



Supply Chains **4** Community Case Management

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



# SC4CCM Project Goal

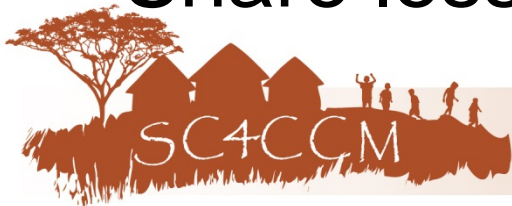
SC4CCM will **identify**, **demonstrate**, and **institutionalize** supply chain management practices that **improve the availability** and use of selected essential health products in community-based programs

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



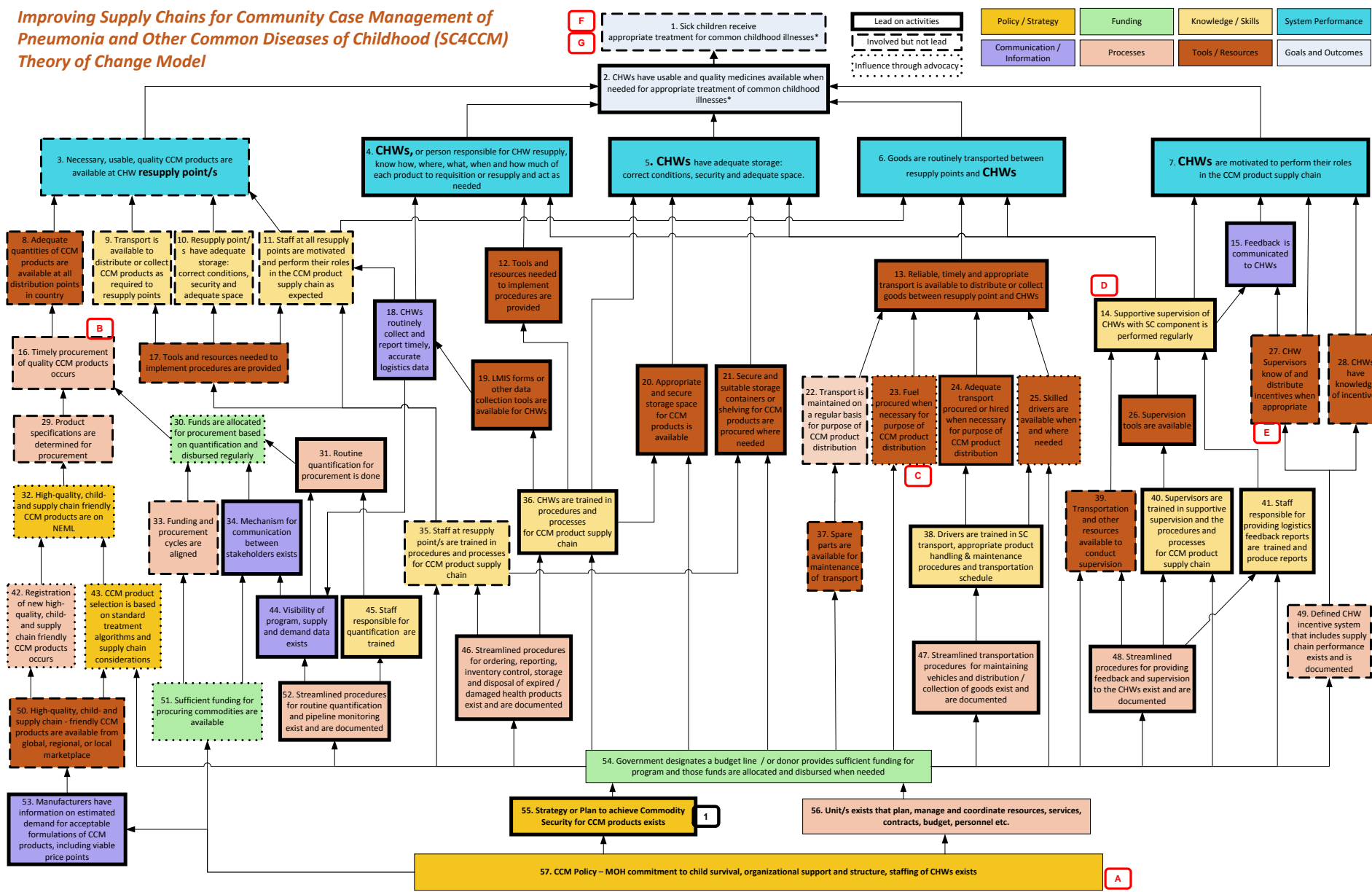
# Project Objectives

- **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



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

## Theory of Change Model



# SC4CCM Core Indicators

Derived from the main country level objective and immediate preconditions

**GOAL LEVEL OBJECTIVES**  
Sick children receive appropriate treatment for common childhood illnesses

**Main Country Level Objective:**  
CHWs have usable and quality medicines available when needed for appropriate treatment of common childhood illnesses

