DEVELOPING INTERVENTION STRATEGIES

to improve community health worker motivation and performance

inSCALE
Innovations at Scale for Community Access and Lasting Effects

malaria consortium
disease control, better health

The Learning Papers Series

Since starting operations in 2003, Malaria Consortium has gained a great deal of experience and knowledge through technical and operational programmes and activities relating to the control of malaria and other infectious childhood and neglected tropical diseases.

Organisationally, we are dedicated to ensuring our work remains grounded in the lessons we learn through implementation. We explore beyond current practice, to try out innovative ways – through research, implementation and policy development – to achieve effective and sustainable disease management and control. Collaboration and cooperation with others through our work has been paramount and much of what we have learned has been achieved through our partnerships.

This series of learning papers aims to capture and collate some of the knowledge, learning and, where possible, the evidence around the focus and effectiveness of our work. By sharing this learning, we hope to provide new knowledge on public health development that will help influence and advance both policy and practice.

Developing Intervention Strategies [to improve community health worker motivation and performance]

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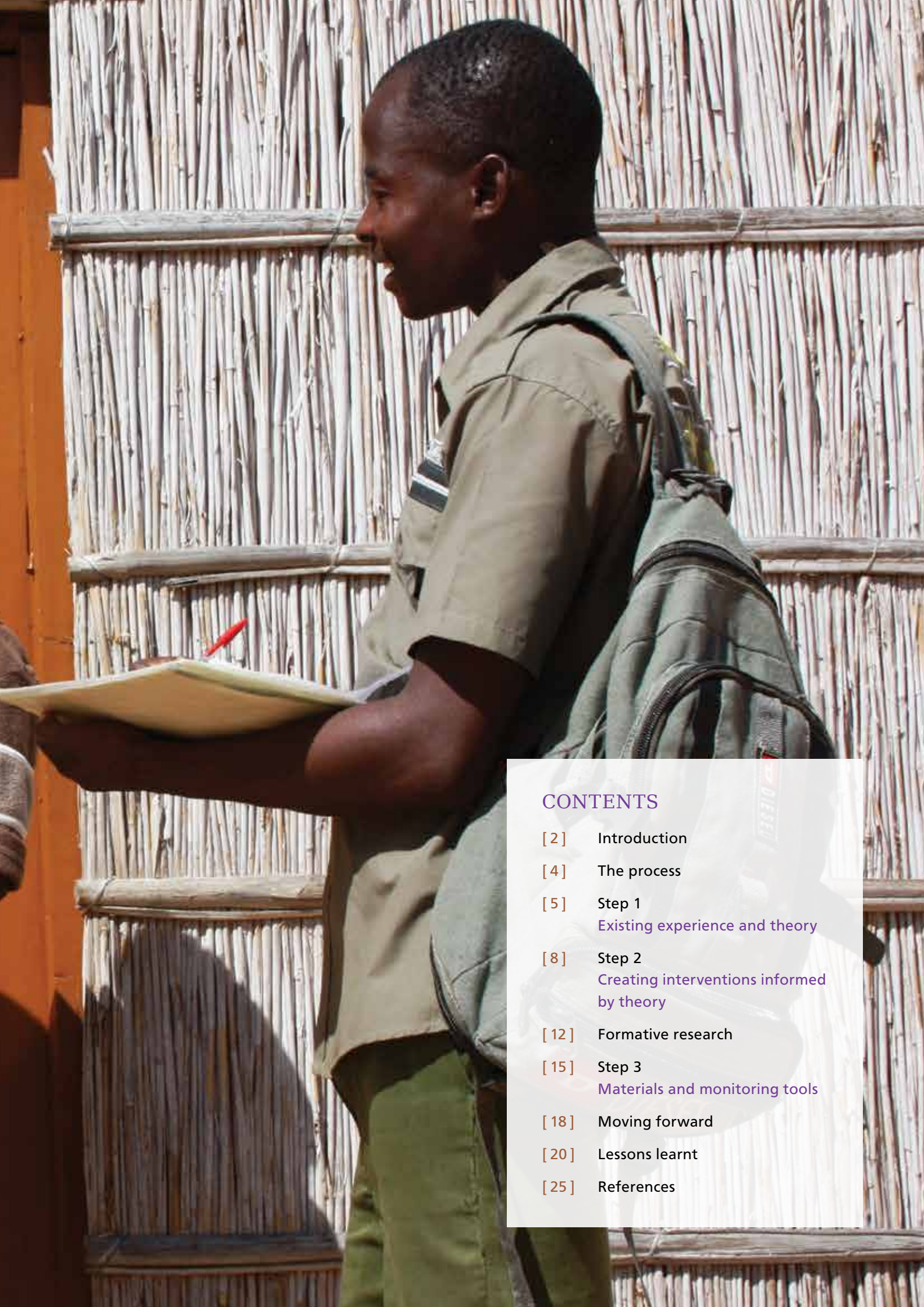Senior Research Associate, University College London

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Mozambique: Community health worker, Fernando Zacule, makes a home visit to check on a young patient
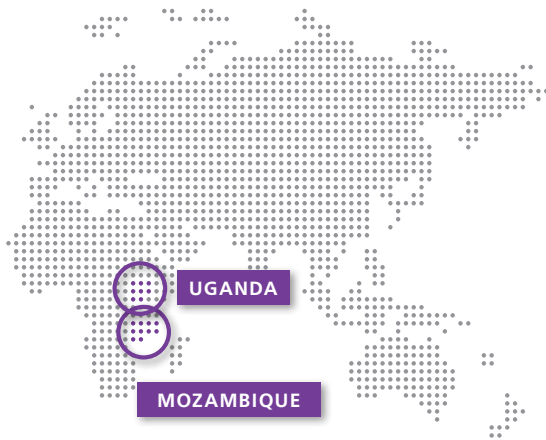Photo: Ruth Ayisi / Malaria Consortium

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Introduction

inSCALE

is a Bill & Melinda Gates Foundation funded five-year project to identify and seek solutions to the difficulties and limitations experienced by community health workers to diagnose and treat diarrhoea, pneumonia and malaria in young children.

