



Evidence to improve maternal and  
newborn health: **The IDEAS Project**

# Introducing IDEAS



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IDEAS is a measurement and evaluation project aiming to understand which health innovations and programmes improve maternal and newborn health on a large scale, as well as why and how.

Based at the London School of Hygiene & Tropical Medicine, a world-leading centre for research and education in public and global health, the IDEAS team are specialists committed to generating high-quality evidence to inform policy and practice.

Measurement and evaluation are vital for local, national and global health planning, so that resources can be used effectively to improve the health of families in Ethiopia, India, Nigeria, where IDEAS is working directly, and beyond.

I feel privileged to lead a project that will generate evidence to inform key decisions about maternal and newborn health

**Dr Joanna Schellenberg**  
IDEAS Principal Investigator,  
The London School of Hygiene & Tropical Medicine

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**Cover images (l-r)** Frontline worker with mother and newborn, Uttar Pradesh, India © Agnes Becker/IDEAS. Auxiliary nurse midwife health records, Uttar Pradesh, India © Dr Bilal Avan. Health records, Ethiopia © Dr Bilal Avan. Mother and newborn, Nigeria © Pep Bonet/Save the Children. Health Extension Worker, Ethiopia © Dr Neil Spicer. Pregnant mother, Nigeria © istockphoto.

**Image right:** Mother with newborn, Atthasia village, Bahraich district, Uttar Pradesh. Image courtesy of IntraHealth's Manthan project © Agnes Becker/IDEAS.



IDEAS uses measurement and evaluation to understand which health innovations and programmes deliver the greatest impact on maternal and newborn survival at scale, as well as why and how they work, in Ethiopia, North-Eastern Nigeria and the state of Uttar Pradesh in India.

Every day 800 women die from pregnancy-related causes<sup>1</sup> and more than 7,300 babies are delivered stillborn<sup>2</sup>. Furthermore, newborn deaths contribute to 40% of all child deaths globally<sup>3</sup>. Many of these deaths occur in low-income settings, from well understood and preventable causes.

Despite huge efforts and advances – the number of maternal deaths due to pregnancy complications dropped by nearly 50% between 1990 and 2010<sup>4</sup> – the evidence base for what works to improve maternal and newborn health on a large scale remains relatively weak.

### Why is IDEAS important?

IDEAS aims to improve the health and survival of mothers and babies through generating evidence to inform policy and practice.

#### Research

We contribute to the evidence base by:

- Using standardised approaches to evaluate maternal and newborn health programmes across multiple projects and countries.
- Studying the scale-up of innovations in maternal and newborn health.
- Testing the theory underlying the Bill & Melinda Gates Foundation maternal and newborn health strategy.
- Building capacity in measurement, learning and evaluation.

#### Policy

We offer local, national and global health decision-makers and programme managers:

- Evidence of which maternal and newborn health innovations work best in specific contexts and why.
- Evidence of which innovations are likely to be scaled-up successfully from the areas in which they were introduced to a larger geographic area.
- Lessons about using health data in decision-making to improve maternal and newborn health.



**Top image:** A premature baby lies in hospital © Bill & Melinda Gates Foundation.

**Bottom image:** A mother with her newborn baby sitting outside her house, Nigeria © Bill & Melinda Gates Foundation.



<sup>1</sup> UNFPA, et al., Trends in Maternal Mortality: 1990-2010, 2012: WHO

<sup>2</sup> Lawn, J., Kinney, M. 'Stillbirths – An Executive Summary for The Lancet's Series' The Lancet, 14 April 2011

<sup>3</sup> WHO, World Health Statistics 2011, 2011: WHO pp15

<sup>4</sup> Countdown to 2015, Building a Future for Women and Children 2012 Report 2012: WHO and UNICEF pp13

# What we do

IDEAS is testing the theory of change for improving maternal and newborn health put forward by the Bill & Melinda Gates Foundation. This is the basis of the foundation's maternal and newborn funding strategy. IDEAS aims to test the theory by answering four questions. Evidence from IDEAS will inform future investments, policy decisions and strategic plans.

IDEAS is collaborating with projects funded by the Bill & Melinda Gates Foundation to improve maternal and newborn health in Ethiopia, North-Eastern Nigeria and Uttar Pradesh, India. These projects deliver innovations that support local health systems, particularly through improving the interactions between families and frontline workers. They aim to improve access, use and provision of care for women and their babies during pregnancy, childbirth and the month after birth.

## Capacity building

The IDEAS Technical Resource Centre supports measurement, learning and evaluation by strengthening the capacity of key personnel within the maternal and newborn health projects we collaborate with. The Centre promotes collaboration between projects, and stimulates exchange of expertise.

## Evidence into policy and practice

IDEAS advocates the use of evidence for effective decision-making and policy. We promote learning between projects, share findings and tools with the academic community and provide evidence to inform future investments, policy decisions and strategic plans.

