



## From Pilot to Practice

LESSONS ON SCALE, INSTITUTIONALIZATION AND SUSTAINABILITY FROM THE (IN-PROGRESS) JOURNEY OF THE SC4CCM PROJECT







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Scale up and institutionalization of successful practices is the goal of every pilot project. Once scaled, the goal is to sustain the intervention so that benefits proven at small scale can generate measurable health impact. Successfully navigating this pilot-to-practice journey to meet scale up and sustainability goals has been a challenge for many global health interventions. There is need for more evidence on what works to increase the likelihood of scale up and sustainability.

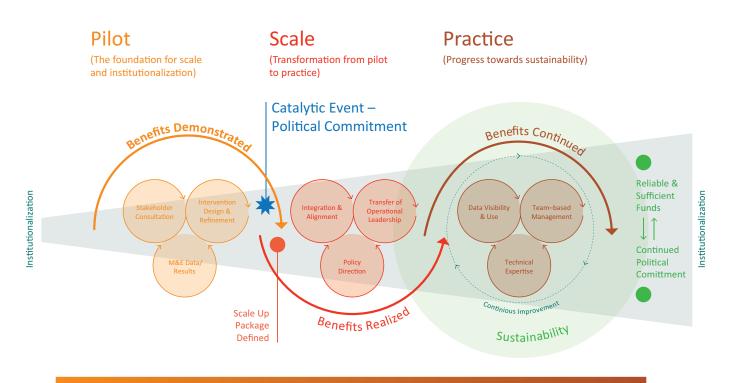
This brief outlines the pilot-to-practice journey of the Supply Chains for Community Case Management (SC4CCM) project in three implementation contexts in Sub-Saharan Africa (Malawi, Rwanda and Ethiopia). Based on the project's five year experience with identifying, testing, and scaling up successful community level supply chain interventions, we describe three distinguishable stages of the journey:

- 1. Laying the foundation for scale and institutionalization during the pilot stage;
- 2. Transforming pilot successes into practice at scale using a strategy built on evidence from the pilot; and,
- 3. Integrating successful practices into organizational structures so that the benefits can be realized more broadly within the health system.

We show that institutionalization is a process that must begin at the very outset of this journey. Political commitment and engagement of local implementing partners play important roles in each step of the journey. We identify what approaches worked across implementation contexts to move the interventions from pilot to scale to practice and assess the opportunities and risks to institutionalization and sustainability. Although it was recognized from the start that the short project implementation period would not allow a full assessment of scalability, institutionalization, and sustainability, important lessons were still derived. These are presented here. The purpose is to lay bare the process of scaling, institutionalizing and sustaining a systems-based innovation from one multi-country project in hopes of contributing to the success of the scale up, institutionalization and sustainability of other health systems interventions.

## THE PILOT STAGE: THE FOUNDATION FOR SCALE AND INSTITUTIONALIZATION

The pilot stage of the SC4CCM project was similar in all three implementation contexts. The approach included three common elements that proved important for laying the foundation for scaling up the community supply chain interventions: 1. consulting with stakeholders, 2. continuously refining the intervention design, and



Project Health System

3. consistently using monitoring and evaluation data. Using this multi-faceted approach provided numerous opportunities to demonstrate the benefits (and identify challenges) of the intervention.

From the outset, the SC4CCM project was mindful of the end goal of achieving scale and institutionalization. This informed the design approach: interventions were deliberately designed to be affordable, easily adopted by in-country implementing partners, including Ministries of Health (MOH), and easily integrated into existing organizational practices<sup>1</sup>. SC4CCM conducted a baseline assessment to identify key gaps in the community health supply chain of each country and used these findings to design country-specific intervention packages in close consultation with MOH and other in-country stakeholders. Although there were variations, the interventions in all three countries included redesigning and streamlining the community level resupply procedures (RSP), as well as

adding a quality improvement team (QIT) component that reinforced the consistent and correct use of the resupply procedures and linked supply chain management from higher levels to the community<sup>2</sup>.

