



Supply Chains <sup>4</sup> Community Case Management

# Supply Chains for CCM: Preliminary Baseline Results & SC Intervention Areas



# SC4CCM Project Goal

SC4CCM will **identify**, **demonstrate**, and **institutionalize** supply chain management practices that **improve the availability** and use of selected essential health products in community-based programs

- In partnership with MOH, CCM and supply chain stakeholders in Malawi, Ethiopia and Rwanda



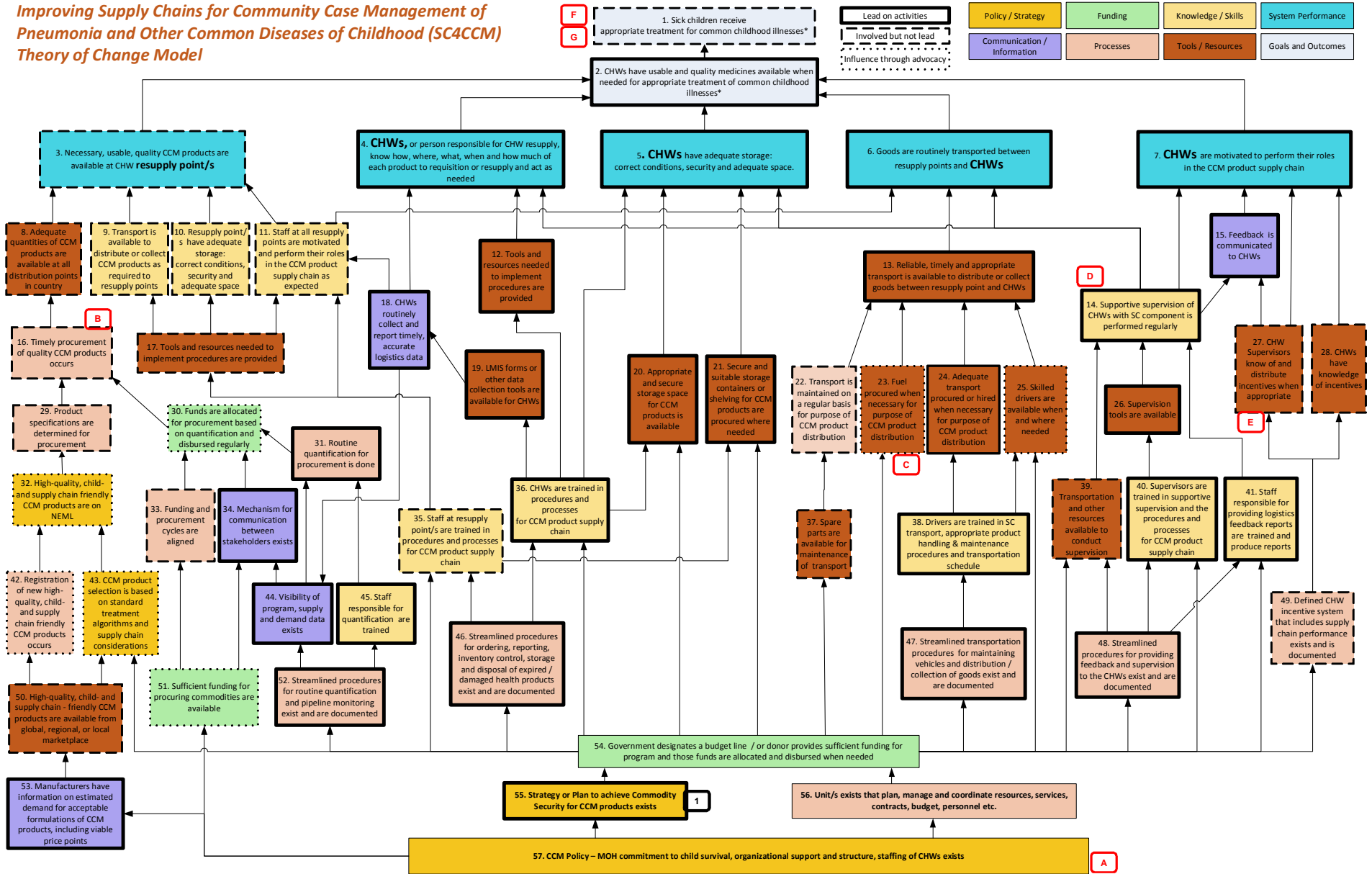
# Project Objectives

- Conduct a baseline assessment and develop implementation plan
- Test, identify and implement supply chain interventions
- Collaborate with partners to institutionalize improved supply chain practices
- Ensure capacity to procure quality, affordable CCM products
- Share lessons learned