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

**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

**Precondition 3:**  
**CHWs** have adequate storage: correct conditions, security and adequate space.

**Precondition 4:**  
Goods are routinely transported between resupply points and **CHWs**

**Precondition 5:**  
**CHWs** are motivated to perform their roles in the CCM product supply chain





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# Preliminary Baseline Results: Malawi



# Describing the HSA Sample

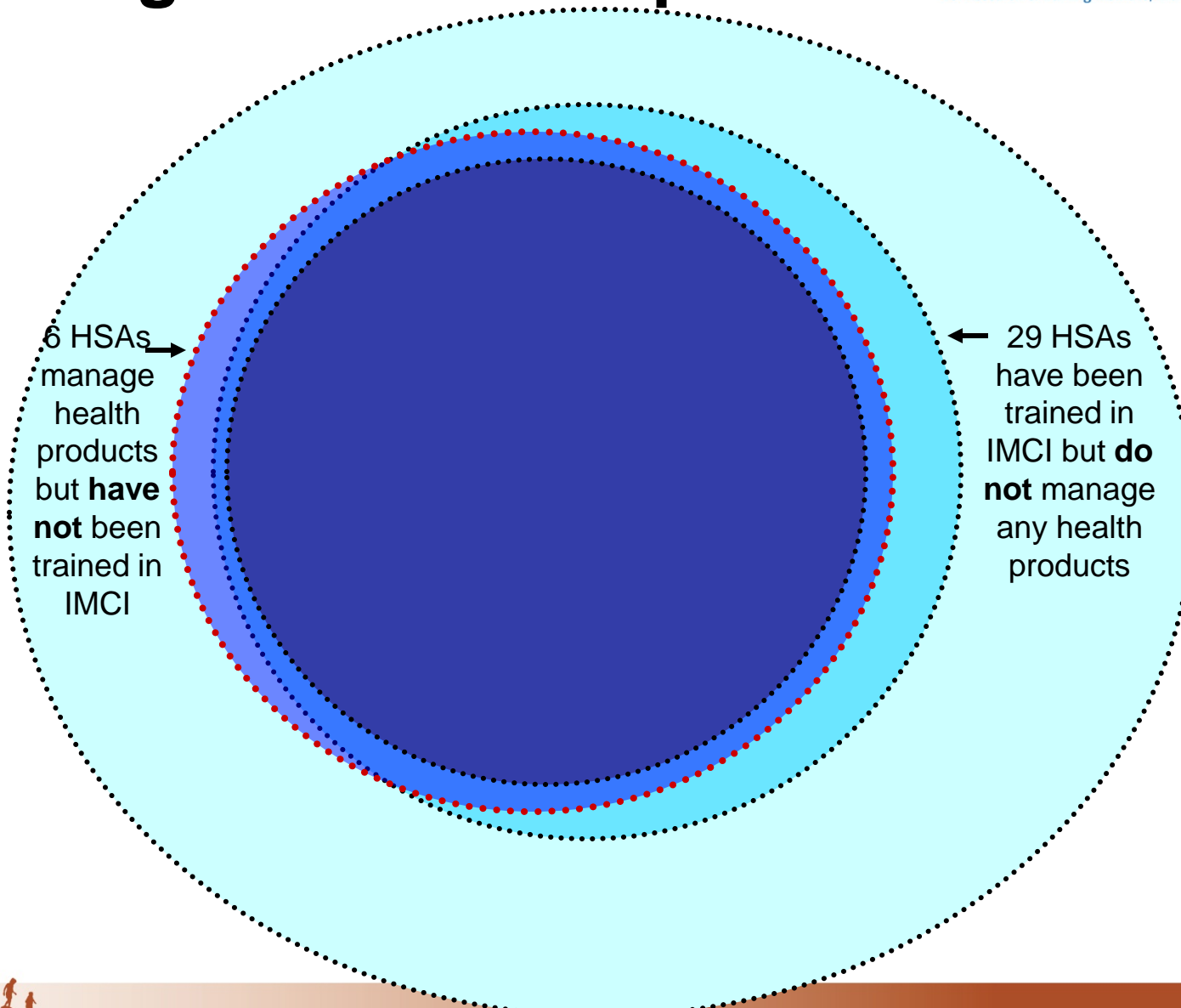
All HSAs interviewed  
(N=248)

65% HSAs have  
received IMCI training  
(N=162)

**56% HSAs manage  
any health products  
(N=139)**

54% HSAs are both  
IMCI trained and  
manage any health  
products (N=133)

46% HSAs manage all  
three CCM products  
(N=114)



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

Of the HSAs who manage health products  
**27%** had the **4 tracer** drugs\* in stock,  
**35%** had the **3 tracer** drugs\*\* in stock  
on the day of visit

