IDEAS

Informed Decisions for Actions in Maternal and Newborn Health

2010–17 Report

What works, why and how in maternal and newborn health

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

Foreword

Back in 2009, the Bill & Melinda Gates Foundation in Seattle developed a new strategy for the coming years, outlining how they might achieve their long-term aim of fewer maternal and child deaths in Nigeria, Ethiopia and the state of Uttar Pradesh in India. They chose to focus on these settings for two reasons: firstly, the alarmingly high death rate among mothers and children, largely due to preventable causes, and secondly, the very high numbers of mothers and children. Uttar Pradesh, for example, has over 200 million people, making it comparable to Brazil which is the fifth largest country in the world.

In 2010, the foundation approached the London School of Hygiene & Tropical Medicine with a request to support the measurement, learning and evaluation of their new maternal and child health strategy. The IDEAS project was developed to respond to this request.

Since 2010, the IDEAS team have worked closely with collaborators in north-east Nigeria, Ethiopia, and India to improve understanding of "what works, why and how" in these settings for maternal and newborn health. This report outlines their approach, giving highlights of the work. We hope you enjoy reading it.

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IDEAS Strategic Management Group
2010–17

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Executive Summary

IDEAS is a measurement, learning and evaluation project based at the London School of Hygiene & Tropical Medicine (LSHTM). The project aims to find out "what works, why, and how" for maternal and newborn health in three low-resource settings in Nigeria, India, and Ethiopia. The IDEAS team includes 20 research and professional support staff, living in Abuja, Addis Ababa, London, and New Delhi, who have been working since 2010 with the Bill & Melinda Gates Foundation (the foundation) and with the foundation's implementation partners.

The project started with the launch of a Technical Resource Centre to support implementation partners in Ethiopia, India and Nigeria with their own measurement, learning and evaluation. Between 2010 and 2017, nearly 80 technical support activities were completed, including reviews of research protocols and cross-country learning workshops.

IDEAS research was based on four learning questions, with an underlying theory of change. Firstly, what foundation-funded innovations were implemented and how were they expected to improve maternal and newborn health. Our second learning question was to find whether innovations enhanced interactions between families and front-line health workers and increased the coverage of life-saving interventions, and if so then how and at what cost. Thirdly, we studied how and why scale-up happens. And lastly, we studied the extent to which scaled-up innovations affect coverage of life-saving interventions. We worked with measurement, learning and evaluation partners in Nigeria, India and Ethiopia.

We found 57 diverse innovations, put in place by 9 implementation partners. We developed a structured approach to "characterise" these innovations, describing them by what they aimed to enhance, such as community awareness or front-line worker capacity. We repeated this on an annual basis.

Our work on the extent to which the innovations enhanced interactions between families and front-line workers and increased life-saving intervention coverage started in 2012. We conducted a baseline survey, in specific areas of each country, of households and resident women with a recent birth, primary health facilities, and front-line health workers; and we repeated these surveys in 2015. The results showed some important gains in care provided, although in all three settings newborn health indicators showed the least improvement. We used qualitative methods to explore how front-line health workers influenced the place of delivery and newborn care practices.

© Agnes Becker / IDEAS

In Ethiopia, we found that factors driving changes in newborn care practices in the community included saturation of messages, increased knowledge, and a desire to be modern.

To understand how and why scale-up happens, we conducted 221 in-depth interviews and investigated three case-studies of successfully scaled innovations. We identified six critical actions that implementation partners adopted to catalyse innovation scale-up: design for scalability; building up evidence; harnessing the power of individuals; being prepared and responsive; ensuring continuity; and embracing aid effectiveness principles.

To study the extent to which scaled-up innovations affect coverage of life-saving interventions, we evaluated the scale-up of community-based newborn care in Ethiopia by studying changes in intervention and comparison areas using surveys and qualitative enquiry. In India, we developed a novel method with an in-built process for assessing the implementation strength of scaled-up innovations, the Data-Informed Platform for Health.

Project outputs include 17 data sets, 27 reports, 19 journal articles, 10 research briefs, and 5 infographics.

From 2017, a second phase includes tracking progress in coverage of life-saving interventions; support to local use of data in decision-making; research on improving coverage measurement and on understanding mechanisms underlying quality-improvement; and a study of sustainability.

Introduction

by Joanna Schellenberg

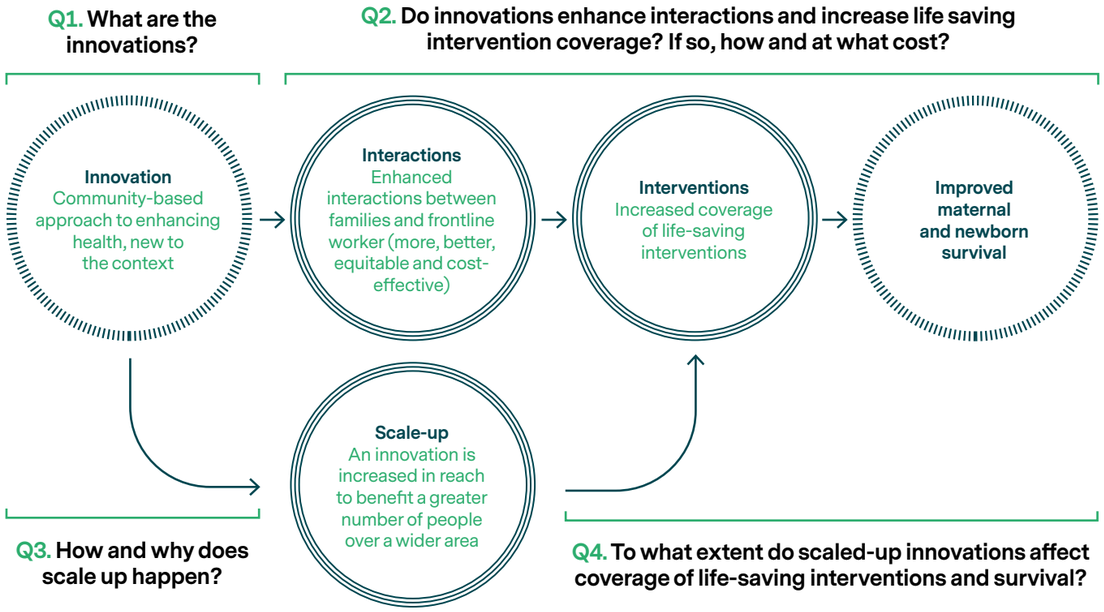
The IDEAS project started in 2010, with the aim of supporting the Bill & Melinda Gates Foundation (the foundation) to track progress towards a goal of better maternal and newborn survival in Ethiopia, north-east Nigeria, and the state of Uttar Pradesh in India. The foundation's maternal, newborn and child health team had developed a strategy[1] towards the goal of better survival. The foundation gave grants to both local and international non-governmental organisations in each of the three countries, who in turn developed innovations in maternal and newborn health.

The foundation strategy centred on interactions between families and front-line health workers[2], taking the view that these contacts have huge potential to lead to lasting change, whether during pregnancy, childbirth, or in the first few days of life. A theory of change, shown in the figure below, showed how innovations developed through grants to non-governmental organisations working in each setting, were expected to lead to more and better interactions between families and front-line workers, and that these improved interactions would be both efficient and equitable. In turn, the improved interactions between families and frontline workers would lead to higher coverage of life-saving evidence-based interventions, such as iron supplementation in pregnancy, breastfeeding within an hour of birth, or prompt identification and treatment of newborn sepsis; and maternal and newborn survival would improve as a result.

The IDEAS project's first two learning questions were to describe the innovations and to find out whether innovations enhanced interactions and increased the coverage of life-saving interventions, and if so then how and at what cost.

There's an African proverb: "If you want to go fast, go alone – but if you want to go far, go together". The foundation was convinced of the need to work with governments and with other donors in order to achieve lasting impact at scale. Their strategy included a catalytic effect on others, to maximise the chance of successful innovations being scaled-up and sustained at state or national level. The IDEAS project therefore included learning questions about how and why scale-up happens, and on the extent to which scaled-up innovations affect coverage of life-saving interventions and survival.

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



1 A strategy for reducing maternal and newborn deaths by 2015 and beyond – GL Darmstadt et al, *BMC Pregnancy and Childbirth, 2013.* http://researchonline.lshtm.ac.uk/1386899

2 Front-line health workers include facility-based staff and trained community members who visit families where healthcare facilities are scarce. They give health advice and basic health services.

Partnerships

Partnerships are essential to the IDEAS project and approach. This section highlights some of the key players.

