

Protocol for the IDEAS qualitative study of scalability and sustainability of maternal and newborn health innovations in northeast Nigeria, Ethiopia and Uttar Pradesh, India

Neil Spicer and Deepthi Wickremasinghe

January 2018

Background and rationale

This IDEAS sub-study will explore the sustainability of maternal and newborn health (MNH) innovations funded by the Bill & Melinda Gates Foundation (the foundation). We define **sustainability** as: the long-term implementation of a scaled health innovation as an integrated component of the existing local health system. Sustainability embraces multiple dimensions; these dimensions are listed below and captured in our conceptual framework (Figure 1). As the figure suggests our focus is on what is known as **‘technical sustainability’** – meaning an innovation that is sustainably implemented at scale; this study will identify and explore supply and demand side actions and conditions that enable technical sustainability to happen.

- **Political, financial and fiscal sustainability:** whether there are adequate ongoing financial resources to support an innovation in achieving its objectives and targets based on government funding - and therefore high-level political support - or private sector investment, local income generation or longer-term donor commitments;
- **Institutionalisation:** when an innovation becomes embedded within a host country’s health policies, systems and processes such as its legal, regulatory and budgetary frameworks, routine management information systems, logistics and supply chain systems, and human resources systems;
- **Organisational and programmatic sustainability:** the existence of supporting elements of the health system including a health workforce with sufficient capacity, adequate infrastructure and functioning management information systems, logistics and supply chain systems that underpin the sustainable delivery of an innovation;
- **Partners:** technical and financial support from development partners and their implementers;
- **Routinisation:** the willingness of health workers to adopt and continue to use innovations within their day-to-day practices in the longer term;
- **Social sustainability:** creating and maintaining demand among beneficiary communities for the innovation¹.

Value and justification

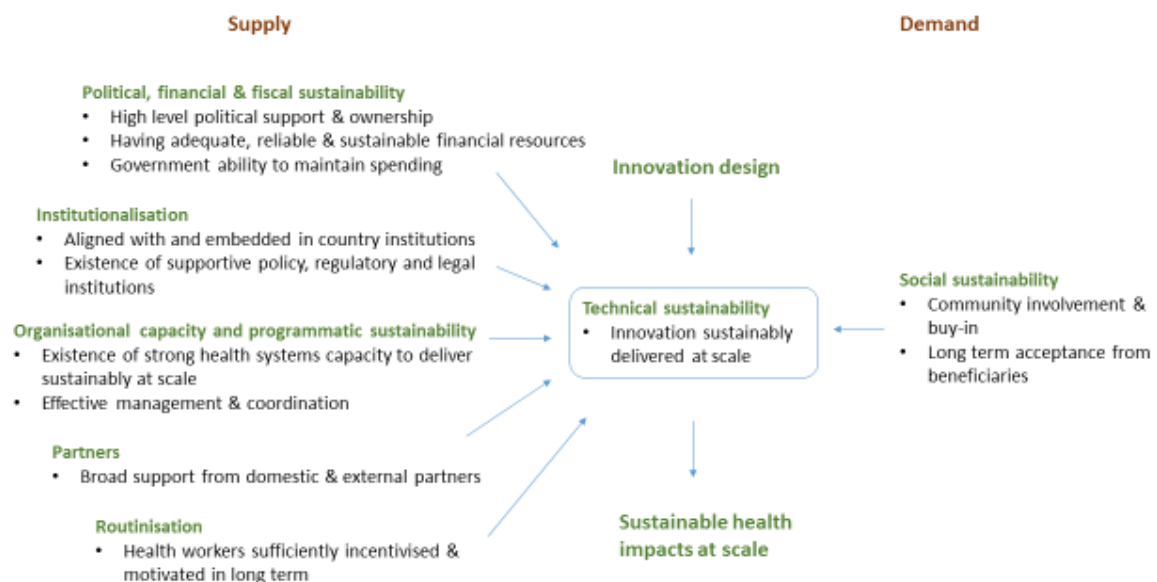
This study will generate new knowledge on sustaining health programmes in low-income settings. We are building on the qualitative study of scale-up that was part of IDEAS Phase I which focused on the early adoption and scale-up of foundation-funded MNH innovations². The current study is exploring what happens to those innovations in the longer-term, and specifically will aim to identify the steps and conditions that are required to sustain scaled MNH innovations within country health systems in the longer term. We will provide insights and recommendations that are useful for governments, MNH innovation implementers and donors and other development partners. This IDEAS sub-study also responds to the

