IDEAS: Informed Decisions for Actions in Maternal and Newborn Health

What works, why and how for maternal and newborn health

Phase 1: 2010-2017

Geneva, 20th February 2018

Joanna Schellenberg, Tanya Marchant, Zelee Hill

ideas.lshtm.ac.uk

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Outline

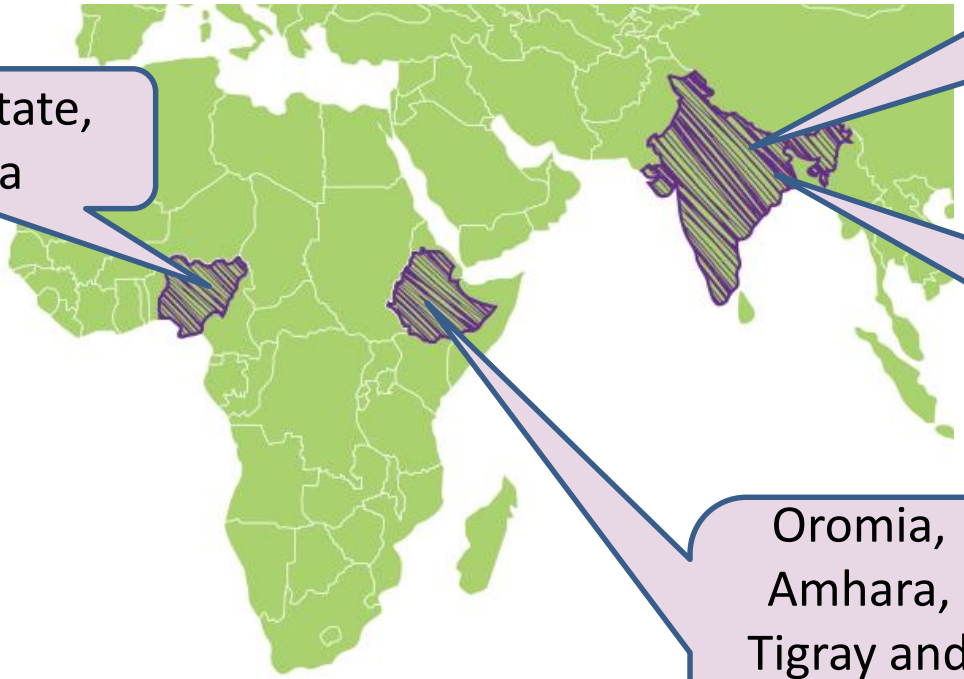
- Introduction to IDEAS phase 1
- What are the innovations?
- Do innovations enhance interactions?
- How do innovations enhance interactions?
- Scale-up: how and why?
- Effectiveness at scale
- Outputs & acknowledgements
- IDEAS phase 2

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

IDEAS phase 1: where, why, and what?

Actionable measurement for change



Uttar Pradesh State, India

Gombe State, Nigeria

West Bengal State, India

Oromia, Amhara, Tigray and SNNP Regions, Ethiopia

IDEAS

Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

IDEAS Phase 1: who?

