

Institutionalizing Community Health Conference

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Strong systems to ensure availability and appropriate use of medicines at the community level: What does this mean?

Jane Briggs Institutionalizing Community Health Conference Johannesburg March 27, 2017





Outline

- Why medicines and commodities are important
- A pharmaceutical system and what strengthening it means
- The importance of a strong pharmaceutical system for the community
- Describe examples of pharmaceutical systems strengthening (PSS) interventions relevant to the community



Why Worry about Medicines?

- Affordable quality medicines and other health commodities are essential for disease prevention, treatment, and control
- Medicines account for large proportions of total health expenditure and out-of-pocket health care expenditures
- Limited availability of essential medicines in the public and private sectors
- Medicines may be unaffordable for the poor
- Medicines may not be easily accessible, especially in rural areas
- Services may not consider cultural or personal preferences



What is a Pharmaceutical System?

All structures, people, resources, processes, and their interactions within the broader health system that aim to ensure equitable and timely access to safe, effective, quality pharmaceutical products and related services that promote their appropriate and cost-effective use to improve health outcomes.

HEALTH SYSTEM PHARMACEUTICAL Public Commercial SYSTEM Manufacturers Medicines NGO Regulatory Pharmaceutical Products Authority Wholesalers and Services PVO Central Pharmaceutical Importers Medical Store FBO/NGO Management Hospitals Medical Store Faithbased Clinics **Regional & District** Pharmacies ACCESS Medical Stores Hospitals USE **Public Health Facilities Medicine Shops** UNS COMMUNITY

Hafner et al HPP 2016



Pharmaceutical Systems Strengthening





Why Do Community Health Services Need Strong Pharmaceutical Systems?

- Access to and appropriate use of affordable medicines is essential for improving primary health care
- Health system has extended to include community level where we need a continuous uninterrupted supply of quality medicines at affordable prices
- Additional challenges at community level
- Community health workers need to be prepared to respond in an emergency/crisis situation when health services may be overwhelmed





Why do I need to apply a pharmaceutical systems strengthening approach if all I need to do is ensure products are available at the community level ?





Governance: Policy, Laws, Regulatory Systems

 Registration of a medicine helps to ensure quality, efficacy, and safety at all levels including community

Improving registration in Democratic Republic of Congo

- Problem: Unclear and inefficient process, delays in registration
- Process: National registration committee was established & procedures were documented





Information: Data for Decision Making

• Data on availability and consumption needed for decision making at all levels, including the community

Mali Logistics Management Information System (LMIS)





Service Delivery

Pharmaceutical services are key to improve use of medicines, e.g. prescribing, dispensing and administering medicines.

Improving use of amoxicillin in Democratic Republic of Congo

- Problem: new product (amoxicillin DT), poor knowledge of dosage, counseling often not given on how to administer
- Process: Job aids for dispensers and dispensing envelopes piloted

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Financing: Costing Exercises for Planning and Resource Mobilization - Burundi

- Problem: How to expand CCM pilot and what resources were required
- Process: Costing exercises, planning strategy
- Result: Funds leveraged from Global Fund and others for expansion of CCM

Projected Costs for iCCM (USD)

	2014	2015	2016	2017	2 018
Total annual cost	1,121,952	1,540,847	2,525,733	3,759,724	5,247,137
Average recurrent cost per child per year	4	4	4	5	6
Average recurrent cost per CHW per year	528	571	661	762	876
Start-up cost per CHW	321	143	176	205	202



Conclusion

To ensure appropriate access and use of medicines in the community and ensure health outcomes, we need strong systems.

- Pharmaceutical system is part of the overall health system
- Consider all components of the pharmaceutical system, not just logistics
- Study the linkages between the components
- Many diverse stakeholders who need to be involved
 - Program people
 - Finance people
 - Pharmaceuticals people
- Consider sustainable strengthening over supporting



Thank you!



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System Strengthening to Promote Commodity Availability and Use at Community Level: The Experience of Ethiopia

March 27, 2017

Paul Dowling, JSI Ethiopia

Representing USAID Ethiopia partners: USAID DELIVER PROJECT & AIDSFree (JSI); SIAPS (MSH) and PQM (USP)



Outline

- Background: Health Extension program
- Integrated Pharmaceutical Logistics System in Ethiopia
- Supply Chain at community level
- Assuring quality of medicines and services
- Funding and coordination
- Lessons learned





The Health Extension Program (HEP)

- In 2005 only 40% of the population lived within 10km of a health facility
- Shortages of trained providers: most preferring to live and work in urban areas
- In 2003, GOE launched HEP to reach mainly poor, & rural populations with basic preventive and curative services





Rapid Growth in Service Delivery.....





Commodities Managed at community level

- Currently Health Extension Workers manage about 52 items (17 service packages) including:
 - Contraceptives
 - Vaccines
 - Antibiotics
 - Anti-malarials
 - De-wormers
 - Analgesics
 - Test Kits (HIV, malaria)
 - Nutrition ORS, RUTF, Vit. A etc.
 - Misc. supplies gloves, cotton wool, syringes, etc.