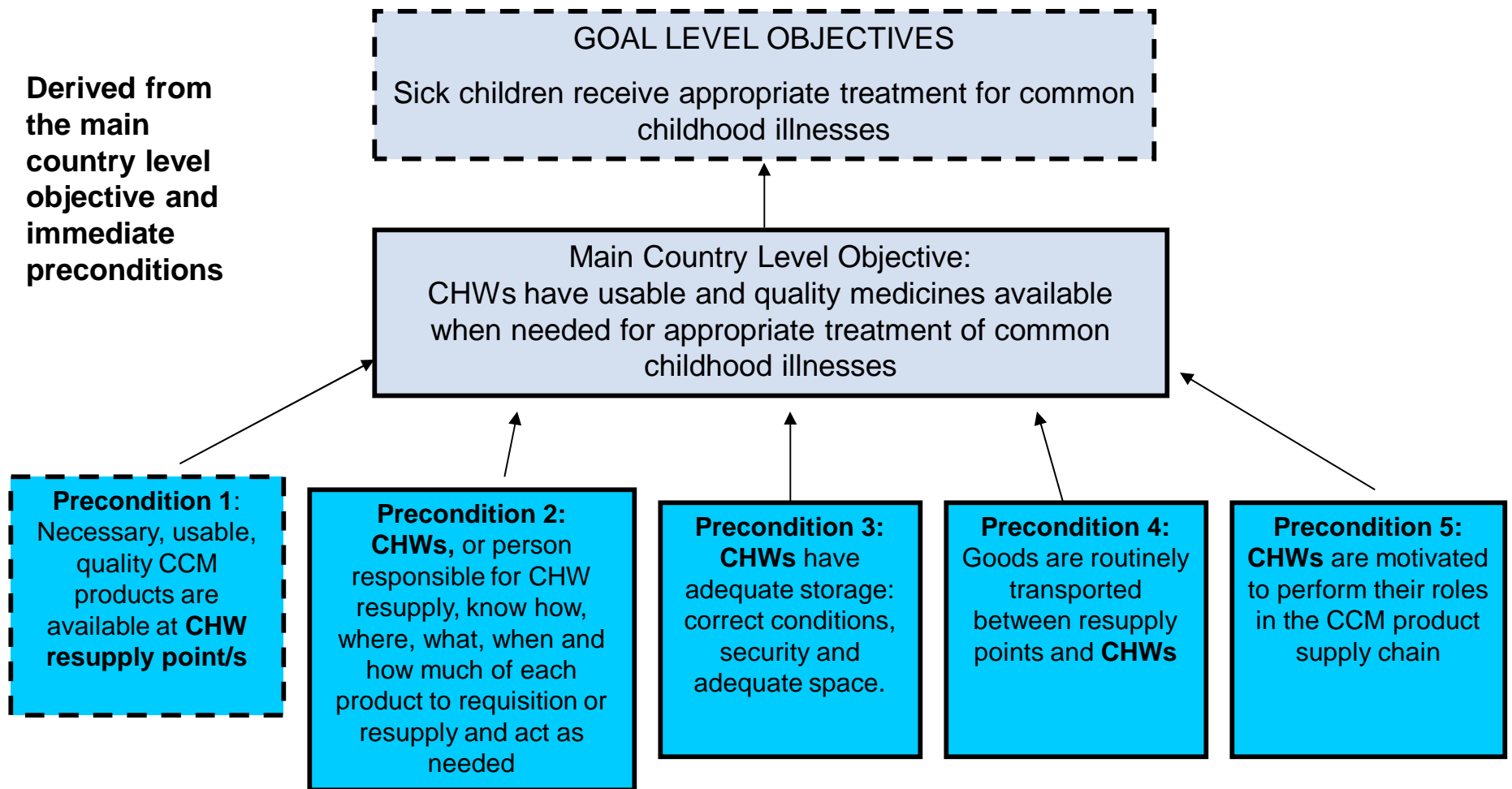


# SC4CCM Theory of Change

## Improving Supply Chains for Community Case Management of Pneumonia and Other Common Diseases of Childhood (SC4CCM) Theory of Change Model



# SC4CCM Core Indicators







Supply Chains **4** Community Case Management

# Analysis of Product Availability Results by Precondition

## Malawi, Ethiopia & Rwanda



# Country Contexts

- Community health workers reach children in the most hard to reach areas with a wide variety of geographies



Malawi – **3,000+** HSAs  
managing up to 19 products



Ethiopia – **30,000+** HEWs  
managing up to 50+ products

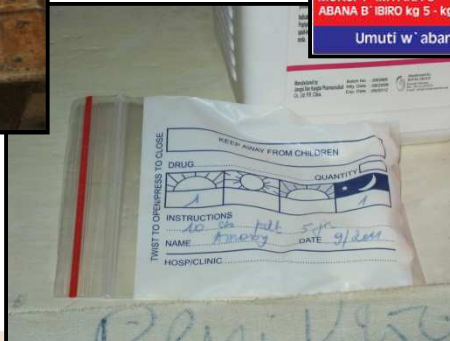


Rwanda – **60,000+** CHWs  
managing 5-8 products (~ 1/2  
doing CCM)