UGANDA

MOZAMBIQUE

CHWs have the potential to reduce child deaths from malaria, pneumonia and diarrhoea by up to

60%

During the last decade child mortality has reduced significantly in a number of African countries, largely due to the scale up of appropriate management of diarrhoea, pneumonia and malaria, the three main causes of death among young children. As a way of increasing access to treatment for sick children, several African countries are investing in community health workers (CHWs) to deliver integrated community case management (ICCM). If properly trained, equipped and used, CHWs have the potential to reduce child deaths from malaria, pneumonia and diarrhoea by up to 60 percent [1]. However, CHW programmes have been faced with challenges of scale up while maintaining effectiveness, largely due to problems with high attrition rates and low performance of CHWs.

The Bill & Melinda Gates Foundation is committed to reducing child mortality by contributing to the large-scale and sustained uptake of selected interventions in those countries of sub-Saharan Africa with the highest disease burdens. Making available funding for a project to demonstrate that ICCM programmes can be rapidly driven to scale, the Foundation – through a series of consultations with country programme managers and development partners – identified three main implementation barriers to be addressed.

In partnership with the London School of Hygiene and Tropical Medicine and University College London, Malaria Consortium was awarded funding by the Bill & Melinda Gates Foundation to manage

Integrated Community Case Management

Over 50 percent of childhood illnesses in sub-Saharan Africa can be attributed to diarrhoea, pneumonia and malaria - diseases that are relatively easy to diagnose and treat yet remain the primary cause of deaths in children under the age of five. The carers of these children, however, are often unable to access functioning health facilities. Integrated community case management (ICCM) - an approach where community-based health workers are trained to identify, treat and refer complex cases of children with these diseases – is increasingly being used to supplement these gaps in healthcare provision. ICCM programmes have been endorsed by major international organisations and donors, and many African Ministries of Health as a key strategy for reducing child mortality.

in Uganda
141,000
children die before their
5th birthday; of these
56,000
from pneumonia,
malaria and diarrhoea*

in
Mozambique
pneumonia, malaria and
diarrhoea account for
44% of
deaths
in under-fives*

a project to address these barriers through a project called inSCALE. Innovations at Scale for Supporting Community Access and Lasting Effects. inSCALE committed to identify and test innovative solutions that can facilitate sustainable scale up of ICCM in African countries.

inSCALE aims to demonstrate that coverage and impact of government-led ICCM programmes can be extended if innovative solutions can be found for critical limitations, such as motivation and retention of CHWs. Once feasible and acceptable solutions are identified, these can be used to increase the coverage of ICCM and improve its quality so that more children under the age of five have prompt access to appropriate treatment.

In order to reach the end objectives, several different clinical as well as behavioural outcomes must be met and, therefore, many different actors would need to be influenced – from community members, CHWs and health workers to district and government officials. To achieve this, Malaria Consortium formed a multi-disciplinary team - the inSCALE technical team – bringing together clinical and technical experts, epidemiologists, social scientists and health economists. A key factor to success has been this team's in-depth involvement at each and every stage of the process, resulting in the design of a finely-tailored set of evidence based intervention strategies.

Over the period from January 2010 to August 2012, the inSCALE technical team developed two intervention packages – two for Uganda and one for Mozambique – designed to positively influence motivation, retention and performance amongst CHWs. The first approach involving technology based activities is to be implemented in both countries and the second, through community based innovations, in Uganda only.

This paper summarises the process adopted by inSCALE for identifying the barriers to CHW motivation and performance in Uganda and Mozambique and documents innovative solutions to these challenges that are potentially acceptable and feasible, including the rationale for the design of the two interventions developed.

Three main implementation barriers to be addressed

- Minimally trained CHWs need regular, **supportive supervision** to operate effectively; yet distances to health facilities and district offices and lack of transportation, coupled with poorly developed management information systems, present a continuous challenge to implementation of effective supervision.

- **Motivation** – through remuneration or otherwise – of CHWs is a critical barrier in most countries. Many governments are reluctant to allocate funds and create thousands of new civil servant posts, yet lack alternative approaches to motivate CHWs to keep their health provision services effective and operational.

- **Documentation** of programme implementation processes and results, and **sharing** of solutions with districts about to start implementation, is scarce, leading to continuous and significant waste of time and resources.

The process

The rigorous process employed, which led to the design of two innovative intervention packages, has been based on a combination of methods designed to understand better the main obstacles for regular and effective supervision and motivation of CHWs. In addition to applying underlying theories of worker motivation, a key element in the process was to truly understand how context could impact upon CHW motivation and performance before identifying and developing potential solutions.

Following each step of the process, the inSCALE team gathered to evaluate findings in order to inform and determine the activities, research, or further reviews necessary for the design of the next step. The net was thrown wide at the start, so that these meetings served to systematically distil information and refine ideas at each and every step, and involved all members of the inSCALE technical team throughout.

CHW (known as a village health team member or VHT) Sewanyana Christopher keeps a record of his treatment of a young child, Hoima, Uganda

Step 1
Existing experience and theory

At the beginning of the inSCALE project a variety of reviews and consultations took place to ensure interventions designed drew on experience from previous work and appropriate theory. There was an additional focus on using these sources to identify areas of legitimate need with genuine potential for innovation. An initial team meeting determined the decision process on what to review and why, and areas to be covered were identified. The result was the three strands described below, which were allocated to team members with relevant expertise, each of whom carried out extensive reviews, the findings of which were presented and discussed in subsequent meetings.

Literature reviews

Existing literature on 10 different subjects within the areas of supervision, motivation and incentives (including payment for performance), data use in quality improvement, mHealth, community development, and management, business and human resources was thoroughly reviewed and relevant information extracted. 'Off target' areas, such as corporate approaches, were included to provide a fresh perspective to stimulate discussion and debate.

History and context reviews

The historical contexts of Uganda and Mozambique as they related to CHW programmes were reviewed to ensure any precedents were considered [2]. The way routine data flowed through health information systems was also documented.

The inSCALE project countries differ greatly in their CHW programmes, making this exercise essential to understanding which innovations may work and how to embed them into current structures. One major difference, for example, was CHW coverage.

Step 1 Understanding relevant programme experience and theory

In Mozambique, one CHW covers approximately 2,000 community members who live 8-25km from a health facility, whereas Ugandan CHWs should be present in all villages and typically cover between 250 and 500 people. Such a variation would affect the feasibility of some innovations, so it was important that adjustments were made to the design of the intervention packages for each country.