IDEAS Programme Officers at the Bill & Melinda Gates Foundation


John Grove


Win Brown


Phillip Setel


Saul Morris

> "IDEAS has pioneered measuring, with greater clarity, the complicated and essential 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."
> – John Grove, Deputy Director, Maternal, Neonatal and Child Health

Measurement, Learning and Evaluation partners

Nigeria

ChildCare and Wellness Clinics
ChildCare and Wellness Clinics is a healthcare service delivery organisation conducting quantitative and qualitative research, working in collaboration with researchers with practical field based expertise and tested research and data collection skills.
childcareclinics.com

ChildCare & WellnessClinics

Data Research and Mapping Consult Ltd
Data Research and Mapping Consult Ltd is a research organisation based in Abjua, Nigeria, providing professional consultancy services in monitoring and evaluation, training, operations research, GIS mapping, data collection, processing analysis, report writing, and dissemination.

Health Hub
Health Hub is a consultancy in Nigeria that offered a wide variety of consulting services, ranging from public health to information technology and management infrastructure, with a mission to provide and support management and technological solutions that serve to improve health care systems; subsequently, improving access to adequate healthcare for all citizens.

Ethiopia

JaRco Consulting
JaRco Consulting PLC is an international development consulting firm based in Addis Ababa, Ethiopia, with a mission to ensure that programmes aimed at improving the lives of the most vulnerable groups around the world are of the highest quality.
www.jarrco.info

JaRco Consulting

India

The Public Health Foundation of India
The Public Health Foundation of India is a public-private initiative whose mission is to strengthen India's public health institutional and systems capability and provide knowledge to achieve better health outcomes for all.
http://www.phfi.org/

KNOWLEDGE TO ACTION phfi PUBLIC HEALTH FOUNDATION OF INDIA

Sambodhi
Sambodhi Research & Communications Pvt. Ltd. is a leading research and advisory consultancy based in New Delhi, India, providing services and technical support in areas including health, poverty, education and forestry.
www.sambodhi.co.in

SAMBODHI KNOWLEDGE FOR CHANGE

Implementation partners

India

Better Birth
The Better Birth Program and Trial, led by Ariadne Labs, tested whether adoption (through peer-coaching) of the WHO Safe Childbirth Checklist programme in birth facilities in Uttar Pradesh State, India, improves birth attendant practices during childbirth and impacts health outcomes for mothers and their babies.

HARVARD School of Public Health

The Uttar Pradesh Community Mobilization Project
The Community Mobilization Project aimed to develop and scale-up a package of family health innovations through self-help groups in Uttar Pradesh State, India.
www.bu.edu/cghd/our-work/projects/community-mobilization-in-uttar-pradesh

Manthan
Manthan provided technical assistance to the Government of Uttar Pradesh, India, to implement evidence-based maternal and newborn health interventions, such as mSakhi, a mobile phone application to assist frontline workers.
www.intrahealth.org/projects/the-planning-for-improving-maternal-and-neonatal-health-in-northern-india-project

Manthan Project

Sure Start
PATH's Sure Start project reached 24.5 million people with essential maternal and newborn health interventions in India's two most populous states, Uttar Pradesh and Mahrashtra.
www.path.org/surestart/about.php

PATH SURE START

Nigeria

Pact
Pact is working to strengthen maternal, newborn and child health frontline workers in north-east Nigeria.
pactworld.org

pact

Society for Family Health
Society for Family Health Nigeria works with the private and public sectors, adopting social marketing and behaviour change communication to improve access to essential health information, services, and products to motivate the adoption of healthy behaviours.
www.sfhnigeria.org

SFH Society for Family Health ...Creating Change, Enhancing Lives

Ethiopia

Last 10 Kilometers
Last 10 Kilometers implements innovations that engage local communities in improving maternal, newborn and child health in Ethiopia.
l10k.jsi.com

L10K The Last Ten Kilometers Project

Saving Newborn Lives
Saving Newborn Lives aims to reduce global neonatal mortality through effective, evidence-based newborn care innovation packages implemented at scale.
www.savethechildren.org/savenewborns

Save the Children

The Maternal and Newborn Health in Ethiopia Partnership
The Maternal and Newborn Health in Ethiopia Partnership implemented an initiative to demonstrate a community-oriented model for improving maternal and newborn health care in rural Ethiopia.

Maternal and Newborn Health in Ethiopia Partnership (MaNHEP)


© Bilal Avan / IDEAS

Additional partners

The IDEAS project also collaborated with Paolo Patruno Photography in Ethiopia; IMPACT Partners in Social Development in India; and Yared Amare in Ethiopia.

Technical Resource Centre

by Krystyna Makowiecka

The Technical Resource Centre (TRC) aimed to support measurement, learning and evaluation among the foundation's implementation partners in maternal and newborn health in Ethiopia, Nigeria and India.

We launched the TRC at learning workshops in each country where implementers met to identify areas of potential synergy and learn from one another. Almost 80 technical suppport activities initiated by grantees were completed between 2010 and 2017. We organised annual learning workshops, webinars on relevant MNH topics and updates on the latest academic papers.

Initial meetings with each implementation partner identified areas where support would be welcome. These included measurement, learning and evaluation systems enhancement, technical advice and individual capacity strengthening. Examples are given here.

Measurement, learning and evaluation systems enhancement

We mapped innovations onto a theory of change to describe how the project was expected to lead to higher uptake of life-saving evidence-based interventions, and thereby better health outcomes.

The mapping showed what needed to happen, where and at what scale. For two implementation partners, the mapping formed the basis of a focused measurement, learning and evaluation plan.

Technical advice

We reviewed protocols and advised on sample size calculations; supported indicator development to measure compliance with regulations for funding in Nigeria; and gave an overview of academic literature relevant to training community volunteers in India to inform programme design. In Nigeria, our regular research highlights were used by a community of practice.

In Ethiopia, we collaborated in research on front-line worker performance and perceptions of postnatal care, and a time-and-motion study on health extension workers' workload. And in India, we collaborated in research on how a foundation-funded Technical Support Unit could best engage with the informal health care sector.

Individual capacity strengthening

We made LSHTM distance learning module materials available to partners, and provided geographic information systems courses in Nigeria and Ethiopia. We held paper-writing workshops, where first-authors from implementation partners were matched with LSHTM academic staff providing guidance on all aspects of paper-writing.

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TRC in Nigeria

by Nasir Umar

Pact requested technical support to develop an evaluation plan for the complex SAQIP[3] grant, which included phased implementation, multiple supply and demand side innovations, and institutional capacity building at state and local government area levels.

IDEAS support also helped to characterise the innovations, leading to clarity about measurable indicators. When SAQIP evaluation was delayed, IDEAS included SAQIP indicators in IDEAS surveys, providing a no-cost baseline for the project and avoiding delays in implementation.

TRC in Ethiopia

by Della Berhanu

The foundation's implementation partners, the Federal Ministry of Health and IDEAS' measurement, learning and evaluation partner, JaRco Consulting, requested an introduction to Stata statistical software.

In July 2012, the IDEAS project held a two-day hands-on Stata workshop in Addis Ababa, attended by staff from Save the Children, the Maternal and Newborn Health in Ethiopia Partnership, the policy and planning directorate of the Federal Ministry of Health, and JaRco.

TRC in India

by Meenakshi Gautham

The Uttar Pradesh Community Mobilization Project sought to layer a health intervention onto the social and financial platforms of women's self-help groups.

The project was implemented by a consortium led by the Public Health Foundation of India,[4] with Rajiv Gandhi Mahila Vikas Pariyojana as the field implementation partner, the Population Council conducting evaluations, and Boston University providing technical assistance. IDEAS' work to characterise the complex set of project innovations required intense reflection by the implementing teams to distinguish project innovations, how these enhanced interactions, the nature of project activities and how their outcomes related to each innovation.

Dissemination activity and impact

by Shirine Voller

Few projects formally document the impact of dissemination activities – perhaps because impacts often come after a project has ended. IDEAS documented the dissemination activity, output and impact of the foundation's maternal, neonatal and child health implementation partners.

Dissemination was used for many purposes, from raising awareness and fostering a supportive working environment, to policy change and influencing the international maternal and newborn health agenda. Partners disseminated to local, regional, national and international audiences, and differentiated their activities by audience type: community, government, non-governmental organisation, donor and academic. Partners appeared to be well embedded within national policy and advocacy networks, and had a detailed understanding of relevant stakeholders, partnerships and relationships. They reported research-related, policy, service and societal impacts, as categorised using the Research Impact Framework.[5]

3 State Accountability for Quality Improvement Project
4 www.phfi.org/component/content/article/1438
5 Kuruvilla S et al. *BMC Health Services Research*, 2006. bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-6-134

Communicate and make a difference

by Agnes Becker and Suzanne Welsh

A professional Communications Officer working closely with researchers helps to translate research into policy and practice and raise the profile of the research group.

