

Improving Community Level Supply Chain Performance Using Team-led, Data Driven Solutions in Malawi and Rwanda

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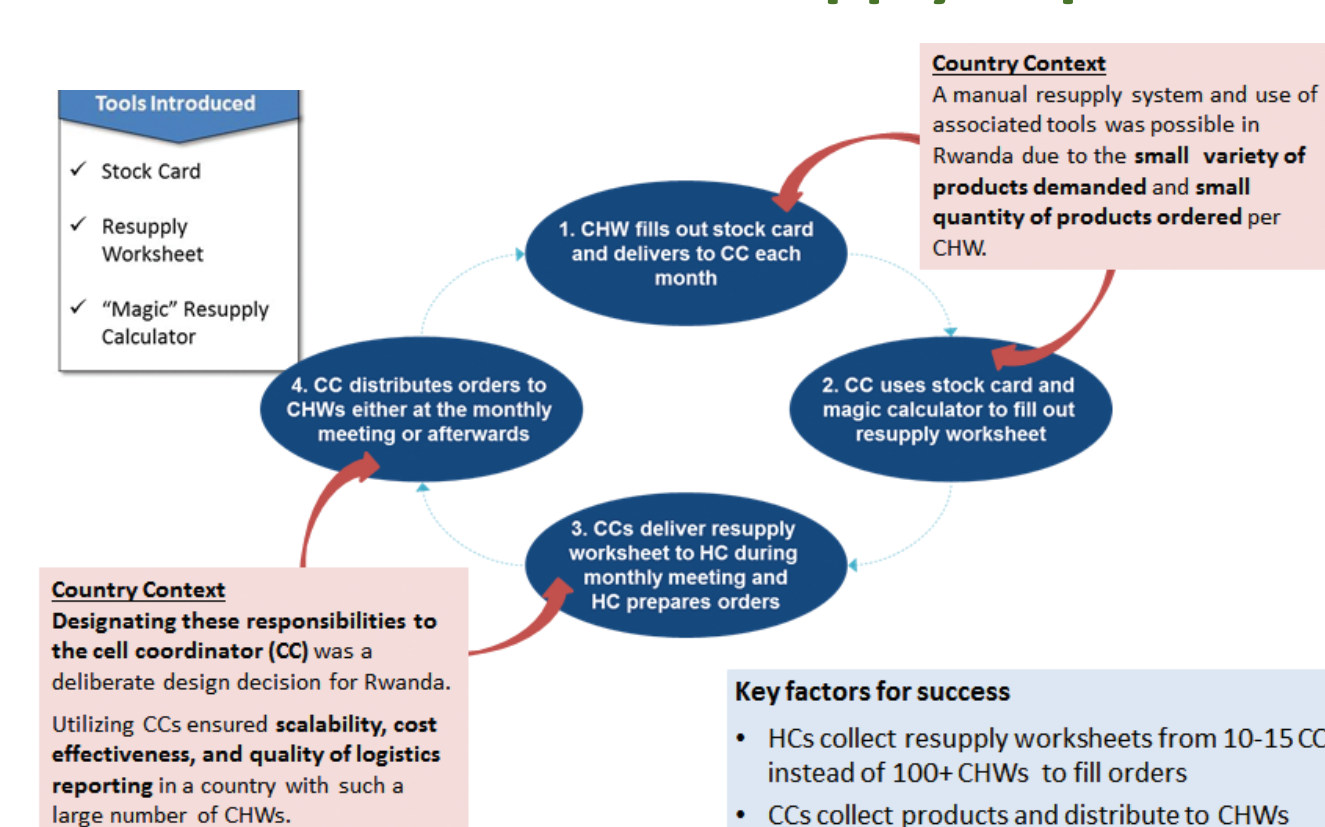
RWANDA