Strategic management group

Professor Andy Haines
Professor of Public Health and Primary Care

Professor Simon Cousens
Co-Principal Investigator

Dr Kara Hanson
Reader in Health System Economics

Professor Betty Kirkwood
Professor of Epidemiology and International Health

Professor Anne Mills
Co-Principal Investigator

Dr Elizabeth Allen
Statistician

Dr Bilal Avan
Scientific Coordinator

Agnes Becker
Communications Officer

Dr Della Berhanu
Country Coordinator Ethiopia

Anita Lyons
Assistant Project Manager

Dr Meenakshi Gautham
Country Coordinator India

Dr Zelee Hill
Qualitative Lead

Krystyna Makowiecka
Technical Resource Centre Coordinator

Lindsay Mangham-Jefferies
Research Fellow in Health Economics

Dr Tanya Marchant
Epidemiologist

Kate Sabot
Research Fellow

Dr Pauline Scheelbeek
Research Associate

Professor Joanna Schellenberg
Principal Investigator

Dr Neil Spicer
Qualitative Lead on Scale-up

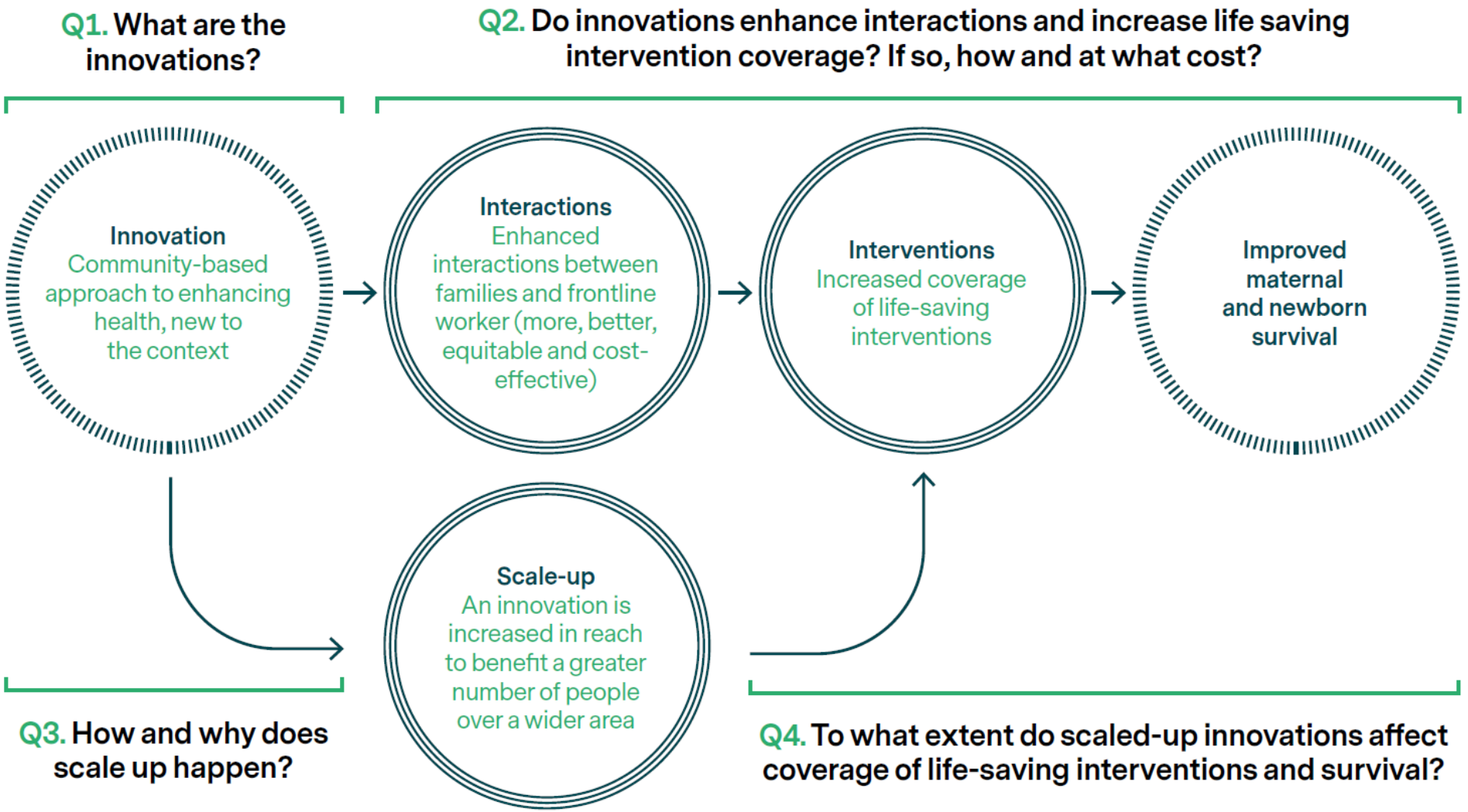
Keith Tomlin
Data Manager

Dr Nasir Umar
Country Coordinator Nigeria

Shirine Voller
Project Manager

Deepthi Wickremasinghe
Research Assistant & Information Management

The IDEAS project's four learning questions and the underlying theory of change



Measurement, Learning and Evaluation partners

Nigeria

- Childcare & Wellness Clinics
- Data Research and Mapping Consult Ltd
- Health Hub

India

- Public Health Foundation of India
- Sambodhi

Ethiopia

- JaRco Consulting

Implementation partners

Nigeria

- Pact
- Society for Family Health

India

- Better Birth
- The Uttar Pradesh Community Mobilisation Project
- Manthan
- Sure Start

Ethiopia

- Last 10 kilometres
- Saving Newborn Lives
- Maternal and Newborn Health in Ethiopia Partnership

Outline

- Introduction to IDEAS phase 1
- What are the innovations?
- Do innovations enhance interactions?
- How do innovations enhance interactions?
- Scale-up: how and why?
- Effectiveness at scale
- Outputs & acknowledgements
- IDEAS phase 2

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

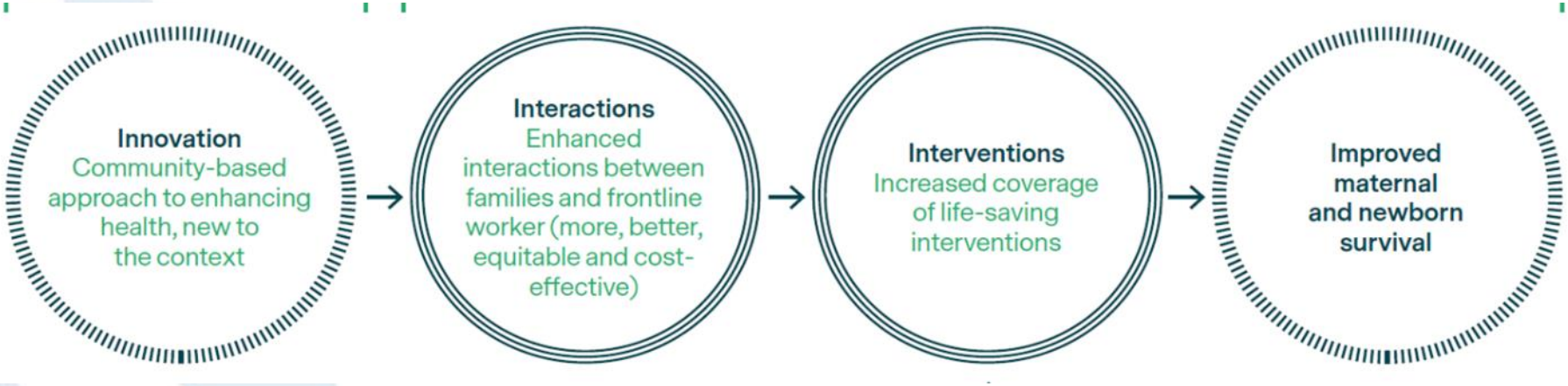
What are the innovations?