IDEAS' full-time Communications Officer enabled the research team to raise awareness both of the IDEAS project and of the implementing partners among new national and international audiences and strengthen relationships with the wider academic community.

For example, at the international level, improving the online presence through the website and Twitter inspired the team to connect with 'Mom Bloggers for Social Good', whose founder included the IDEAS project in the Huffington Post article (2014) '25 Leading Tweeters on Maternal Health',[6] and March of Dimes through participating in World Prematurity Day Twitter campaigns. At country level, a report of baseline findings and dissemination meetings with policy makers in Uttar Pradesh, India, resulted in the National Rural Health Mission Director issuing a directive to all health facilities with a reminder about the importance of delayed bathing of the newborn.

Contracts with many partners in many countries

by Anita Lyons

Negotiating contracts has its own challenges within a single country, but dealing with partners in several countries adds more complexity. In contrast to exciting and highly vocal research discussions, once terms and conditions start to be written down everyone involved can become edgy and keep their cards close to their chest.

Words can get lost in translation and this causes frustration on both sides. Culture has an effect on negotiating styles in each country; being aware of local economic and political issues is also essential. We have learned that building relationships, gaining trust, using clear, simple and concise writing, as well as knowing the hierarchical structure for signing off contracts are all essential.

Context

by Tanya Marchant

Understanding the context of a health programme is important in interpreting evaluation findings and in considering the external validity for other settings.

Through a structured, consultative process, IDEAS identified contextual factors and compiled evidence on them through desk reviews, secondary data extraction and key informant interviews. Collecting evidence on context was resource intensive. We were limited by data being unavailable for precise areas and time periods. However, the use of contextual evidence remained an important qualitative tool in the interpretation of findings.

Knowledge Summaries

by Bilal Avan

The Partnership for Maternal, Newborn & Child Health[7] (PMNCH) includes over 650 international organisations. PMNCH advocates key decision-makers worldwide to ensure that reproductive, maternal, newborn and child health is kept on the development agenda.

Knowledge Summaries are among PMNCH-branded products that support this advocacy work, and aim to synthesise scientific evidence in a concise format.

During 2013–14, IDEAS was commissioned to produce seven Knowledge Summaries for PMNCH. We developed a systematic and standardised process, drawing on engagement with the global maternal, newborn and child health community. The Knowledge Summaries were circulated widely, and translated into other languages. We conducted evaluation research on the Knowledge Summaries to review their development process, find their reach and use, and consider how their relevance could be improved.

6 Huffington Post 2014 accessed 19 June 2017. www.huffingtonpost.com/jennifer-james/25-leading-tweeters-on-ma_b_4714060.html

7 www.pmnch.org

Harmonising indicators

by Tanya Marchant

Data are a powerful tool for performance management of programmes and the IDEAS project worked with partners to synthesise maternal and newborn evidence from diverse settings and over time.

Initially this activity was hampered by differences in partners' indicator definitions. In the absence of global guidance for the measurement of maternal and newborn indicators, IDEAS reviewed multiple guidance documents and compiled a compendium of standardised indicator definitions from pregnancy to newborn periods. Working with partners to harmonise indicator definitions within existing measurement plans has enhanced the potential to track progress.

What are the innovations?

by Krystyna Makowiecka

The IDEAS project's first learning question seems simple: describe 57 diverse innovations put in place by nine implementation partners working in India, Nigeria and Ethiopia.

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We developed a structured and rigorous approach to this work, which we termed "characterising" the innovations. Working closely with each implementation partner, we started by developing a framework of basic questions about each innovation. We asked what innovations had been implemented, their purpose, geographical scope and timing; what changes in interactions between families and front-line workers were expected as a result; and in turn how life-saving intervention coverage was expected to change.

Using this framework we described all 57 implementation partner innovations, then collated the data for a bigger picture across all innovations. To capture changes over time, we repeated this on an annual basis.

We developed a typology for the innovations, classifying them first as focussed to the community or to front-line workers. Within these categories we further split innovations by what they aimed to enhance: awareness and positive actions in the community; community structures; front-line worker capacity or motivation; job-aids; infrastructure; or health systems operation. When collating the results for the bigger picture, we mapped innovations by type and by geography, showing their anticipated combined effect.

Figure: The table opposite shows innovations put in place by the Society for Family Health in Nigeria in 2013 and 2016, according to the typology and showing changes over time.

Q1. What are the innovations?

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

Innovations by the Society for Family Health in Nigeria in 2013 and 2016

Innovation type	2013	2016
Community-focussed		
Awareness or behaviour change	– Mass media event – Train and deploy community volunteers	– Mass media event – Village Health Worker training, equipping and deployment
Community structures	– Emergency Transport Scheme	– Emergency transport to facilities – Forum of mothers-in-law – Forum of male community members and religious leaders – Ward Development Committee – Local Government Area Maternal and Newborn Health Steering Committee
Front-line worker focussed		
Capacity-strengthening	– Train and deploy community volunteers	– Village Health Worker training and deployment
Motivation	– Financial incentives	– Financial incentives for continuum of care including appropriate referral by Village Health Workers
Job-aids	– Front-line workers' toolkit	
Infrastructure	– Call Centre	
Operational enhancement	– Map service users and providers – Enhanced supply of clean delivery kits	– Enhance supplies in primary care facilities – Access to cheaper clean delivery kits – Village Health Worker linkage with facilities

> "...we mapped innovations by type and by geography, showing their anticipated combined effect."

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Do innovations enhance interactions and increase life-saving intervention coverage? If so, how and at what cost?

by Tanya Marchant

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IDEAS' work on interactions between families and frontline workers and coverage of life-saving interventions for mothers and newborns was conducted between 2012 and 2015. This research was done in areas where foundation-funded implementation partners were working in Ethiopia, Nigeria and India. Specifically, in Ethiopia, this was in the four regions where John Snow Inc.'s L10K project was working; in Gombe State, Nigeria, where a Society for Family Health project was implemented, and in Uttar Pradesh, India, in six districts where the Uttar Pradesh Community Mobilization Project was operating.

In 2012, in each geography, we conducted a baseline survey of households and resident women with a recent birth, primary health facilities providing care to women and newborns, and front-line health workers. Three years later, in 2015, the surveys were repeated in the same communities. In Ethiopia we collected data in both intervention and comparison areas for a difference-in-differences analysis. In Gombe State we used a before-and-after design, collecting a representative sample of data across the state. In Uttar Pradesh we collected data in pre-defined intervention and comparison areas, but changes to implementation plans meant that the final analysis represented before-and-after change.

In Ethiopia, large-scale changes were observed in both intervention and comparison areas. By 2015 in intervention areas, 50% (95% confidence interval 41–59) of women had at least one antenatal care visit with a skilled provider, rising from 32% (22–44) in 2012; 39% (32–47) of women had the recommended four antenatal visits, rising from 22% (14–33). A skilled birth attendant attended 45% (35–55) of women at birth compared to 16% (10–26) in 2012. Statistical analysis showed that these differences were unlikely to be due to chance. However, coverage of postnatal checks for the mother and the newborn remained under 5%.

In Gombe State, there was no evidence of change in the frequency of routine interactions between families and front-line workers with 60% of women having at least one antenatal care visit, 29% delivering in a health facility, and 7% reporting a postnatal visit for their newborn. The content of routine antenatal care improved, as did some targeted life-saving interventions that relied on behaviour change by carers. For example, clean cord care increased from 28% (20–36) to 46% (42–50), and delayed bathing increased from 11% (7–15) to 21% (17–26). However, there was no evidence that the quality of delivery or postnatal care improved. Inequities in access persisted, with women in the poorest households consistently having the poorest health care.

In the six districts of Uttar Pradesh coverage of at least one antenatal care visit with a skilled provider increased from 63% (57–68) to 76% (73–79), and coverage of facility delivery was already high in the study area, at 76% in 2012 and 81% in 2015. Postnatal care for the mother within two days of birth increased from 54% (48–59) to 63% (58–67), but postnatal care for the newborn remained low, at 15% in 2015. Some interventions were already reported to have almost universal coverage in 2012 (for example hand washing with soap and use of gloves by birth attendants), while clean cord care and initiation of breastfeeding within one hour of birth remained constant at approximately 50%. There was evidence of a change in behaviour for immediate drying of the newborn from 0% in 2012 to 13% of in 2015.

Overall, these results demonstrated some important gains across focus geographies in the care provided to mothers and newborns. However, a consistent finding in all three settings was that newborn health indicators showed the least improvement. Addressing newborn health issues is an urgent priority.

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Q2. Do innovations enhance interactions and increase life saving intervention coverage? If so, how and at what cost?