BASELINE RESULTS

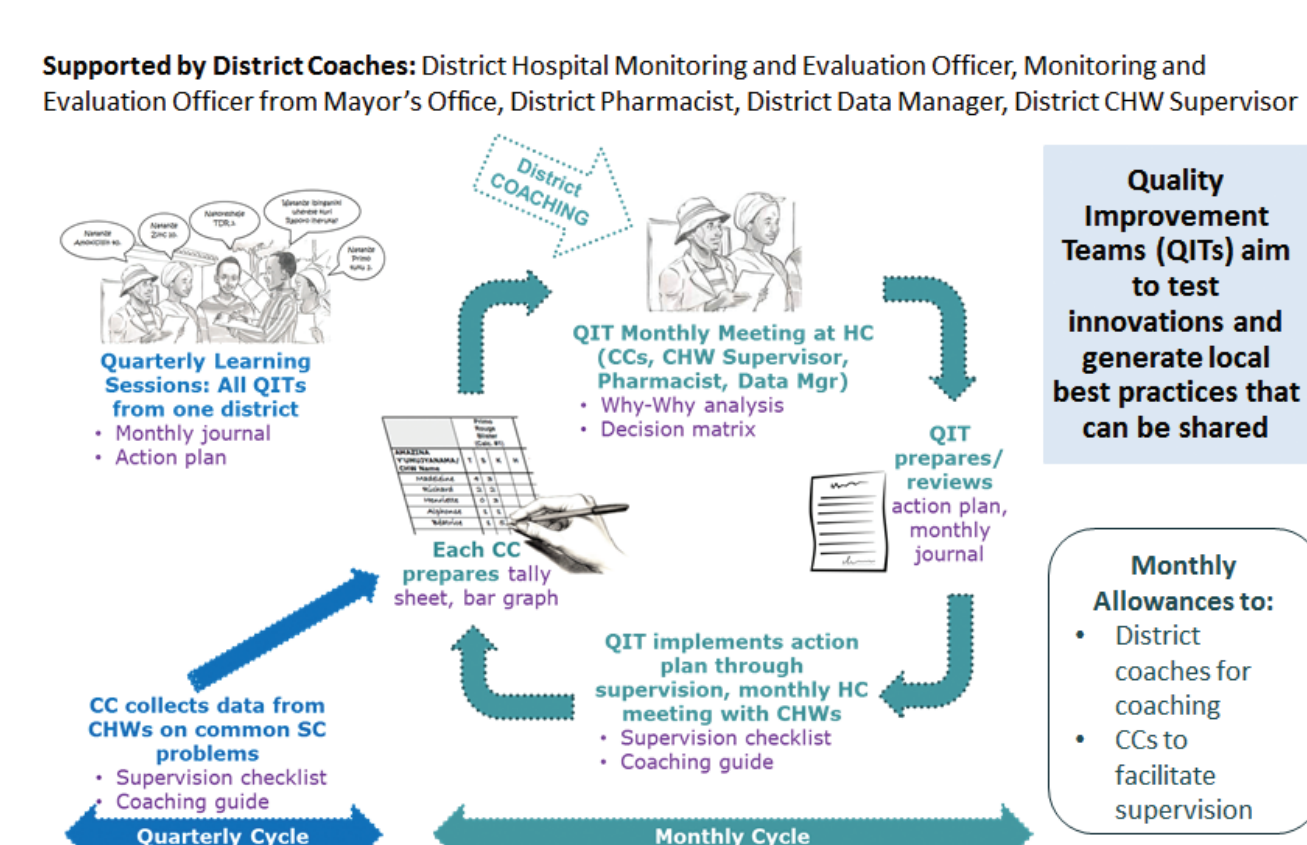
- 49% of CHWs who manage health products had 5 CCM tracer drugs** in stock on day of visit
- No standard procedures or formulas for calculating resupply quantities for CHWs
- Information flow **not aligned** with product flow; CHWs report to multiple places, but often not to their resupply point.

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

Standard Resupply Procedures were introduced in Rwanda to create the foundation for good stock management and improve flow of information to enhance resupply of products.