# Main Country Level Objective:

CHWs have usable and quality medicines available when needed for appropriate treatment of common childhood illnesses





# Product Availability among CHWs

Malawi - of HSAs who manage health products

- **35%** had all CCM medicines in stock on the day of visit (*cotri, LA1x6 and/or LA2x6, ORS*)

Ethiopia - among HEWs who managed

- **47%** had ORS and RUTF in stock on DOV,  
**25%** had all CCM medicines in stock (*ORS, RUTF, ACT 1x6 and/or ACT 2x6*)

Rwanda - of CHWs managing child health products

- **49%** had all in stock on the day of visit (*ORS, amoxicillin, zinc and both Primos*)



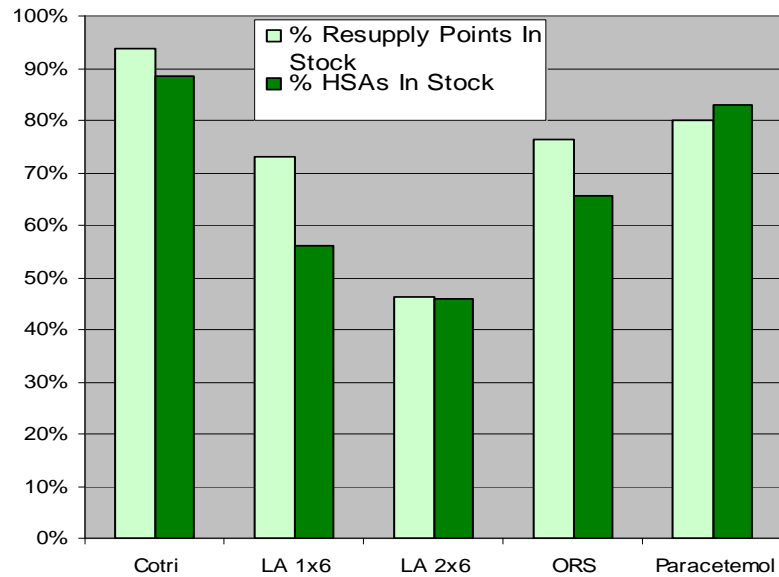
**PRECONDITION 1:** Necessary, usable, quality CCM products are available at CHW resupply point/s