3 geographies
9 projects
57 innovations

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

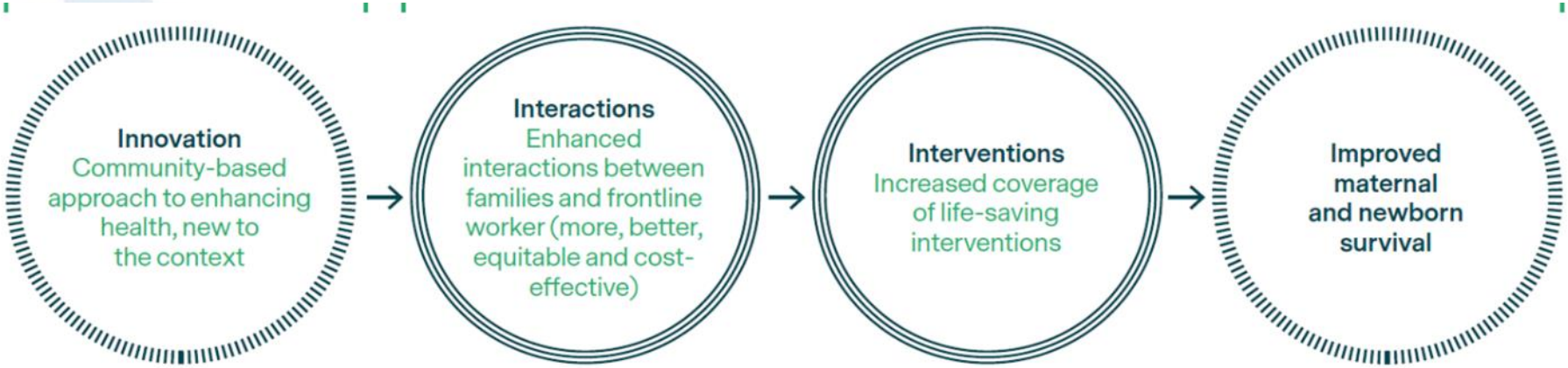
What are the innovations?



IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

What are the innovations?



Q1. What is the nature of the innovation?

Q2. What was the scope and timing?

Q3. What kind of enhancement was anticipated as a result?

Q4. How did it enhance contacts?

Q5. Which interventions anticipated to increase?

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Innov-ation	Type	Description	Purpose	Project Activities	Innovation scope, timing, & type of enhancement
1. Mapping of service users and provision	Operational enhancement	Innovation to enhance existing government mapping of facilities to include element of quality of care (approved facilities). Maps & database of approved facilities & trained FLWs made available to Call Centre staff. FLWs given information on closest appropriate approved facilities. Map telecom coverage in intervention area.	To enhance quality of referral, by making mapping information available to FLWs, families and the community on appropriate referral facilities in the area. To increase interactions with FLW by informing families / community of trained FLW in the area. To enhance effectiveness and efficiency of referral. To ease access to the Call Centre each community has appropriate SIM card for free-phone contact.	**Develop:** Maps and a database for use by Call Centre staff, TBAs and FOMWAN. **Equip:** FLWs with community-specific information; Call Centre staff with maps and a database of approved facilities and trained FLWs. **Train and support:** Call Centre staff in using the maps and database; FLWs in using community-specific information; On-going support by up-dating database every 2 years FLW up-dated on new information through supervision and quarterly review meetings.	**Implementation scope and timing** Whole of Gombe State. Started 2010, ongoing. **Type of enhancement** **Frequency:** Access to Call Centre and thereby to referral facilities, access to nearby, trained FLWs through the Call Centre **Equity:** New information is available on location of pastoralist / remote communities, which might otherwise not access care.
2. Skilled TBA trained and deployed	FLW capacity-strengthening	Prepare and deploy a community-based cadre of rural FLW to * promote ANC, identify danger signs in pregnancy and refer appropriately * offer clean delivery care, identify danger signs and facilitate appropriate referral * undertake post-partum checks of the mother and newborn, identify danger signs and facilitate appropriate referral.	To increase contact between FLW and pregnant, delivering and postnatal women and newborns in all communities. To enhance the cleanliness of home-based delivery care. To enhance identification of danger signs in pregnancy, delivery and post-partum and refer in a timely and appropriate way. To increase and enhance coverage of post-natal checks and appropriate referral of the mother and baby.	**Develop:** Training and deployment programme for FLWs; training manual; appropriate MIS; supervision and support system. **Equip:** Project staff with training manual and MIS; FLWs with the toolkit including appropriate data-collection tools (see SFH innovation 4); uniform clothing items for easy identification. **Train and support:** FLWs have 5 days' training (in Phase 2 increased to 6 days) followed by monthly supervision visits by project staff; quarterly review meetings with MoH and SFH management.	**Implementation scope and timing** Phase I: initially with six Local Government Areas – June 2010 ongoing. Phase II: All rural Gombe State – September 2010 ongoing. **Type of enhancement** **Frequency:** FLWs generate interest in MNH, promote facility care **Quality:** Enhanced MNH knowledge and practice including delivery care (TBAs) **Equity:** FLWs deployed in under-served communities

