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# Reflections from using logic modelling as part of realist evaluation of a community health worker programme in Nigeria.

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## 1. Introduction

Since 2015, researchers in the University of Leeds, UK and University of Nigeria have used realist evaluation approach to assess the extent which and under what circumstances a community health worker (CHW) programme [1] promotes access to services and improves maternal and child health (MCH) outcomes in Nigeria [2]

We share lessons from using logic modelling as an essential part of realist evaluation design (see Fig. 1) to deconstruct the CHW programme.

## 2. What are logic models?

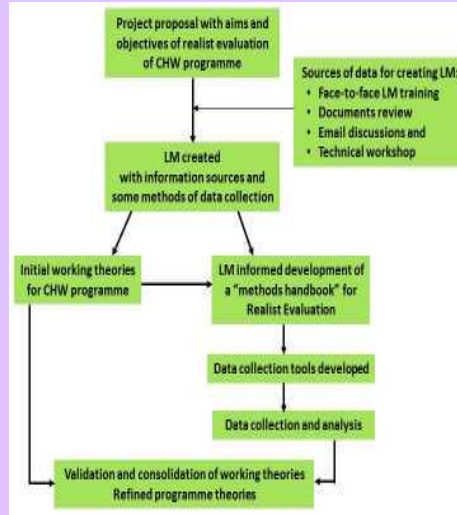
Logic models (LMs) are tools for planning, describing, communicating, managing and evaluating policies, programmes or interventions [3].

The LM offers a visual representation of the relationship between various programme components (see Fig. 2) and may state the underlying assumptions of how the programme is expected to produce change.

LMs vary in their complexity and take different forms including flowcharts, tables, pictures and diagrams that include different elements [4]

A coherent LM is a thread of evidence-based logic that integrates programme objectives, inputs, activities, outputs and outcomes with programme context.

Figure 1: Position of the logic model within the Realist Evaluation



## 4. Key messages and lessons learned

- Creating a coherent LM requires in-depth knowledge of a programme's goals, components and environment—often drawn from multiple sources of information.
- Developing a LM is a critical step for understanding of the contexts, mechanisms and outcomes (CMOs) and for identifying hypotheses/initial working theories of how a programme is intended to produce change
- Example of initial working theories that emerged from our LM is: *Providing financial and non-financial incentives to health workers will make them feel valued (M), thereby improving staff motivation, job satisfaction, performance and retention (Os) in a country like Nigeria, that is otherwise characterised by irregular remuneration and poorly functioning facilities (C)*
- Logic modelling provided stakeholders with a shared language and an approach for strengthening learning at local levels.
- The process of creating a LM fostered closer links among stakeholders
- The LM depicted a linear/simplified relationship between inputs, activities and outputs, or between outputs and outcomes of the programme. In reality, there are complex diagonal or vertical interrelationships between or among programme inputs, activities, outputs and outcomes

1<sup>st</sup> two weeks of July 2015: Face-to-face training meetings for researchers

Aug 2015: Email discussions with key stakeholders (policy makers, implementers & researchers)

Oct. 2015: Review and finalization of LM

Jan. 2016: LM facilitated development of methods handbook for realist evaluation

2<sup>nd</sup> two weeks of July 2015: Documents review

Mid-Sept 2015: Technical workshop with researchers

Dec. 2015: Initial working theories approved by stakeholders

## 3. Methods

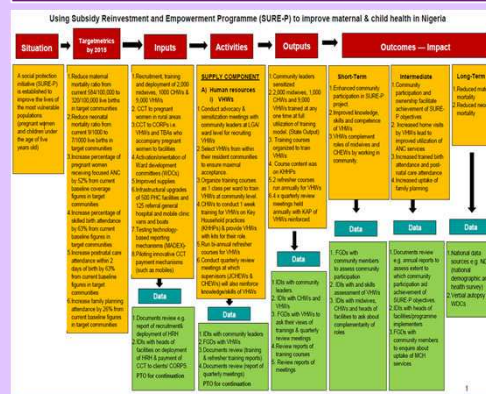
Overall methodology for the realist evaluation involves three steps:

- Initial programme theory development,
- Theory validation
- Theory consolidation and identification of lessons learned. Details of methodology is available elsewhere [5].

The LM informed step 1. Between July and October 2015, we developed a LM for the CHW programme using multiple sources of data (see above timeline):

- Face-to-face logic model training meetings for researchers
- Documents review of policies and the programme implementation manual.
- Email discussions with key stakeholders to deconstruct and represent their thinking of how the programme should work
- A technical workshop with researchers, that served to:
  - Clarify and untangle relationships between and among programme elements (see Fig 2), and
  - Develop initial working theories of how the CHW programme is intended to work in context of Nigeria.

Figure 2: Logic model for the CHW programme



## 5. References

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