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Catalysing scale-up of maternal and newborn health innovations: lessons from a case study in Ethiopia

Scaling-up successful maternal and newborn health (MNH) innovations to a wider geographical area should improve the survival of more women and babies.

We studied a maternal and newborn health (MNH) innovation* with roots in the Community Based Interventions for

Newborns in Ethiopia 'COMBINE' study which enabled Health Extension Workers (HEWs) to administer antibiotics to manage neonatal sepsis at community level. From late 2013 the innovation was being scaled-up* as one component of Phase One of the Ethiopian Government's Community

Based Newborn Care (CBNC) package.

Lessons from this case study could help implementing organisations, national governments and donors to scale-up successful innovations in the future.

Key actions to catalyse scale-up

Implementation partners

- The innovation was designed to be scalable by being: simple to administer, aligned to government programmes, affordable and cost effective and adaptable to diverse geographic settings.
- Multiple types of evidence were important in supporting innovation scale-up including quantitative survey data, qualitative process data and cost effectiveness data.
- The implementation partner, Save the Children, collaborated closely with government and development partners rather than working in isolation.
- Timing was a critical factor – the implementation partner took advantage of a 'pivotal moment' to feed into the development of the CBNC package alongside government and other stakeholders.

National government

- National government was centrally involved throughout the process of designing and developing the innovation and had good working relations with the implementation partner; indeed, government considered that it 'owned' the innovation.
- The government-led coordination mechanisms – the Technical Working Groups were important facilitators to scale-up. Among other roles they facilitated information sharing and learning among implementers and government.
- Strong government leadership was critical in leading implementation partners in the first phase of scaling-up of the CBNC package.

Donors

- Direct support from the Bill & Melinda Gates Foundation, which funded Save the Children, was important – involving foundation staff brokering relationships and facilitating coordination and information exchange.

Enablers and barriers to scale-up

- ✓ MNH is a national priority and there is strong policy commitment – this is a critical enabling environment for scaling MNH innovations.
- ✓ Health Extension Workers (HEWs) have critical roles, and increase women's confidence in seeking antenatal care; however, high workloads and limits to their training, remain problems.
- ✓ The Health Development Army (HDA) has the potential to enable scale-up by easing HEWs' workloads.
- ✗ There are challenges to adding innovations to existing health systems without strengthening those systems.
- ✗ Encouraging community uptake of the innovation can be a problem as it takes time for communities to change strongly held beliefs that shape their traditions and lives.

About the study

This qualitative study of scale-up in Ethiopia, northeast Nigeria and Uttar Pradesh in India forms part of the IDEAS project at the London School of Hygiene & Tropical Medicine funded by the Bill & Melinda Gates Foundation.

Study aim

To understand what helps and what hinders scale-up of community-based maternal and newborn health (MNH) innovations, both within and beyond implementation partner areas, and how scale-up can be catalysed.

Methods

We investigated three case studies - one in Ethiopia, one in Uttar Pradesh in India and one in northeast Nigeria. The case studies are concrete examples of Bill & Melinda Gates Foundation-funded innovations that have been scaled-up beyond their original implementation districts to a wider geographical area. We conducted 60-70 qualitative in-depth interviews in 2014-2015 in Ethiopia, India, Nigeria, UK and USA with a range of stakeholders including implementers, government, development partners, foundation staff, professional associations and researchers.

We conducted 22 of these interviews in Ethiopia between March and October 2014.

Research brief focus

We carried out a case study of an MNH innovation in Ethiopia with its roots in the Community Based Interventions for Newborns in Ethiopia 'COMBINE' project which enables Health Extension Workers (HEWs) to administer antibiotics to manage neonatal sepsis at community level, which was evaluated through a randomised controlled trial. The innovation was facilitated by Save the Children USA, through Saving Newborn Lives (SNL), and was initially implemented by HEWs and the Health Development Army in 19 woredas of Ethiopia. From late 2013 the innovation was being scaled-up to 92 woredas as one of nine components of Phase One of the Ethiopian Government's Community Based Newborn Care (CBNC) package.