Product availability at the resupply point appears to be strongly linked to product availability at the CHW, but is not the only predictor

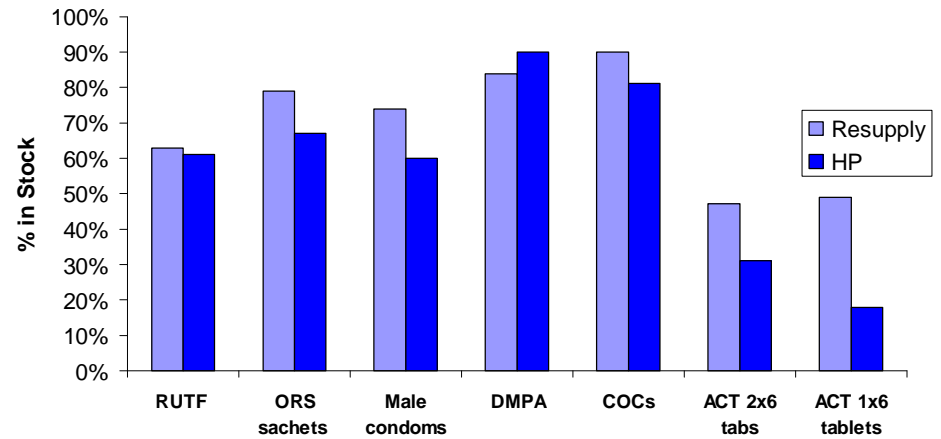


# Product Availability at the Resupply Point & CHW

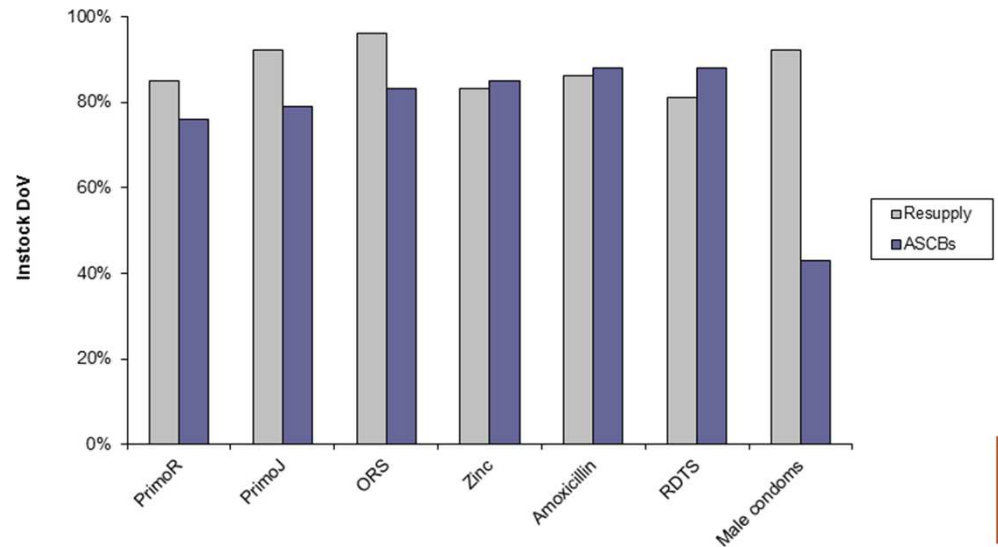
## Malawi



## Ethiopia



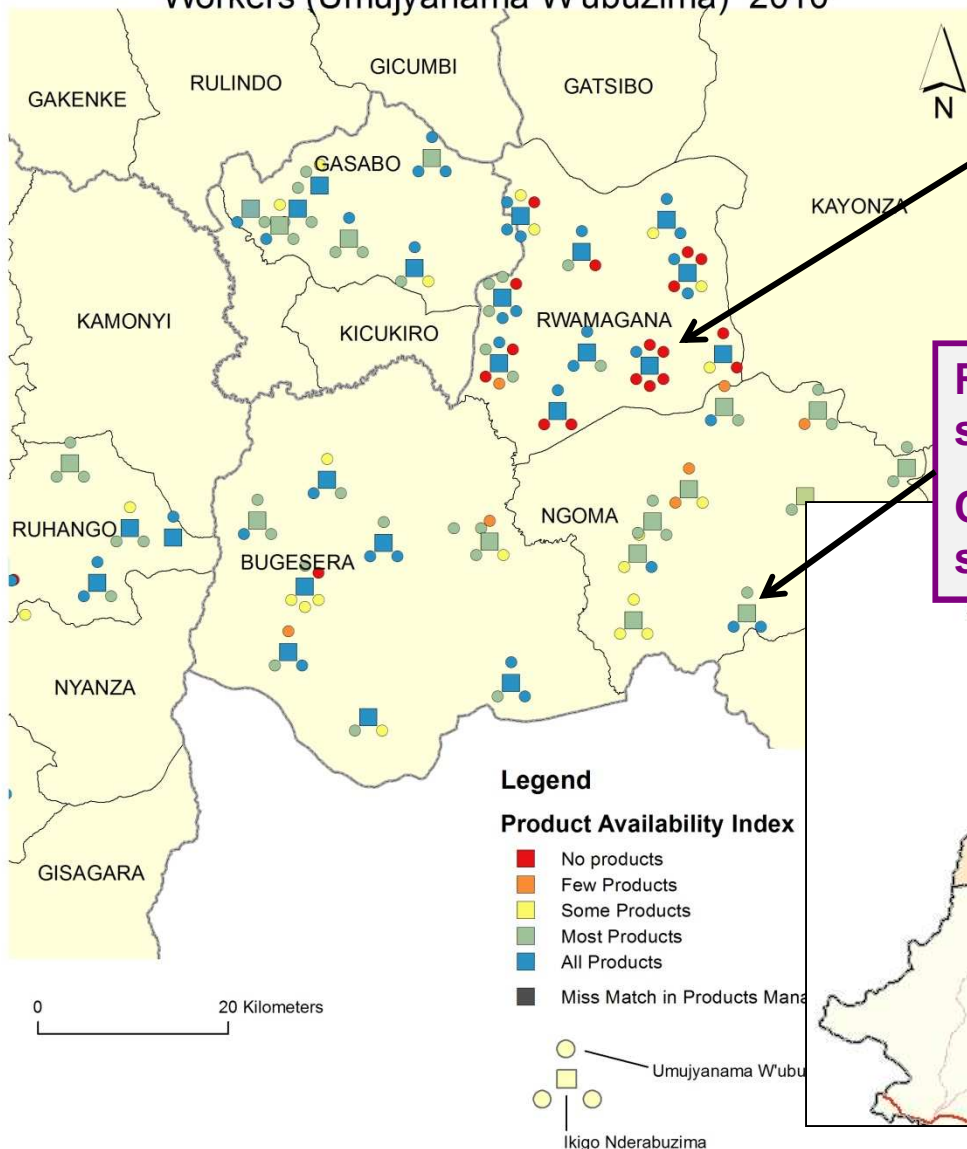
## Rwanda





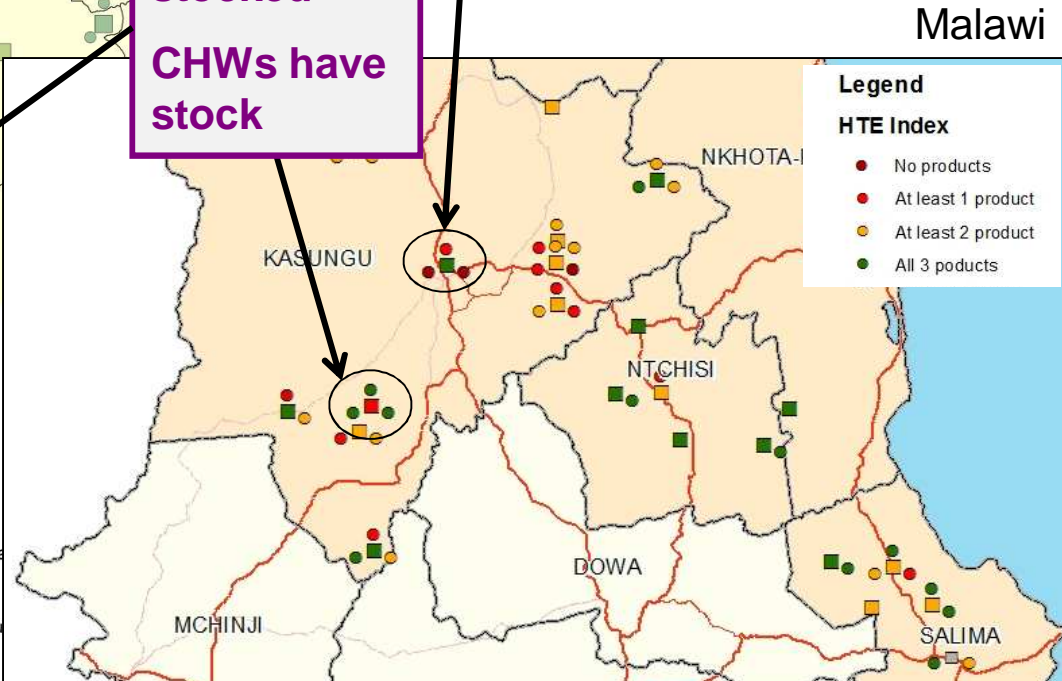
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# SC4CCM/Rwanda Product Availability Index at Health Centres (Ikigo Nderabuzima) and Community Health Workers (Umujeanama W'ubuzima) 2010



**RP fully stocked**  
**CHWs stocked out or not fully stocked**

**RP not fully stocked**  
**CHWs have stock**





**PRECONDITION 2:** CHWs, or person responsible for CHW