Over the course of the pilot period, the project deliberately invested heavily in monitoring intervention implementation, sharing data, and regularly updating MOH, implementing partners and other stakeholders. SC4CCM also invested in providing targeted support to pilot areas that led to refining and improving the interventions, in line with the project's scale up principles: affordability, ease of adoption, and integration into existing practices. These investments maintained the critical connections between the intervention refinement process, stakeholder consultation and monitoring and evaluation data use, which laid the foundations for transformation to scale. The iterative refinements during the pilot stage meant that the key MOH stakeholders at central and district levels, and



### PILOT

Setting the foundation for scale and institutionalization

#### **MALAWI**

Project consulted with the MOH and stakeholders when designing and refining the interventions. Evaluation and monitoring data were shared through meetings and with individuals. Quarterly monitoring data informed intervention support and refinement of interventions throughout this stage, such as redesigning the mHealth dashboard to allow for better performance monitoring and training staff on how to run an effective meeting.

#### **RWANDA**

Project consulted with the MOH during design phase, discussed project approach and feasibility with MOH and supply chain partners and used their input to develop plans. Interventions were monitored and data and findings were shared with MOH and stakeholders. Project staff provided intervention support and based on feedback, made adaptions to streamline and simplify RSP and quality improvement team (QIT) tools and processes.

#### **ETHIOPIA**

An LQAS (Lot Quality Assurance Sampling) was conducted during training roll out to identify areas to target in follow up support, such as health center staff knowledge and ability to train CHWs. After roll out supervision data was collated and shared through zonal review meetings to monitor progress and solicit feedback on required intervention support. Data and progress was shared at central level technical working group meetings.

 $<sup>^{1}</sup>$  This strategy is in line with current thinking by donors such as USAID (e.g., USAID Local Systems Framework, 2014).

<sup>&</sup>lt;sup>2</sup> Country midline reports available at: http://sc4ccm.jsi.com/tools-publications/results

other in-country implementing partners, were involved and participating in the interventions from the beginning of this journey. The project's approach to intervention refinement also contributed to additional benefits being realized, which caught the attention of stakeholders and increased the desire to scale up, and support future scale up, even before the end of the pilot stage.

For example, in Malawi, both the mHealth system dashboard and the resupply worksheet were refined during the pilot stage with user and stakeholder input. The

refinements enabled easier performance monitoring by health center and district staff, and occurred in response to practical challenges with the originally designed tools identified through implementation monitoring and project support. This process allowed the benefits of improved data visibility to be easily and rapidly identified by partners in Malawi who picked up the mobile resupply system and began scaling it to other districts even before evaluation results were available. In addition, district managers and other local stakeholders in Malawi who were not part of the pilot testing were kept abreast of the intervention

# CATALYTIC EVENTS: PROPELLING THE INTERVENTION FROM PILOT TO SCALE

All three countries experienced a "catalytic event" led by the MOH that was the stimulus for moving from the pilot to the transformative stage. Some of these events developed organically from earlier project investments in iterative consultations during the pilot stage, and some were designed and executed by the project at the end of the pilot stage.

The most important enabler and facilitator for moving from pilot to scale was political commitment, which was in turn facilitated by the project's early and continuous investments in stakeholder consultation, data sharing, and collaborative intervention design and refinement. In all three countries, senior MOH staff endorsed elements of the intervention, even before the midline evaluation, based on benefits seen through the monitoring or reported benefits from the field. Regardless of potential risks to adhering to the project timeframe, SC4CCM invested substantial resources in stakeholder consultation, which went beyond just engagement to continuous involvement and collaborative problem-solving, resulting in political commitment and the catalytic events that propelled the SC4CCM interventions from pilot to scale.

#### **MALAWI**

Senior MOH Management Team endorsed scale up of mHealth innovation before midline evaluation based on positive feedback from users of the system.