Characterisation: summary for PNC

	NE Nigeria		Ethiopia			Uttar Pradesh, India			
	SFH	Pact	L10K	SNL	MaN-HEP	Man-than	CMP	Better Birth	Sure Start
Coverage of PNC-M									
Quality (timing/content)									
Equity									
Knowledge / d signs									
Coverage of PNC-N									
Quality (timing/content)									
Equity									
Knowledge / d signs									
Clean cord care									
Early breastfeeding									
Thermal care (*)									
Exclusive bfeeding									

Characterisation: summary for PNC

	NE Nigeria		Ethiopia			Uttar Pradesh, India			
	SFH	Pact	L10K	SNL	MaN-HEP	Man-than	CMP	Better Birth	Sure Start
Coverage of PNC-M	X		X	X	X	X	X		X
Quality (timing/content)	X		X	X	X	X	X		X
Equity	X		X	X	X	X	X		X
Knowledge / d signs	X		X	X	X	X	X	X	X
Coverage of PNC-N	X		X	X	X	X	X		X
Quality (timing/content)	X		X	X	X	X	X		X
Equity	X		X	X	X	X	X		X
Knowledge / d signs	X		X	X	X	X	X	X	X
Clean cord care	X		X	X	X	X	X	X	X
Early breastfeeding	X		X	X	X	X	X	X	X
Thermal care (*)	X		X	X	X	X	X	X	X
Exclusive bfeeding	X		X	X	X				X

Do innovations enhance interactions? (1)

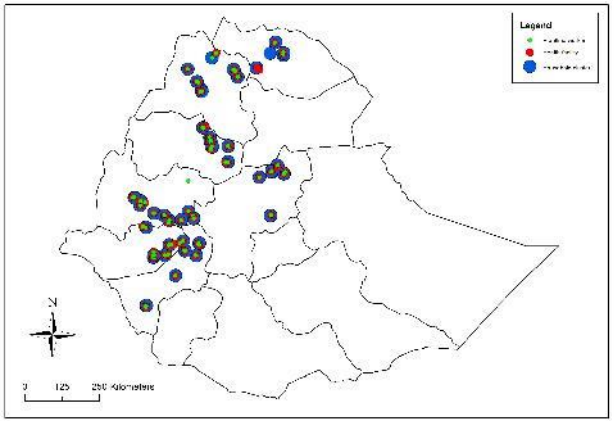
IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

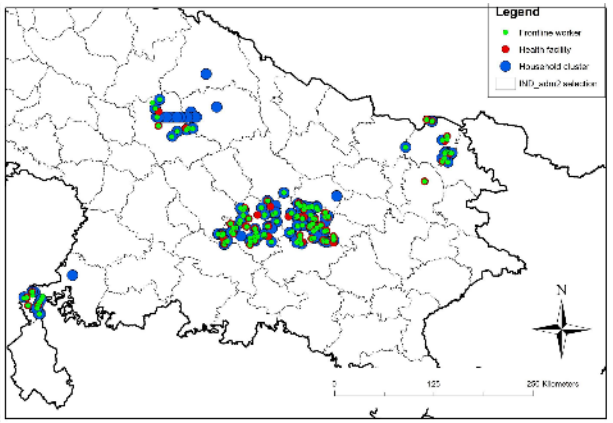
Do innovations enhance interactions? (1)

- Aim to quantify change (2012-2015) in the frequency, quality and equity of contacts and coverage of life saving interventions *in BMGF grantee areas*
- Household surveys (live births <12 months prior to survey) linked to survey of primary health care facilities and frontline health workers providing services to sampled communities
- Study areas defined after careful discussion