Expert consultations

Fifteen international stakeholders with a wide range of programme and research experience related to CHWs were consulted to elicit their views, learn lessons and catalogue recommendations relevant to innovative practice [3]. Some fundamental issues were highlighted here that were not necessarily relevant to the implementation of the inSCALE project (for example the importance of community-led CHW selection as opposed to appointments by village leaders or district officials), but were documented to serve as important key recommendations to other districts or countries implementing ICCM programmes in the future.
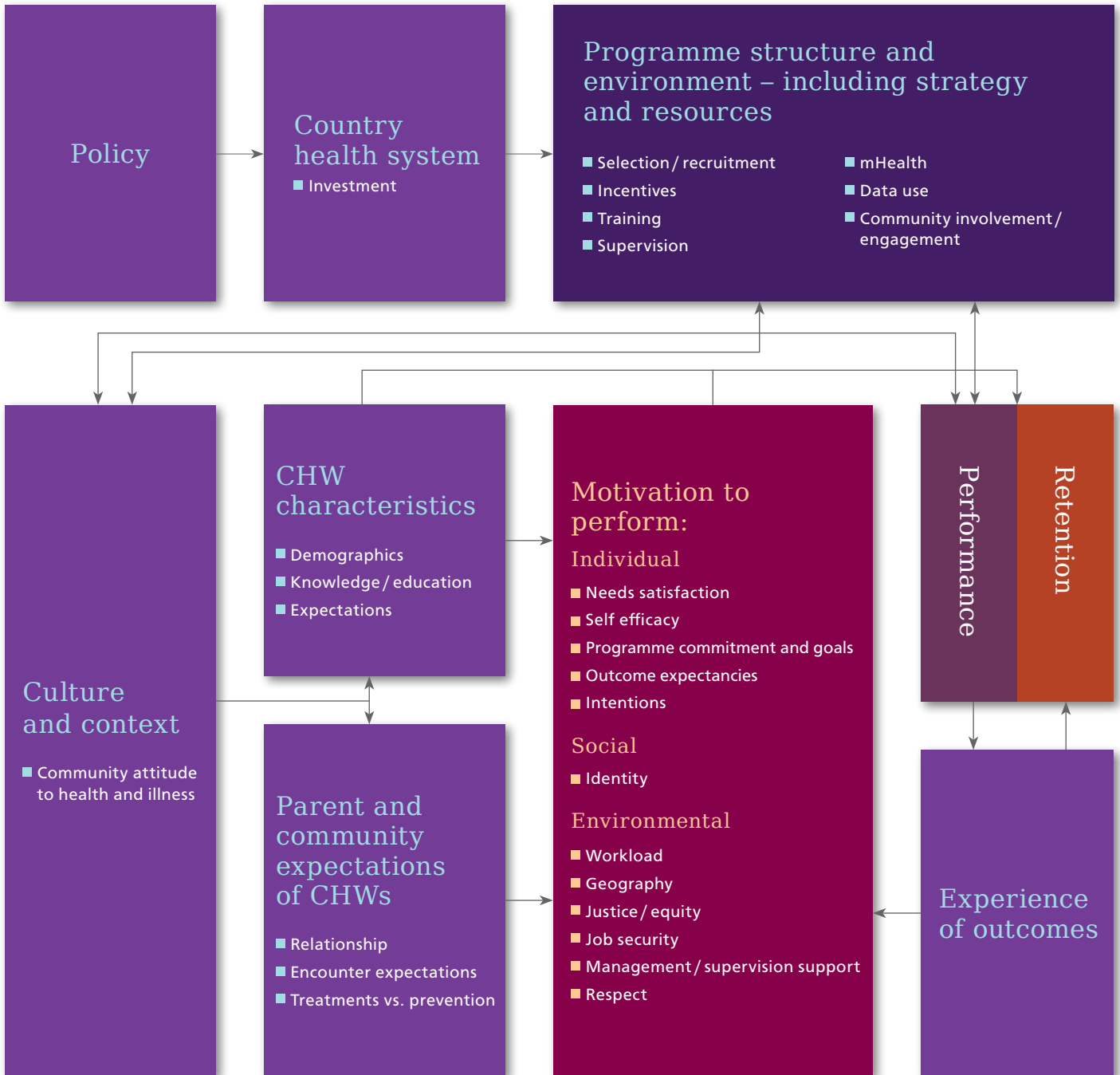
This exercise helped distil and clarify best practices that are already known to work and therefore would need no further testing and, equally, identify approaches that had shown promise but had not been tested sufficiently.

Using the findings, a detailed framework was developed using proposed models [4] for low-income countries combined with motivation and incentives theory. The purpose of this framework was to inform the development of interventions and provide guidance when seeking to understand their impact.

A CHW practices using a mobile phone with the inSCALE interface to send data

Policy

Country health system
- Investment

Programme structure and environment – including strategy and resources
- Selection / recruitment
- Incentives
- Training
- Supervision
- mHealth
- Data use
- Community involvement / engagement

Culture and context
- Community attitude to health and illness

CHW characteristics
- Demographics
- Knowledge / education
- Expectations

Parent and community expectations of CHWs
- Relationship
- Encounter expectations
- Treatments vs. prevention

Motivation to perform:

Individual
- Needs satisfaction
- Self efficacy
- Programme commitment and goals
- Outcome expectancies
- Intentions

Social
- Identity

Environmental
- Workload
- Geography
- Justice / equity
- Job security
- Management / supervision support
- Respect

Performance

Retention

Experience of outcomes

- What inSCALE seeks to understand when designing the interventions and what will inform their impact
- What the project seeks to influence through interventions
- Factors proposed as of greatest relevance to CHW motivation
- Project outcome
- Project outcome

Framework to inform development of interventions to influence performance and retention of CHWs

Step 2
Creating interventions informed by theory

Following on from the evaluation of theoretical findings, the inSCALE team began the extensive process of narrowing down potential intervention methods and innovations still further. Some were identified as best practices and added to the 'resource bank' while others were sorted in to 'best bets' for the Uganda and Mozambique contexts.