Key implementing partner mobilized resources to scale up mHealth innovation before midline evaluation was conducted.

#### **RWANDA**

Involving MOH partners in the follow up and results allowed them to see the benefits – they saw improved product availability and added value of QIT. MOH heard feedback from users on positive aspects of pilot interventions.

This resulted in early political commitment by the MOH to roll out QITs and RSPs.

#### **ETHIOPIA**

State Minister requested concept note from newly formed Logistics Management Unit (LMU) on how to move away from fixed quantity kits and integrate iCCM products into national logistics system. As LMU was well informed on project activities, they asked to use our experience to inform the concept note.



### SCALE

#### Transforming the intervention from pilot to scale

#### **MALAWI**

Data validation workshops at midline were used to refine the intervention package. The MOH supported the project in advocating for partner support to roll out as part of national system. A five year transition plan was developed to transfer operational ownership to MOH, based on outcomes of Pathway to Sustainability Tool workshop and results from an assessment conducted on local public and private sector capacity to support a mHealth system.

#### **RWANDA**

The data validation workshop and midline evaluation shared the demonstrated benefits with key stakeholders — improved product availability, and added value of QIT. This led to political commitment to roll out of QITs and RSP. To implement quickly and efficiently, integrated RSP and QIT were included in the standard iCCM training. MOH decided to include an indicator related to the QIT component in the performance based financing (PBF) system and supply chain performance indicator to community PBF. The project worked with the MOH to develop a scale up plan and community supply chain strategic plan for MOH.

#### **ETHIOPIA**

Workshops were conducted to share results of pilot at regional and national levels. Feedback from these workshops were used to develop final recommendations for scale up. The scale up package was included in some zonal level workplans and included in national concept note. Ownership of innovation was transferred to LMU.

implementation to build awareness in preparation for future scale up.

In all countries, the pilot stage was capped off by the midline evaluation to assess intervention impact in the pilot areas, followed by a data validation process with key MOH and in-country implementing partners. Benefits of the tested intervention packages were demonstrated in the evaluation results. These evaluation results, combined with learning from the pilot stage on feasibility and affordability, allowed stakeholders to provide informed input for identifying which successful practices to include in the scale up package, increasing ownership of and political commitment to the scale up process, and opening the door for transfer of operational leadership. Having refined the package, stakeholders were led through an analytical process to identify what was required to scale and institutionalize the successful practices. The project used a structured analysis tool<sup>3</sup> and collaborative workshop process to identify action items which then informed the next stage of the journey: transforming from pilot to scale.

### THE SCALE UP STAGE: TRANSFORMATION FROM PILOT TO PRACTICE

The catalytic events in all three countries signaled the transformation of the intervention from the pilot to the scale up stage. In each implementation context, political commitment to scaling up a defined intervention package initiated the transformation and facilitated the process of resource mobilization and partner commitment to supporting the scale up process. Once initial resources to support scale up were identified, certain factors were critical to driving the process of moving from pilot into practice: integration and alignment of the scale up package with existing processes and systems; transfer of operational leadership from project to other stakeholders; and continued policy direction and support to both integration and operational leadership. These factors also worked to further institutionalize the intervention, moving it closer to organizational practice.

At endline in all three countries, interventions were in the scale up stage; experience up until the endline evaluation

<sup>&</sup>lt;sup>3</sup> Pathway to Sustainability Tool, JSI/SC4CCM, 2012, http://sc4ccm.jsi.com/?p=1140



showed both achievements of and opportunities for integration of the practices into existing processes and systems, operational leadership transfer and continued policy direction. Resupply procedures were being integrated both vertically up the supply chain system and horizontally across programs. Central level quantification processes were more informed by lower level data, rather than assumptions, and were being standardized across programs. As part of the QIT component, implementers were successful in building team-based management at the community level. Although linking these community level teams with higher levels, and scaling them to new areas, was difficult in all implementation contexts, there was clear policy direction for finding ways to overcome these challenges.