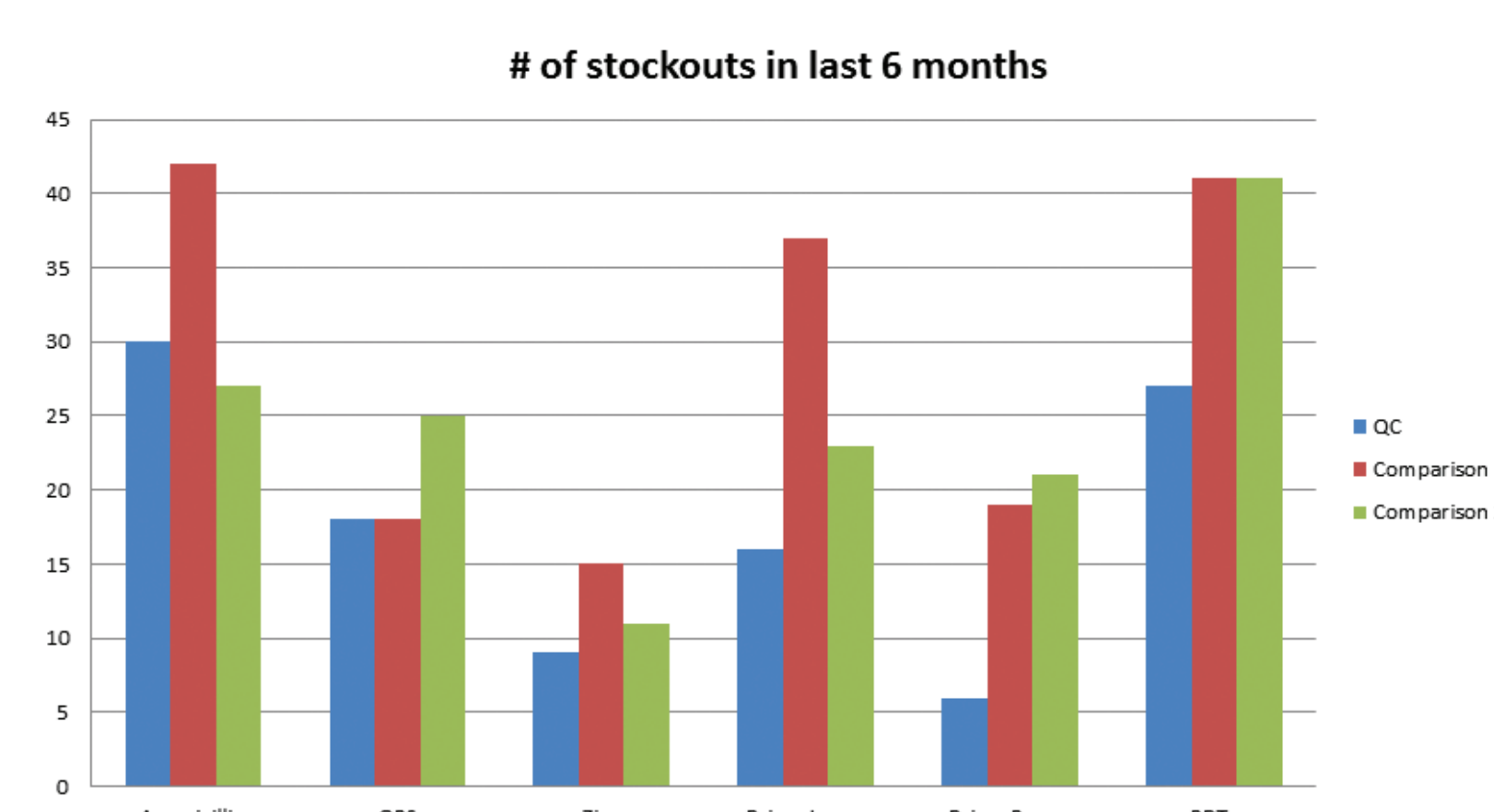
The Quality Collaborative (QC) intervention established quality improvement teams (QITs) at each health center (HC), comprised of HC staff and cell coordinators (CCs). Individual QITs focused on improving the use of RSPs by using data from CHWs in their cells to identify performance gaps and then working to close those gaps by testing activities, tracking performance over time, and maintaining practices that improve performance.



2013 Evaluation Results

RWANDA

- QIT districts in Rwanda had 25% greater product availability than the comparison group districts
 - Greater than 90% availability of stock cards at CHW for most products in QIT group
 - Over 95% of HCPM in QIT districts had some or all copies of RSWs from their cells, 71% had all
- FGDs showed perceived value of QC by members: QIT member capacities built in problem solving, advance planning and evidence-based decision making, QIT members gained confidence in new capacities related to the intervention, gained increased understanding and perceived importance of CHWs' among QIT members
- QCs had the lowest six month stockout rates for all products
 - Across all groups and all products there was an average of only 1 stockout lasting longer than 3 days
 - Suggests short lead time and high responsiveness to stockouts



Identifying Major Supply Chain Bottlenecks Using Baseline Assessments and a Theory of Change in Malawi and Rwanda

