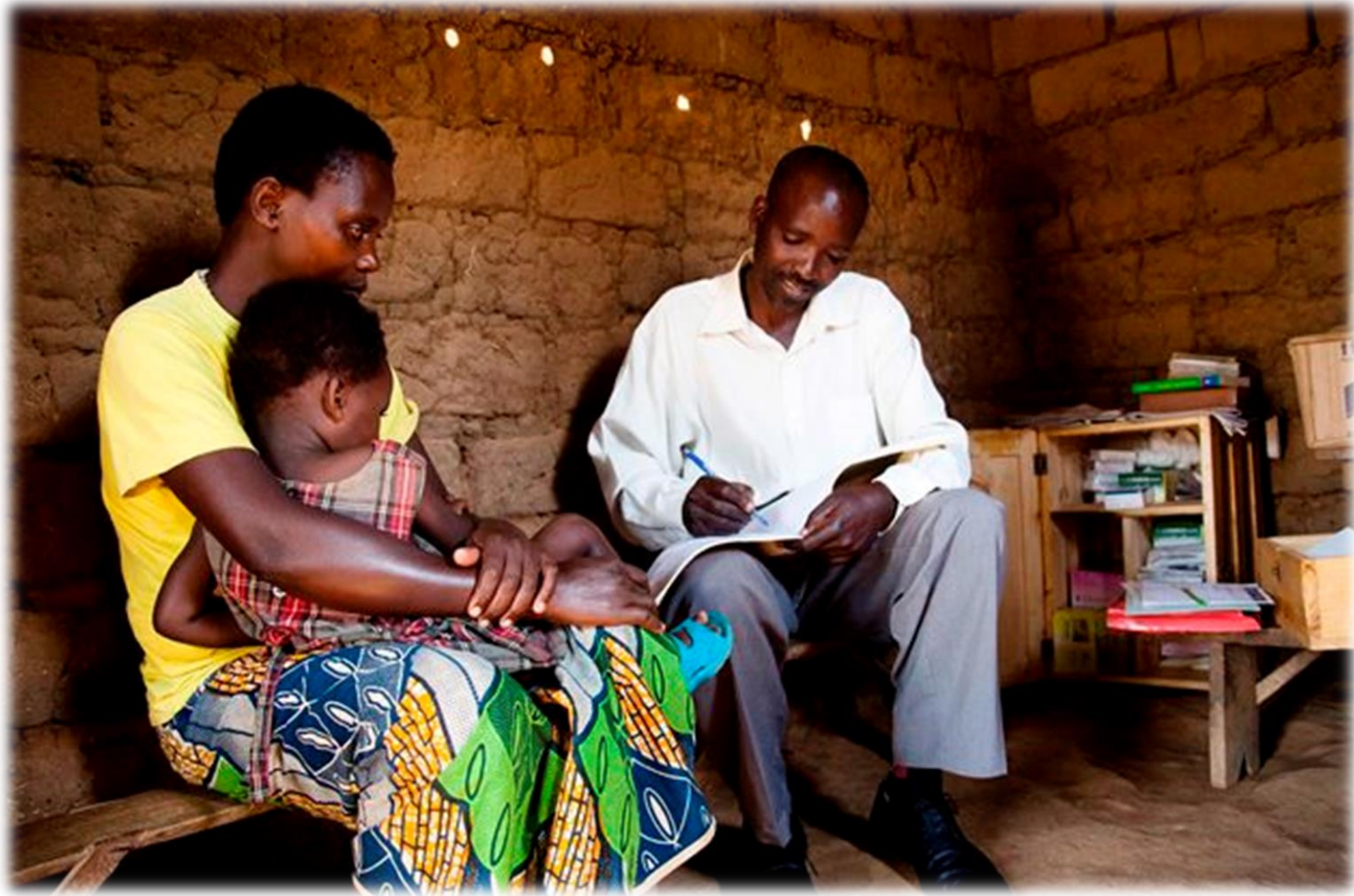


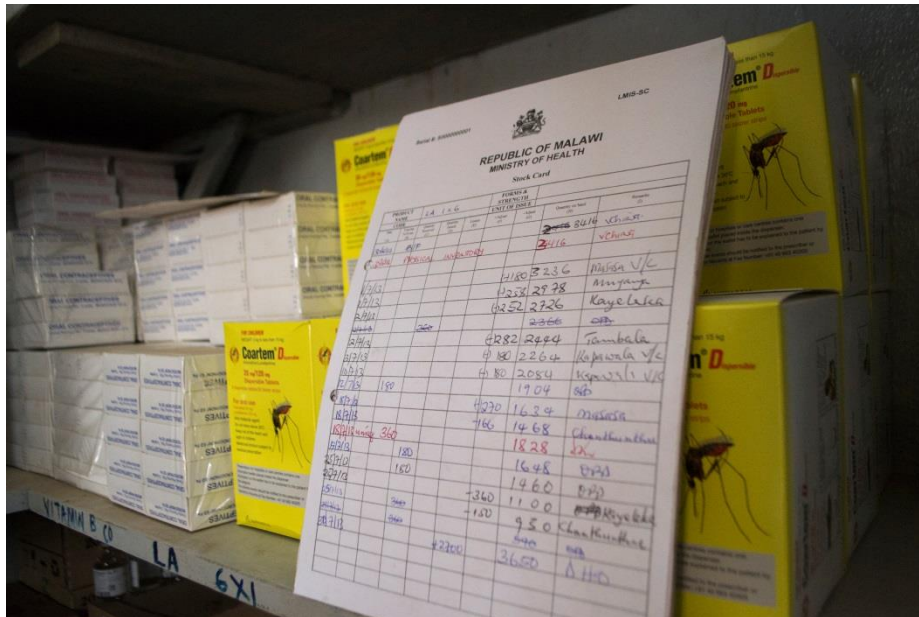
Webinar 3 - Quantification for CCM



February 26, 2014
SCM Subgroup of the CCM Task Force

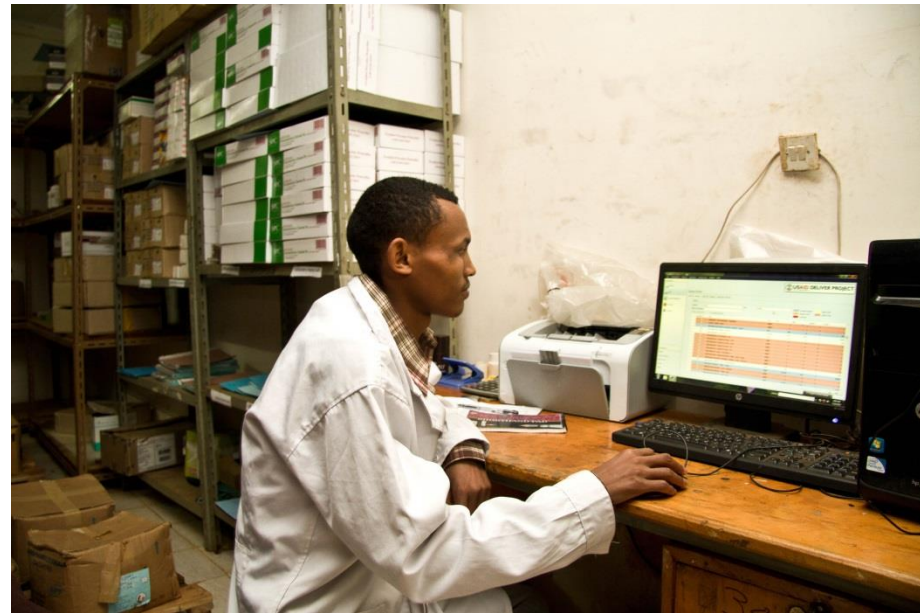
Objective

This webinar with the SCM subgroup of the CCM Taskforce will provide an overview of quantification, focusing on some of the unique considerations of quantification for CCM and potential options to address common challenges



Target Audience

NGO staff engaged in providing technical assistance to MOH programs in quantification for CCM or those conducting quantification for their own programs



Getting products to the community

- CCM brings treatment closer to the community, but frequently relies on the same source and flow of products used by facilities
- Unless medicines are **fully funded** and **in full supply** throughout the system CHWs are the most vulnerable to shortages and the most likely to face stock outs if there is no deliberate effort to ensure products reach them
- This means that without careful planning – including **quantification** and an **enabling funding and policy environment** - CHWs rarely have enough medicines to treat all of the sick children who come to see them



Quantification is the first step to ensuring there are enough products in the system so that CHWs have the supplies they need to treat children

What is Quantification?