¹ Torpay K Mwenda L Thompson C Wamuwi E van Damme W 2010 From project aid to sustainable HIV services: a case study from Zambia *Journal of the International Aids Society* 13:9; WHO and ExpandNet 2010 *Nine Steps for Developing a Scaling-Up Strategy*. WHO; Hirschhorn L Talbot J Irwin A May M Dhavan N Shady R Ellner A Weintraub R 2013 From scaling up to sustainability in HIV: potential lessons for moving forward. *Globalisation and Health* 2013 9:57; Larson A Raney L and Ricca J 2014 *Lessons Learned from a Preliminary Analysis of the Scale-Up Experience of Six High-Impact Reproductive, Maternal, Newborn, and Child Health (RMNCH) Interventions*. Jhpiego: Baltimore, MD; Wilson K Gertz B Arenth B and Salisbury N 2014 *The Journey to Scale – Moving Together Past Digital Health Pilots*. PATH.

² Spicer N et al ‘*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. *Globalization and Health* 2016 12:75. Spicer N et al ‘*Scaling-up is a craft not a science*’: catalysing scale-up of health innovations in Ethiopia, India and Nigeria. *Social Science & Medicine* 121 (Nov 2014): 30-38.

foundation's commitment to seeing health investments being both scaled-up geographically and having a longer-term legacy (see for example Achieving Lasting Impact at Scale).

Figure 1: Conceptual framework of factors influencing 'technical sustainability'



Study aim and objectives

The aim of this study is: **to identify the critical steps and conditions required to foster the sustainability of maternal and newborn health (MNH) innovations.** We are addressing the following objectives:

1. To **document** what happens to case study foundation-funded MNH innovations (Table 1, below) that are adopted and scaled in the longer-term;
2. To identify the **attributes** (Appendix 1) of the case study innovations that foster their sustainability, including their effectiveness and relative advantages, observable benefits, acceptability to health workers and communities, and simplicity and costs, as well as potential challenges;
3. To assess the most important **actions** and **conditions** required to foster sustainability at scale of selected MNH innovations, including ways the foundation and other donors can take steps to foster sustainability relating to the following dimensions: financial, fiscal and political sustainability, institutionalisation, organisational capacity and programmatic sustainability, partner support, routinisation and social sustainability;
4. To identify the **contextual** factors within the broader health system, socioeconomic and geographical settings, that enable and inhibit the scale-up and sustainability of selected MNH innovations and assess how barriers have been overcome.

Team roles

The IDEAS lead researcher for this sub-study is Neil Spicer, who will work closely with Deepthi Wickremasinghe in London, Meenakshi Gautham in India and Nasir Umar in Nigeria. In addition, country research teams experienced in qualitative data collection methods will be contracted to conduct, document and contribute to analysing a series of interviews and focus group discussions (FGDs). We are contracting the following partners:

- Childcare and Wellness Clinics led by Dr Yashua Hamza in Nigeria;

- School of Public Health, University of Addis Ababa led by Dr Abiy Seifu in Ethiopia;
- Independent consultants with extensive experience in qualitative methods in India (to be determined).

All the researchers will attend one-day orientation sessions in Nigeria, Ethiopia and India ahead of the data collection, and IDEAS researchers will participate in early interviews to further orientate and reinforce the purpose and approach of the study. During data collection, field researchers will be supervised by their research lead, either in-person or through daily phone calls and emails.

Study design

We are adopting a qualitative study design consisting of in-depth, semi-structured interviews with purposively selected stakeholders working in MNH or having in-depth knowledge of issues relating to scale-up and sustaining the case study innovations in the three geographies. Additionally, we will conduct focus group discussions (FGDs) with frontline implementers of selected MNH innovations. Details of study participants are given below. This qualitative approach will allow us to explore in detail ‘how’, ‘why’ and ‘what’ questions of complex, multi-dimensional phenomena, including emerging issues not originally anticipated.