How does change happen?

by Zelee Hill

Using qualitative methods, we explored how front-line health workers influenced the place of delivery and newborn care practices. In Ethiopia, we found that changes in newborn care practices were driven by:

- Increased knowledge: community health worker networks allowed message penetration
- Saturation of messages: advice came from multiple sources increasing credibility and coverage
- Wanting to be modern: behaviours were new and viewed as modern. Traditional practices were considered outdated, harmful and undesirable
- Trust and power dynamics: families trusted the advice and felt they should obey the front-line health worker. Knowing the benefits of a behaviour was not necessary for behaviour change.
- Improved efficacy: increased knowledge gave families the power to oppose contrary views
- Increased facility deliveries: facilities were an important source of information, and were responsible for carrying out behaviours such as wrapping the baby and early breast-feeding.

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Economic model

by Lindsay Mangham-Jefferies and Joanna Schellenberg

We developed a generic economic model that can be used to simulate the cost-effectiveness of community-based innovations to improve maternal and newborn health.

The aim of the model is to produce a tool that can be used to estimate cost-effectiveness of wide-ranging innovations and inform funding decisions by identifying priorities for future investment.

Inequities

by Tanya Marchant

Community-based innovations were designed to be pro-poor, with no family left behind.

We did an equity analysis of the change in coverage for a sub-set of nine indicators[8] assessed in all three geographies. Where changes did occur these were almost exclusively equitable: change was observed for all socio-economic groups. However, coverage was no higher for the poorest than the least poor in either survey.

8 At least 4 antenatal care contacts; institutional delivery; hand washing with soap and use of gloves by the birth attendant; hygienic cord care; initiation of breastfeeding within one hour of birth; delayed bathing beyond the first 24 hours of life; postnatal care for the mother and for the baby

Sample sizes

by Elizabeth Allen

IDEAS provided interesting insights into the complexities of sample size estimation in this context. The difference-in-differences approach to evaluating change that may be attributed to innovations, above and beyond any temporal changes occurring in the setting, was limited by large scale changes to programme delivery in both intervention and comparison areas – either by government or other actors.

Such shifts had important implications for the adequacy of sample size calculations that were based on pre-specified differences between intervention and comparison areas with design effects used to account for clustering. However, many analyses were based around difference within clusters and, whilst allowing for correlation with baseline measures in sample size calculations for studies conducted at an individual level is common, there is scope for further exploring how to incorporate repeated measures at a cluster level into sample size calculations. Allowing for these correlations when estimating sample sizes would provide additional power and enable the detection of smaller effects, which would mitigate the limitations outlined above.

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Bridging gaps in measurement for maternal and newborn health

by Tanya Marchant

Throughout IDEAS, important gaps in measurement approaches for maternal and newborn health became clear.[9]

One area developed by IDEAS was to add dimensions of quality of care to measures of contacts with health services, to generate the effective coverage of contacts.[10] Adding content to contacts can present a more accurate picture of the potential for health gain currently being achieved, and help to identify bottlenecks in the provision of high quality, life-saving care. Improving measurement approaches is a core component of the IDEAS Phase II grant.

9 Marchant T, et al, *Journal of Global Health*, 2016. http://researchonline.lshtm.ac.uk/2728925

10 Marchant T, et al, *PLoS ONE*, 2015. http://researchonline.lshtm.ac.uk/2173697

How and why does scale-up happen?

by Neil Spicer

We asked what actions help, as well as the contextual factors that influence, efforts to catalyse the scale-up of donor-funded maternal and newborn health innovations. Two rounds of qualitative, in-depth interviews enabled us to explore these questions: 150 in 2012–13 and 71 in 2014–15 with government officials, implementers, development partners and community health workers. Findings from the first round are published in peer-reviewed journal articles.[11]

For our second round, we selected three successfully scaled innovations as case studies:

- mSehat in Uttar Pradesh: a smart phone 'app' for community health workers implemented in five districts by a state government-funded partnership, influenced by foundation-funded implementation partners.
- Emergency Transport Scheme in Adamawa, northeast Nigeria: a foundation-funded innovation to incentivise taxi drivers to transport women to facilities for childbirth in Gombe State that was scaled to Adamawa with funding from the UK charity Comic Relief.
- Newborn sepsis case-management in Ethiopia: an innovation allowing community health workers to administer antibiotics to newborns, scaled as part of the government's flagship Community-Based Newborn Care programme.

Based on these case studies we identified six critical actions that foundation-funded implementation partners adopted to catalyse innovation scale-up:

1. Designed for scalability. The innovations were effective, with observable effects and impacts; simple, being easily used by health workers and requiring low financial and human resource inputs; acceptable culturally, met health workers' needs, and adaptable across diverse geographic contexts; and aligned, in that they fitted with and built on country health policies and systems.
2. Built up evidence. The implementers generated multiple forms of evidence including quantitative impact data, qualitative operational lessons and synthesising secondary evidence which informed government decisions about scale-up and offered valuable lessons on how to implement innovations at scale.
3. Harnessed the power of individuals. The implementers had the backing of well-connected government officials and development partners who were instrumental to scale-up.
4. Prepared and responsive. The implementers assessed policy, health systems and sociocultural contexts to prepare for scale-up. They were also responsive to policy change, and waited to act until there was political support and health systems readiness.
5. Ensured continuity. The implementers supported governments in the transition to scale through contributing to developing and implementing the scaled innovations; contributing operational evidence and project resources; and harnessing the experience of project staff.
6. Embraced aid effectiveness principles. The implementers ensured that their innovations had strong country ownership; that their work aligned with country priorities, programmes and targets; and there was strong harmonisation with other implementers and donors including synchronising communication with government and exchanging learning.

We recommend that donors, including the foundation:

1. Support implementers to generate strong evidence to assist government decision making and implementation at scale.
2. Incentivise and support implementers to integrate scale-up within their project plans, while allowing flexibility to respond to policy change.
3. Enable implementers to assist government through the transition to scale period.
4. Embrace government-led donor coordination mechanisms to foster country ownership, alignment and harmonisation.

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 area

11 Spicer et al, *Social Science and Medicine*, 2014. http://researchonline.lshtm.ac.uk/2004620; Spicer et al, *Globalisation and Health*, 2016. http://researchonline.lshtm.ac.uk/3148607

Aid effectiveness

by Deepthi Wickremasinghe

The internationally agreed aid effectiveness principles can help to create a suitable environment for scaling up maternal and newborn health innovations.

These principles include government ownership of externally funded innovations, aligning innovations with national health policies and priorities, coordinating donor and implementer activities and encouraging trust, through sharing information between stakeholders and creating transparency and accountability.

Added to this is the need for donor funding strategies that enable governments to make long-term commitments to take innovations to scale and make them sustainable. Governments are also encouraged to tap into civil society capacity in order to meet the health needs of the population.

Social network analysis

by Kate Sabot

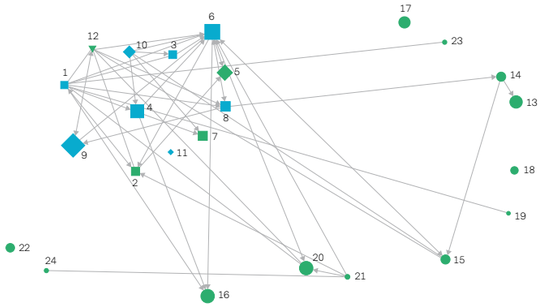
Professional advice networks could be used to improve front-line health worker practices. We used social network analysis to study professional advice networks of 160 healthcare workers in eight primary health care units across four regions of Ethiopia.

We found that there were informal, inter-and intra-cadre advice networks, with varying degrees of utilisation. Advice networks for antenatal or maternity care were used more than advice networks for postnatal or newborn care (see figure below).

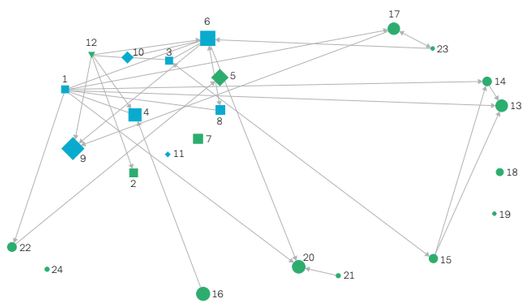
Primary health care unit staff preferred advice from their peers, particularly midwives, but networks were not limited to these or supervisors. Knowledge mattered more than experience in determining advisors. Mechanisms were primarily in person or over the phone. There were few barriers to seeking advice.

Figure: Advice networks for maternity and postnatal care for one primary health care unit in Ethiopia (dichotomised network sociograms).