In both countries, results pointed to a lack of CHW logistics data visibility and weak coordination between CHWs, health centers (HCs) and districts as barriers to community level availability of medicines



MALAWI

BASELINE RESULTS

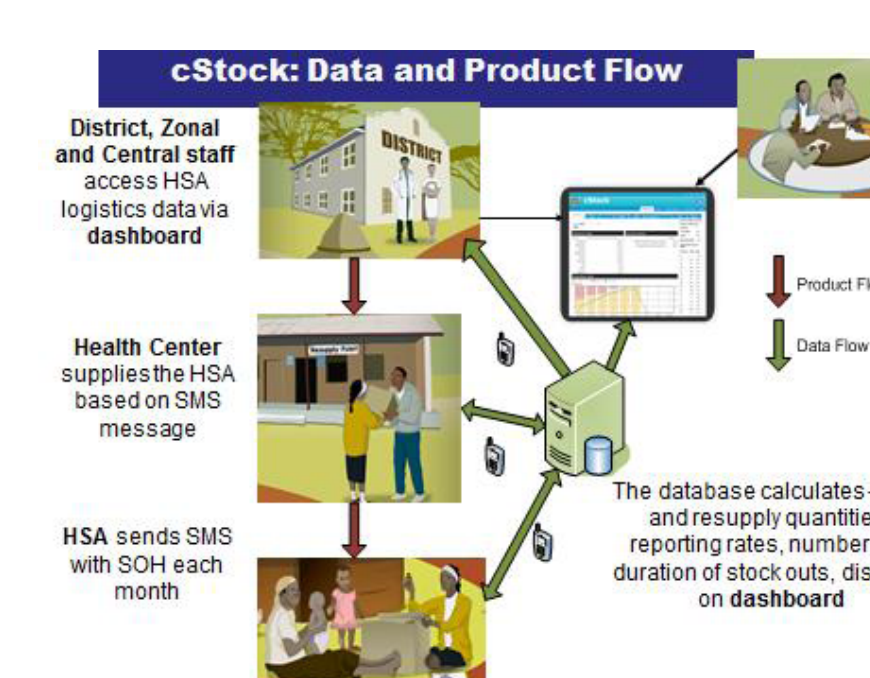
- 27% of HSAs who manage health products had 4 CCM tracer drugs* in stock on day of visit
- Poor HSA logistics data visibility with only 43% HSAs reporting logistics data to HC
- 94% of HSAs surveyed had a mobile phone

* cotrimoxazole, ACT 1x6, ACT 2x6, ORS

cStock, an SMS, web-accessible logistics management information system for the community level in Malawi was designed to improve data visibility and resupply of products for CHWs.