Study participants

Up to forty respondents for semi-structured interviews will be purposively selected from among key stakeholders representing each of the three IDEAS geographies. Stakeholder interviewees will be identified from a common sampling framework (allowing direct comparison across each geography) as follows:

- government decision makers;
- subnational health sector managers;
- foundation staff and other relevant development partners;
- implementing organisations;
- researchers and other experts and stakeholders with knowledge of the topic area and contexts.

In order to obtain a detailed and valid account of innovation sustainability it will be essential to ensure we select stakeholders in each geographical setting who are highly knowledgeable about themes relevant to this study including: financial flows for sustaining MNH innovations, issues of country health institutions, organisation capacity and the innovations themselves.

We will also carry out up to ten FGDs with frontline implementers of case study MNH innovations where we will focus on routinisation, social sustainability, organisational capacity and institutionalisation for each selected innovation. Implementers we will invite to be part of FGDs will include:

- Village Health Workers (VHWs), taxi and community drivers, call-centre operators and members of Ward Development Committees (WDCs) and Mothers’ Groups in Nigeria;
- Health Extension Workers (HEWs) and Women’s Development Army (WDA) members in Ethiopia;
- ASHA, Auxiliary Nurse Midwives (ANMs), health centre and health post staff and call centre staff in India.

Final selection, composition and locations of these FDG will be informed by stakeholder interviews.

Study settings

This is a comparative study across the three IDEAS geographies: northeast Nigeria, Uttar Pradesh in India and Ethiopia. The stakeholder interviews will take place in Delhi and Lucknow in India; Abuja, Gombe City and Yola in Adamawa state in Nigeria; and Addis Ababa in Ethiopia. Additionally, telephonic and/or Skype interviews will be conducted where appropriate. Interviews with sub-national level health managers and FGDs with frontline implementers will be convened, as far as possible, in districts with an overlap in the coverage of selected case study innovations (these innovations are listed below). The district selection will be informed by stakeholder interviews.

Case studies and selection criteria

MNH innovations have been selected for in-depth qualitative analysis. Innovations will need to meet the following selection criteria to be selected as case studies:

1. MNH innovations originally funded by the foundation;
2. Innovations adopted for scale-up beyond the initial foundation-funded project period or scaled innovations that were heavily influenced and informed by foundation-funded innovations;
3. Innovations that have been implemented at scale for a minimum of one year.

We will select case study innovations that have been *sustained for at least one year* beyond the point at which they were adopted for scale-up. Selecting case studies of 'successful' sustainability will allow us to focus on the critical events and factors that fostered each case study to be sustained over this period.

We will continue following our case study innovations studied as part of IDEAS Phase I (the *mSaki* smart phone platform in Uttar Pradesh; COMBINE neonatal sepsis case management in Ethiopia; and the Emergency Transport Scheme scaled in Adamawa state in northeast Nigeria). These and other innovations selected as case studies are shown in Table 1.

The unit of analysis is selected case study MNH innovations. We are aiming to identify and better understand the features of these innovations that foster their sustainability; by selecting multiple case studies we can draw out valuable comparisons. We are also interested in how aspects of country contexts influence innovation sustainability including financial resources, political support, country health systems and institutions, and issues of community acceptance and demand. We expect to select an equal number of innovations per geographical setting to enable us to make a balanced cross-country comparison. Table 1 shows innovations that are currently under consideration. In practice we expect to select two or three case studies per setting from those listed in the table (or, potentially, we may select alternative MNH innovations that do not currently appear in the table).

There are, however, factors that make the selection of case studies challenging. Firstly, there are examples of BMGF-innovations that have been adopted beyond project periods but do not neatly fit into the working assumption that to be considered 'scaled' an innovation needs to be adopted, financed and implemented by a host **government**. Hence, we distinguish between three types of scale-up:

- a) **‘Government-led scale-up’**, meaning country and state governments adopting and implementing donor-funded MNH innovations at scale and/or drawing on support and learning from donor-funded MNH innovations;
- b) **‘Donor-led scale-up’**, whereby governments or other actors adopt, finance and implement donor-funded innovations at scale and;
- c) **‘Community-led scale-up’**, whereby communities take ownership of, and generate local financing to sustain, an innovation.