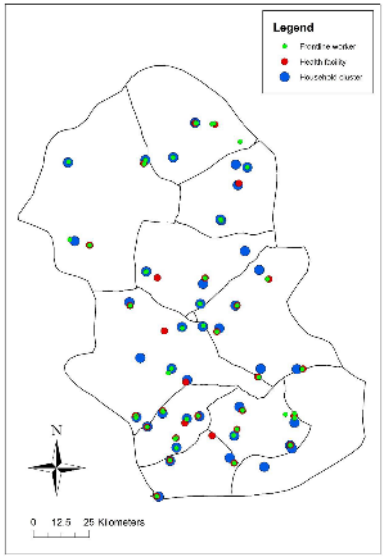
Ethiopia: L10K

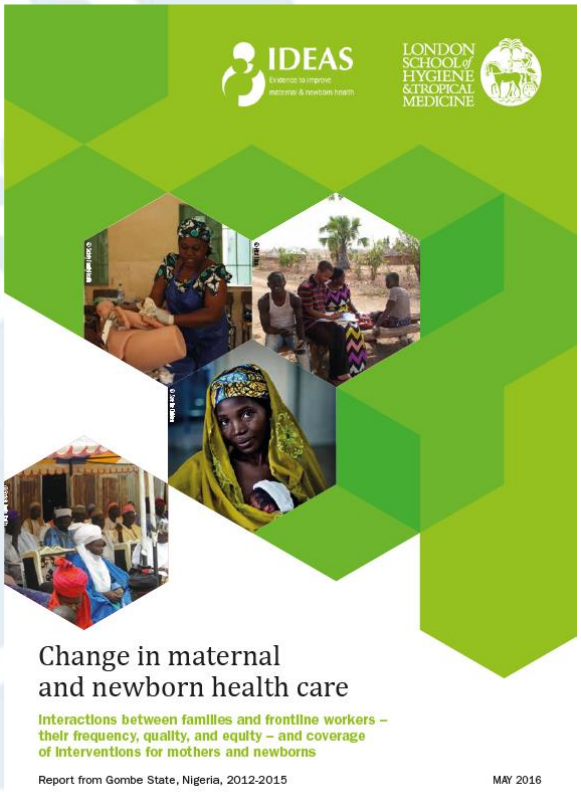


Uttar Pradesh: CMP



Gombe: SFH





IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

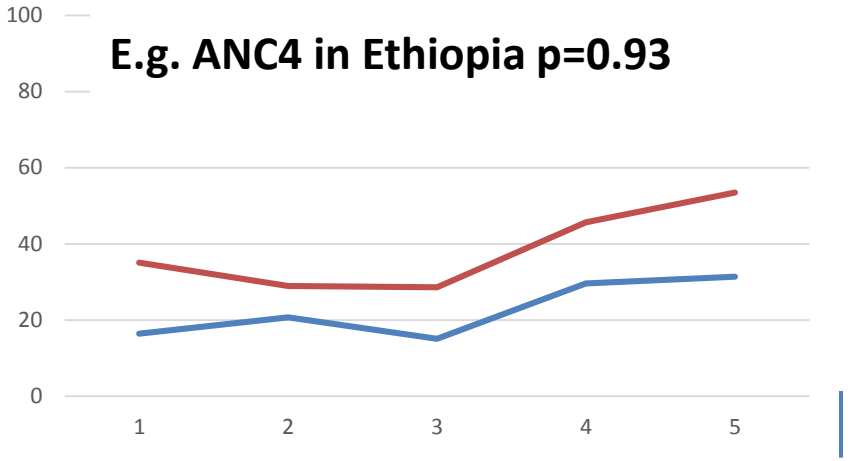
Summary findings: common indicators

	Gombe State		Ethiopia		Uttar Pradesh	
	Coverage 2012	Coverage 2015	Coverage 2012	Coverage 2015	Coverage 2012	Coverage 2015
≥4 ANC visits						
Institutional delivery						
Postnatal care for the mother						
Postnatal care for the newborn						
Hand washing with soap						
Use of gloves						
Hygienic cord and skin care						
Early breastfeeding						
Delayed bathing						

Summary findings: common indicators

	Gombe State		Ethiopia		Uttar Pradesh	
	Coverage 2012	Coverage 2015	Coverage 2012	Coverage 2015	Coverage 2012	Coverage 2015
≥4 ANC visits	40 (30-51)	37 (30-43)	22 (14-34)	39 (30-48)	28 (24-33)	25 (21-30)
Institutional delivery	30 (21-41)	29 (24-35)	15 (9-25)	43 (32-54)	76 (71-80)	81 (77-85)
Postnatal care for the mother	7 (4-10)	10 (7-13)	4 (2-8)	4 (2-6)	54 (48-59)	63 (58-67)
Postnatal care for the newborn	4 (2-9)	7 (5-10)	4 (2-7)	4 (2-7)	19 (15-23)	15 (11-20)
Hand washing with soap	55 (45-65)	81 (77-84)	81 (73-87)	72 (64-79)	94 (91-96)	93 (90-95)
Use of gloves	46 (34-58)	44 (38-51)	26 (17-37)	54 (43-64)	85 (82-88)	88 (85-91)
Hygienic cord and skin care	26 (19-36)	45 (41-49)	44 (36-52)	51 (41-60)	49 (44-53)	53 (48-57)
Early breastfeeding	40 (33-47)	49 (46-53)	50 (42-58)	66 (59-72)	54 (48-59)	55 (51-60)
Delayed bathing	15 (10-21)	21 (17-26)	39 (30-49)	51 (41-60)	68 (63-73)	70 (64-75)