Only about 1/3 of HSAs had the health products needed to treat all 3 common childhood illnesses (pneumonia, diarrhea, and malaria) meant to be treated under the current CCM program on the day of visit

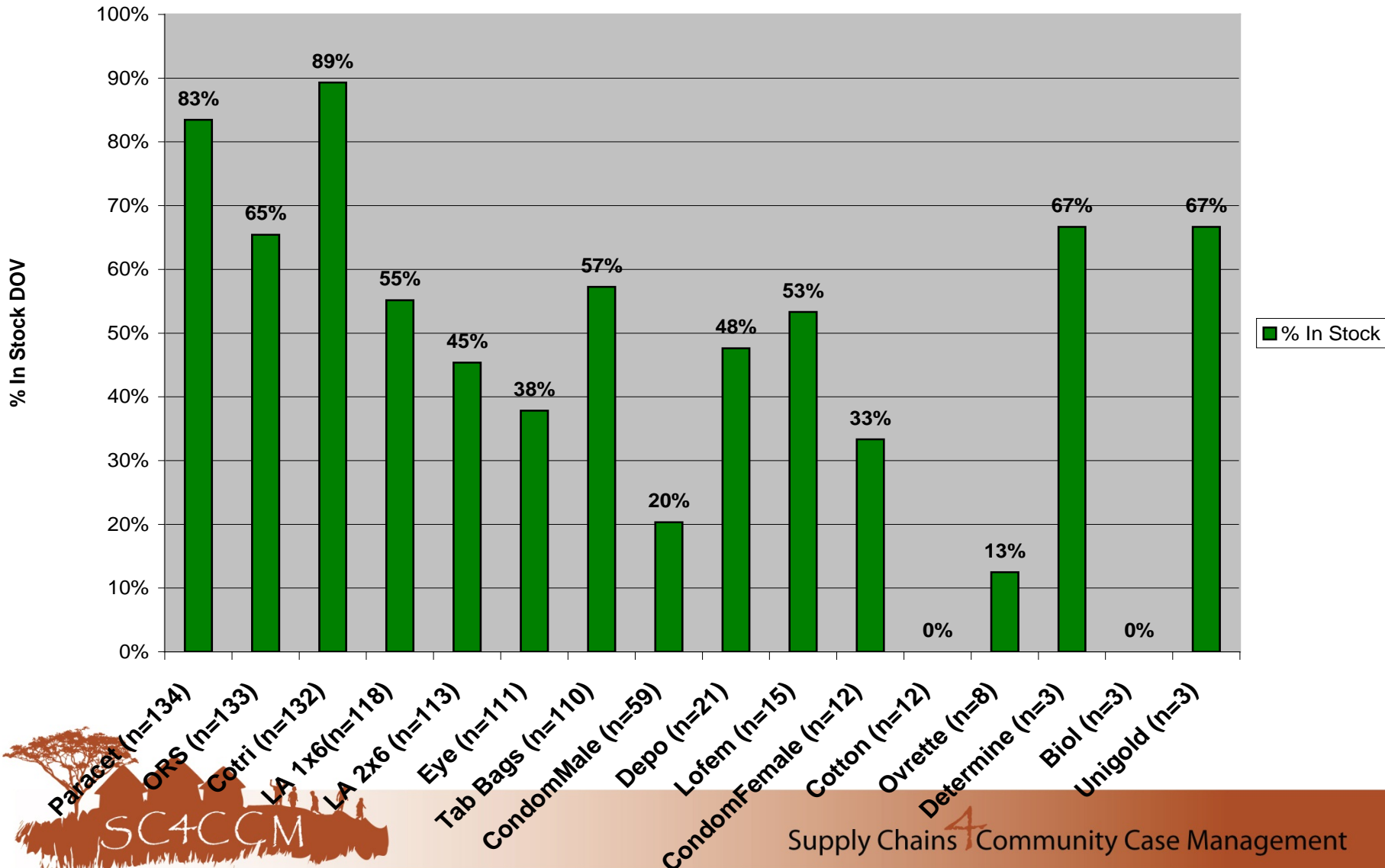


\*cotrimoxazole, LA 1x6, LA 2x6, ORS

\*\* cotrimoxazole, LA1x6 and/or LA2x6, ORS