The 'best bets'

From the reviews of theory and previous experience, a long list of potential activities using innovative approaches was drafted. Using a standard table that was designed for extraction of interventions (description, source, methods, feasibility, moderators), the team worked on compiling this list independently. During team meetings, the 'best bets' – being the most relevant, feasible and innovative approaches within the project time frames – were presented and discussed. Ultimately, four to five were selected based on ratings for:

- impact potential
- ability to fulfil required needs
- acceptability
- feasibility and sustainability

Step 2 Creating interventions informed by theory
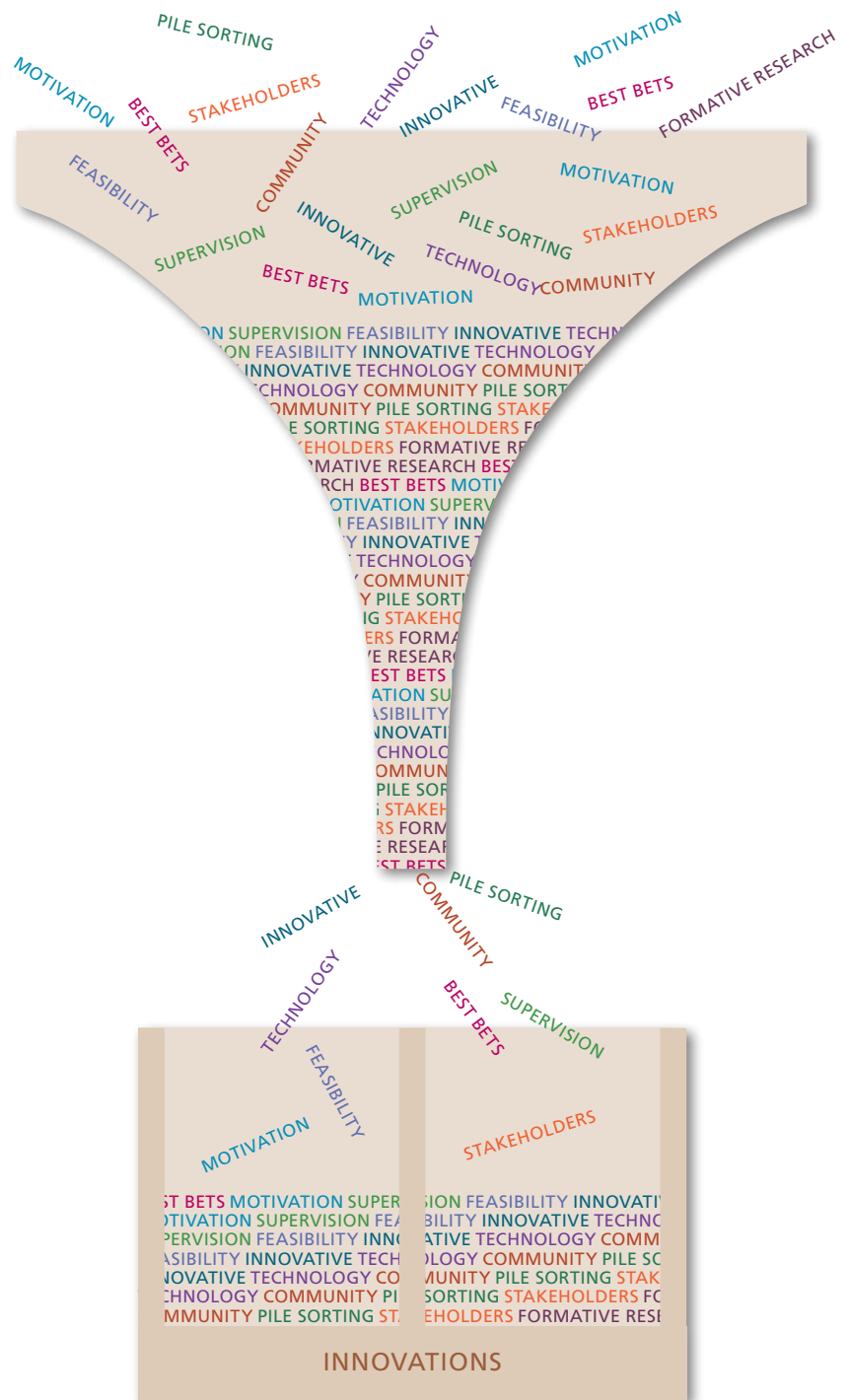
> Given the large number of reviews produced by the team, the 'best bets' approach was suggested as a way of speeding up the discussion and selection process. This exercise was incredibly successful and helpful as it ensured that every team member received an overview of each topic area and had an opportunity to compare and contrast the best bets suggested from all reviews "

Karin Källander, Regional Programme Coordinator, inSCALE, Malaria Consortium

From the start, the inSCALE project intended to develop two different interventions to address motivation and supervision respectively. However, during the first step which focused on understanding the underlying theory, what emerged was that the two areas were not easily separated, but rather interlinked. Therefore, a decision was made to change the approach to designing two intervention packages that each address motivation and supervision but in very different ways. From this final selection, appropriate innovative activities were decided on and grouped into two clusters: a technology arm and a community based arm.

Both these approaches aimed to positively influence CHW motivation and retention by promoting their sense of collective identity.

By the end of the 'best bets' exercise, the list was narrowed down to 17 potential innovations under the technology arms and 13 under the community one for Uganda, and seven and five respectively for Mozambique. As project activities were a step ahead in Uganda, decisions made for Mozambique would partly be based on lessons learnt in Uganda with activities streamlined and combined accordingly.

1. Technology supported approach

Promoting CHW learning and support using information communication technology (ICT) to improve CHW performance, motivation and retention.

When face to face contact is infrequent, this approach aims to use low cost technology, through the development of tools and applications for mobile phones, to increase CHW's feeling of connectedness to the wider health system. The approach will be used to support motivation through self learning, provision of job aids, assist with data submission, and provide individual performance related feedback. It is also intended to provide support supervision, and offer problem solving and peer-support. The mobile phones themselves provide the added benefit of being symbolic of status.

2. Community supported approach

Promoting CHWs as key village health assets to improve CHW performance, motivation and retention.

This approach aims to enhance the perceived value of the CHW, both for themselves and for the communities they serve, through inclusive and participatory local activities. This will not only lead to greater status for CHWs, but will also increase demand for their services, contributing to the sustainability of their role.