Maternity Care Advice Exchange



Postnatal Care Advice Exchange



Legend

Position = Facility (grouped by facility)

Colour = Gender
Green = Female
Blue = Male

Shape Size = years of experience

Shape = Cadre
◆ = Health Officer
■ = Nurse
▲ = Midwife
● = Health Extension Worker

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

by Bilal Avan

To study the extent to which scaled-up innovations affect the coverage of life-saving interventions, we used a series of novel methods and techniques.[12]

Initially, we were interested in understanding the use of evidence-based, collaborative decision-making for innovations to be implemented sustainably at the district level.

Through exploratory research in Ethiopia, Nigeria and India, we found multiple and diverse health stakeholders at the district level were lacking formal coordination; that although the information system is pivotal to service improvement, it lacks connectedness; and that uncertainty usually prevails at the district level, diminishing the confidence of district health administrators to engage in formal decision-making and planning.[13]

We conducted a systematic literature review,[14] and found limited and sketchy evidence of the use of health data for decision-making at the district level in low and middle income countries, and that no standardised processes or structured tools were available to facilitate decision-making.

Scaling up an innovation is usually an organic process rather than being pre-defined. We developed the "implementation pathway" approach which showed how a specific innovation is implemented in the broader contexts of the implementation partner project, the health system and the socio-cultural background. The pathway analysis (see the figure on page 23) provided a structured layout of components to describe an innovation from execution to the end-user, and how this links to coverage of evidence-based, life-saving interventions and health outcomes.

We used both conventional and novel methods to study the extent to which scaled-up innovations affect coverage of life-saving interventions. In Ethiopia, we used a conventional approach to evaluate the scale-up of community-based newborn care by studying changes in intervention and comparison areas through surveys and qualitative enquiry (see panel). In India, we developed a novel method in the form of the Data Informed Platform for Health (DIPH), which has an in-built process for assessing the implementation strength of scaled-up innovations (see panel). These two strands of research are ongoing in the second phase of IDEAS, from 2017.

Evaluation of community-based newborn care in Ethiopia

by Della Berhanu

Foundation-funded research[15] showed that in a few districts of Ethiopia, front-line health workers could identify and treat newborns with signs of possible severe bacterial infection using antibiotics. In 2014 this evidence contributed to scaling up the approach through the Government's Community Based Newborn Care programme (CBNC).

IDEAS' evaluation, requested by the Ministry of Health, will estimate the effect of the programme on coverage of life saving interventions. A 2013 baseline survey included household, health worker and facility level assessments. A 2015 midline quality of care assessment used novel methods to assess quality, including observation of community health worker consultations for sick young infants, followed by re-examination. An endline survey is scheduled for late 2017.

12 Note that IDEAS studies were not designed to assess the relationship between scaled-up innovations and survival empirically.
13 Avan et al *Health Policy and Planning*. 2016. http://researchonline.lshtm.ac.uk/2837711
14 Wickremasinghe et al. *Health Policy and Planning*, 2016. http://researchonline.lshtm.ac.uk/2837728
15 Community-Based Intervention for Newborns (COMBINE) study, led by Save the Children.

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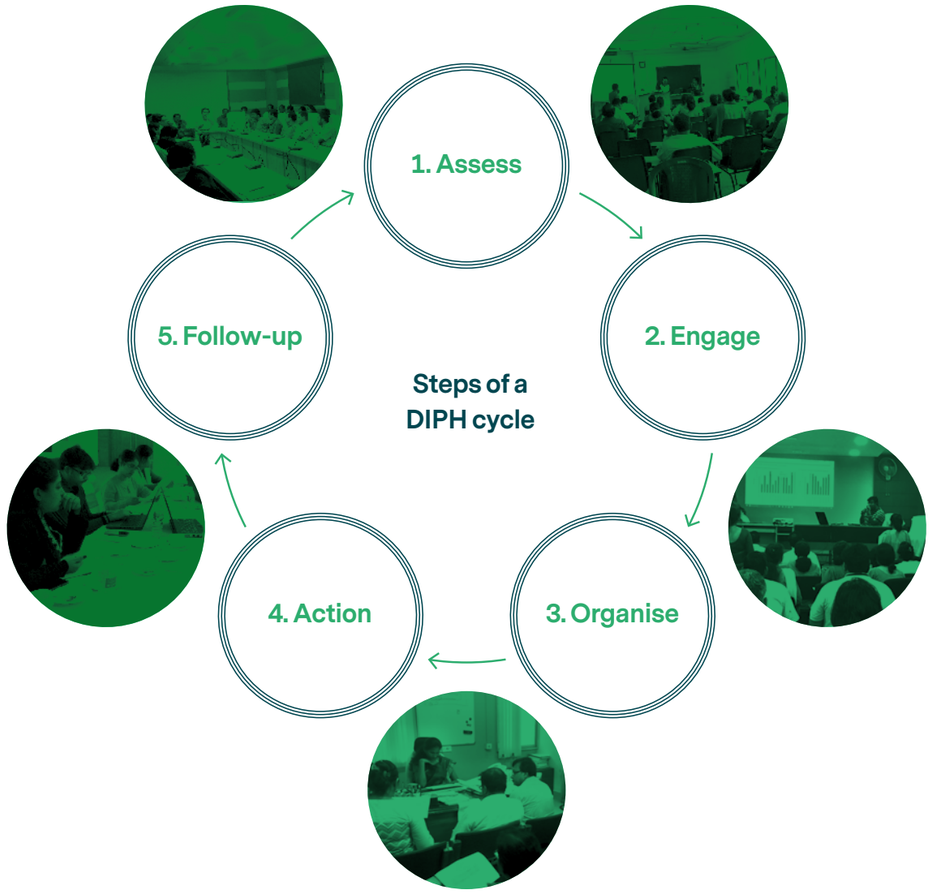
Data-Informed Platform for Health

by Bilal Avan

The 'Data-Informed Platform for Health' (DIPH) guides coordination using a framework: bringing together key district-level data from public and private health sectors on inputs and processes that could influence maternal and newborn health. The concept has its roots in the 'National Evaluation Platform' approach.[16] The dual aims are to facilitate the use of local data from existing programmatic activities in decision-making, priority-setting and planning at the district level; and to promote the role of such data in appraising health services and programmes, comparing implementation strength across districts, and between the district and state levels.

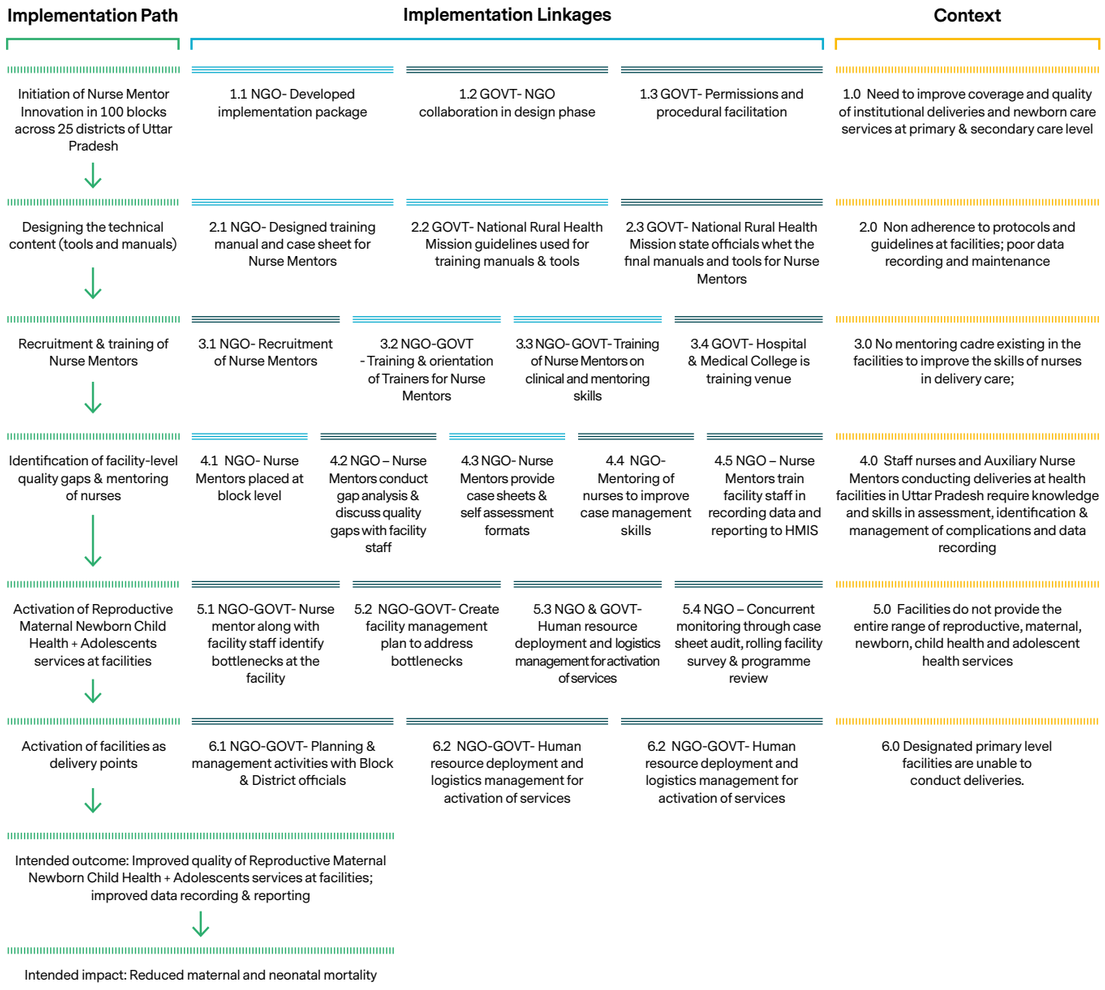
The DIPH approach brings government and non-government service providers to a common forum on a regular basis, sharing data in a systematic way. Quarterly cycles are based on a series of structured interactions among core team members, following five steps (see figure). We developed a digital app which includes job-aids, guides and training material. A prototype phase in three districts of West Bengal State, India started in early 2016. By the end of 2017 we expect to start scale-up through the state of West Bengal, and to begin adaptation in selected districts in Ethiopia.