## What is an innovation?

A community-based approach to enhancing health, which is new to the context.

## Who are frontline workers?

Frontline workers include facility-based staff, shopkeepers who families see regularly, and trained community members who visit families where healthcare facilities are scarce. All give health advice and basic health services. They are often the first point of contact with the health system for rural families in low-income settings.

## What is an intervention?

A life-saving procedure or behaviour that has a proven direct biological benefit for the mother or newborn, e.g. cutting the umbilical cord with a sterilised blade to prevent the baby becoming infected.



**Top image:** An Innovation: Village health and sanitation committees use a hand drawn map to plan how to reach every pregnant woman in the village. Courtesy of Sure Start project, Uttar Pradesh © Agnes Becker/IDEAS.



**Bottom image:** Interactions are enhanced by a mobile phone app innovation to support frontline workers in their work. Courtesy of IntraHealth's Manthan project, Uttar Pradesh © Agnes Becker/IDEAS.

# Theory of change for maternal and newborn health

## with IDEAS learning questions

This diagram shows the theory of change for the Bill & Melinda Gates Foundation maternal and newborn strategy. Innovations enhance the interactions between families and frontline workers. This enables more mothers and babies to access life-saving interventions (increased coverage) leading to improved maternal and newborn survival. Over time, effective innovations are scaled-up from the areas in which they were introduced to the whole state or country and beyond, and benefit more mothers and newborns. The purple boxes show the four questions IDEAS is asking to test the theory of change.

**Image left:** Mother with children, Ethiopia © Bill & Melinda Gates Foundation.



**Image right:** Life-saving intervention: Initiation of breastfeeding within the first hour of life, Nigeria © Society for Family Health.

**Q1** What are the innovations?

**Q2** Do innovations enhance interactions and increase life-saving intervention coverage? If so, how?

### Innovation

Community-based approach to enhancing health, new to the context

### Interactions

Enhanced interactions between families and frontline workers (more, better, equitable and cost-effective)

### Intervention

Increased coverage of life-saving interventions

Improved maternal and newborn survival

**Q3** How and why does scale-up happen?

### Scale-up

An innovation is increased in reach to benefit a greater number of people over a wider geographical area

**Q4** To what extent do scaled-up innovations affect coverage of life-saving interventions and survival?

# How we are answering our learning questions

## Characterising the innovations

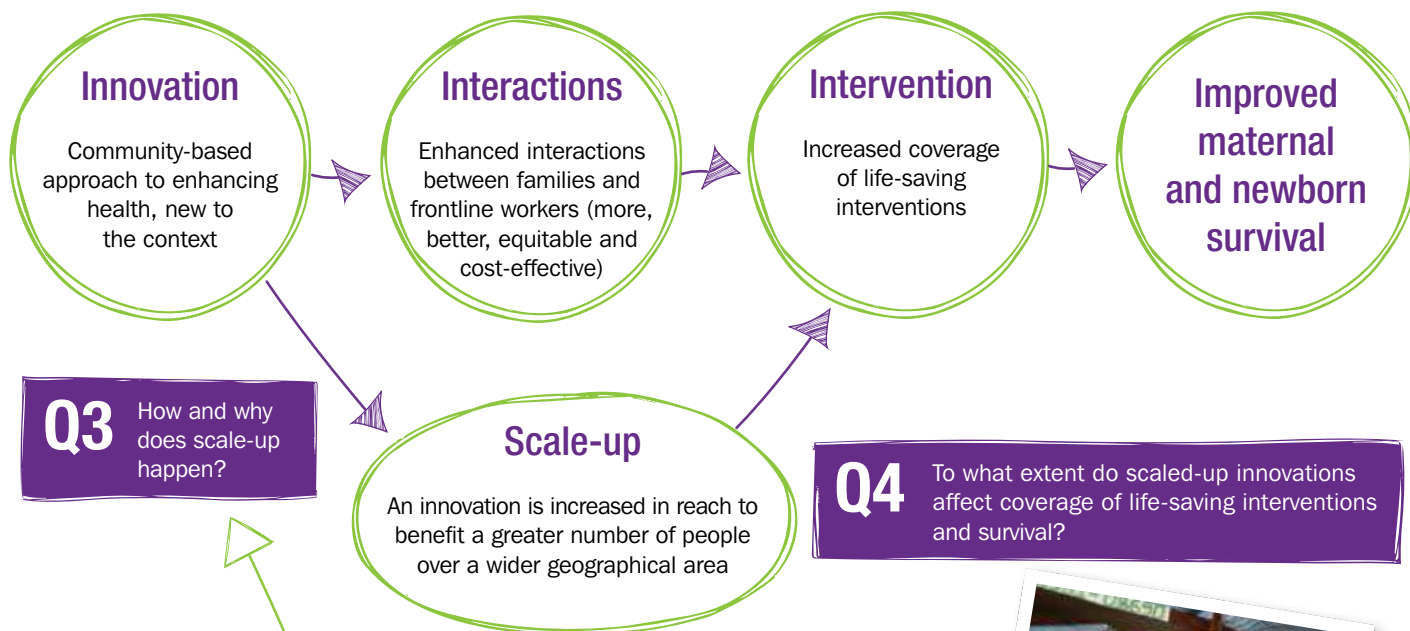
We are working with Bill & Melinda Gates Foundation funded projects to describe each of their maternal and newborn health innovations using a common framework.