Quantification answers the question: “How much will be procured and when will it be delivered?”

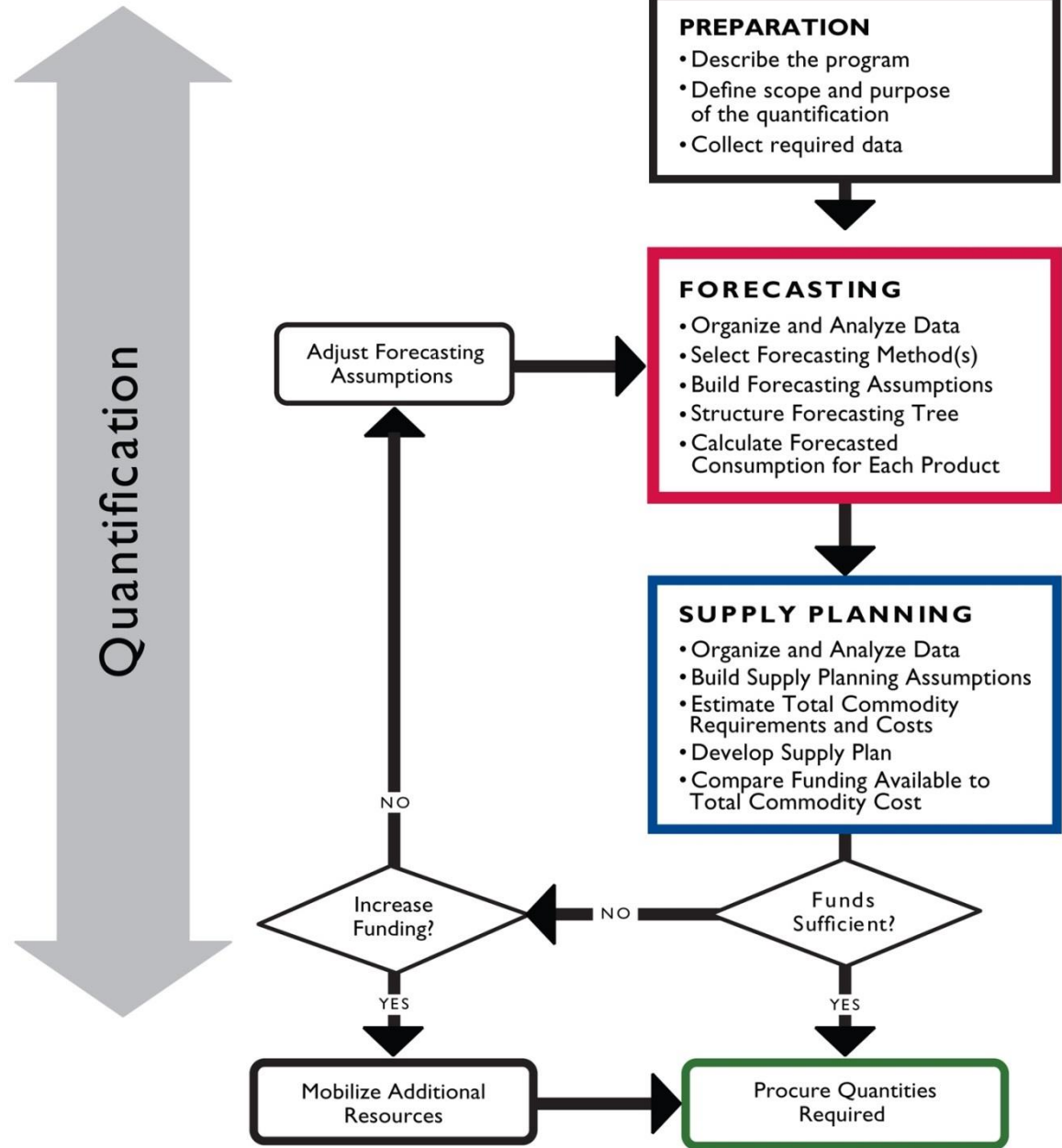
Forecasting -

estimating the quantities and costs of the products required for a specific health program (or service) for a specific period of time

Supply Planning -

determining when the products should be delivered to prevent interruptions in supply

Process



Types of Forecasting Data

Historical **logistics** / consumption data

- Quantities of **products** dispensed or used over a specified period of time (ideally a year or more)

Services data

- Number of **services provided** – number of children treated or referred over a specified period of time