Summary findings: common indicators



	Gombe State					
	Coverage 2012	Coverage 2015	Coverage 2012	Coverage 2015	Coverage 2012	Coverage 2015
≥4 ANC visits	40 (30-51)	37 (30-43)	22 (14-34)	39 (30-48)	28 (24-33)	25 (21-30)
Institutional delivery	30 (21-41)	29 (24-35)	15 (9-25)	43 (32-54)	76 (71-80)	81 (77-85)
Postnatal care for the mother	7 (4-10)	10 (7-13)	4 (2-8)	4 (2-6)	54 (48-59)	63 (58-67)
Postnatal care for the newborn	4 (2-9)	7 (5-10)	4 (2-7)	4 (2-7)	19 (15-23)	15 (11-20)
Hand washing with soap	55 (45-65)	81 (77-84)	81 (73-87)	72 (64-79)	94 (91-96)	93 (90-95)
Use of gloves	46 (34-58)	44 (38-51)	26 (17-37)	54 (43-64)	85 (82-88)	88 (85-91)
Hygienic cord and skin care	26 (19-36)	45 (41-49)	44 (36-52)	51 (41-60)	49 (44-53)	53 (48-57)
Early breastfeeding	40 (33-47)	49 (46-53)	50 (42-58)	66 (59-72)	54 (48-59)	55 (51-60)
Delayed bathing	15 (10-21)	21 (17-26)	39 (30-49)	51 (41-60)	68 (63-73)	70 (64-75)

Do innovations enhance interactions? (2)

Ethiopian government's Community-based Newborn Care

- 1. 2014 baseline (population level)
- 2. 2015 midline survey (quality of care)
- 3. 2017 endline (population level)

- 2. QoC: identification and case-management of sick newborns
  - 893 children aged 0-60 days observed at health posts
  - 'Gold standard' re-examiners classified 130 as 'very severe disease'

- Health Extension Workers:
  - Correctly ruled out very severe disease in 743/763 infants – 97% specificity
  - Correctly identified very severe disease in 39/130 infants – 30% sensitivity

- Results shared for course-correction with FMoH and partners

Outline

- Introduction to IDEAS phase 1
- What are the innovations?
- Do innovations enhance interactions?
- How do innovations enhance interactions?
- Scale-up: how and why?
- Effectiveness at scale
- Outputs & acknowledgements
- IDEAS phase 2

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

How do innovations enhance interactions?

Understanding PNC coverage in Ethiopia

- **Background:** Health extension workers trained to make early PNC home visits. Health development army help identify women
- **Study sites:** Two 'typical' Kebeles, with reasonably functioning HEWs, in Amhara and SNNPR
- **Respondents:** Recent mothers, grandmothers, fathers, community health workers and volunteers (46 contacts)

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Accessibility

- Extreme distances and difficult terrain made visits impossible in some areas
- Information and work issues a greater barrier than moderate physical difficulties

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Knowledge of delivery

- Visits were more likely where HEW were involved in the delivery as they knew about the birth
- More likely in areas where HDA-HEW information system functioned
  - Poor function in less accessible areas, where HEW relied most on this system
  - Poor function if HDA thought the HEW would not come anyway
- Less likely in areas where information system was not clear e.g. HEW relied on mothers to inform them, but mothers did not know this

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Work issues

- HEW unavailable due to competing activities, multiple women needing visits and staff absences
- HEW activity level was the main driver of visits
  - Some had clear coverage strategies
  - Temporary staff and those less connected did worse
  - Some relied on HDA to do community level work
  - Some active but focused on facility deliveries

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Wrap up message

- Supply driven with no 'branding'
- HEWs need realistic workloads and catchment areas
- Identification needs to be improved: clear and organized, HDA-HEW notification system, links with facilities
- The difference in HEW activity level suggests that selection, supervision and motivation plays a key role in coverage
- PNC needs to be seen as a priority

Outline

- Introduction to IDEAS phase 1
- What are the innovations?
- Do innovations enhance interactions?
- How do innovations enhance interactions?
- Scale-up: how and why?
- Effectiveness at scale
- Outputs & acknowledgements
- IDEAS phase 2

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Scale-up: how and why?

Scale-up is an **art** not a **science:** multiple factors influence scale-up beyond developing a strong innovation and having evidence of its impacts

*'The policy breakthrough is never the data, the findings themselves... it's the **trust**, the **relevance**, it's **being at the table**, being able to show you **support implementation**... you also need the **right time** – you cannot push a policy breakthrough when the system is not ready'*

Six critical implementer actions to catalyse scale-up

1 Evidence: building a strong evidence base

2 Power of individuals: backing of well-connected advocates and government personalities

3 Prepared and responsive

4 Continuity: implementer supporting transition to scale

5 Aid effectiveness

6 Scalability: designing innovations to be scalable

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Six critical donor actions to catalyse scale-up

1 Evidence: Support implementers to generate strong evidence

2 & 3 Prepared and responsive

- Incentivise implementers to integrate scale-up within project plans
- Allow flexibility in implementer project plans to respond to policy change