# % HSAs with Products In Stock (Day of Visit)





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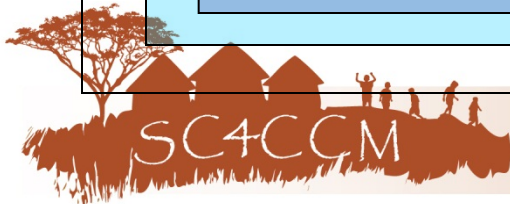
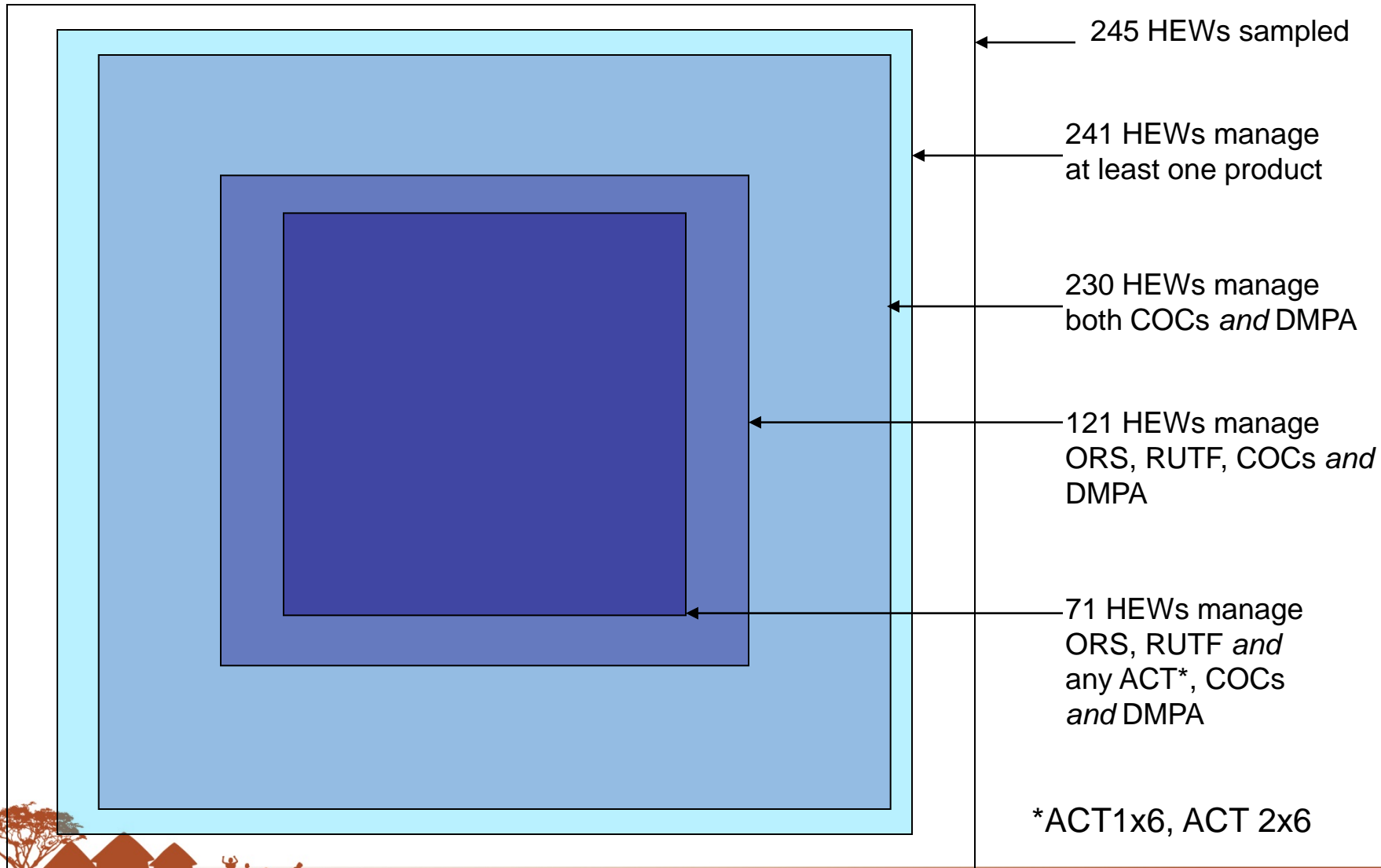
# Preliminary Baseline Results: Ethiopia



# Describing the HEW Sample



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## **Main Country Level Objective:**