Demographic and/or morbidity data (population-based data)

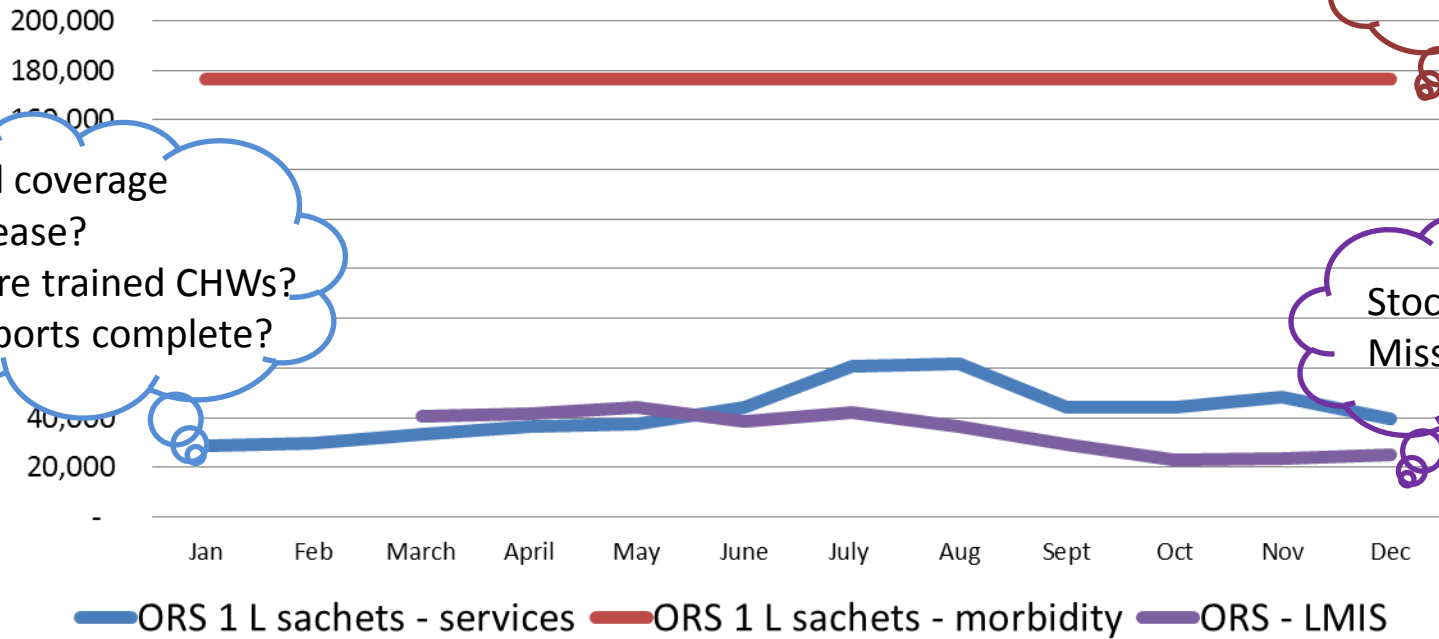
- Number and characteristics of the **population** targeted for services
- Data on prevalence or incidence of a disease or health condition in a specific population



Assess **quality of collected data**, identify gaps, and ask questions to understand what may be missing or misleading to determine which type(s) of data to use; **adjust for stock outs** or other limitations; if no data make assumptions

A Forecast Ideally Uses Multiple Types of Data

ORS: consumption, services, and morbidity data



Realistic?
Seasonality?

-Will coverage increase?
-More trained CHWs?
- Reports complete?

Stock outs?
Missing data?

Extend current trends, adjusting for expected changes, to estimate future consumption, then **compare results** to arrive at final forecast

Alternatives to Consumption Data for New Programs

Consumption data is ideal but in new programs this data (and services data) may not be available

Morbidity-based estimates may be necessary for CCM if programs are new or still in an early phase

→ ideally transition to consumption based forecast once that data is captured routinely and if reporting is regular (another reason to establish a LMIS system that includes community level data)



Whatever method used, document **all assumptions** made so that they can be reviewed/revised as better data becomes available

Forecasting – A Reality Check

Even if data are of high quality, it may still be necessary to make assumptions about:

- Expected uptake of services
- Impact of changing program policies or products
- Service capacity
- Client access to services
- Seasonality of service demand or disease burden
- Geographic variation
- Other factors that might impact demand