Expansion of Services & Commodities Offered



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How has USAID support for health systems strengthening – and specifically pharmaceutical & supply chain management contributed to improving availability and use of commodities in the Health Extension Program?



Integrated Pharmaceutical Logistics System (IPLS)

- Pre 2009: ad-hoc, non standardized systems, multiple program-based supply chains; unsustainable & inefficient
- Government led strategy to develop an integrated system
 - 2006: Master Plan for SC finalized, including creation of PFSA (Federal Supply Chain agency)
 - 2009 IPLS begins implementation (design took c. 2 years)
 - 2010: Health Post resupply component of IPLS begins
 - Gradually, program items have been integrated into overall IPLS
 - 2012: FP added
 - 2014: EPI added
 - 2015: malaria added
 - MCH items still not completely integrated



Public Sector Supply Chain (IPLS)





Supply Chain at the Community Level

- Monthly resupply from Health Center – but HEWs collect during routine visits
- Bin cards (paper) kept for each item
- Storage is mix of mainly local solutions (shelves, cabinets)
- There are a number of jobaids and guides printed in local language





Logistics Management Information System at Community Level

- Paper system: monthly reports from HPs to Health Centers (HCs)
- Standardized forms, printed centrally and distributed by PFSA to HCs
- Combined Report & Order
- HCs include HP requirements in bimonthly report to PFSA
- Apart from limited pilots (mobile), no automation of logistics data collection
- Data Visibility: Real time data for Center & Hubs, bimonthly static data from HCs, no visibility (disaggregated) for HPs





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Capacity Building for Supply Chain

Situation 2010: Tens of thousands of HEWs with little or no formal commodity training

Time	Activity	Result
Immediate	Train woreda supervisors to mentor HEWS in SC	2,931 trained between 2011-16
Medium	Opportunities for catch up training during Integrated Refresher Training	Limited success- programs protect their time
Long	Institutionalize SC as part of curriculum for new HEWs	Module developed, formally included in curriculum: c. 5,000 new HEWs trained (2016)
Long	Develop reference manual for Medicine Management	Handbook (English & Amharic) launched in 2016
		27



Commodity Availability – Index score by program



Data Source: L10K

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Supply Chain Challenges

- Despite significant efforts and improvements challenges remain:
 - No provision for delivery of commodities to HPs
 - Low use of standardized forms 55% had monthly report & request form; 40% had bin cards (2015)
 - Storage conditions need improvements: in 2015, 29% had "suitable" storage conditions (versus 63% of HCs)
 - Medicine availability at HP level < than at higher levels



Pharmaceutical Regulatory Systems

- Pre 2009:
 - Fragmented medicine regulation; no clear demarcation of responsibilities
 - Weak medicine safety monitoring
 - Lengthy & ineffective medicine registration process,
 - Weak QA systems; lack of quality management & law enforcement
- 2009: Federal Medicine & Healthcare Administration & Control Authority (FMHACA) established



Medicine Quality

- Healthcare & Facility Standards developed and adopted
- Support to FMHACA for improved regulatory systems for medicines
 - Establishment, equipping, capacity building and ISO accreditation of national QC laboratory
 - Strengthening post marketing surveillance and medicine inspection
 - 2016 Automation of medicine registration
 - Policy and systems support for item naming (bar code track and trace)





Pharmacovigilance

- Strengthening of Adverse Drug Event (ADE) monitoring center
- Development of automated Pharmacovigilance Data Management System (PVDMS)
- Revision of ADE reporting form to include product quality defects enabled the tracking of counterfeit & substandard medicines.
- → recall of 22 products including amoxicillin powder for suspension and paracetamol syrup





Funding & Coordination for Pharmaceutical systems

- Support managed by Systems Strengthening team at USAID Ethiopia
- Multiple USAID funding streams leveraged:
 - PEPFAR
 - Presidents Malaria Initiative (PMI)
 - Health and Populations Funds (MCH and FP)
- CDC funds
- Also coordination with other GOE funding sources,
 - e.g. Global Fund and GAVI (commodities & infrastructure support)
 - MDG multidonor basket funds (commodities)



Lessons Learned

- HSS means support for pharmaceutical mgmt., SC mgmt., financing, health services, HMIS etc.
- Combine "quick fixes" with long term systems strengthening
- Systems strengthening is: People + Processes + Technology
 - Corollary: Technology will not fix broken processes (in fact it may make them worse)
- Increasing use of data is usually harder than
 increasing data availability

Use of information: Malawi's experience on scaling up and expanding cStock to manage commodities at the community level



Humphreys K. Nsona IMCI Unit-Malawi MoH



Introduction

- Integrated Community case management introduced in Malawi in 2008
 - Managed by Community Health Workers (called Health Surveillance Assistants)
 - Paid cadre of workers, live and work in hard-to-reach areas (>5km from health center)
 - HSAs are trained to treat children under 5 years for malaria, pneumonia and diarrhea and provide family planning to women
 - Supervised under the District Health Management Team, HSAs provide services through 3700+ village clinics nationwide
- HSAs manage up to 17 products that they store in a drug box in their home
- HSAs collect medicines from the nearest health center


What prompted the use of C stock? What was the problem?