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



**FP better established and better supplied**

**ACT is a limiting factor for product availability**

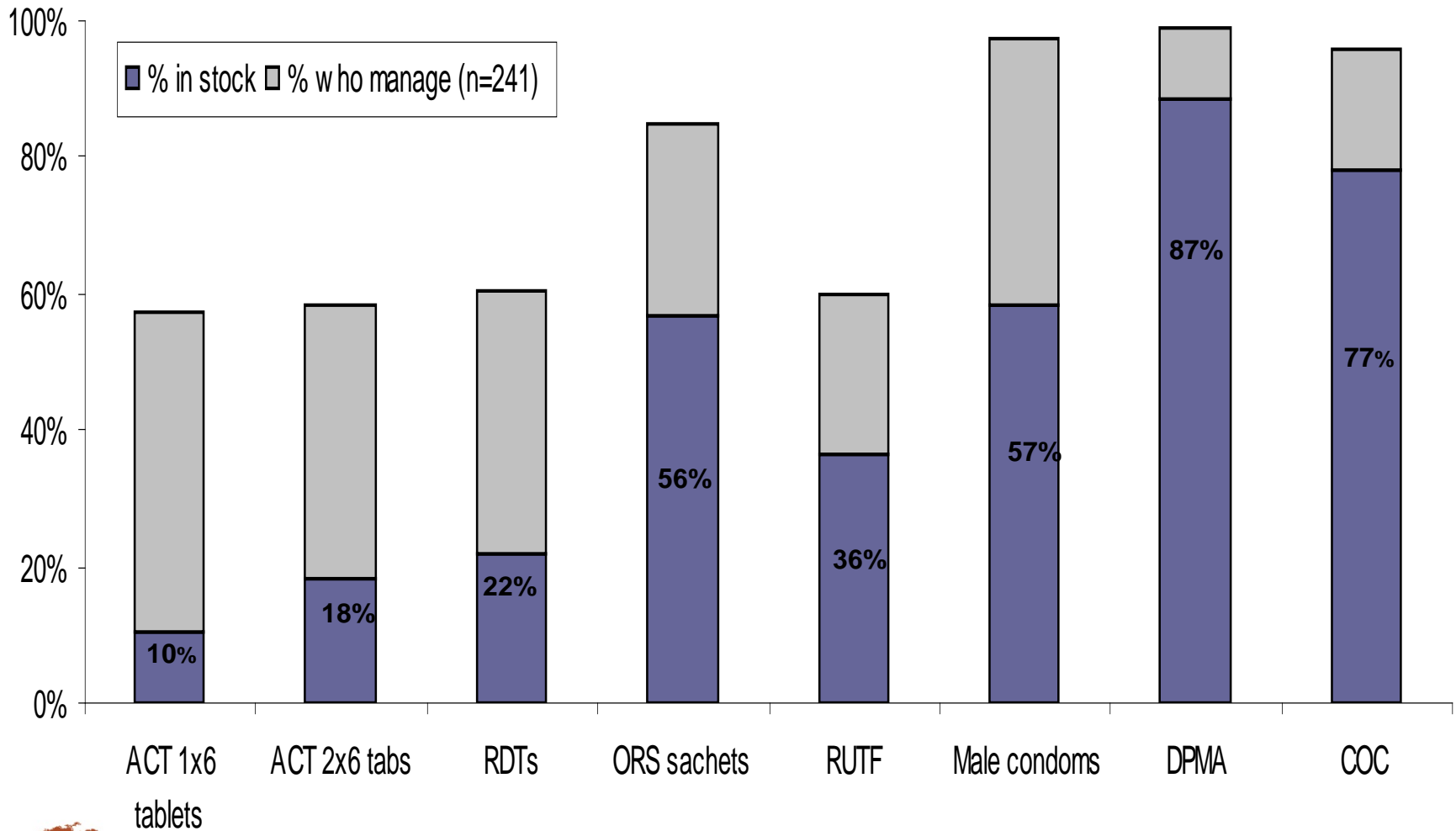
14 of 71 (**20%**) HPs with ORS, RUTF, COCs, DMPA and any ACT have them **all in stock**

49 of 121 (**41%**) HPs who manage ORS, RUTF, COCs *and* DMPA have **all in stock**

171 of 230 (**74%**) HPs manage both COCs *and* DMPA and have **all in stock**



# Stock on DOV at HP by Product





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# Analysis of Product Availability Results by Precondition

## Malawi & Ethiopia



**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 there is much variability by district (Malawi) and region and product (Ethiopia)