16 Victora et al, Lancet, 2010. http://dx.doi.org/10.1016/S0140-6736(10)60810-0
17 Hargreaves et al, *Health Policy and Planning*, 2016. http://researchonline.lshtm.ac.uk/2535219.
18 The term "implementation strength" has been used interchangeably with "implementation intensity", and can be defined as a quantitative measure of the amount of input to the implementation of a programme.

Implementation pathway of Nurse Mentor innovation

Uttar Pradesh



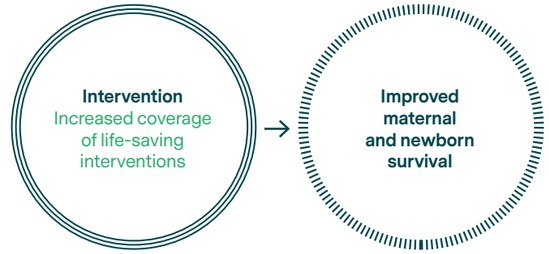
Implementation strength

by Joanna Schellenberg

In a published paper[17], we reviewed the role of implementation strength[18] in the evaluation of strategies for evidence-based, low-cost interventions to reach those in need, exploring the association between implementation strength and public health gains.

The paper used examples of implementation strength in evaluation in low-income settings, which each involved large-scale implementation, addressed important public health topics, and used designs without comparison areas. We conclude that implementation strength can strengthen pragmatic impact evaluation, and outline five key aspects of developing an implementation strength measure.[18]

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



Outputs

Compiled by Deepthi Wickremasinghe

We have

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

45 Blogs
http://ideas.lshtm.ac.uk/blog

Measurement, Learning and Evaluation for Maternal and Newborn Health #HSR2016: Perspectives from IDEAS
Rhys Williams, 2017

Learning in maternal and newborn health – 5 essential issues! #HSR2016
Professor Joanna Schellenberg, 2016

Scaling Up Innovations in Maternal and Newborn Health: 5 Lessons Learned
Neil Spicer, 2016

Avoiding pregnant husbands and 30kg newborns – making electronic data collection work
Keith Tomlin, 2016

The future of IDEAS in maternal and newborn health
Rhys Williams, 2016

How can we get life-saving interventions to women and babies? #HSR2016
Rhys Williams, 2016

The role of health markets in managing antibiotic use and addressing antimicrobial resistance
Meenakshi Gautham, 2016

Cross-sector collaboration is needed to achieve the Sustainable Development Goals: Global Maternal Newborn Health Conference
Deepthi Wickremasinghe, 2015

Rough roads and rivers: getting institutional delivery services to women in rural West Bengal
Neil Spicer, 2015

How can data improve implementation?
Keith Tomlin, 2015

One house, too doors: Making sure survey numbers represent the people
Nasir Umar, 2015

Measuring content of contacts reveals missed opportunities to deliver quality maternal and newborn heath care
Tanya Marchant, 2015

Integrating maternal and newborn car at the 68th World Health Assembly
Agnes Becker, 2015

Using the Research Impact Framework as a tool for reflection
Shirine Voller, 2015

Reproductive Health Rights: Collateral damage in the face of Ebola?
Kate Sabot, 2015

From clean birth kits to call centres: making sense of diverse efforts for a common purpose
Krystyna Makowiecka, 2015

Blogging for impact
Agnes Becker, 2015

Can one person have all the skills to do research uptake?
Agnes Becker, 2015

Our contribution to Bill and Melinda Gates' big bet
Agnes Becker, 2015

How can you get your health innovation to benefit more women and babies in Ethiopia, Nigeria and India?
Neil Spicer, 2014

Upheaval, disasters and disease make it easy to forget the thousands in North eastern Nigeria born too soon. Let's not! Let's count every newborn.
Yashua Alkali Hamza, 2014

Sharing birth data in an Indian private clinic is not what I expected
Meenakshi Gautham, 2014

New hope for newborns
Agnes Becker, 2014

Will your efforts get the health outcomes you want?
Shirine Voller, 2014

Northeast Nigeria myths and superstitions pose more barriers to health of women and babies than conflict
Nasir Umar, 2014

Can measurement inspire change for women and children?
Agnes Becker, 2014

Child-bearing women deserve respectful and equitable healthcare – a theme for the post-MDG agenda
Iram Ejaz Hashmi, 2014

Harnessing the power of open data to improve maternal and newborn health
John Ballenot (PATH), 2014

Gates "myths" strike a chord for IDEAS
Shirine Voller, 2014

Connecting for a cause: how NGOs link with the health system to reach their goals
Aradhana Srivastava, 2013

Leadership in maternal and newborn health: Fatima Muhammad, Nigeria
Agnes Becker, 2013

Leadership in maternal and newborn health: Dr Yashua Alkali Hamza, Nigeria
Agnes Becker, 2013

Why harmonise indicators?
Krystyna Makowiecka, 2013

Integrated services to improve maternal and child health
Katherine Theiss-Nyland, 2013

ICTs in maternal and child health poised for scale up in Uttar Pradesh, India
Meenakshi Gautham, 2013

Lessons from large-scale programmes: the Sure Start experience in Uttar Pradesh
Aradhana Srivastava, 2013

Research in action: interning with IDEAS in Ethiopia
Anne Narayan, 2013

Breaking the cycle: Can human rights improve accountability to health commitments?
Aradhana Srivastava, 2013

Leadership in maternal & newborn health: Dr Tewabech Bishaw
Agnes Becker, 2012

Leadership in maternal & newborn health: Dr Shershah Syed
Agnes Becker, 2012

Using data to improve healthcare in Ethiopia
Della Berhanu, 2012

It takes all of us: Successful completion of IDEAS surveys in North East Nigeria through teamwork
Tanya Marchant, 2012

A paradigm shift: from healthcare for the elite to healthcare for all
Meenakshi Gautham, 2012

Sun, sea and scale-up in San Diego
Neil Spicer, 2012

Meeting new and greeting old partners in Uttar Pradesh
Krystyna Makowiecka, 2012

10 Research briefs

The Data-Informed Platform for Health: Meeting the challenge of local decision-making for maternal and newborn health in West Bengal, India
Sanghita Bhattacharyya, 2017
researchonline.lshtm.ac.uk/id/eprint/3962462

The Pathway to Improved Maternal and Newborn Health Outcomes: Use of data for maternal and newborn health in Gombe State, Nigeria.
Krystyna Makowiecka, 2016
researchonline.lshtm.ac.uk/3172428/

Summary of IDEAS maternal and newborn household and facility surveys in Ethiopia for local health officials
Tanya Marchant, 2016
researchonline.lshtm.ac.uk/2508002/

Catalysing scale-up of maternal and newborn health innovations in Ethiopia
Neil Spicer, 2016
researchonline.lshtm.ac.uk/2551368/

Catalysing scale-up of maternal and newborn health innovations: lessons from a case study in North-Eastern Nigeria.
Neil Spicer, 2016
researchonline.lshtm.ac.uk/2508035/

A content analysis of district level health data in Uttar Pradesh, India
Bilal Avan, 2014
researchonline.lshtm.ac.uk/1917772/