resupply, know how, where, what, when and how much of each product to requisition or resupply and act as needed

## Formal SC training did not appear to be a strong driver of product availability

- SC training rates varied across countries:
  - Malawi - 59% of HSAs (59%) and ~75% resupply staff
  - Ethiopia - 11% HEWs and 8% resupply
  - Rwanda - 49% CHWs



## PRECONDITION 3: CHWs have adequate storage: correct conditions, security and adequate space

### Storage did not appear to be a strong driver of product availability

- **Malawi** - HSAs on average scored **high** on storage conditions, although score drops as number of products increases
- **Ethiopia** - nearly 40% of HPs did not fulfill any storage conditions; HEWs reported insufficient shelving and using the storeroom for living
- **Rwanda** - CHWs reported that boxes were too small for products, reports & cash; carrying bag not waterproof



# PRECONDITION 4: Goods are routinely transported between resupply points and CHWs

## Transport is a challenge for CHWs

- **Malawi** - ~ 90% depend on bike or foot to travel on dirt road; on average travel 1 to 3 hours
- **Ethiopia** – 71% of HEWs walk, 32% use public transport and 9% use animals; < 30 minutes to a full day
- **Rwanda** - 88% of CHWs travel by foot, 10% use bikes

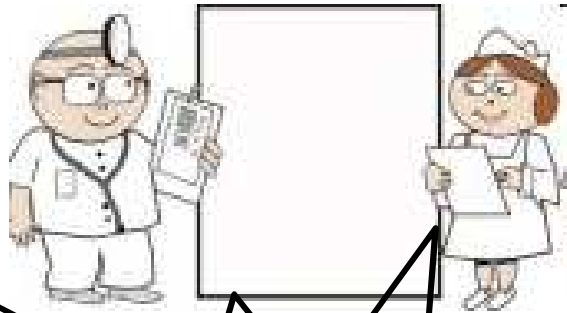
*HEWs reported leaving some products at resupply points because they could not carry them*

*CHWs reported lack of motivation to travel to collect supplies as no compensation for time/travel*