# Malawi Product Availability at all Levels (Day of Visit)

**RMS (3 total)**  
**33%** had all three key products

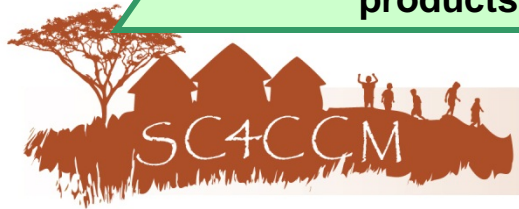
10 Districts

**Resupply Points\***  
 (~8 per District, 81 total)  
**47%** had all three key products

**HSAs**  
 (~3 per HC, 248 total)  
**35%** had all three key products

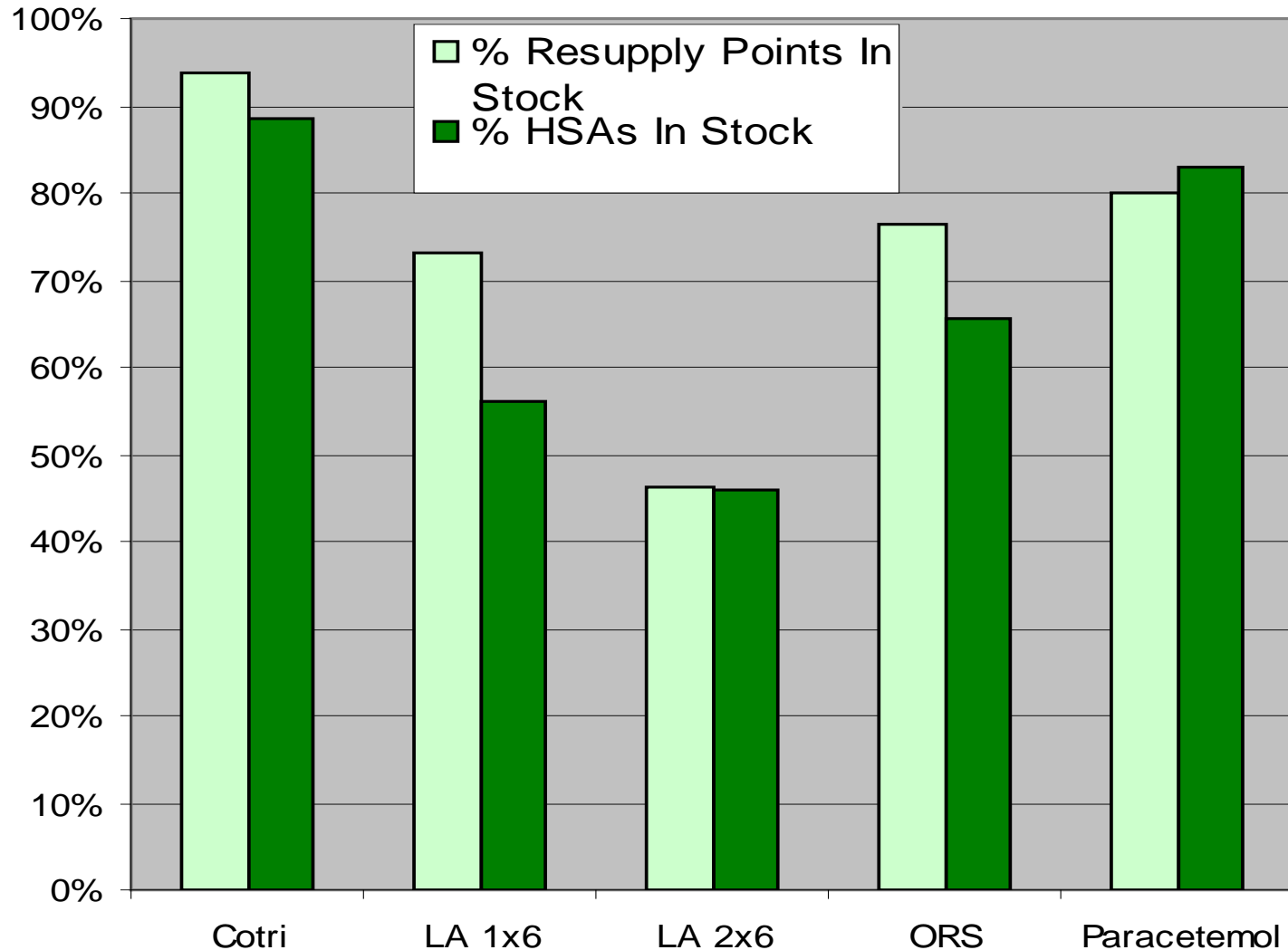
- Resupply points also have challenges maintaining sufficient stock of the three tracer products on the day of visit
- Resupply points were better stocked than HSA

\* Note: Resupply point includes health centers and district hospitals



# Malawi % Resupply Points & HSAs In Stock

## DOV



# Ethiopia Product Availability at All Levels



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(Day of Visit)

Availability of ORS and RUTF on day of visit

Availability of ORS, RUTF and ACTs on day of visit

RHB (6 total)  
100% of 3 who manage had ORS & RUTF

RHB (6 total)  
100% of 3 who manage had ORS, RUTF and either ACT

ZHD (9 total)  
78% had ORS & RUTF

ZHD (9 total)  
78% had ORS, RUTF and either ACT

WHO (26 total)  
64% of 22 who manage had ORS & RUTF

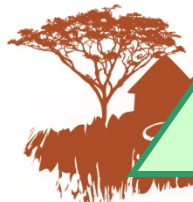
WHO (26 total)  
50% of 20 who manage had ORS, RUTF and either ACT

