

Lessons for community level supply chains

Implementing standardized resupply procedures and team based approaches to improve supply chain knowledge and practices among CHWs in Rwanda



Supply Chains for Community Case Management Project
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Rwanda iCCM Program Overview and Problem Statement

Baseline Results (2010)

- **49%** of CHWs who manage health products had 5 CCM tracer drugs* in stock on day of visit
- No standard procedures or formulas for calculating resupply quantities for CHWs
- Information flow **not aligned** with product flow; CHWs report to multiple places, but often not to their resupply point.

* amoxicillin, ACT 1x6, ACT 2x6, ORS, zinc



Rwanda Context

- 30,000 CHWs (binomes) are trained to provide CCM to children under 5 in their villages
- CHWs organized into cells of 10-12 CHWs/cell
- Each cell has a CHW designated as the cell coordinator, who takes on added coordination responsibilities in addition to being a CHW
- CHWs manage up to six commodities for CCM

Results pointed to problems with **Product Flow** – no procedures to support resupply quantities; **Data Flow** - lack of CHW logistics data visibility; and **Effective People** - weak coordination between CHWs, health centers (HCs) and districts as barriers to community level availability of medicines which impacted motivation

Product Flow and Data Flow: Coordination and Standard Resupply Procedures



MOH integrated implementation of supply chain interventions to other CHW trainings and **coordinates procurement** with government and donor funding

Addressed challenges with stock management and data visibility by implementing simple **standardized resupply procedures (RSPs)**...

MOH Coordination (national)

- MOH conducts regular annual quantification for CCM
- MOH introduced unique product formulations and/or packaging for CCM, making it easier to ensure quantities would reach CHWs
- MOH coordinates budgets for procurement of medicines and products for CCM
- MOH procures all products used for iCCM

RSPs (6 districts)

- CHWs provide stock on hand data to Cell Coordinators (CCs) who are peer CHWs monthly
- CCs use resupply “magic calculator” to determine resupply quantities
- HCs collect resupply worksheets from 10-15 CCs instead of 100+ CHWs to fill orders
- HC packs orders while CCs are at monthly HC meeting; afterwards CCs collect products and distribute to CHWs

Effective People: Quality Improvement Collaboratives and Supply Chain Incentives

To reinforce the use and practice of the **standardized resupply procedures (RSPs)**, and **promote the skills of the people using them**, paired them with either...

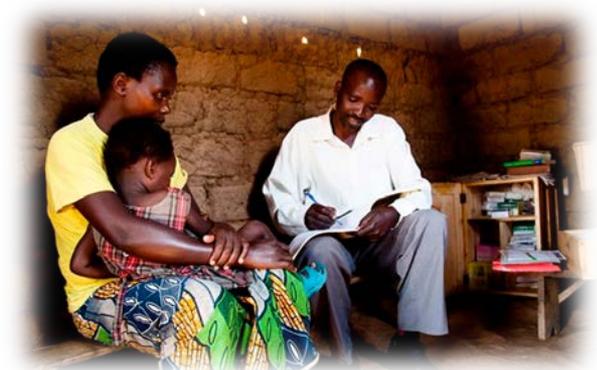
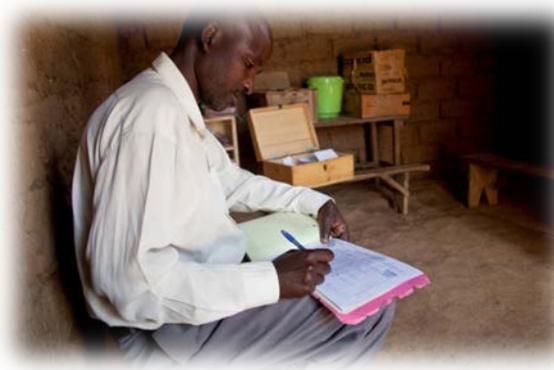
Quality Improvement Teams (QITs) to test innovations and generate local best practices that can be shared across teams (3 districts)