Activity: Post-training orientation community meeting to clarify CHW role and understand all stakeholder expectations

Decision: Dropped

Justification: Stakeholders emphasised that this is already a recommended activity in the strategic guidelines and will not therefore be innovative

DROPPED by Uganda stakeholders as considered to have low feasibility:

Activity: Outsourcing supervision to a new cadre of non-health worker supervisors using best practice recruitment approaches

Decision: Dropped

Justification: Stakeholders felt that the country is not yet ready for this activity

Pile sorting

Working with key personnel from Ministries of Health at district and national level in Uganda and Mozambique respectively, discussions were held to establish individual stakeholders' views on the feasibility and acceptability of potential activities by ranking them. Pile sorting methodology [5] was then used to create a shortlist of activities to take to development stage, a process which gave useful insights into participants' perceptions. As a secondary benefit, this step of the process also encouraged early understanding of the inSCALE project amongst key government officials.

In Uganda, a total of five interviews and three group sessions were conducted, involving 23 participants. In Mozambique, five interviews and five group discussions took place. Based on the feedback, the inSCALE team was able to narrow down the list of potential innovations to the following:

In **Uganda**, five of the eight proposed community based activities were dropped – or incorporated into relevant ones being taken forward to the next step of development. Four out of 10 under the technology arm were also dropped.

Due to external delays and project time constraints, just one intervention package was developed for **Mozambique**; the technology supported arm, narrowed down to six activities at this stage. The main reasoning behind choosing the technology approach over community activities was based on pile sorting findings, which highlighted that the local CHW strategy already incorporated substantial community components. Although these might not be working to optimal capacity, the proposed community activities were not therefore seen as particularly innovative for the Mozambique context.

Mozambique: CHWs consider options for the best approach to provide them with support

Formative research

In Uganda

61 in-depth interviews and

15 focus group discussions were conducted for both packages

In Mozambique formative research included

26 in-depth interviews and

4 focus group discussions for the technology intervention

With the final list of 15 potential activities across the two intervention packages in two countries, the general structure of the interventions had been defined. The formative research stage would now help fine-tune the activities by gauging the views of the CHWs, their supervisors, district officials and key programme implementers, as well as caregivers, heads of households and traditional community leaders, on the following:

- The potential for the proposed innovations to meet genuine needs and have an impact (in terms of meeting project aims)
- The feasibility of implementation and scale up of the proposed activities
- The acceptability of the proposed activities to the CHWs themselves, their supervisors, communities, districts and the Ministry of Health

Field workers were recruited and trained to carry out the formative research in two rounds in Uganda – one focusing on the technology arm and one on community innovations. In Mozambique there was one technology based round, which was followed by a pilot CHW interview and focus group discussion. The feedback from this led to amendments to the data collection guides, which were trialled again in a different district, and then finalised.

In Uganda, 61 in depth interviews and 15 focus group discussions were conducted in total for both intervention packages. The Mozambique formative research (again, with lessons learnt from Uganda) included 26 in depth interviews and four focus group discussions for the technology intervention.

Formative research findings

In both Uganda and Mozambique, CHWs find positive feedback and acknowledgement of their work motivating. They value performance focused supervision as this provides them with knowledge to improve how they serve their community. However, health facility supervision is found to be sporadic due to work loads and transport costs.

Resulting interventions

For both countries, conducting performance-based supervision over the phone may reduce travel needs and make supervision more efficient. The inSCALE project is developing a system by which CHWs can submit ICCM data using mobile phones, with immediate automated, personalised performance related feedback. To implement this, job aids and/or additional training will be required to assist supervisors.

In Uganda, supervisors oversee between 25-90 CHWs each, making regular community supervision difficult. The data submission component will be used to target community visits to the weakest CHWs, whereas the better performing ones will be encouraged to keep motivated via mobile phone messages.

In Mozambique, where supervisors only oversee 2-3 CHWs each but long distances make supervision irregular, the intervention will instead be designed to help the supervisor focus on topics which CHWs find difficult and which will need to be addressed in supervision meetings, either face to face or over the phone using competency checklists.
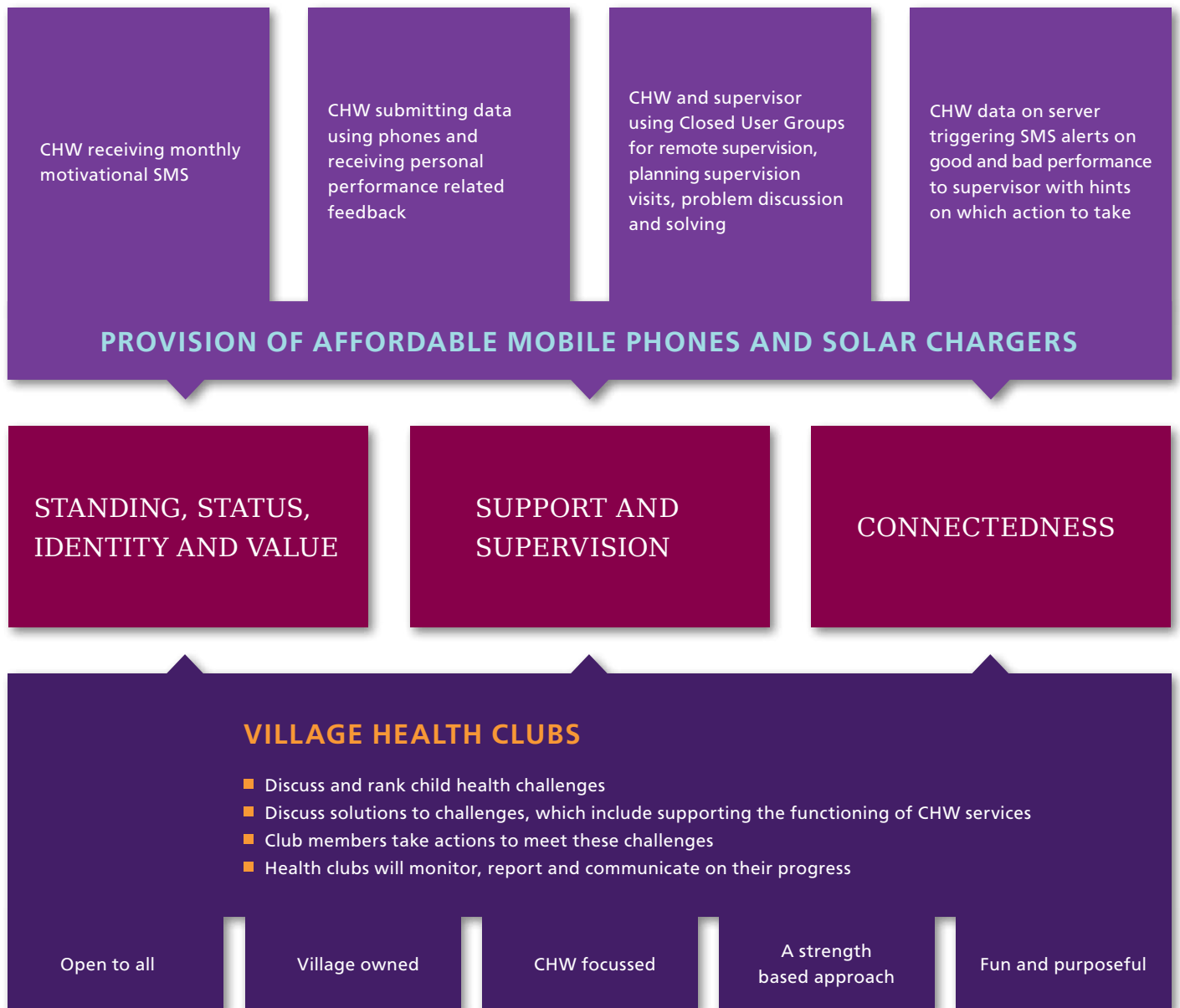
CHWs in Uganda review the process of setting up a village health club
Photo: Paula Valentine / Malaria Consortium