This summary presents evidence from the study. We focus on what interviewees report as the critical actions the implementation partner took to catalyse scale-up of the COMBINE innovation and the key barriers and enablers to scale-up. We illustrate our findings with quotations in *italics*.

Target audience

National government, development agencies and implementation partners in the field of maternal and newborn health.

*Definitions

Innovations

New ways of working, introduced within Ethiopia by externally funded programmes, to enhance interactions between frontline workers and households.

Scale-up

Increasing the geographical reach of externally funded maternal and newborn health innovations to benefit a greater number of people within and beyond externally funded implementation partner programme districts.

Authors

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Coordination of publication

by Agnes Becker

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1. Mangham-Jefferies et al. **How do health extension workers in Ethiopia allocate their time?** Human Resources for Health 2014;12:61

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Critical actions to catalyse scale-up

Interviewees referred to several critical actions the implementation partner Saving Newborn Lives (SNL) took to help catalyse the scale-up of the sepsis case management innovation within the CBNC package:

'Simple yet robust': the innovation was designed to be scalable

Our respondents highlighted the importance of the innovation being designed with attributes to enable scaled-up beyond the original project districts. Attributes include:

- It is **simple** for frontline workers to administer: *'The innovation was simple yet robust...'*
- It is **affordable** and **cost effective** in tackling neonatal sepsis;
- It is closely **aligned** to government priorities, systems, programmes and infrastructure: *'It builds on the system, it isn't a parallel system. The health system can take it on';*
- It is **adaptable** to the diverse geographic settings of Ethiopia.

Importantly, the innovation needed to be modified for scale-up within the Ethiopian Government's CBNC package. During a review stage, cost-effective elements of the innovation were included within the scaled model – this period of reflection and redesign was seen by respondents as critical to the scale-up process.

'On the ground experience': the implementation partner produced strong, relevant evidence

Multiple types of evidence were generated by the implementation partner. In combination these were important in catalysing the scale-up of the innovation:

- **Quantitative data demonstrating innovation outcomes and impacts** was important in justifying the decision that was made to scale the innovation within the CBNC package: *'What our endline provided is how effective that intervention was';*
- **Qualitative process data and implementation lessons** were valuable in informing government about how the innovation would be implemented at scale: *'SNL provided on the ground experience in terms of what the package might look like within a national programme...';*
- **Cost effectiveness studies and cost estimates of scaling innovations** were valuable in demonstrating the scalability of the innovation as well as identifying which elements of the innovation should be retained in the scaled CBNC package: *'The cost of different [innovations] was monitored... [some were] discontinued during scale-up'.*

'Collective effort': the implementation partner worked very closely with other actors

An important factor was the way the implementation partner collaborated closely with the government and development partners. It is clear that working in isolation would not be conducive to catalysing scale-up.

The Ethiopian Government was centrally involved throughout the process of designing and developing the innovation – indeed the government considered that it 'owned' the innovation. This meant that when discussions were underway about scale-up the government had already bought into the concept and had good working relations with the implementation partner: *'It's not about ad hoc engagement. It's about government owning the programme - government*

accountability with partner support...'

Individuals in the Ethiopian Government were particularly important in brokering the decision to scale the innovation within the CBNC package: *'... once [a key official] was convinced he was trying to convince the head minister...that was very, very decisive.'*

Working with supportive **development partners** including UN agencies was also seen as essential, with individuals acknowledged as a critical in engendering broad agreement: *'It's a collective effort – one agency's voice would be very thin and low...'*

Direct support from the **Bill & Melinda Gates Foundation**, which funded the COMBINE study, was also

important – involving foundation staff brokering relationships and facilitating coordination and information exchange: *'Usually donors give money and you deliver the deliverables. But this was different – [the foundation] was engaged through continued involvement in the Ministry of Health and in bringing [implementation partners] together...'*

Having the buy-in from **professional associations** has also catalysed innovation scale-up: *'The Paediatric Association, the Obstetricians and Gynaecologists Association and the Midwives Association - they were really into it and they have become the voice of newborn [health] in the country'.*

