cStock and Supporting Teams (DPATs)

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Malawi





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Malawi Overview

- iCCM nationwide strategy initiated in Malawi in 2008
- Run and managed by CHWs called Heath Surveillance Assistants (HSAs)
- HSAs are one of the lowest cadre in Malawi Civil Service- paid by MOH
- Target for implementation is in hard to reach areas
- Coverage is over 84%
- Leadership by MoH-IMCI Unit and operationalized at Districts
- Conditions Malaria, Pnuemonia, and Diarhea
- Supply chain commodities for iCCM ACTs, Zinc and ORS and Cotrimoxazole (Amoxycillin)





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Rationale for Focus on Supply Chain

- In-availability of medicines
- Irrational drug management process
- Lack of coordination in drug management
- Supply chain reached health center (HC) only
- Weak linkages between community and HC



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Malawi Baseline Assessment 2010

- Product availability hampered by poor use and visibility of community level data
 - 27% of HSAs who manage health products had four CCM tracer drugs* in stock on day of visit
 - 43% HSAs submitting reports that contain logistics data to HC
 - 14% of HCs reported passing that information to higher levels
- Opportunity
 - 94% of HSAs surveyed had a mobile phone
 - **85%** had mobile network coverage at least sometimes
 - District and central level staff have access to computers and internet at least some of the time



*cotrimoxazole, artemether lumefantrine 1x6 and 2x6, ORS

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Enhanced Management



mHealth system called cStock to address data visibility challenges



District Product Availability Teams

(DPATs) with a common goal to improve supply chain performance

cStock

- HSAs use their personal, basic GSM phones to report logistics data monthly
- System calculates resupply quantities for HCs to prepack
- Provides different management reports via easy-to-use, web-based dashboard
- Data is hosted on *The Cloud*, an inexpensive, reliable and easy to manage option for a small scale system.

DPATs

- Product availability teams made up of HSAs, HC and district staff who set combined performance goals
- Teams use structured approach for problem solving and action planning
- Recognize individual and facility level improvements in supply chain performance and achievements

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cStock: Data and Product Flow

District and Central levels **monitor** resupply and stock levels through SMS alerts and a dashboard

3. Health Center receives request via SMS and notifies HSA either "order ready" or "out of stock".

4. HSAs collects products and sends SMS with **receipt**





The dashboard displays reporting rates, stock outs, lead times, consumption and more

2. cStock calculates the resupply quantity and sends SMS to HC Pharmacy

Product Flow

Data Flow

District Product Availability Teams

District Product Availability Teams (DPATs) were introduced to use the increased **data visibility** to improve supply chain performance

Enhanced Management (EM)

DPAT/HPAT Meetings

- Quarterly District Meetings with District staff and HSA supervisors
- Monthly HC Meetings with HC and HSAs
- 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

cStock Data

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cStock: Reports & Dashboard



Evaluation Results

Product Availability

- ✓ 62% of HSAs had the 4 tracer drugs* in stock day of visit (compared to 27% BL)
- HSAs in districts using cStock and DPATs had 14% fewer stock outs or low stocks than other districts on day of visit

Pilot conducted in 6 districts from July 2011 to January 2013

Data Visibility

✓ More than 80% of HSAs report logistics data to cStock every month (vs. 43% at BL)

Use of Data

- ✓ 91% of Drug Store in Charges use cStock to inform resupply quantities
- ✓ 56% of HSA supervisors use cStock data for performance monitoring

Teamwork

- ✓ 100% of District & HSA Supervisors reported finding product availability teams useful
- ✓ 92% of HSA Supervisors know their recognition plan

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Scale Up and Institutionalization

cStock and DPATs are now scaled up to 2700+ HSAs and over 400 HCs

Partnering for Scale

 29 of 29 districts have committed funding for scale up: 9 WHO, 5 Save the Children, 2 IWG, 6 SSDI, and 7 SC4CCM; scale up will be complete by mid-2014

Operationalising MOH ownership

- Formation of a taskforce (MOH chair) dedicated to the scale up and sustainability of SC innovations
- Finding champions in MOH by having central level advocates and trainers in every districts
- Capacity building of MOH to provide management and leadership
- Development of comprehensive, multi-year cost estimates for resource mobilization, in the short term, and a transition plan to eventually cover all costs through the MOH



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Lessons Learned

- Clear MOH Leadership and engagement of partners from the outset is key for managed partnership for scale up to build broad ownership
 - Consider sustainability scalability, institutionalization and integration from the design phase- ground work and transition
- Keep the design of mHealth systems simple and suitable for the context
- Combining an mHealth solution with interventions that introduce structured processes for routine use of data so staff value the tool
- Cloud hosting is a cheap, reliable and easy to manage option for small scale systems
- Promising and Acceptable intervention for improving medicines availability at community level



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