Mozambique	Uganda
Communities use the CHWs, think their work is important and respect them; a supportive relationship that is valued by the CHWs.	Status and community standing is important to CHWs; yet many feel that their work and aims are not well understood in their communities.
THEREFORE	
Innovation design should highlight community support and use terminology meaningful to CHWs, such as "reputation, respect and recognition".	Innovation design should aim at increasing CHW standing and status to improve motivation by, for example, encouraging a higher level of involvement by community leaders in CHW work.

Formative Research Findings illustrating differences between Uganda and Mozambique

The data from this extensive qualitative research exercise was analysed and synthesised into three different formative research reports. The outcomes were then presented at workshops where the implications for the acceptability and feasibility of the proposed innovation were discussed. Final decisions were made on the activities that would fulfil the aims of the project in the most effective way possible. The result: two intervention packages, following different paths to achieving the same objectives, ready for design, development and pre-testing.

CHW receiving monthly motivational SMS

CHW submitting data using phones and receiving personal performance related feedback

CHW and supervisor using Closed User Groups for remote supervision, planning supervision visits, problem discussion and solving

CHW data on server triggering SMS alerts on good and bad performance to supervisor with hints on which action to take

PROVISION OF AFFORDABLE MOBILE PHONES AND SOLAR CHARGERS

STANDING, STATUS, IDENTITY AND VALUE

SUPPORT AND SUPERVISION

CONNECTEDNESS

VILLAGE HEALTH CLUBS

- Discuss and rank child health challenges
- Discuss solutions to challenges, which include supporting the functioning of CHW services
- Club members take actions to meet these challenges
- Health clubs will monitor, report and communicate on their progress

Open to all

Village owned

CHW focussed

A strength based approach

Fun and purposeful

Two approaches to improve motivation and performance of CHWs

Step 3
# Materials and monitoring tools

At the conclusion of the theory and research stage, the inSCALE team had defined two intervention strategies for influencing CHW motivation and retention in two different ways.

Innovations under the technology arm were clearly outlined, allowing for extensive development of innovative mobile phone software and intricate feedback systems including: weekly report phone interface; feedback messages for CHWs; algorithms that will generate flagged messages for supervisors; and monthly motivational messages for CHWs.

While technology arm design process was relatively linear, the community arm development and design process was circular, moving back and forth between findings from Steps 1 and 2. Eventually this evolved into the Village Health Clubs, a participatory approach resting on five key pillars, using a four-step cycle to engage community members. This bottom up approach – promoting inclusivity, equality, fairness, with a focus on pulling together to take health action to seek solutions to child health problems - was chosen from several proposed community based solutions following positive feedback during testing in three field sites.

Once the design and development stages were concluded, these strategies were prepared for implementation: the contents of each message were finalised, and supporting materials developed, tested and produced.

To support the activities and monitor the training to ensure the quality of the implementation, a large number of training materials, job aids and monitoring tools were designed in English and Portuguese.
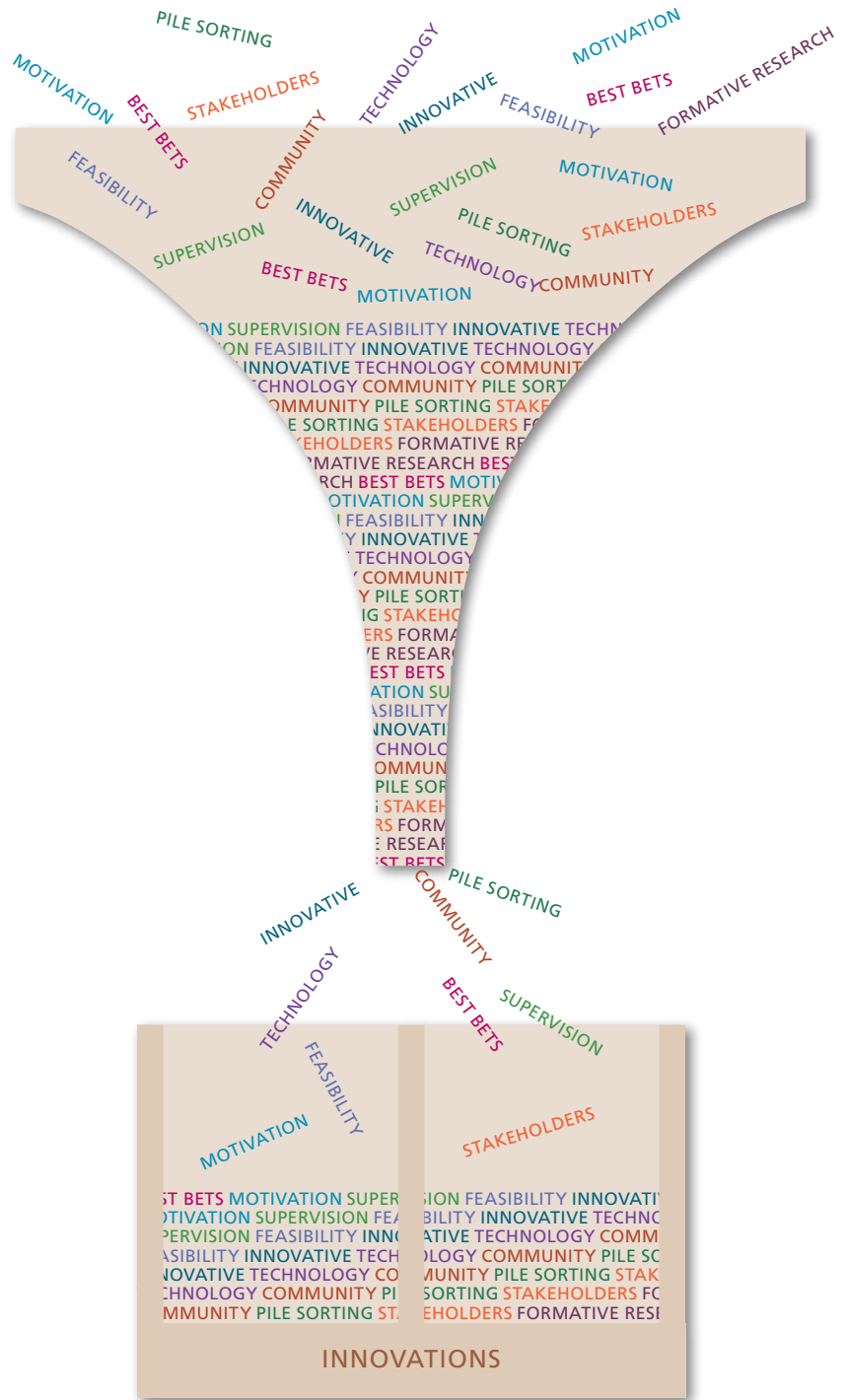
Step 3 Design, development and pre-testing of interventions