'Pivotal moment': the implementation partner responded to a supportive policy environment

Government was initially cautious about allowing HEWs to administer antibiotics. However a policy window opened up: *'[events came together] in a certain pivotal moment where the Ministry on its own decided there's going to be a policy shift'*. These events included:

- A study visit to Nepal, initiated by UNICEF, that demonstrated the approach could be feasible in practice;
- It became clear that despite government commitment to the health of rural communities through the Health Extension Programme (HEP), improvements in neonatal and maternal mortality had been disappointing: *'When the DHS report came out they said yeah - we have to do something about this! And we jumped in and said this is what you have to do!'*;
- There was system readiness – pneumonia treatment was accepted as an addition to the HEP which previously concentrated on preventative interventions. The implementation partners responded to this 'pivotal moment' in the development of the CBNC package by feeding in evidence and experience: *'I would say we were finding the right moment to feed in. And things happening globally and nationally opened doors for us...!'*

'Being at the table': the implementation partner and other partners worked closely with and supported government to deliver the CBNC package at scale

Based on its experience of developing and implementing the innovation the implementation partner worked with and supported the Ethiopian Government to implement the CBNC package at scale. This support included:

- **Technical assistance** and participation in working groups to design, develop and plan the CBNC package;
- Sharing **implementation lessons** on what worked well and why, and how to overcome challenges, based on SNL's on the ground experience;
- Providing government and other CBNC package implementers with key **project materials and resources** including health communication and training materials;
- **Strengthening government capacity** to administer and implement the package including staff, organisational and systems capacity – especially at the regional (sub-national) health bureau level.

Photo: A Health Extension Worker visits a mother and her 5 day old baby at home, Ethiopia.

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Innovation scale-up: enabling factors and challenges

Scaling-up the innovation across a large geographical area as part of the CBNC package produced challenges, yet there have also been positive and enabling factors:

'Well aligned with government': Ethiopia's policy environment is supportive to scaling MNH innovations

✔ MNH is a national priority issue: there is political commitment and the Ministry of Health has taken a strong lead in scaling-up the CBNC package: *'No one considers CBNC a donor programme now. If you go to the Ministry of Health they treat CBNC as any other government initiative... After the decision was made to scale it up the leadership role was taken up by government.'* This leadership has created an enabling environment for scaling-up MNH innovations and has

generated support for the CBNC package from a wide group of stakeholders.

✘ Despite MNH being a priority for the Ethiopian Government, getting the innovation accepted for scale-up was not straightforward because it was outside the original parameters of the HEP: *'...the Ministry of Health was not comfortable to allow doing anything different - so we had to do a lot of negotiation.'*

'One happy family': Technical Working Groups are important facilitators of scale-up

✔ Coordination is the responsibility of various government-led national and regional Technical Working Groups which are important facilitators to scale-up. They help specify activities and match them with programme implementers to:

- avoid duplication
- guide and facilitate logistical arrangements
- facilitate sharing of information and learning among implementers and government
- identify gaps and critical issues

All of these factors are important considerations for successful scale-up: *'Coordination works well... the [country level] Technical Working Group is [guiding] government and the team members on how to implement child survival programmes without duplication.'*

'Overstock and out of stock': health system capacities present challenges to scaling-up

✔ The Ethiopian Government's Primary Health Care Unit (PHCU) structure is a robust platform for delivering the CBNC package to poor, rural communities: *'It's really good the Ethiopian Government chose the primary health care "PHC" modality.'*

- **Challenge: High government staff turnover.** Concerns were expressed about the risks to the package's continuity because of the turnover of government officials at all levels: *'Turnover is very frequent - federal down to regional - it's a challenge.'*

✘ However, scaling the innovation as one component of the CBNC package's first phase revealed a number of considerations; interviewees felt there were challenges to adding an innovation to existing health systems structures without strengthening those structures: *'The system may not be ready. So when you go for scale-up you have to put into your programme other components to strengthen the health system...'*

- **Challenge: Problems with antibiotic supply.** Managing logistics systems to ensure health facilities have antibiotics for HEWs to administer as part of the innovation is a recurring challenge: *'Reaching every health post with the required number and type of commodities is still a challenge...'*

- **Challenge: Low regional government capacity.** The capacity of regional government could be strengthened so the innovation is sustainable once external partner organisations leave: *'...when you withdraw support there is not much capacity within the system.'*



Maternal and newborn health is a national priority issue... the Ministry of Health has taken a strong lead in scaling-up the Community-Based Newborn Care package."