SC4CCM did not have a mandate to scale up the tested interventions themselves, but to leverage the effort and resources of relevant in-country implementing organizations and government health supply chains to support the scale up process. This required a new way of working, providing technical assistance and strategy inputs, but also ensuring that local partners were well equipped to take the work forward so that operational leadership could be transferred from the project. For example in Malawi, SC4CCM and the MOH advocated with partners for financial support for scale up, as well as operational leadership, and progressively, funding was secured to roll out the intervention scale up package nationally.

SC4CCM also worked very closely with MOH and partners during this transformation stage to ensure the scale up package was well integrated with existing systems and was aligned and set up to be housed and managed within existing structures. In some cases, the interventions needed to be adapted further to ensure they were aligned with other initiatives, encouraging further institutionalization. For example, in Rwanda the resupply procedures and QIT tools were included in an integrated iCCM training package

that all community health workers would receive, even though that package was not specific to supply chain.

The scale up intervention package differed from the intervention package tested during the pilot stage. Despite this, the endline evaluation results showed that benefits realized (and challenges faced) did not differ much in the scale up areas and showed up relatively rapidly after implementation began.

The most prominent risk to progressing from pilot to scale, identified in all three contexts, was maintaining the quality of implementation as operational leadership was transferred. We identified that the quality aspect rests heavily on the management component of the intervention, which has been difficult to scale and institutionalize because of several commonly encountered systemic barriers: weak routine supervision or follow up, mostly due to lack of funding; scheduling difficulties for meetings; overburdened health staff who cannot fit in additional responsibilities, despite recognizing benefits, due to competing time demands; and continuous staff turnover.

Another challenging aspect of the management component was that it had both immediate and longer term benefits, and while benefits associated with improved communication, collaboration and coordination were realized immediately, other benefits related to supply chain performance measures (such as improvements in stock card use and accuracy, reporting rates, lead times etc.) took more time to be realized. Without consistent implementation of the management intervention, which was the challenge in all three countries, the full range of supply chain benefits are unlikely to be realized at scale. Ultimately, the management initiatives represent a new way of doing business — incorporating a continuous improvement approach into everyday operations- this culture needs more time and consistent implementation to take root.

## THE PRACTICE STAGE: PROGRESS TOWARDS SUSTAINABILITY

The SC4CCM project hypothesis was: once operational leadership for the aligned, integrated intervention is transferred, and implementation at scale is achieved, institutionalizing the intervention into organizational practice is necessary for benefits to be realized at scale, and for the intervention to eventually be sustained. The short project period precluded a direct assessment of how to achieve full-scale implementation or what contributes to successful establishment of the scale up package as an organizational practice. Instead, we analyzed the endline evaluation evidence on organizational practice and contributions to scalability to identify a trajectory and

### INSTITUTIONALIZATION AND ORGANIZATIONAL PRACTICE

SC4CCM recognized early on that scale up alone was not sufficient to ensure sustainability; the pilot interventions needed to be institutionalized into routine organizational practice in order to be sustained SC4CCM defined organizational practice as "a set of procedures carried out routinely by an identified set of individuals in an organization, who act as a unit working to accomplish a common purpose or task." It is distinguished from "standard practice", which is done routinely by individuals without regard to their connection with the larger organization or in connection with a set of individuals with a

Organizational practice is established through a process of institutionalization that begins during the design stage, and aligns the organization's policies, systems, structures and complementary processes to support the desired practice. This process continues through each stage of intervention development and implementation. The degree of institutionalization gradually increases as the intervention is integrated into different aspects of the organization, as policies and procedures are aligned, and as adaptations are made to the intervention for good fit within existing structures and systems. Because organizational practice requires individuals working together as a unit to achieve common objectives by using the established routine practices, the continuous improvement culture is a key element to achieving both organizational practice and sustainability of the intervention.

hypothesize about whether the interventions were likely to be sustained.