# PRECONDITION 5: CHWs are motivated to perform their roles in the CCM supply chain

- Most CHWs reported receiving supervision that includes some SCM on a regular basis



Malawi - **84%** HSAs reported receiving a supervisory visit in last **3 months**

Ethiopia - **81%** HEWs reported receiving a supervisory visit in **last month**

Rwanda - **59%** CHWs reported receiving a supervisory visit in the **last month**

2% of HEWs identified supervision as a motivating factor

Supervisors in Rwanda report supervising an average of 88 CHWs each



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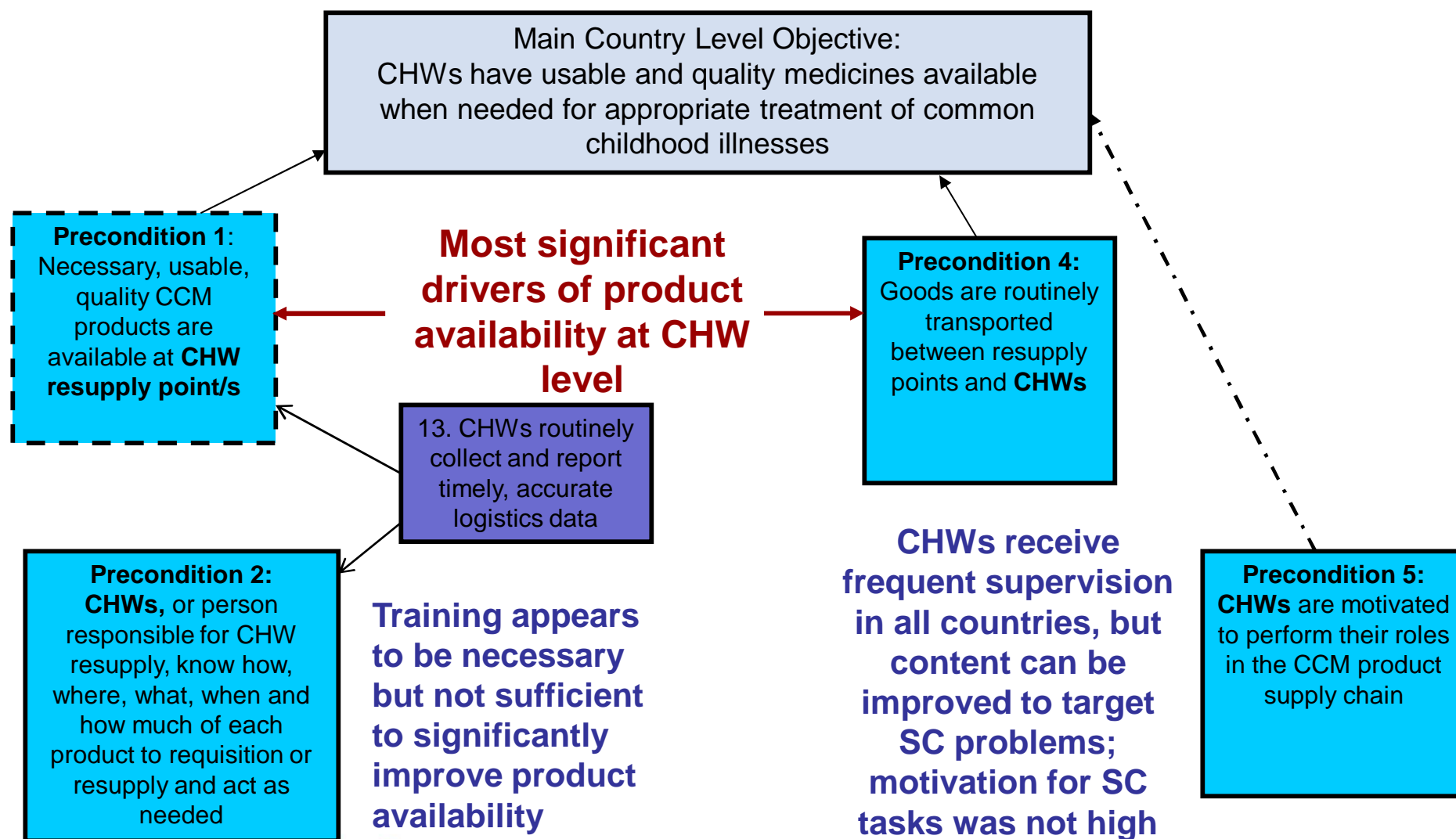
# PRECONDITION 5: CHWs are motivated to perform their roles in the CCM supply chain