HCs (74 total)  
42% of 57 who manage had ORS & RUTF

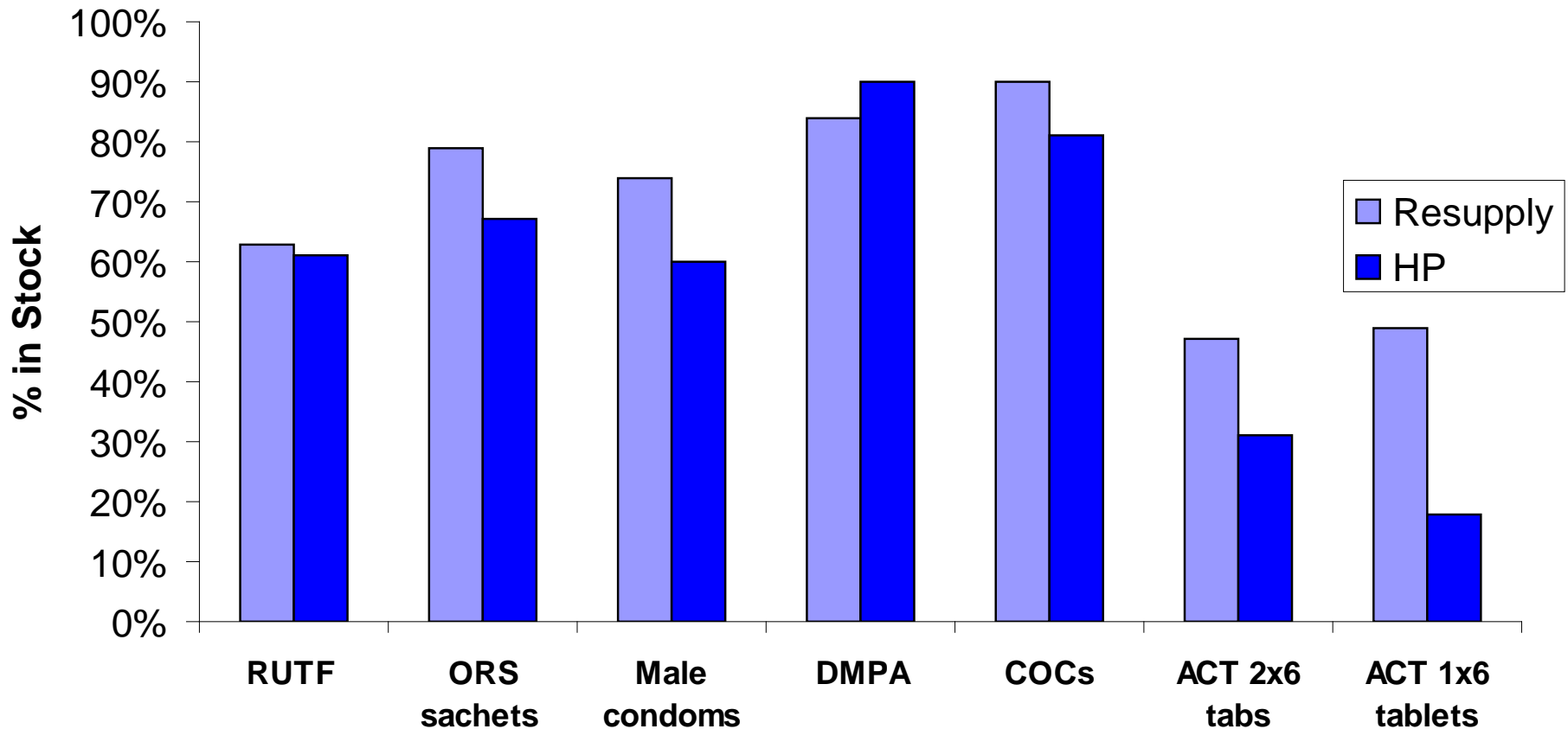
HCs (74 total)  
28% of 43 who manage had ORS, RUTF and either ACT