Be realistic about scale-up rates and patterns of use of services - assuming immediate service availability and service use at scale will over-estimate need and risk misuse, diversion, or expiry

The End Result of a Quantification Exercise Should be a Supply Plan

The supply plan indicates when products are required in country to fill the pipeline and meet the forecast need

The supply plan uses the forecast but also requires data on:

- (1) timing and availability of funding,
- (2) stock on hand of products currently in the system and any orders already placed, and
- (3) estimated supplier lead-time for each product
- (4) desired stock levels



This supply plan should **guide coordination and procurement**, not the forecast

Developing a Supply Plan

Maximum Stock Level		12 MOS					
Minimum Stock Level		6 MOS					
Month	Beg. Bal.	Shipment Qty	Forecasted Consumption	Stock Adjustment	Ending Balance	Projected Average Monthly Consumption	MOS
Jun-12	900,000		100,000		800,000	100,000	8
Jul-12	800,000		100,000		700,000	100,000	7
Aug-12	700,000	400,000	100,000		1,000,000	100,000	10
Sep-12	1,000,000		100,000		900,000	100,000	9
Oct-12	900,000		100,000		800,000	100,000	8
Nov-12	800,000		100,000		700,000	100,000	7
Dec-12	700,000	300,000	100,000		900,000	100,000	9
Jan-13	900,000		100,000		800,000	100,000	8

The output is a **monitoring tool** that allows you to estimate future stock levels based on current SOH, your forecast consumption, and planned receipt of future shipments – and then determine **when shipments need to arrive**

Quantification is Not a One-Time Activity

Forecasting

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graph LR; Forecasting --> SupplyPlanning[Supply Planning]; SupplyPlanning --> Review[Review and Update]; Review --> Forecasting;
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Forecasting should be conducted **annually** or **bi-annually** (or more frequently if warranted) to produce a **rolling two year plan**

Supply Planning

The supply plan should be **reviewed** and **updated** regularly (**quarterly** or **monthly**) to adjust for changes in consumption, assumptions, and stock levels.

Common Challenges for CCM

- CCM program data may be incomplete
 - Weak reporting systems - incomplete/unavailable data
 - Often CHW logistics data is aggregated with HC data before it reaches the central level making it difficult to quantify specifically the need for CCM
- CCM programs are immature
 - Trends and variations in demand are not yet well understood (due to on-going demand generation activities, on-going scale up efforts, limited historical consumption data, nascent data systems)



And thus estimates are frequently based on good assumptions rather than precise data and should be updated regularly

Additional Considerations for CCM Quantification

- CCM often does not receive dedicated product funding and relies on essential medicines being available in the system
- There are rarely enough essential medicines to meet all the needs
- The same essential medicines in same presentations are used for other conditions and at other levels in the health system
- CHWs are at the end of the supply chain and often unable to advocate for supplies

Amoxicillin example:

If a new CCM program relies on amoxicillin used throughout the system, but there is no coordination to fund/procure additional quantities needed by CHWs it is very likely that available quantities will be insufficient and products will be used before reaching CHWs



If Good Data and Processes are Not Available, Why Invest Time and Resources to Quantify Regularly?

- Quantification is important for all programs to achieve health outcomes by helping make sure products are available when needed
- Therefore, even with imperfect information, it is critical to use the information available and educated assumptions to conduct regular quantification exercises
- Quantification can create the platform for discussion and coordination



Quantification also needs to take into account the unique considerations of CCM Programs so the **required approach may be different from other more vertical programs**

How Can Quantification Effectively Promote Product Availability at the Community Level?

Quantify for CCM AND medicines used at other levels together

- Forecast for all conditions the products are used for (Total Needs)
- Understand what % of total needs CCM represents (CCM needs)
- Understand what funding is available for the total need and how products flow through the system



Include national partners, procurers, and donors in quantification exercise to ensure all inputs and resources are **captured** and **coordinated**

Then Develop a Supply Plan and Compare Funding Available

The supply plan should be used by policymakers, program managers, procurement managers, and donors to **make decisions** and **take action** around the following:

- Program planning and budgeting decisions
- Mobilization and allocation of funding for product procurement
- Coordination of multiple sources and timing of funding for procurement
- Informing procurement actions on which products to procure, how much to procure, and when to procure
- Adjust timing of procurements and shipment delivery schedules to ensure continuous supply, avoiding stockouts and overstocks



Easier Said Than Done Sometimes...