Photo: Medicine cabinet in Dejen Health Centre, Amhara Region, Ethiopia
© Paolo Patruno Photography



'A responsibility to reach newborns': Health Extension Workers are critical to scale-up

- ✔ Initially the role of HEWs within the HEP was health education and prevention but subsequent training of HEWs to administer antibiotics to children with pneumonia broadened their role and was an enabling factor for HEWs administering antibiotic treatment for newborn sepsis: *'The local [health systems] context was very conducive to the policy breakthrough.'*
- ✔ Study participants noted that HEWs who have been trained in sepsis management can now offer a range of health-related interventions. HEWs reported that after receiving training, women in the community had more confidence in them and were more willing to seek antenatal care: *'Now, there is no pregnant woman who doesn't get checked at least twice before giving birth.'*
- ✘ Nevertheless, there are concerns about the workloads of HEWs who are administering multiple programmes and packages: *'... everyone comes with innovative ideas and wants them to be included in the health extension packages...'*
- ✘ The need to improve HEW training and supervision was raised as a concern as they are taking on increasingly complex tasks and responsibilities: *'...we're dealing with human lives - if we don't receive the proper training we might go so far as killing these babies.'*
- ✘ HEWs have wide ranging roles that extend beyond health, thus their time for health work¹ may be limited and they may not always be at the health post: *'If the HEW is not there when a mother turns up with her child or for a health clinic... and her expectation isn't fulfilled, then she may not turn up again. That is a challenge at community level.'*
- ✘ HEWs are expected to make home visits as this may be the only way they can gain access to newborn babies: *'HEWs have a responsibility to reach newborns in their homes and that is critical!'* However, travel distances can be problematic since HEWs are expected to visit six to eight households a day and sometimes they need to travel for more than two hours to reach a household.

'A long process to adopt recommended behaviours': sociocultural beliefs and practices take time to change

- ✘ Encouraging community uptake of the innovation requires greater awareness about what is available, as well as changes in behaviour patterns. It will take time for people to change strongly held beliefs that shape their traditions and lives – expecting this in a short timescale may be unrealistic: *'It's really a long process for families to adopt recommended behaviours and practices... you cannot achieve [change] in four or five years.'*
- ✘ Families often do not take newborns out of the house for at least a month. This reinforces the importance of home-based innovations: *'The hardest part is when [HEWs and HDAs] teach mothers and they don't take heed of your teaching.'*
- ✔ Community leaders and gate keepers have substantial influence on healthcare seeking behaviour; engaging them is critical to scaling this and other innovations: *'...it is important to work with them and reach them appropriately.'* ■

'Penetrating down to the community level': the Health Development Army's role is also important

- ✔ The volunteer women's group the Health Development Army (HDA) has the potential to help relieve the burden on HEWs by identifying pregnant women in the community and encouraging them to seek help from HEWs and give birth in health facilities: *'...it does a good job of penetrating down to the community level.'* Where kebele leadership is strong and HEWs are motivated, the HDA does well, but more capacity in the system would increase its impact: *'If we use it appropriately, [the HDA system] is a breakthrough, so it is an enabler to the programme.'*
- HDA volunteers would benefit if the quality of training they receive was improved and supervision mechanisms were stronger to ensure that key health messages are delivered to families and household visits are more uniform.

IDEAS project

IDEAS (Informed Decisions for Actions) aims to improve the health and survival of mothers and babies through generating evidence to inform policy and practice.

Find out more

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