Secondly, in practice, we have found that scale-up can be highly fragile reflecting the realities of attempting to position innovations for scale-up in complex policy environments. For example, while it is aimed to scale innovations such as mSehat in Uttar Pradesh and the Emergency Transport Scheme in Adamawa, Nigeria, at the time of writing this protocol, neither had clarity about whether they would be sustained in the longer term. Hence, as we conduct fieldwork through 2018 we will continue to monitor the progress of the innovations listed in Table 1 (some of which are marked as ‘provisional’), and potentially drop case studies that are not sustained and/or do not fit our criteria. We will also be open to selecting additional innovations if appropriate. Finally, it is important to point out that a limitation of our study is that we will complete our fieldwork by the end of 2018. The study therefore represents a snap shot in time; we will not be able to monitor what happens to innovations beyond the end of 2018, although we will be able to document the arrangements that are in place to sustain them beyond this horizon.

Table 1: Case study innovation selection

Geography	Innovation name	BMGF-funded implementer	Scale-up type	Comments
Ethiopia	COMBINE Sepsis case management for newborns	Save the Children (Saving Newborn Lives project)	Government-led scale-up	Scaled as one component of the Community Based Newborn Care (CBNC) programme
Ethiopia	HEW Checklist	John Snow International (L10K project)	Government-led scale-up	Government adopted innovation in 2017
Ethiopia	Community-Based Data for Decision Making (CBDDM)	John Snow International (L10K project)	Government-led scale-up	Scaled through OHEP
India	mSehat smart phone platform	Influenced by Manthan’s BMGF-funded mSakhi innovation	Government-led scale-up	Funded by the government of Uttar Pradesh. Scale-up status is uncertain beyond summer 2018
India	Safe Childbirth Checklist	Harvard School of Public Health (Better Birth project)		Provisional: scale-up status uncertain
India	Three linked innovations: Mobile Kunji mobile phone innovation; Kilkari voice message service;	BBC Media Action	Government-led scale-up	Originally implemented in 8 districts of Bihar; scaled to 11 or 12 states of India

	Mobile Academy health worker training module			
Nigeria	Emergency Transport Scheme (ETS) in Adamawa	Society for Family Health	Donor-led scale-up	Scaled in Adamawa currently funded by Comic Relief
Nigeria	Emergency Transport Scheme (ETS) and Community Transport Volunteer (CTV) schemes in Gombe	Society for Family Health	Community-led scale-up	Provisional: scale-up status uncertain
Nigeria	MNH Call Centre adopted by Gombe state government	Society for Family Health	Government-led scale-up	Adopted by Gombe state government in July 2016
Nigeria	Village Health Worker (VHW) scheme in Gombe	Society for Family Health	Government-led scale-up	
Nigeria	Ward Development Committees (WDCs)	PACT	Community-led scale-up	Provisional: scale-up status uncertain
Nigeria	Mothers' Groups	PACT	Community-led scale-up	Provisional: scale-up status uncertain

Data collection and analysis

Tool design

To guide the interviews and FGDs, a topic guide (a draft is shown in Appendix 2) will be used to prompt interviewers on the themes to be covered, together with an information sheet and consent form (Appendices 3 and 4). Versions of the topic guide will be created to tailor questioning to different categories of interviewees including participants in the FGDs, and will be refined over the course of the fieldwork in response to emerging themes.

Field researchers will attend one-day orientation sessions prior to the start of data collection in each geography, which will include overall study familiarisation, gaining consent, interview and focus group facilitation skills, and preparing structured transcripts (described below). Topic guides will be shared with the researchers at these sessions to familiarise them with the purpose of the study and the types of information that might be relevant to it, as well as to gain their feedback before finalising the topic guide and adapting it for different respondent groups.