4 Continuity: Support implementers through transition to scale

5 & 6 Aid effectiveness

- Embrace government-led donor coordination mechanisms
- Direct involvement in fostering country ownership and harmonisation

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

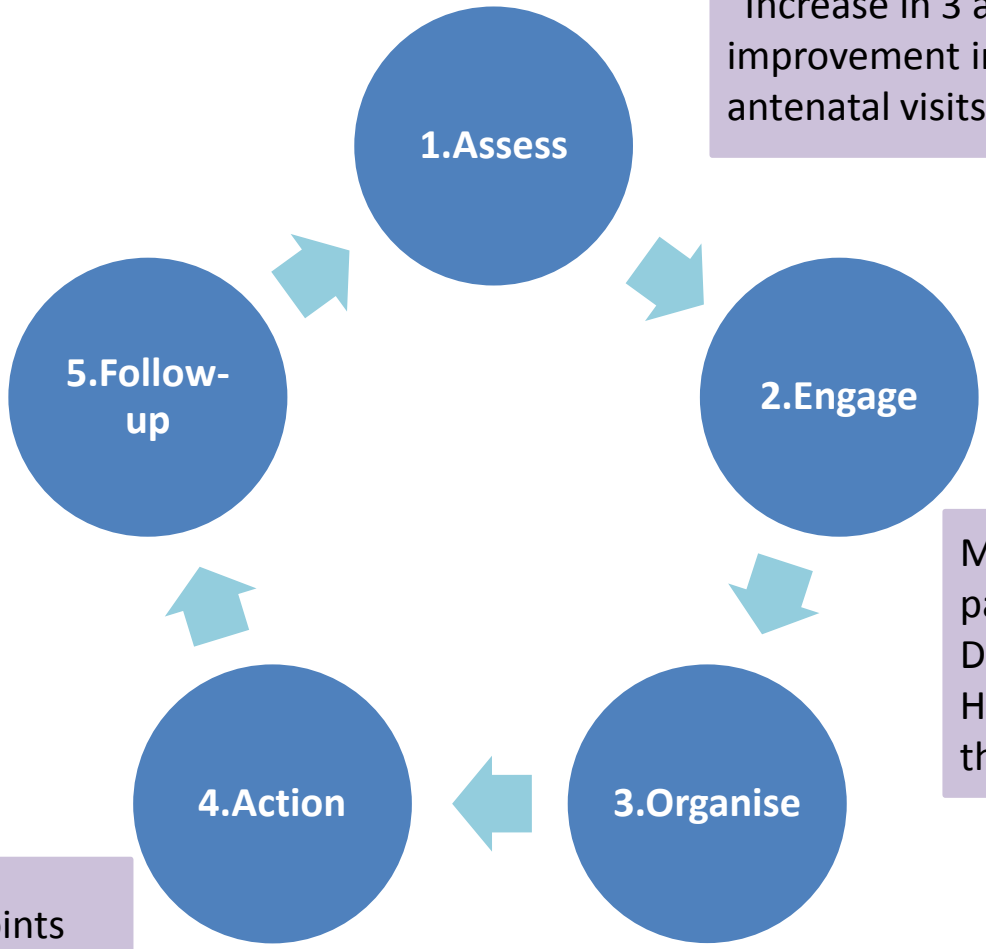
To what extent do scaled-up innovations affect coverage of life-saving interventions and survival?

- Ethiopia: scale-up of Community-Based Newborn Care 2013-2018
  - Conventional design: baseline-endline and intervention-comparison areas
- Implementation strength approach
- Sustainable implementation at district level
  - Exploratory research in Nigeria, Ethiopia and India & literature review
  - Gaps in use of health data for decision-making at district level
- India: Data-Informed Platform for Health (DIPH)
  - Standardised use of data for decision-making at district level
  - Prototype, West Bengal, India: 3 health districts, 18m population, 2016-17
  - Embedded in existing district-level structures: District Health Society
  - Enhanced interaction among district-level health personnel, linked databases

Example of a DIPH cycle

Apr – Jun 2016 - theme: **Antenatal care**

Situation analysis team
Finalised theme objective:
"Increase in 3 antenatal visits and improvement in tracking of 4th antenatal visits"



13 action points:
7 completed,
3 on-going &
3 not started

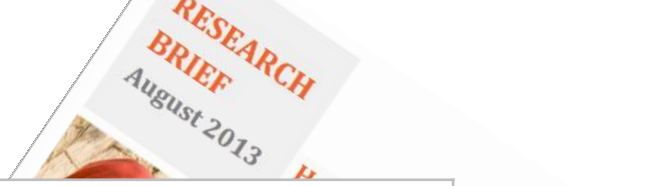
Multi stakeholder participation
District Maternity & Child Health Officer selected as theme leader.