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- Biggest motivators for CHWs:
  - Malawi
    - helping the community and saving lives
  - Ethiopia
    - training, availability of products / tools and community participation
  - Rwanda
    - social relationships, trust and esteem from neighbors and saving children's lives/help community



# Preliminary Conclusions



# General Hypothesis Guiding Selection of Interventions

Current supply chain practices at CHW level are often an extension of the facility model, and innovative supply chain solutions that target the unique challenges of CHW need to be identified to significantly improve product availability



# Malawi Proposed Intervention Strategies

## Efficient Product Transport:

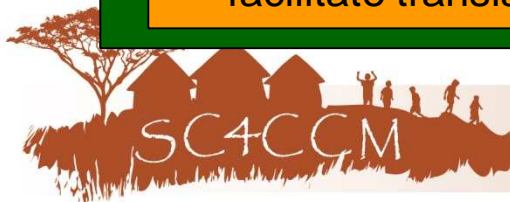
- flexible inventory control procedures to align to the routines of the HSA
- more frequent top up orders to reduce the volumes to be transported
- maintain bicycles to improve reliability

## Enhanced Management:

- customer service oriented supply chain
- create teams around urgency in maintaining consistent product availability
- improve data visibility and decision making authority/capacity
- recognize good SC performance

## Data Visibility:

- automate calculation of resupply quantities
- provide high level decision makers with more accurate data
- facilitate translation of data into regular performance reports





# Ethiopia Proposed Intervention Strategies



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GROUP A: “Ready Lessons” for SC knowledge and skills

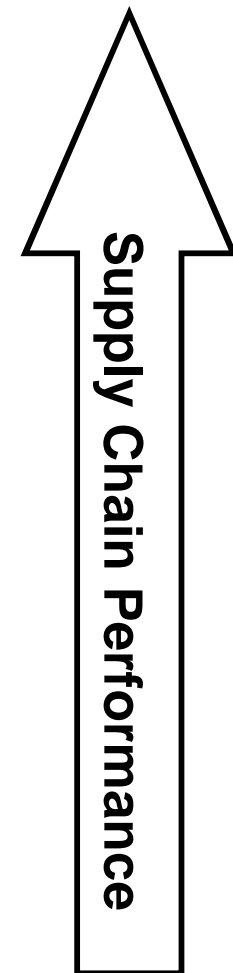
GROUP B: Collaborative SC problem solving. “Finding local solutions together!”

GROUP C: Supply chain segmentation for improved transportation. “No product left behind!”



# Ethiopia Interventions

- Supply Chain Segmentation to Improve Transportation
  - Address transportation challenges related to an increasing number of products managed at HPs
- Collaborative SC Problem Solving
  - Ensure SC is a priority for HEWs and supervisors, especially during supervision
  - Improve collection, sharing and use of data
  - Enhance communication and team approach to SC problem solving
  - Promote regional / local approaches
- Ready Lessons for Improving SC Knowledge And Skills
  - Prioritize logistics as an issue for all partners



# Rwanda Proposed Intervention Strategy

Engaging  
CHWs to  
Prioritize  
SC Activities

SMS System:  
Data-Driven Advance-Orders,  
Simplified

Standardize Resupply Procedures



# Challenges

- Limited supply chain leadership in public sector in all countries
  - No specific organization responsible for CCM supply chain
- Fragmented supply chains
- Supply chains implicitly lend themselves to perverse incentives
  - Leakage, corruption are chronic issues
- Significant questions about resources and leadership to take successful lessons to scale
- Learning agenda is not popular



# Thank You!



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