Fieldwork in practice

To preserve confidentiality, interviews will be conducted in private spaces, and all respondents be asked to give informed consent prior to starting. Researchers will be asked to follow the topic guides while being attentive too and exploring emerging themes that are relevant to the study's aim. Where possible, interviews will be conducted in English to retain the nuances and vibrancy of the conversations, and to allow members of the IDEAS London-based team to participate. However, the research team will include local researchers with experience of conducting qualitative interviews and FGDs who are also fluent appropriate local languages, in order to ensure that the views of interviewees who prefer to speak these languages are captured. Where participants give permission, interviews and focus group discussions will be

digitally recorded. Where permission is not given, field notes will be taken. The FDGs will be conducted by two interviewers; one to facilitate the discussion and one to take notes and record their observations.

Data capture, management and analysis

Data collection will take the form of 'structured transcripts'. Structured transcripts consist of full verbatim transcripts of interviews based on sound recordings structured under headings relating to the themes being explored in the topic guide together with emergent themes. Field researchers will be asked to write a structured transcript as soon as possible after each interview or FGD. These transcripts will be checked by the research lead on the same day as part of the supervision of the field work and any feedback on areas to be explored in later interviews will be fed back to the research team.

Issues about data security and data management in the field will be discussed during the orientation sessions with researchers. The sound recordings, structured transcripts and scanned consent forms, will be transferred to and stored securely on the IDEAS password-protected shared online workspace routinely during the fieldwork period. Each researcher will then be responsible for deleting digital files from all other electronic devices. We will use unique reference numbers for each interview transcript, while separate log sheets will be used to identify interviews, document their roles and other details of each interview.

Our data analysis will embrace a *deductive approach*: that is drawing out the *a priori* (expected) themes we are exploring as part of the study (please see draft topic guide below). We will also take an *inductive approach*: we be attentive to emerging themes, that is themes that we did not originally anticipate in the study design but emerged over the course of the interviews. In addition to analysing the qualitative data from each case study innovation in its geographical setting we will also make a comparative analysis across all settings. We will create a common (cross-country) analytic framework enabling us to tabulate and directly compare (and contrast) findings under common analytic themes.

During our analysis we will also draw out comparisons between the three broad types of scale-up listed above (government-led, donor-led and community-led scale-up). This will enable us to show in our analysis which of these types of scale-up are more effective in fostering innovation sustainability. We will additionally explore in our analysis issues of timeframes for sustainability including the time period required for an innovation to become institutionalised in each geographical setting, and the sequence of events or actions that led to an innovation becoming sustained.

Validity and reliability of qualitative data

We plan to adopt several methods to enhance the validity of our findings. We will triangulate our data; stakeholders were interviewed from multiple organisations and we will cross-verify their accounts enabling us to form a balanced interpretation of the issues being explored. An investigator triangulation approach will be taken where we will compare and agree different researchers' analyses; hence the findings will be the interpretation of multiple researchers. We will also aim to conduct member checks by presenting and discussing emerging findings with stakeholders in the three geographies.

Ensuring ethics and quality in practice

Ethical approval will be sought from the London School of Hygiene & Tropical Medicine's Research Ethics Committee and ethical committees or equivalent in each geography. Ethical

clearance has already been granted by the Research Ethical Committee of the Gombe State Ministry of Health.

At the beginning of any interview or FGD the purpose of the research will be explained to the participants, the steps that will be taken to protect their anonymity, how the interview will be recorded, how the material will be used and stored and that there will be no consequences if they choose not to be interviewed. On this basis, participants' written informed consent will be sought. Appendix 3 shows the consent form template. Participants will also be given an information sheet explaining the purpose of the study (Appendix 4). If it is necessary to conduct any interviews by phone or skype, participants will be sent the information sheet in advance and informed consent will be sought by email or will be included as a direct question at the beginning of the interview recording.

At the end of the study, it is unlikely that it will be possible to make the transcripts available through open access, because it is doubtful that participants of the in-depth interviews can be anonymised sufficiently, given the small number of stakeholders in each setting.

Study outputs

Study outputs will be relevant to the needs of policymakers, the foundation and other development partners, implementation grantees and practitioners in the focus geographies and beyond. Outputs will reflect on what has worked well, what has been problematic, as well as proposing concrete approaches to overcome problems and offering recommendations for ways forward. Outputs will include:

- Presentations to stakeholders within each geography;
- Presentations at international conferences;
- A presentation for foundation staff;
- At least one major journal article presenting a comparative analysis across the three geographies;
- Country-focused policy briefing sheets.