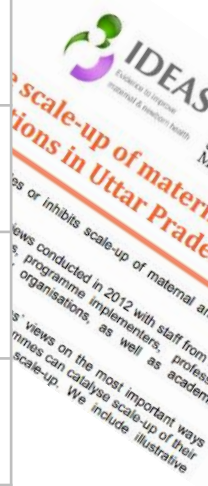
10 actions points
13 actionable solutions

Prioritize the action points
Responsibilities assigned

IDEAS phase 1 outputs

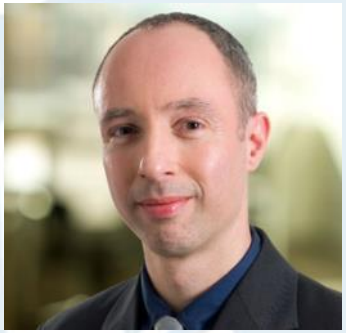
45 Blogs	25 Presentations
10 Research briefs	11 Posters
27 Reports	5 Infographics
19 Journal articles	18 Videos
17 Data sets	8 Web seminars
1 Research tool	5 Overview leaflets
7 PMNCH Knowledge Summaries	





All available on
ideas.lshtm.ac.uk

Acknowledgements



Saul Morris

Philip Setel *"At the time we made the grant, the foundation was attempting to implement a new model of actionable measurement, learning, and evaluation. The IDEAS grant was one of the first made based on these principles, and it is evident that much has been gained through this investment."*

Win Brown

John Grove *"IDEAS has pioneered measuring, with greater clarity, the …services and quality of care women and children should receive in a way that will inform how the rest of the world will do this in future."*

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Outline

- Introduction to IDEAS phase 1
- What are the innovations?
- Do innovations enhance interactions?
- How do innovations enhance interactions?
- Scale-up: how and why?
- Effectiveness at scale
- Outputs & acknowledgements
- IDEAS phase 2

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

IDEAS Phase 2 (2017-2020)

Building on the work of Phase 1, IDEAS is pursuing 6 new outcomes

1. **Tracking progress**

- In NE Nigeria – close examination of demand and supply side change in an area with multiple innovations, coordinated by government

2. **Use of data for decision making**

- In NE Nigeria – working with government to coordinate evidence-based decision making through a shared results framework
- In Ethiopia and India – working with government to adapt and integrate the Data Informed Platform for Health

3. **Improving measurement**

- In NE Nigeria – multiple data methods used to generate evidence on validation, respectful care, linking methods, effective coverage methods and enhancing routine facility data for measurement

IDEAS Phase 2 (2017-2020)

4. Understanding quality improvement

- In Ethiopia, understanding by which mechanisms QI operates (qualitative) and the drivers of health worker motivation (econometric), working with IHI
- In Lagos, Nigeria, understanding the processes of QI in public vs private, primary vs secondary level facilities, working with PSHAN

5. Fostering innovation sustainability

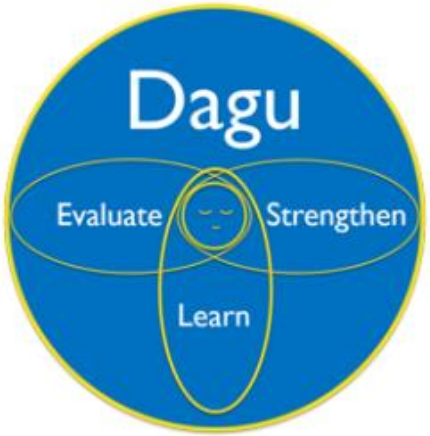
- Across geographies, qualitative investigation into what happens to scaled-up BMGF-funded innovations in the longer-term; how can longer-term sustainability be achieved?

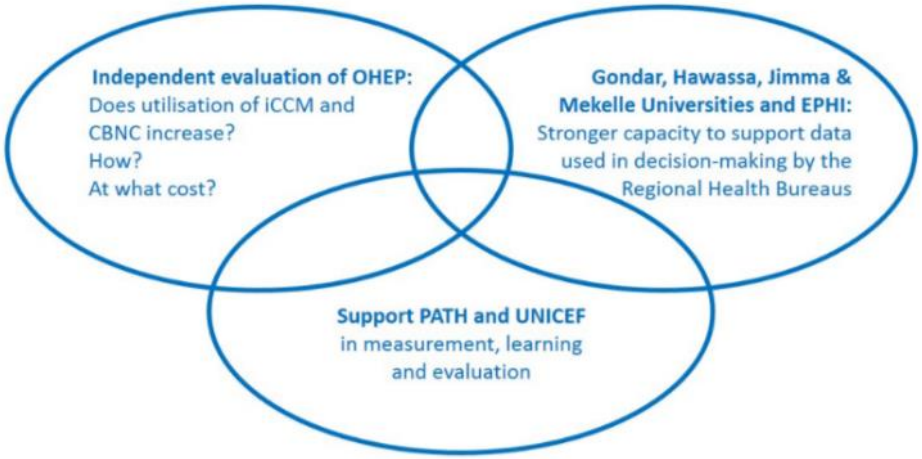
6. Partner engagement

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

IDEAS Phase 2 ++ Ethiopia





- **ORCA**: Operational Research and Coaching for Analysts: Improving Ethiopian Federal Government Health Metrics

IDEAS
Evidence to improve maternal & newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE