOME

2. Creates realistic expectations of expected impact of the intervention as stakeholders have to compromise on what outcomes are possible within the context and available resources.

# **Feasibility**

**Implementation** 

stakeholders

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

- 1. Improves dissemination of results with a powerful visual, common sense tool which can be used throughout the project with a diverse range of
- 2. Facilitates scaling-up by making adaptation of intervention to new settings easier as there is a framework effect of different components can be disentangled

# **Evaluation**

- Combines process and effectiveness evaluations into one framework.
- Helps disentangle which intervention components are most effective by explicitly measuring the impact of each intervention pathway.

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# **Grand Challenges in Global Mental Health**

ToC is being used as a framework to evaluate the impact of the Grand Challenges Canada global mental health funding programme. Each of the 15 funded projects will develop a ToC.

These will be collated and used to develop a ToC to illustrate the causal pathways through which the GCC global mental health funding programme (\$20 million) intends to achieve an impact.

Each project will collect data on all the indicators in their ToCs, and these feed into the GCC ToC in order to evaluate the impact of the total funding programme over the course of the projects...

# Conclusions

stakeholders.

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

- Helping a diverse range of stakeholders reach a realistic consensus on what is to be achieved, how, using what resources and under what constraints.
- Providing an overarching theoretical framework which highlights knowledge gaps and incorporates formative, process and impact evaluation research questions under one
- theoretical framework. Increasing the likelihood that the intervention will achieve its' intended outcomes through participation and buy-in of
- 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.