## What is the context?

When answering our learning questions we consider local social, political, cultural and economic factors which may influence how innovations are implemented. We measure changes in these contextual factors over time.

**Q1** What are the innovations?

**Q2** Do innovations enhance interactions and increase life-saving intervention coverage? If so, how?



**Q3** How and why does scale-up happen?

**Q4** To what extent do scaled-up innovations affect coverage of life-saving interventions and survival?

## Understanding scale-up

We are conducting interviews with a range of stakeholders - including national and regional government, development agencies and civil society - to find out what factors help an innovation get scaled up nationally and what barriers need to be overcome. Our analysis provides recommendations on what different stakeholders can do to improve scalability of innovations to improve maternal and newborn survival.



© Dr Bilal Avan

### Measuring interactions between families and frontline workers

We are undertaking large-scale surveys in Ethiopia, North-Eastern Nigeria and Uttar Pradesh, India, by interviewing families, frontline workers and health facility staff. The surveys will show whether:

- Interactions between families and frontline workers have been enhanced, i.e. increased in number, and become better in quality and more equitable.
- The coverage of life-saving interventions and behaviours has increased as a result of the maternal and newborn health innovations.

### Understanding the link between enhanced interactions and coverage of critical interventions

We are conducting in-depth interviews to find out how and why the interactions between frontline workers and families have changed and how they affect the coverage of life-saving interventions.

### Cost effectiveness analysis

We are developing an economic model to synthesise evidence on the cost-effectiveness of a range of maternal and newborn health innovations.

### Measuring scale-up: Pathway analysis of innovations and implementation strength

For innovations that are most likely to be scaled up, we are developing an in-depth understanding of each innovation's pathway from its implementation through to the life-saving interventions intended to improve as a result. Implementation strength is a score showing the intensity of effort put into operationalising an innovation: through regular data collection over time, this measure shows the extent to which implementation efforts result in the scale-up of an innovation to a wider geographic area.

### Measuring scale-up: Coverage of life-saving interventions surveys, analysing lives saved and cost-effectiveness

In areas where innovations are being scaled up, we are conducting surveys to estimate the change in the coverage of life-saving interventions. The surveys will also assess the relationship between implementation strength ('dose') and change in the coverage of critical life-saving interventions ('response'), i.e. if more effort is put in to implementing an innovation, does it result in more life-saving interventions reaching women and newborns? We will use mathematical modelling to estimate the number of maternal and newborn lives saved when an innovation is scaled up, and its cost effectiveness.



**Top image:** Nigerian children playing  
© Bill & Melinda Gates Foundation.

**Middle image:** Newborn baby having anthropometric measures taken during a post-natal check © Dr Tanya Marchant.

**Bottom image:** Mother with newborn and the local ASHA, a frontline worker, at a rural Primary Health Centre, Uttar Pradesh © Dr Meenakshi Gautha.

# Where we work

IDEAS works in Ethiopia, North-Eastern Nigeria and Uttar Pradesh in India. All three areas have high death rates for women and babies and many of these deaths could be prevented with improved access to effective health care<sup>5</sup>.

## IDEAS team

Our UK-based team and staff in Ethiopia, Nigeria and India work closely with Bill & Melinda Gates Foundation funded maternal and newborn health projects and our in-country research partners – JaRco Consulting (Ethiopia), Sambodhi Research & Communications Pvt. (India) and Health Hub (Nigeria).

An African woman's risk of dying from pregnancy-related causes is

**100 times**

higher than that of a woman in a high-income country.



**Image left:** Mother and newborn, Uttar Pradesh, India © Bill and Melinda Gates Foundation.

**Image right:** The size of a newborn babies foot can be used to determine whether it is putting on enough weight © Bill and Melinda Gates Foundation.



<sup>5</sup> Countdown to 2015, Building a Future for Women and Children 2012 Report 2012: WHO and UNICEF

## Contact us

London School of Hygiene  
& Tropical Medicine  
Keppel Street  
London  
WC1E 7HT  
United Kingdom

## Email

[ideas@lshtm.ac.uk](mailto:ideas@lshtm.ac.uk)

## Website

[lshtm.ac.uk](http://lshtm.ac.uk)

## twitter

[@LSHTM\\_IDEAS](https://twitter.com/LSHTM_IDEAS)

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