What strategies are cost-effective in improving health care for women and their newborns?
Lindsay Mangham-Jefferies, 2014
researchonline.lshtm.ac.uk/1883876/

How to catalyse scale-up of maternal and newborn innovations in Ethiopia
Neil Spicer, 2013
researchonline.lshtm.ac.uk/1126642/

How to catalyse scale-up of maternal and newborn innovations in Uttar Pradesh, India
Neil Spicer, 2013
researchonline.lshtm.ac.uk/1126641/

How to catalyse scale-up of maternal and newborn innovations in north-eastern Nigeria
Neil Spicer, 2013
researchonline.lshtm.ac.uk/1126643/

27 Reports

DIPH Monitoring Report – South 24 Parganas – Cycle 3
Bilal Avan, 2017
researchonline.lshtm.ac.uk/3962299/

DIPH Monitoring Report – North 24 Parganas – Cycle 3
Bilal Avan, 2017
researchonline.lshtm.ac.uk/id/eprint/3962298

DIPH Monitoring Report – Diamond Harbour – Cycle 3
Bilal Avan, 2017
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DIPH Monitoring Report – North 24 Parganas – Cycle 2
Bilal Avan, 2017
researchonline.lshtm.ac.uk/id/eprint/3962472

DIPH Monitoring Report – South 24 Parganas – Cycle 2
Bilal Avan, 2017
researchonline.lshtm.ac.uk/id/eprint/3962443

DIPH Monitoring Report – Diamond Harbour – Cycle 2
Bilal Avan, 2017
researchonline.lshtm.ac.uk/id/eprint/3962468

DIPH Monitoring Report – South 24 Parganas – Cycle 1
Bilal Avan, 2017
researchonline.lshtm.ac.uk/3962297/

DIPH Monitoring Report – North 24 Parganas – Cycle 1
Bilal Avan, 2017
researchonline.lshtm.ac.uk/id/eprint/3962456

DIPH Monitoring Report – Diamond Harbour – Cycle 1
Bilal Avan, 2017
researchonline.lshtm.ac.uk/id/eprint/3962480

Community based newborn care in Ethiopia: quality of CBNC programme assessment midline evaluation report
Della Berhanu, 2017
researchonline.lshtm.ac.uk/3962288/

Community based newborn care in Ethiopia: Executive summary for the quality of CBNC programme assessment midline evaluation report
Della Berhanu, 2017
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Changes in maternal and newborn health care in Ethiopia
Tanya Marchant, 2016
researchonline.lshtm.ac.uk/2572488/

Changes in maternal and newborn health care in Gombe State, Nigeria
Tanya Marchant, 2016
researchonline.lshtm.ac.uk/2550772/

Changes in maternal and newborn health care in Uttar Pradesh, India
Tanya Marchant, 2016
researchonline.lshtm.ac.uk/2550774/

PMNCH Knowledge Summaries: improving their production process, reach and use
Agnes Becker, 2015
researchonline.lshtm.ac.uk/2115600/

Implementation pathway report: Uttar Pradesh Technical Support Unit
Bilal Avan, 2015
researchonline.lshtm.ac.uk/2248350/

Implementation pathway report: Community Resource Person
Bilal Avan, 2015
researchonline.lshtm.ac.uk/2115602/

Community Based Newborn Care Baseline Survey Report Ethiopia
Della Berhanu, 2014
researchonline.lshtm.ac.uk/2005438/

Dissemination activity and impact of maternal and newborn health projects in Ethiopia, India and Nigeria
Shirine Voller, 2014
researchonline.lshtm.ac.uk/1917775/

Engaging the public & private sectors in data sharing to improve maternal and newborn health in Uttar Pradesh, India
Meenakshi Gautham, 2013
researchonline.lshtm.ac.uk/1917776/

Maternal and newborn health care. Baseline findings from Ethiopia
Tanya Marchant, 2013
researchonline.lshtm.ac.uk/1126640/

Maternal and newborn health care. Baseline findings from Gombe State, Nigeria
Tanya Marchant, 2013
researchonline.lshtm.ac.uk/1126638/

Maternal and newborn health care. Baseline findings from Uttar Pradesh, India
Tanya Marchant, 2013
researchonline.lshtm.ac.uk/1126639/

Data Informed Platform for Health Feasibility Study Report, Amhara and Oromia Regions, Ethiopia
Bilal Avan, 2012
researchonline.lshtm.ac.uk/1229912/

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Bilal Avan, 2012
researchonline.lshtm.ac.uk/705619/

Data Informed Platform for HealthFeasibility Study Report, Uttar Pradesh, India
Bilal Avan, 2012
researchonline.lshtm.ac.uk/705621/

Measuring implementation strength: Literature review draft report 2012
Bilal Avan, 2012
http://researchonline.lshtm.ac.uk/1126637/

19 Journal articles

The stars seem aligned': a qualitative study to understand the effects of context on scale-up of maternal and newborn health innovations in Ethiopia, India and Nigeria.
Neil Spicer, 2016
researchonline.lshtm.ac.uk/3148607/

Paper series: District decision-making for health in low-income settings: -Commentary-District decision-making to strengthen maternal, newborn and child health services in low-income settings
Kara Hanson & Joanna Schellenberg, 2016
researchonline.lshtm.ac.uk/2837722/

-District decision-making for health in low-income settings: a feasibility study of a data-informed platform for health in India, Nigeria and Ethiopia
Bilal Avan, 2016
researchonline.lshtm.ac.uk/2837711/

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researchonline.lshtm.ac.uk/2344716/

Adding Content to Contacts: Measurement of High Quality Contacts for Maternal and Newborn Health in Ethiopia, North East Nigeria, and Uttar Pradesh, India
Tanya Marchant, 2015
researchonline.lshtm.ac.uk/2173697/

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Mihretab Salasibew, 2015
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Deepthi Wickremasinghe, 2015
researchonline.lshtm.ac.uk/2293127/

How do health extension workers in Ethiopia allocate their time?
Lindsay Mangham-Jefferies, 2014
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Cost-effectiveness of strategies to improve the utilization and provision of maternal and newborn health care in low-income and lower-middle-income countries: a systematic review
Lindsay Mangham-Jefferies, 2014
researchonline.lshtm.ac.uk/1846442/

A qualitative study exploring newborn care behaviours after home births in rural Ethiopia: implications for adoption of essential interventions for saving newborn lives
Mihretab Salasibew, 2014
researchonline.lshtm.ac.uk/2030918/

Measurement of breastfeeding initiation: Ethiopian mothers' perception about survey questions assessing early initiation of breastfeeding
Mihretab Salasibew, 2014
researchonline.lshtm.ac.uk/1911620/

'Scaling-up is a craft not a science': Catalysing scale-up of health innovations in Ethiopia, India and Nigeria.
Neil Spicer, 2014
researchonline.lshtm.ac.uk/2004620/

A strategy for reducing maternal and newborn deaths by 2015 and beyond
GL Darmstadt et al, 2013
researchonline.lshtm.ac.uk/1386899/

Measuring skilled attendance at birth using linked household, health facility, and health worker surveys in Ethiopia, northeast Nigeria, and Uttar Pradesh, India
Tanya Marchant, 2013
researchonline.lshtm.ac.uk/1126660/

17 Data sets (with accompanying documentation on Data Compass)

Change in maternal and newborn health care. Data from two cross-sectional surveys in Gombe State, North-East Nigeria, 2012 and 2015
Tanya Marchant, 2016
datacompass.lshtm.ac.uk/315/

Change in maternal and newborn health care. Report from two cross-sectional surveys in six districts of Uttar Pradesh, India, 2012–15
Tanya Marchant, 2016
datacompass.lshtm.ac.uk/246/

Change in maternal and newborn health care. Data from two cross-sectional surveys in Ethiopia, 2012 and 2015.
Tanya Marchant, 2016
datacompass.lshtm.ac.uk/317/

Qualitative data for the Data Informed Platform for Health formative study in West Bengal
Sanghita Bhattacharyya, 2015
datacompass.lshtm.ac.uk/275/

Private sector health data sharing study in West Bengal
Meenakshi Gautham, 2015
datacompass.lshtm.ac.uk/266/

Study of behaviour change in maternal and newborn care in Ethiopia
Zelee Hill, 2015
datacompass.lshtm.ac.uk/318/

Study of behaviour change in maternal and newborn care in Northeast Nigeria
Zelee Hill, 2015
datacompass.lshtm.ac.uk/319/

Scaling-up innovations to improve maternal and newborn health – Nigeria case study resources
Neil Spicer, 2015
datacompass.lshtm.ac.uk/285/

Scaling-up innovations to improve maternal and newborn health – Uttar Pradesh case study resources.
Neil Spicer, 2015
datacompass.lshtm.ac.uk/286/