- HC-based Quality Improvement Teams consisting of CCs, HC and district staff (coaches) aimed at implementing RSPs, and improving product availability
- CCs collect data during supervision
- QITs use data and structured approach to problem solving and action planning

OR

Supply Chain Incentives to test payments to existing CHW cooperatives to improve performance of supply chain tasks (3 districts)

- Tested 9 supply chain indicators for tasks carried out by CHWs and CCs
- CCs collected data during supervision visits
- HCs used data to score quarterly and make payments to cooperatives based on performance



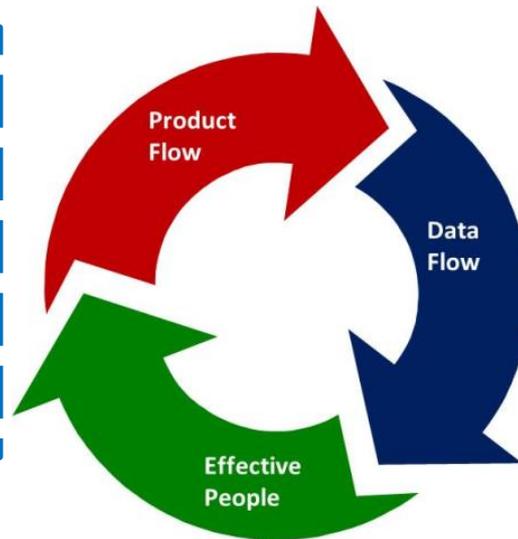
End Result - By targeting product flow, data flow, and effective people for supply chain management at community level, Rwanda saw quantifiable improvements across the board.

RSP Results

- Significant difference in stockcard availability with 83%-98% CHWs with stockcards on day of visit compared to 65%-83% in comparison group
- High levels of competency in completing resupply worksheets; 83% CCs were able to enter correct quantities required

QIT Results

- 75% of expected members attended QIT meetings
- 100% of HCs documented progress using the Monthly Documentation Journal
- 77% of HCs could show their completed Q3 action plan



Incentives Results

- 96% of CCs were able to show complete Supplemental SC checklists in the last quarter
- All three districts showed significant improvement in three SC indicators across 4 quarters

Product Availability Results

In both intervention groups in Rwanda, more CHWs had all 5 products in stock on day of visit than the comparison group; the QC group had **25% greater Product Availability**, the IcSCI group had **7% greater Product Availability**.

Quality Improvement Teams and Incentives are effective **strategies to improve teamwork and communication** between different levels of the health system

Quality Improvement Teams can be effective with CHWs, but **tools and practices need to be tailored to community level context and needs**

Organizing quarterly learning sessions with opportunities to share across QITs and across districts are very resource intensive and **may not be sustainable for governments to adopt** unless it can be combined with an existing meeting

The community supply chain indicators built upon existing, robust cPBF structures already established in Rwanda; one supply chain indicator now being added to national cPBF system

Incentives can be effective with CHWs, but workload to collect data, score, and administer payments needs to be considered; this could work in Rwanda due to:

- Existing structures to support quarterly data collection, score verification, and flow of payments
- Existing awareness of cPBF program and CHWs already organized into cooperatives to receive payments



FGDs: ...the QIT has built such a good relationship along the entire chain. For me the biggest prize has been to learn how to work on plan and be able to achieve it every month. (Pharmacy Manager, Ngoma)

Success Factors

Designing **simple tools with minimum data elements** and ensuring translation into local languages enables CHWs to effectively and regularly execute supply chain tasks and standardizes processes to improve product availability

Products specifically designed for the community level can improve iCCM product availability by ensuring they are not used at other levels of the system before they reach CHWs. Essential medicines are never in full supply, and CHWs are at the end of the supply chain, so ensuring there is a mechanism for CHWs to access drugs regularly is crucial.

Regularly occurring meetings can be made more effective by establishing quality improvement concepts of team-based work and objectives. They can be used to teach participants how to set an agenda, use the data they have, determine what kind of decisions to make and include regular problem-solving, action planning and performance monitoring.