Activities and timelines

Design stage (2017-2018):

Key activities have been:

- reviewing the literature on sustainability to inform the development of the conceptual framework guiding data collection (Figure 1);
- developing this study protocol in preparation for country fieldwork including seeking peer review before finalising;
- selecting country research partners;
- selecting case study innovations informed by country visits and a 'mapping' exercise of all innovations within the IDEAS portfolio of projects. The mapping exercise involved documenting the foundation-funded project timelines of each innovation, whether each innovation was scaled-up at the end of the project period, the length of the scale-up period, and which organisations funded and implemented the scale-up. Information was drawn from the IDEAS Phase I innovation characterisations exercise; from documents and the web; and from Skype, phone calls and face-to-face meetings with relevant stakeholders.

Fieldwork stage (2018):

Key activities will include:

- gaining ethical approval through LSHTM's Research Ethics Committee and within each country;
- contracting research partners;
- conducting orientation sessions for country researchers;
- qualitative data collection including country visits for LSHTM staff to participate in the fieldwork (provisional timings indicated below);

Analysis and outputs stage (2018-2019):

Key activities will include:

- carrying out qualitative comparative thematic analysis;
- preparing and presenting study outputs listed above.

Figure 3: Sub-study timeline

Activity	2017				2018				2019				2020	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Design stage														
Reviewing literature & preparing conceptual framework	■	■												
Develop study protocol			■	■										
Selecting country research partners		■	■	■										
Innovations mapping and case study selection			■	■										
Fieldwork stage														
Ethical approval					■									
Contracting country research partners						■								
Orientation session & data collection in Ethiopia						■	■							
Orientation session & data collection in Nigeria							■	■						
Orientation session & data collection in India								■	■					
Analysis and outputs														
Comparative thematic analysis								■	■	■				
Preparing & presenting outputs									■	■	■	■	■	■

Appendix 1: Attributes of scalable innovations³

Relevant & important	Addresses important and/or visible health problems/needs
Effective & advantageous	Impacts positively on communities' health Has a comparative advantage over other innovations
Observable benefits	Benefits and health impacts are visible Benefits are easily demonstrated through evidence
Acceptable to health workers & communities	Culturally acceptable to sociocultural norms, religions, language, health beliefs and practices Appropriately branded using ideas and language meaningful to users Seen as being owned by communities Works with existing community structures and actors including village committees and traditional birth attendants Benefits and incentivises health workers

³ This framework is based on 150 interviews reflecting on scaling-up health innovations in three low- and middle-income countries (Spicer N, Bhattacharya D, Dimka R, et al. 'Scaling up is a craft not a science': Catalysing scale-up of health innovations in Ethiopia, India and Nigeria. Social Science & Medicine, 2014. 121:30-38. <http://dx.doi.org/10.1016/j.socscimed.2014.09.046>)

	Does not burden health workers by adding to their workload or making them more accountable for failure
Simple & low cost	Simple/convenient to use and easily understood by health workers and communities
	Low cost to implement at scale and/or cost effective
	Low human resource inputs required
	Places no/minimal cost burden on user communities
Aligned & harmonised	Builds on and aligns with existing government health systems
	Addresses needs/fills gaps in government health programmes
	Coordinates with other donor programmes
Adaptable	Adaptable to different geographical, socioeconomic and cultural contexts
	Adaptable to different health systems contexts
Sustainable	Avoids/has low recurrent costs
	Includes local income generating schemes

Appendix 2: Draft generic topic guide

Overall sustainability of the innovation

DESCRIPTION

Is the innovation being sustained? In what ways?
How long is it expected to be sustained?
Which actors are contributing to its sustainability?

ACTIONS

What key **actions** have fostered innovation sustainability?
Which **actors** performed/performed those actions?
Have these actions been **effective**?
How was the **decision** made to sustain the innovation?
What were the key **factors** influencing the decision to sustain the innovation? [probe – was evidence of cost/cost effectiveness a part of the decision making?]
Who were the main **actors** influencing the decision?

CONTEXT

What are the main factors in the country **context** enabling and undermining innovation sustainability?
Were **actions** taken to overcome any barriers?