Interview guide and survey design documents for grantee dissemination activity
Shirine Voller, 2015
datacompass.lshtm.ac.uk/255/

Community based newborn care evaluation: first round qualitative study field notes
Della Berhanu, 2014
datacompass.lshtm.ac.uk/302/

Private sector health data sharing study in Uttar Pradesh
Meenakshi Gautham, 2014
datacompass.lshtm.ac.uk/274/

Coverage and Content of Health Contacts for Mothers and Newborns in Uttar Pradesh, Ethiopia and Nigeria, 2012
Tanya Marchant, 2014
datacompass.lshtm.ac.uk/12/

Scaling-up innovations to improve maternal and newborn health – Ethiopia case study resources
Neil Spicer, 2014
datacompass.lshtm.ac.uk/284/

Study of the scale-up of innovations to improve maternal and newborn health
Neil Spicer, 2013
datacompass.lshtm.ac.uk/256/

Data Informed Platform for Health feasibility study in Uttar Pradesh
Meenakshi Gautham, 2013
datacompass.lshtm.ac.uk/325/

Feasibility study for a Data Informed Platform for Health in Ethiopia
Della Berhanu, 2012
datacompass.lshtm.ac.uk/375/

1 Research tool

Harmonised indicators across the continuum of care
Krystyna Makowiecka, 2013
researchonline.lshtm.ac.uk/1126644/

25 Presentations

Measurement, learning and evaluation for maternal and newborn health – IDEAS satellite session presentation at the Fourth Global Symposium on Health Systems Research (5 presentations)
Joanna Schellenberg, 2016
researchonline.lshtm.ac.uk/3172490/

Aid effectiveness principles for scale-up of innovations to improve maternal and newborn survival in Northeast Nigeria, Ethiopia and Uttar Pradesh State, in India
Deepthi Wickremasinghe, 2016
researchonline.lshtm.ac.uk/3201588/

How can multimedia help improve health services and systems? Photography as a research tool. IDEAS multimedia submission to the Fourth Global Symposium on Health Systems Research
Rhys Williams, 2016
researchonline.lshtm.ac.uk/3201585/

How Do Frontline Workers Provide the Four Cs of CBNC? Contact with newborns, Case identification, Care and Completion of treatment.
Della Berhanu, 2015
researchonline.lshtm.ac.uk/2965061/

District decision-making for health in low- and middle-income countries (5 presentations)
Bilal Avan, 2015
researchonline.lshtm.ac.uk/2331789/

Catalysing scale-up of maternal and newborn child health innovations: a qualitative study in Ethiopia, Uttar Pradesh, India and northeast Nigeria
Neil Spicer, 2015
researchonline.lshtm.ac.uk/2331788/

Measuring evidence synthesis output uptake by the women and children's health community: A case study of PMNCH Knowledge Summaries
Agnes Becker, 2015
researchonline.lshtm.ac.uk/2101928/

Catalysing scale-up of people-centred maternal and newborn health innovations within health systems: building a conceptual framework
Neil Spicer, 2014
researchonline.lshtm.ac.uk/1989301/

Impact evaluation of public health strategies in low and middle-income settings. Measuring implementation strength: why and how?
Joanna Schellenberg, 2014
researchonline.lshtm.ac.uk/2026585/

IDEAS Private Sector Study of Maternal Newborn Child Health Data Sharing in Uttar Pradesh, India
Meenakshi Gautham, 2014
researchonline.lshtm.ac.uk/1931459/

Measuring skilled attendance at birth using linked household, health facility, and health worker surveys in Ethiopia, North-East Nigeria, and Uttar Pradesh, India
Tanya Marchant, 2013
researchonline.lshtm.ac.uk/1126646/

The IDEAS Project: evaluating complexity in maternal and newborn health in Ethiopia, Nigeria and India
Joanna Schellenberg, 2013
researchonline.lshtm.ac.uk/1924269/

Catalysing the adoption and scale-up of innovative maternal and newborn health interventions within the health system of Uttar Pradesh, India: findings from a qualitative study
Neil Spicer, 2013
researchonline.lshtm.ac.uk/1924271/

Human Rights & Accountability panel presentation
Kate Sabot, 2013
researchonline.lshtm.ac.uk/1126647/

Strength of linkages between public and NGO sectors in India: A case study for potential engagement opportunities in Uttar Pradesh
Aradhana Srivastava, 2013
researchonline.lshtm.ac.uk/1924272/

Evidence to improve maternal and newborn health in Ethiopia, North-Eastern Nigeria and Uttar Pradesh, India
Joanna Schellenberg, 2012
researchonline.lshtm.ac.uk/1126674/

Knowledge into action: using research findings to inform policies in maternal and newborn health
Neil Spicer, 2012
researchonline.lshtm.ac.uk/1126649/

11 Posters

Socio-Economic Status or Caste? Inequities in Maternal and Newborn Health Care in Rural Uttar Pradesh, India
Meenakshi Gautham, 2016
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Mihretab Salasibew, 2015
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Lindsay Mangham-Jefferies, 2012
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5 Infographics

Scaling up maternal and newborn health interventions in Ethiopia
Rhys Williams, 2016
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Agnes Becker, 2014
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Rhys Williams
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How to get started with data visualisation
Agnes Becker, 2015
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Krystyna Makowiecka, 2015
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Recent research in maternal and newborn health: Indian community project results and Ethiopian frontline workers
Krystyna Makowiecka, 2015
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Neil Spicer, 2014
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Recent research in maternal and newborn health: Cost-effectiveness of health strategies
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Krystyna Makowiecka, 2014
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Krystyna Makowiecka, 2014
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Seminar: Strategies to improve health worker performance in low income settings – a systematic review
Alex Rowe, 2013
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Seminar: Evaluating MNCH programs at scale – Why is something so important so hard to do?
Jennifer Bryce, 2012
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8 Web seminars

How to undertake a literature review
Lindsay Mangham-Jefferies, 2013
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How to do a meta analysis
Elizabeth Allen, 2013
researchonline.lshtm.ac.uk/1917777/

How to write a research paper
Tanya Marchant, 2013
researchonline.lshtm.ac.uk/1917778/

Human rights & accountability
Kate Sabot, 2013
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Ensuring health services meet the needs of child brides
Katherine Theiss-Nyland, 2013
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Integrating maternal, newborn and child health programmes with immunisation schedules
Katherine Theiss-Nyland, 2013
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Behaviour change
Val Curtis, 2012
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Mobile technologies for health
Meenakshi Gautham, 2012
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5 Overview leaflets

Mechanisms of change
Rhys Williams, 2016
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Data driven action
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District level data for decision making
Rhys Williams, 2016
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7 Knowledge Summaries

KS 31: Maternal mental health: Why it matters and what countries with limited resources can do
Iram Ejaz, 2014
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Katherine Theiss-Nyland, 2014
researchonline.lshtm.ac.uk/1932421/

KS 27: Death reviews: maternal, perinatal and child
Boika Rechel, 2013
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KS 25: Integrating immunization and other services for women and children
Katherine Theiss-Nyland, 2013
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KS 23: Human Rights & Accountability
Kate Sabot, 2013
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KS 22: Reaching Child Brides
Katherine Theiss-Nyland, 2012
researchonline.lshtm.ac.uk/705616/

KS 20: Access to Family Planning
Kate Sabot, 2012
researchonline.lshtm.ac.uk/705615/

Preparing data for open access through a repository

by Emma Beaumont and Deepthi Wickremasinghe

Quantitative data from IDEAS was made open access using a curated digital repository, LSHTM Data Compass.[19] All variables were named and labelled and participant identifiers removed, including names, GPS coordinates and lower level location information such as village name.

Data were stored in DTA (Stata version 12) and CSV format to maximise accessibility, along with a codebook, questionnaires in all translated languages and a description of the data and how they were collected. Decisions on the level of open access were also needed. A small number of variables in the quantitative datasets are considered sensitive and although the risk of re-identification is considered low, access permissions have been set to ensure data are used for research purposes only.

Qualitative data from IDEAS cannot be open access because of sensitive personal information, or because the small number of participants, well known in their field, means it is not possible to anonymise the field notes sufficiently to protect anonymity and comply with research ethics. For IDEAS' 11 qualitative studies, Data Compass includes study tools and documentation, accompanied by a description of the study.

19 http://datacompass.lshtm.ac.uk

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The IDEAS project aims to improve the health and survival of mothers and babies through generating evidence to inform policy and practice. Working in Ethiopia, north-east Nigeria and the state of Uttar Pradesh in India, IDEAS uses measurement, learning and evaluation to find out what works, why and how in maternal and newborn health programmes.

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