- Poor availability of medicines
- Lack of visibility of HSA logistics data due to low reporting rates and poor movement of data
- Weak linkages between community and health facilities
- HSAs would travel long distances to collect products only to return empty handed



Key outcomes – To Improve availability

- Key Quantitative Baseline Assessment Data
 - 27% of HSAs who manage health products had four CCM tracer medicines in stock on day of visit
 - **43% HSAs** submitting reports that contain logistics data to HC
 - **29% of HCs** reported passing HSA information to higher levels

94% of HSAs surveyed had basic GSM mobile phones (Personal)

- Key Quantitative Endline Assessment Data
- 80% of HSAs had four CCM tracer medicines visible throughout the supply chain period
- 86% of HSAs were able to compile and send reports that contain logistics data

• **85% of HSAs** were able to pass information to higher levels

cStock Approach: Objective & Vision

An approach to provide real-time, actionable HSA logistics data for managers, stakeholders to coordinate, plan and identify solutions to better meet customer needs in a timely manner

Improve resupply procedures and visibility into HSA stock levels

Empower SC managers at all levels of the supply chain with HSA logistics data

Improve coordination among stakeholders

Create and promote a culture of data driven decision making

Core Features of Enhanced Management Approach

cStock

A mobile health application effective in improving community logistics data visibility at all levels by providing data on a web-based dashboard

District Product Availability Team (DPAT)

A team with a shared goal & performance targets that uses data to monitor and strengthen the supply chain



cStock: Data & Product Flow

District, Zonal and Central staff access HSA logistics data via dashboard

Health Center supplies the HSA based on SMS message

HSA sends SMS with SOH each month



National Scale up - Evolution



- cStock adapted and taken up by MoH within a year after pilot
 - Partner buy-in
 - World Health Organization – 10 districts
 - USAID SSDI 15 districts
 - Global Fund
- Capacity Building
 - Training of Trainers
 - District focal persons
 - District Product availability teams
- All (3700+) Functional HSAs

Progress and current status

1. HSA level/Community:

- 80% HSAs report stock on hand, low stocks, and/or stock out
- Receiving notification on products ready at facility
- Reporting product receipts or transfers to cStock
- Source of automatic reminder to send reports (nags)

2. Facility Level:

- Receiving HSAs' product orders from cStock
- Tracking tool for non-reporting HSAs for follow up
- Informing HSAs on product availability at facility
- Facilitating targeted supervision to HSAs

District Level:

- Monitoring product availability at HSAs' level
- Identification of stock outs/low stocked HSAs
- Facilitates well targeted problem solving around restocking and supportive supervision
- Gives more effective control/management of CCM program performance
- Identification of best performers as a starting point for lessons learning on good practices

Sustainability

- Operationalized through District Health Management Teams structures (District Health systems)
 - DPAT MoH Focal persons
 - HPAT MoH Health centre staff
- Commodities resupplied from Health Facilities
- Central level administrator roles (IMCI Unit MoH led)
 - Follow up
 - Supervision
 - Mentorship

Sustainability

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

- District Program Coordinators
- District Pharmacy Technicians
- Cluster supervisors
- Drug Store In charges
- HSA supervisors
- HSAs

DPATs have proven to be an important complement to cStock. DPATs "demand" updated data that cStock "supplies,": motivating CHWs to continue reporting.

cStock Data

Lessons learnt/ Observed

- Improved timely reporting of product data from HSAs to facility level supervisors
- Improved communication between HSAs and their re-supply point
- Improved district visibility into community level product data, and any potential problem areas (stock outs, etc) for intervention
- Eliminated headache of HF In-Charge calculating re-supply qttys

 better use of health centre staff (clinician) time for clinical duties

- Improved evidence-based targeted supportive supervision and prioritization of staff time in a resource limited setting
- Improved Community medicines system's performance monitoring at various levels, and more effective identification of system bottlenecks by level for intervention
- cStock has provided Districts an effective tool to better manage medicines at community level

The Village Clinic Structures built by community to support Community Health services





Acknowledgements

- The Bill & Melinda Gates Foundation
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- District Health Management teams

Questions for discussion

- 1. What are some of the challenges in your pharmaceutical system, that affect availability, appropriate use or safety of commodities at the community level?
- 2. What interventions have you implemented to strengthen the system and with what success?
- 3. What ideas have you had from listening to the presentations today that could apply to your setting?
- 4. What support do you need to strengthen the pharmaceutical system to assure availability and appropriate use of quality commodities at the community level?



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