Decision making

How was the decision made to adopt and sustain the innovation at scale?
Who were the main **actors** influencing the decision? [Probe – individuals and organisations]
What were the main **factors** influencing the decision? [probe – generation and presentation of evidence; government involvement in project; effective policy advocacy; support from champions and other organisations; scale-up was integrated within project design]
Did the **country context** influence the decision to adopt and sustain the innovation at scale? [probe – health and other development priorities; governance – how governments make policy decisions; influence of development agencies, civil society and other policy actors]

Innovation design for sustainability

DESCRIPTION

Is the innovation designed to be sustainable? In what ways?

ACTIONS

What **actions** were/are being taken to help ensure the innovation is designed to be sustainable?
Was evidence generated to support decision making? [probe – impacts evidence; operational evidence; cost evidence; other]
Which **actors** performed/performed those actions?
Have these actions been **effective**? How?

CONTEXT

Are there **contextual** factors making it more or less difficult to design the innovation for sustainability?
Were **actions** taken to overcome any barriers?

Financial and political sustainability

DESCRIPTION

What **financing model** has been/will be adopted to support the continuation of the innovation? [probe – government budgets; private sector investment; donor support; local income generation]

Which **actors** are providing sustainable financing?

What are the **strengths and limitations** of the model?

Is government able to financially sustain the innovation **without donor support**?

Is there **sustainable political support** for longer-term financing for the innovation?

Which **actors** support the sustainability of the innovation?

ACTIONS

What **actions** enabled/are enabling political support and financial sustainability of the innovation to be achieved?

Which **actors** performed/performed those actions?

Have these actions been **effective**?

Have mechanisms been put in place for ensuring the sustained flow of finances to ground?

CONTEXT

Are there **adequate** and **predictable** financial resources in the country context?

Were **actions** taken to overcome any barriers?

Institutionalisation

DESCRIPTION

Has the innovation been **embedded in country institutions** – health policies; health systems; health services? [probe – legal, regulatory, budgetary frameworks; routine information systems; logistics and supply chains; human resources systems, monitoring]

ACTIONS

What **actions** enabled/are enabling the innovation to be embedded within country institutions?

Which **actors** performed/performed those actions?

Have these actions been **effective**?

CONTEXT

Are country institutions supportive or undermining of the introduction of the innovation? Which aspects? How? [probe – legal, regulatory, budgetary frameworks; routine information systems; logistics and supply chains; human resources systems]

Were **actions** taken to overcome any barriers?

Organisational capacity / programmatic sustainability

CONTEXT

Does the health system have **sufficient capacity** to sustain the innovation? [probe – governance; financial systems; logistics and supply chains; information systems; human resources]

Are there **weaknesses** in the health system than make it difficult to sustain the innovation?

Were **actions** taken/will actions be taken to overcome any weaknesses?

ACTIONS

Have **actions** been taken/will actions be taken to strengthen aspects of the health system to enable the innovation to be sustained?

Which **actors** performed/performed those actions?

Have these actions been **effective**? How?

Routinisation in health worker practices

DESCRIPTION

Has the innovation been adopted as part of frontline health workers' routine practices within the health system?

What incentivised HWs to **adopt** the innovation?

What incentivises HWs to continue to use the innovation within their **routine practices**? [probe - supervision, support and training updates; low effort to learn, use and remember; 'fun' and 'pleasurable' to use; gives HW a sense of agency and control; helps HW perform their roles; increasing HW status and ability to persuade others; improves HW pride and awareness of their effective performance]

ACTIONS

What **actions** have been taken/will be taken to encourage health workers to use the innovation within their routine practices?

Which **actors** performed/performed those actions?

Have these actions been **effective**? How?

CONTEXT

Are there **contextual** factors enabling or undermining health workers adopting the innovation within their routine practices? [probe – economic factors; geographical factors; sociocultural factors influencing HW behaviour]

Were **actions** taken to overcome any barriers?

Social sustainability

DESCRIPTION

Is there longer-term acceptance of and demand for the innovation from beneficiary communities?

Are community structures and leaders supportive of the innovation?

Is there community ownership of the innovation?