Coordination can be challenging because:

- The products used by CCM programs may have multiple funding sources or come via multiple programs making coordination difficult
- Funding is frequently insufficient or information on funding is not available
- Essential medicines data is frequently weak and quantification of total need is based on incomplete data

→ This leads to gaps in supply plan
(either uncertainty due to missing information or under-funding)



Given that we've said that quantification is the **first part** of the solution - **what else can be done** to improve this situation?

Improve Data Quality and Visibility

- Implement or strengthen data collection from CHW level and promote visibility and use at higher levels
 - Ensure that community level consumption is included in LMIS, but captured separately from facility consumption
- Where assumptions are used, review and revise the assumptions rather than using the same ones for several cycles of quantification

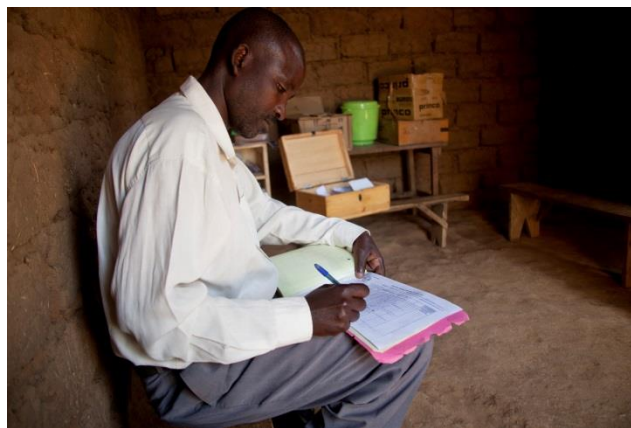


There are many resources available on this topic – please refer to previous SCM webinars on supply chain for CCM overview and mhealth, SC4CCM website, and forthcoming tools provided by the SCM subgroup on CCMCentral.com

Use Outputs to Advocate for Additional Funding

Once quantification has been done and the funding gap established -

- Share output and the budget shortfall with MOH, donors, and partners to increase funding levels – both in total and for CCM to ensure sufficient quantities of products will reach CHWs – and ensure support is coordinated to maximize use of limited funds



If That is Not Enough, Consider Unique Products

Purchase or package products specifically for CHW level

Specific pediatric presentations e.g. blisters of dispersible tablets are preferable for CCM programs, and there may be added benefits in using unique products to treat children under 5 in the community



Despite potentially higher costs, unique packaging or products for CHWs can be an **effective solution** for ensuring product availability at the community level

Or Consider Policy Level Intervention

Policy makers need to make it clear that getting products to CHWs is a priority; policy needs to consider how to promote distribution of products to CHWs and ensure they are fully integrated into the health system and receive an equitable share of products



Align HC and CHW goals for treatment so that health facilities share/release products to CHWs – even when there are shortages

Key Messages: Promoting Product Availability for CHWs through Quantification and Policy

Routine quantification is the first step for ensuring appropriate levels of stocks

- Quantification for CCM, as a subset of total need for these products, is especially important because CHWs are the final stage of the supply chain
 - CHWs will not have enough supplies if products are all used or held by the facilities higher in the supply chain
- Coordination and supportive policies should promote distribution of products to CHWs so they have what they need to treat sick children and have the greatest impact on child health



Conclusion

Quantification is a key part of the planning process for CCM but is critically linked to funding and coordination

A lot is being invested in CCM and training CHWs. Now we need to make sure they have the products they need to treat sick children. Both quantification **AND** a supportive policy environment are needed to ensure that CHWs have the products they need to realize the child survival goals



Some Resources

CCM-specific:

- Quantification of Health Commodities: Community Case Management Products Companion Guide (SC4CCM – sc4ccm.jsi.com)
- iCCM Costing Tool (MSH)

General quantification:

- Quantification of Health Commodities; A Guide to Forecasting and Supply Planning for Procurement (USAID | DELIVER PROJECT)
- Quantimed software (MSH)
- Pipeline software for supply planning (USAID | DELIVER PROJECT)
- Online course on logistics, including a Quantification module (USAID | DELIVER PROJECT)
- Managing Drug Supply-3 (MSH 2012); Chapter 20 Quantifying Pharmaceutical Requirements

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