The evidence showed that establishing the intervention package as an organizational practice relies on a culture of continuous improvement, which in turn is driven by two critical processes: data visibility and use, and teambased management, which both need to be supported by appropriate levels of technical expertise. Sustainability of the package then relies on continued political commitment and reliable, sufficient funding to drive the continuous improvement process and ensure that benefits continue to be realized.

We were able to identify that some of these critical processes had begun, despite the short SC4CCM project period. Data availability had been greatly increased by the interventions, and in some cases, data use and visibility at

all levels of the supply chain also significantly improved. Because the management component of the intervention package was the most difficult to institutionalize and sustain in all settings, it had stopped functioning optimally in some areas. This allowed us to clearly identify, in the endline evaluation, that without support from the management component, which provides the foundation for the continuous improvement culture, resupply processes generally, and data use for continuous supply chain improvement specifically, did not reach full potential. While the resupply procedures had largely become standard practice at the community level, perceptions of the data not being used and lack of products to resupply the community level at the requested levels, were enough to discourage correct and consistent adherence to the recommended procedures, eroding the likelihood that the resupply procedures would be sustained as standard organizational practice. Technical expertise and leadership for supply chain management was lacking at the higher levels in all three contexts, as were identifiable sources of reliable funds in sufficient quantities for both child health products and for the management component of the interventions.

The ultimate project goal was to improve community level product availability. Once this benefit was realized, we hypothesized there would be motivation to take on operational leadership, continue political commitment, and ensure reliable financing for the intervention. However, product availability at the national or higher levels of the supply chain proved to be a barrier in all three countries to achieving or sustaining measurable improvements in community level product availability. Although other measurable improvements in key supply chain processes that contribute to improved product availability were achieved and sustained at the community level, the endline evidence confirmed that the primary drivers of community product availability were having sufficient products available at higher levels of the supply chain and having supply chain practices at these higher levels that ensure supplies routinely reach the community level.





### ORGANIZATIONAL PRACTICE

Moving from scale towards sustainability

#### MALAWI

Data from the mHealth system were used for performance monitoring at all levels. A national team was created to monitor performance and uptake of implementation and provide support to district level. District level management teams were oriented to the intervention. Secondee placed in the central MOH to build technical expertise.

#### **RWANDA**

RSPs were implemented through the integrated training and in use in 14 of 30 districts in less than one year. Conducted training of trainers for master trainers on RSP and QITs. QITs have been introduced as national policy and one supply chain indicator has been added to the community PBF system.

SC4CCM did not have the mandate or resources to tackle these two issues, which were found to be preconditions for improved product availability at the community level. While we strengthened resupply and data use processes and skills at the community level, and routine data-based quantifications in all countries, the project was not able to influence financing or country procurement practices, which ultimately determine how much product is available at the national level. Nor were we able to take a "whole" supply chain approach to ensure that resupply procedures from community to central levels were aligned optimally.

#### **CONCLUSIONS**

The findings show that, to various degrees in all three countries, the SC4CCM project successfully navigated the transition from piloting innovations to scaling them up. The key finding is that investments made at project start-up and through the pilot phase were critical in building the foundation for events and processes that allowed the intervention to scale up. The investments were multifaceted and resource-intensive: continued and consistent stakeholder consultation and intervention redesign and refinement, all based on data and evidence from high-quality monitoring and evaluation activities. The intensive resource investment required that the project recognize

and accept the trade-off between these investments and maintain singular focus on achieving maximum "demonstrated" benefits from the pilot testing. This proved to be a critical risk to take, because although demonstrating intervention benefits was necessary, it was not sufficient for moving to scale: catalytic events were needed to galvanize political commitment to scaling up the interventions. These events were what propelled the intervention from pilot to scale; some developed organically from early project investments and some were designed and executed by the project at the end of the pilot stage. All were necessary for scale up to occur.