Pre-testing of materials

To ensure the materials developed and produced would contain valid and appropriate messaging to be as effective as possible, extensive pre-testing was conducted involving community and end user feedback. For example, responses to the wording and structure of 12 motivational text messages (SMSs) were gathered from 39 CHWs in Uganda, with results incorporated in the final design. Likewise, for the community approach, 20 community members and CHWs assessed images and key messages designed for job aids.

MEETING 1

Club formation

MEETING 2

Prioritising child health problems; finding out causes and solutions; taking action at home

MEETING 3

Finding solutions and taking action together

MEETING 4

Reviewing our actions: How did we get on? What more do we need to do?

PERIOD OF ACTION 3-4 WEEKS

Information for CHWs on how to set up and run a village health club

Training Materials	Job Aids
Community approach	
■ Training of Trainers Guide, including: individual progress chart, peer observation form, CHW workshop evaluation form, and CHW training report ■ 'Sensitisation brief' for sub-county trainers to advocate for Village Health Clubs with other key stakeholders at community / sub-county levels	■ Flipbook of child illness cards to facilitate the four-step process and provide participatory question and answer sessions on malaria, pneumonia, diarrhoea, malnutrition and danger signs in newborns and older children ■ Starter kit for facilitators, including stationery for meetings, certificates of achievement, membership cards, ink pad for LC1 stamp; T-shirts for CHW facilitators, and carry bag for the whole kit ■ Evaluation forms and attendance registers
Technology approach	
■ Training of Trainers Workbook for CHW Supervisors ■ Facilitator's Guide to training on the inSCALE Mobile CHW System ■ Solar Charger Usage Policy and Guidelines ■ Mobile Phone Usage Policy and Guidelines ■ Instructional DVD on mobile phone and solar charger usage	■ How to Use the Nokia Mobile Phone and Solar Charger guide ■ Sending Weekly Reports on the Nokia Mobile Phone guide ■ Mock ICCM register weekly reports ■ Evaluation forms and attendance registers
Supervision training	
■ Four Corners of Supervision handout ■ Supervising the Supervisor guide including evaluation form ■ Supervising the Sub-County Supervisor guide ■ Trainer competency checklist ■ Trainer performance appraisal sheet ■ CHW supervisor competency checklist ■ CHW supervisor performance appraisal sheet	■ CHW Competency Checklist – Mobile CHW System ■ CHW Performance Appraisal Sheet – inSCALE Mobile CHW System

Training materials, job aids and monitoring tools designed in English and Portuguese

Moving forward

Over the next 12 months, the project will assess how effective the interventions have been in achieving their primary goals of increasing motivation and improving performance among CHWs. The process will be reviewed to establish whether interventions were delivered as designed, inform whether remedial action is necessary and feasible, and explain how and why the interventions work or do not work. An end-line survey will evaluate the difference in CHW motivation and performance between intervention areas and a control group, and the proportion of children treated appropriately.

In Uganda

800 CHWs are involved in the community based approach and

1,350 in the technology intervention

The community arm

The community based approach in Uganda will involve 800 CHWs across five districts. The first step in the training cascade was to train 39 development officers, health facility in-charges and health assistants have been trained as sub-county trainers in adult learning, participatory empowerment methodology, and the village health club approach. These trainers are, in turn, training two ICCM CHWs in each village as village health club facilitators with initial practical guidance and support from the inSCALE and district master trainers. The trained CHWs will then work with their peers to mobilise community members to set up and run health clubs in their village. Sub-county trainers will carry out follow up and supportive supervision visits to CHWs to assess their core competencies in delivering ICCM, thus ensuring smooth set up and running of the village health clubs.

The technology arm

In Uganda, the technology intervention will cover 1,350 CHWs across eight districts. Supervisors have already been trained as trainers on the inSCALE mobile CHW system and effective supervision skills using core competency assessment tools, and are now training the ICCM CHWs – initially with the support of Malaria Consortium master trainers. Trained CHWs will return to their villages with mobile phones and solar chargers to assist their work in the community, and sub-county trainers will carry out follow up and supportive supervision visits to ensure that appropriate, quality care is delivered and that mobile phones are being used appropriately and to maximum effect.

