

# How to assure availability of medicines and supplies in CCM: supply chain management considerations

by the  
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of the CCM taskforce  
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# Overview

1. Importance of SCM for CCM
2. Challenges for CCM
3. Coordination and planning for supply
4. Product Flow:
  - Resupply Mechanism
  - Storage Conditions
  - Inventory Management
5. Data Flow - Supply Chain Reporting
6. Effective people
7. Summary

# Why worry about supply chain?

## **Stock outs at the community level can pose a major bottleneck to iCCM program goals**

- Public health supply chains in resource limited settings are often characterized by frequent and persistent stock outs of essential medicines
- Without reliable availability of iCCM medicines and related products, iCCM programs cannot be effective

**Consistent availability of high quality iCCM products to CHWs is key to CHW motivation, public demand for, and trust in CHW services.**



# Challenges of getting products to the community

- Rural areas, difficult geography
- Limited or challenging transportation networks
- Often relying on volunteer community health workers (CHWs) who work out of their homes or villages and have no dedicated physical space
- At the end of the supply chain



Photo: Millenium Promise

**Good planning of supply chain management is essential to overcome these challenges**

# Planning: Product Selection

Children and caregivers prefer liquids. Syrups and suspensions are bulky to transport, store, and manage.

Countries should:

- Select products as **pediatric** dispersible tablets to facilitate administration
- Select **individual courses of treatment**
- Ensure selected formulation is on the **National Essential Medicines List**

## UN Commission on Life Saving Commodities for Women and Children

### *Recommended Products:*

**Amoxicillin** – 250mg dispersible tablets in blister packaging of 10

**Oral Rehydration salts (ORS)** – low-osmolarity sachets (0.2, 0.5, 1.0L sachets)

**Zinc** – 10mg or 20mg dispersible tablets in blister packaging of 10



# Plan for supply chain in CCM

- Establish a plan for the pilot or introductory phase and scale up so that medicines and supplies can be estimated and procured (procurement can take up to a year; need to coordinate donations and partners)
- Define resupply mechanism and design tools and materials for resupply ahead of training of CHWs
- Ensure that the supplies are ready to give an initial stock to the CHWs as they complete their training and that they are trained in the resupply mechanism





# Quantification



## **Quantification involves:**

1. Forecasting future consumption at the CHW level (estimating needs)
2. Ensuring there is adequate inventory at all levels of the system so products will reach the CHWs (supply planning)

Forecasting: ideally uses historical data (such as consumption or case data) to predict future need, but if CCM is new, there is no such data.

Demographic and morbidity data e.g., number of episodes/child/year for each condition can be used

# Supply Planning and Coordination

The output of a quantification exercise should be a supply plan that indicates when products are required in country to meet the forecast need

The supply plan takes into account:

- (1) Timing and availability of funding,
- (2) Stock on hand (SOH) of products currently in the system and any orders already placed
- (3) Estimated supplier lead-time for each product



**The supply plan should guide procurement, not the forecast**

The supply plan is a **monitoring tool** that facilitates coordination of procurements and should be reviewed quarterly



# Product Flow: resupply mechanism



- Clearly define the resupply point: choose the nearest health facility if possible
- Harmonize resupply with existing monthly meetings or reporting to minimize unnecessary travel
- Consider transportation and terrain - bicycles, public transport, by foot
- Consider number of CHWs per resupply point and feasibility
- Consider distribution of medicines by supervisors if supervision is regular to all CHWs

# Storage

- CHWs should be provided with practical storage solutions such as lockable, dry, dark containers.
  - e.g. wooden boxes heat up less than metal ones.
- Health products must always be protected from rodents and insects, and kept out of the reach of children
- Products should be arranged to facilitate counting and general management .
- Expiry dates should be monitored - if this is too difficult for CHWs this can be part of supervision



Storage conditions should ensure the physical integrity as well as quality and safety of products and their packaging.



# Inventory Management

- **Inventory control** systems guide facility staff and CHWs in **when to order and how much to order** to ensure a continuous supply and to minimize or prevent stockouts and overstocks.
- Resupply quantities should be based on consumption and how much the CHW needs to last them until their next order

**Simple systems are needed to help CHWs manage their stock and record and report consumption without the need for complicated calculations or to shift responsibility for calculations to higher levels**



# Data Flow: Supply Chain Reporting

A **Logistics Management Information System (LMIS)** is needed to collect important data to inform routine resupply, respond to emergency situations (e.g., stockouts), monitor performance, and forecast quantities

Typical data collected through LMIS:

- (1) Stock on hand
- (2) Consumption (or issues) data
- (3) Losses and adjustments
- (4) Days stocked out

Consumption and stock data need to be available and usable for supply chain decision making and problem solving



- Limit data collected from the community level to only essential data e.g. stock on hand and consumption
- Design simple tools for CHWs e.g. stock cards and report form

# Effective people:

Training	Supervision	Meetings
<ul style="list-style-type: none"><li>• CHWs need to be trained in resupply and reporting as well as storage of products</li><li>• One off training is not enough</li><li>• Use job aids to show procedures</li></ul>	<ul style="list-style-type: none"><li>• When defining mechanism consider #s of CHWs per supervisor</li><li>• Use of checklist,</li><li>• Do not forget SCM</li><li>• Train supervisors to supervise</li></ul>	<ul style="list-style-type: none"><li>• Regular meetings need to be structured and effective</li><li>• Observe case management</li><li>• Team needs to have goals and track progress</li><li>• Teams work together to solve SC problems</li><li>• Recognition of performing CHWs</li></ul>

**Use teamwork and problem solving to improve supply chain  
CHWs and district staff motivated to do the job**

# Summary of key points

- **Coordination and planning for supply chain management in CCM:**
  - Product selection
  - Quantification
  - Planning for procurement
- **Product and data flow:**
  - Resupply mechanism and tools
  - Reporting system
  - Data analyzed and used
- **Effective people: a skilled and motivated workforce to achieve supply chain goals**
  - Train CHWs
  - Equip supervisors to supervise
  - Motivate CHWs and supervisors to perform their SCM tasks
  - Track progress and aim for continuous improvement