Our endline evidence also demonstrates that the foundation for institutionalization and sustainability has been successfully laid in all three countries, although not yet fully operationalized. There are early signs that translating many of the innovations into standard practices has occurred at some but not all levels of the system, meaning that the innovations have yet to be translated into organizational practices. All countries have identified opportunities for completing the scale up process or making the transition from scale to organizational practice, but this will hinge on technical expertise and availability of adequate resources for effectively scaling the management component, which is needed for the culture of continuous improvement that underpins the organizational practice

#### **KEY MESSAGES**

Pilot projects should recognize that **there is not** a linear progression from pilot to organizational practice, and prepare their implementation plans to accommodate the iterative processes needed.

Pilot projects must start by **deliberately** intending to scale and institutionalize successful parts of the intervention, and by also **explicitly planning** for activities to support scale up when the project is being conceived and designed.

Pilot projects **must invest in continuous**, **collaborative engagement** with health system stakeholders from the outset, along with proving the benefits of the intervention.

Pilot projects **must adjust responsively** to increase the potential scalability of the intervention; they should not fear adjusting the interventions before evaluations <u>are conducted</u> and project effects estimated.

Stakeholders should recognize that **there is no endpoint to the journey** from pilot to sustained
organizational practice; a continuous improvement
process, continued political commitment, and reliable
financing are all necessary ongoing investments for the
process to produce sustained benefits.

stage. In other words, investments to date and sustaining the demonstrated effects are at risk because the management component of the intervention package has been difficult to scale and establish as organizational practice. Without successful scale up and institutionalization of processes to support a continuous improvement culture, and until the barriers to improved higher level product availability are adequately addressed by the health system, the full positive impact of the proven community-level supply chain interventions will not be realized.

#### **BACKGROUND TO THE SC4CCM PROJECT**

In 2009, the SC4CCM project, with funding from the Bill & Melinda Gates Foundation, set out to increase availability of key medicines and commodities for treatment and management of sick children at the community level in three sub-Saharan Africa countries: Malawi, Ethiopia and Rwanda. The underlying hypothesis was that solving supply constraints would yield significant improvements in child

health programs' effectiveness, scale, and impact. The cross-country project goal was to demonstrate that it is possible to overcome common community-level supply chain constraints that prevent effective community-based treatment of common diseases of childhood. The project was further tasked with demonstrating that these innovative solutions could be taken to scale and were feasible to sustain by countries after the project ended.

SC4CCM embraced this dual mandate from the outset, namely to pilot innovations that would significantly improve community health supply chain outcomes, while also ensuring they could be taken to scale and sustained by stakeholders in country after the project's lifetime. Therefore, the project built in considerations for scale, institutionalization and sustainability when designing interventions to pilot.

The emphasis of SC4CCM was on testing, learning, and turning evidence into widespread practice. Specifically, the focus was to learn about successful implementation and how to increase the potential for scale up, institutionalization, and sustaining the interventions and their effects. To this end, midline evaluations were conducted in 2012-13, and endline evaluations in 2014. Midline evaluations were focused on demonstrating positive, measurable effects, and findings were used to identify scale up packages and kick-off the scale up process. Endline evaluations focused on exploring what could be said about the scalability, institutionalization, and sustainability of the SC4CCM interventions.



#### METHODOLOGY FOR THE PILOT-TO-PROGRAM JOURNEY ANALYSIS

The data sources for analyzing the pilot to program journey included: 1. learning regarding feasibility and affordability during pilot; 2. midline evaluation survey and qualitative results, and 3. endline evaluation surveys and case studies. Descriptions of the study designs and data collection techniques for the midline and endline evaluations have been published elsewhere. Country-specific analyses of the endline case studies, integrating endline survey data, were conducted first. Cross-case analysis then used pooled qualitative data coded in atlas.ti and triangulation with case-specific findings, integrating survey and case study data, and included a large team for validation and triangulation purposes. The journey graphic was developed by the cross-case analysis team based on the results of the integrated, triangulated data analysis.

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All materials are available at www.sc4ccm.jsi.com.