In Mozambique, the project area for the technology intervention will be six of the 12 districts in Inhambane province. All district and health facility supervisors, as well as the district CHW coordinators in the intervention districts, will be trained as trainers to deliver the CHW mobile system and provide support supervision for the 150 CHWs in the area. As in Uganda, Malaria Consortium will provide training support, both for initial training of trainers and for trainers in how to carry out support supervision.

A Ugandan CHW from Kyankwanzi district, Western Uganda, sends data about his patients via SMS

Lessons learnt

Successes

- There is much to learn about CHW supervision and incentives by reviewing health worker literature; even where evidence is limited, a literature review can be useful to garner ideas and can make an important contribution to decision making. Similarly, literature reviews from 'off target' areas such as the business world can offer a fresh perspective and provide useful insights and ideas. The rigorous review process, though time consuming, was key in enabling the inSCALE team to make invaluable changes in assumptions early on in the project.

- Early on in the project, mobile phone numbers for the majority of the CHWs (over 7,000) trained in the nine districts in Uganda were collected, which proved a very useful resource for understanding CHWs access to mobile phone networks and for pre-testing SMS messages. A locally established call centre carried out phone interviews with CHWs – an immensely time-saving approach replacing the need for numerous field visits.

- Taking a theoretical view of motivation and retention helps identify innovations and their potential effect, particularly when evidence is lacking. It also helps understand how innovations may work, encourages lateral thinking and provides a framework for understanding why certain conditions have, to date, resulted in lower than hoped for levels of CHW retention and motivation.

- Understanding country context is key. The inSCALE countries differ greatly in their CHW programmes and the in-country work has been essential in understanding which innovations may work and how they can best be embedded into current structures.

- In a multi-country project activity, timeline differences can be taken advantage of to allow skills sharing and mentoring across country teams, by bringing in project staff from the 'secondary' country to shadow activities as they take place in the 'primary' one.

- When developing a project with this many interlinked areas of social and clinical importance, taking the time to engage with and discuss ideas with a variety of professionals with extensive academic and programme experience of working with CHWs is beneficial.

Challenges

Although both Uganda and Mozambique had policies in place to support ICCM implementation, there were some operational challenges that delayed implementation, especially since the approach involved embedding activities into national and sub-national institutional arrangements. As a result, activities that were directly linked to ICCM implementation were behind schedule, ultimately leading to the implementation of just one intervention arm in Mozambique, where the delays were more pronounced.

Designing, developing and rolling out two interventions in two countries simultaneously is an enormous challenge, the time-consuming nature of which should not be underestimated.

When working within a field that has a lot of momentum, the "crowding" of organisations working in this field - sometimes with competing/ similar objectives – can lead to challenges in getting buy-in and support from Ministries of Health to all project activities. A specific example is the proliferation of mHealth pilots in Uganda, where more than 60 projects are running simultaneously with little involvement of or coordination by the Ministry of Health.

This is now being addressed by the formation of a government-led process to create an eHealth framework to guide and coordinate project implementation,while ensuring that government priorities are addressed. This has led to a delay in getting approval for going ahead with project activities.

Working in collaboration with a multi-disciplinary team (the inSCALE team) from many different institutions, particularly at a distance, can be challenging and requires substantial upfront planning, face to face meetings and a well-organised and proactive team. The time that this takes should not be underestimated when planning a project, and reliable distance communication and information sharing using software such as Skype conference calls should be incorporated from the beginning. Where practicable, and as early as possible in the project life, time should be built into the work plan for face to face team building activities and role clarification.

At proposal writing stage for the inSCALE project it was impossible to anticipate how much time would be needed for designing, developing and piloting the prototype innovation for testing, which contributed to a delay in rolling out the interventions. The design and development were also delayed by the need for stakeholder buy-in at national and sub-national levels to assure a greater chance of successful implementation.

While stakeholder involvement early on in the project design is essential for buy-in and understanding of the context specific opportunities and limitations, a challenge with innovative projects which run over several years is the ever-evolving policy environment, where ideas which were seen as unfeasible at one point in time, could be incorporated into policy and rolled-out a year or two later. While projects are often bound to fixed timelines from donors, there is a constant need to juggle these with being flexible enough to address the context on the ground.

eHealth

According to the World Health Organisation, eHealth is the combined use of electronic communication and information technology in the health sector. It includes using information and communication technology such as computers, mobile phones, and satellite communications, for health services and information.

mHealth

In recent years, mobile Health, or mHealth, has emerged as an important part of eHealth and is defined as the use of mobile communications (such as mobile phones) for health services. mHealth programmes can serve as the access point for entering patient data into national health information systems, and as remote information tools that provide information to healthcare clinics, home providers, and health workers in the field.

CHWs learn how to conduct
village health clubs in Uganda
Photo: Paula Valentine / Malaria Consortium

About Malaria Consortium

Malaria Consortium is one of the world's leading non-profit organisations specialising in the comprehensive control of malaria and other communicable diseases – particularly those affecting children under five. Malaria Consortium works in Africa and Southeast Asia with communities, government and non-government agencies, academic institutions, and local and international organisations, to ensure good evidence supports delivery of effective services.

Areas of expertise include disease prevention, diagnosis and treatment; disease control and elimination; health systems strengthening, research, monitoring and evaluation, behaviour change communication, and national and international advocacy.

An area of particular focus for the organisation is community level healthcare delivery, particularly through integrated case management. This is a community based child survival strategy which aims to deliver life-saving interventions for common childhood diseases where access to health facilities and services are limited or non-existent. It involves building capacity and support for community level health workers to be able to recognise, diagnose, treat and refer children under five suffering from the three most common childhood killers: pneumonia, diarrhoea and malaria. In South Sudan, this also involves programmes to manage malnutrition.

Malaria Consortium also supports efforts to combat neglected tropical diseases and is seeking to integrate NTD management with initiatives for malaria and other infectious diseases.

With 95 percent of Malaria Consortium staff working in malaria endemic areas, the organisation's local insight and practical tools gives it the agility to respond to critical challenges quickly and effectively. Supporters include international donors, national governments and foundations. In terms of its work, Malaria Consortium focuses on areas with a high incidence of malaria and communicable diseases for high impact among those people most vulnerable to these diseases.

www.malariaconsortium.org

A young mother in Mozambique
waits her turn to see the CHW
Photo: Ruth Ayisi / Malaria Consortium

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OTHER RESOURCES

www.malariaconsortium.org/inscale
www.malariaconsortium.org/resources/publications