ACTIONS

Have **actions** been taken/will actions be taken to foster acceptance, demand and ownership from beneficiary communities and support from community structures and leaders?

Which **actors** performed/performed those actions? [probe – actions to involve communities/community structures and leaders in designing and implementing the innovation?]

Have these actions been **effective**? How?

CONTEXT

Does the sociocultural **context** enable or undermine communities' acceptance of and demand for the innovation?

Were **actions** taken to overcome any barriers?

Aid effectiveness – behaviour of donors, government and implementers

How should **donors** behave (what approaches should they take) to foster scale-up and sustainability of externally funded innovations?

Probe –

Coordination – harmonisation and alignment and embracing country coordination mechanisms

Embracing country ownership including using existing country systems

Predictability of donor funding

Transparency and accountability

How should **governments** behave (what approaches should they take) to foster scale-up and sustainability of externally funded innovations?

Probe –

Coordination – promoting harmonisation and alignment among donors and implementers and government leadership of country coordination mechanisms

Civil society participation and engagement

Transparency and accountability

How should **implementers** behave (what approaches should they take) to foster scale-up and sustainability of externally funded innovations?

Probe –

Coordination – harmonisation and alignment and embracing country coordination mechanisms

Embracing country ownership including using existing country systems

Transparency and accountability

Appendix 3: Consent form template



IDEAS: Qualitative study of sustainability - consent form

Please tick all boxes that apply:

I have been given a clear overview of the study	
I am happy for you to write about what I have said during our interview on the understanding that you will not reveal my identify in any study outputs	
I am happy for the interview to be sound recorded	
I am happy for you to include quotations from this interview in publications, reports, web pages and other research outputs	
I am happy for the information collected in our interview to be transferred to London, UK	
I am happy for the notes of this interview to be archived (anonymously) on a secure server at LSHTM	
I am happy for the notes of this interview to be shared with other authenticated researchers, if they agree to preserve the confidentiality of information as requested in this form	
I am happy for authenticated researchers, to include quotations from this interview in publications, reports, web pages, and other research outputs, if they agree to preserve the confidentiality of information as requested in this form	
I am willing to be interviewed	

Interviewee

Name (in BLOCK CAPITALS):

Signature:

Date:

Researcher

Name (in BLOCK CAPITALS):

Signature:

Date:

Appendix 4: Example information sheet for study participants



IDEAS Qualitative study of sustainability in northeast Nigeria

This is a qualitative study to understand the factors that contribute to making selected maternal and newborn health innovations sustainable at scale, within Gombe and potentially throughout Nigeria, in order to inform the Gombe State Primary Health Care Development Agency, the National Primary Health Care Development Agency and a wider international audience of donors, implementers and researchers.

The study will:

- assess the attributes of selected maternal and newborn health innovations that make them scalable and foster their sustainability;
- identify the factors within the broader health system, socioeconomic and geographical contexts, that enable and inhibit sustainability and scale-up of these innovations and how those barriers might be overcome;
- assess the critical factors that motivate and help to retain frontline health workers in the longer term;
- make recommendations to the State Primary Health Care Development Agency, and ultimately to federal government, on the scalability and sustainability of the selected innovations.

The study is carried out by the IDEAS team at the London School of Hygiene & Tropical Medicine and Child Wellness Clinics in Nigeria, and is funded by the Bill and Melinda Gates Foundation.

We are inviting you to take part in the study by participating in qualitative interview to capture your thoughts and experience of the scale-up and sustainability of maternal and newborn health innovations and the factors that might contribute to or inhibit its scale-up within the rest of Gombe State and its continued implementation in the longer term, which for this study is referred to as sustainability.

The interview will last no more than one hour. With your permission, we will take notes and record the interview. Your name will not be used in any documents, but because these are qualitative interviews we cannot guarantee confidentiality. We will always check with you before using a quote from your interview.

Data will be stored in a secure server in London and may be shared with other authenticated researchers who are bound by the same rules of confidentiality.

If you prefer not to take part in this study, or if you would like to withdraw at any time you are free to do so, without any consequences.

Contact details

Dr Yashua Hamza, Child Wellness Clinics

Dr Neil Spicer, London School of Hygiene & Tropical Medicine