cStock Highlights

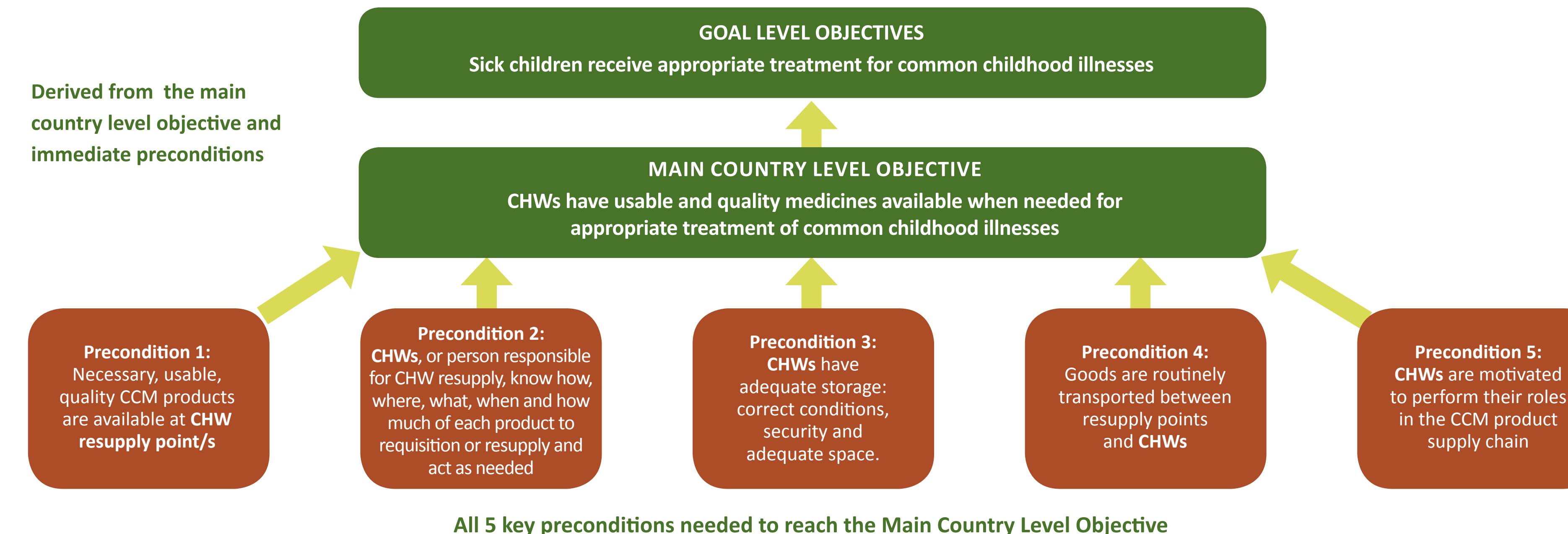
- CHWs use their own basic GSM phones
- CHWs text stock data to cStock, replacing manual resupply forms
- The cStock database calculates the resupply quantity for the HC Pharmacy, saving them time
- CHWs receive text confirmations from HC when their order is ready for pick-up, preventing unnecessary trips to the HC
- CHWs text cStock order receipt confirmations, ensuring accurate record keeping
- District and Central levels monitor resupply and stock levels through SMS alerts and management reports available on an easy-to-use, web-based dashboard, enabling proactive action when needed



Interventions in each country were different but had four common elements

1. Teams consisting of CHWs, health center (HC) and district staff
2. Using data for joint identification of problems, performance monitoring, and development of plans, with targets for improvement
3. Structured approach and tools for problem solving techniques for developing solutions
4. Use of recognition, rewards, and peer-to-peer learning for motivation

SC4CCM Project Hypothesis



SC4CCM targeted improvements in up to four preconditions through a team-led data driven intervention approach that:

- Empowers HCs and CHWs to take positive steps to improve resupply process between levels and supply chain practices at their sites
- Establishes a chain of communication about supply chain issues by involving higher levels
- Makes data the basis of performance monitoring and improvement
- Creates a culture of finding local solutions to solve local problems where possible

Interventions were designed to address gaps and improve use of good supply chain practices, tested in 3 pilot districts each in both Malawi and Rwanda

Conclusions

Data Visibility + Team Work = Improved Supply Chain Practices

- Tools needed to be simple
- Data presented in an easy to use way so key indicators can be monitored
- Clear processes for the right people to obtain or receive the data they need
- Multi-level teams with a goal for continuous improvement
- Clear, standardized structure and process to identify, monitor and address problems
- Joint ownership of solutions and successes



The EM intervention introduced District Product Availability Teams (DPATs) and Performance Plan initiatives to encourage teamwork and motivation aimed at improving product availability.

cStock Data Enhanced Management (EM)

DPAT/HPAT Meetings

- Quarterly District Meetings with District staff and CHW supervisors
- Monthly HC Meetings with HC and CHWs
- Topics discussed include
 - Performance plans & recognition
 - Reporting timeliness and completeness
 - Stock management, expiries & overstocks, and product availability

Performance Plan

- Supply chain performance indicators and targets
- cStock data and resupply worksheets used to track performance
- Formal recognition system to drive SC performance
- Management diaries used to track issues and actions taken

2013 Evaluation Results

MALAWI

- HSAs in districts using cStock had 14% fewer stock outs or low stocks than other districts
- More than 80% of CHWs report logistics data every month compared to 43% at BL
- 91% of Drug Store in Charges use cStock data to inform resupply quantities
- 56% of CHW supervisors use cStock data for performance monitoring
- 92% of CHW Supervisors know their DPAT recognition plan
- 100% District and HSA supervisors reported finding DPATs useful

FGDs showed perceived value of DPATs by HC supervisors: enhances team work, improves communication among members, improves relationships across levels, motivates good performance by creating healthy competition.

On average HC's in Malawi's EM group took 7.6 days to respond after a request compared to the cStock only group, which took 13.5 days.