HPs  
(~3 per HC, 244 total)  
47% of 125 who manage had ORS & RUTF

HPs  
(~3 per HC, 244 total)  
24% of 75 who manage had ORS, RUTF and either ACT



# Ethiopia % of Resupply Points and HPs in Stock on DOV



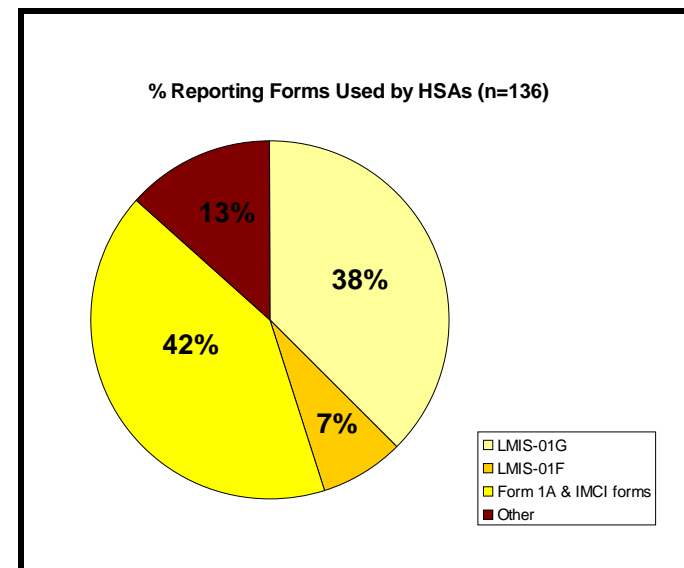
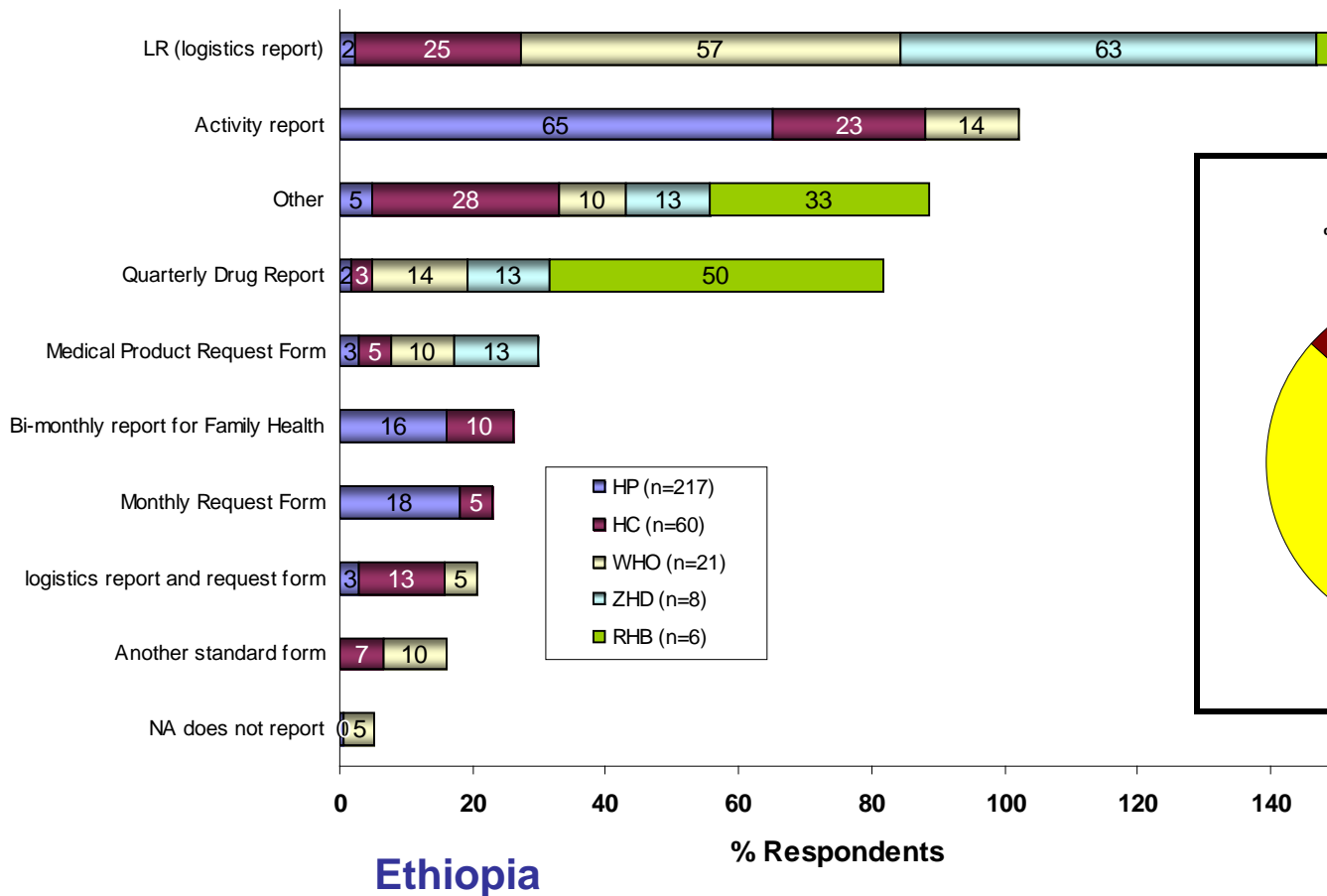
**PRECONDITION 2: CHWs, or person responsible for CHW resupply, know how, where, what, when and how much of each product to requisition or resupply and act as needed**

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

- Training reflected the maturity of the CHW program
  - Relatively high numbers HSAs (59%) and resupply personnel (~75%) trained in SC in Malawi
  - Relatively low numbers HEWs (11%) and resupply personnel (8%) trained in SC in Ethiopia
- OJT was cited as a significant means of HEWs learning SC reporting forms in Ethiopia

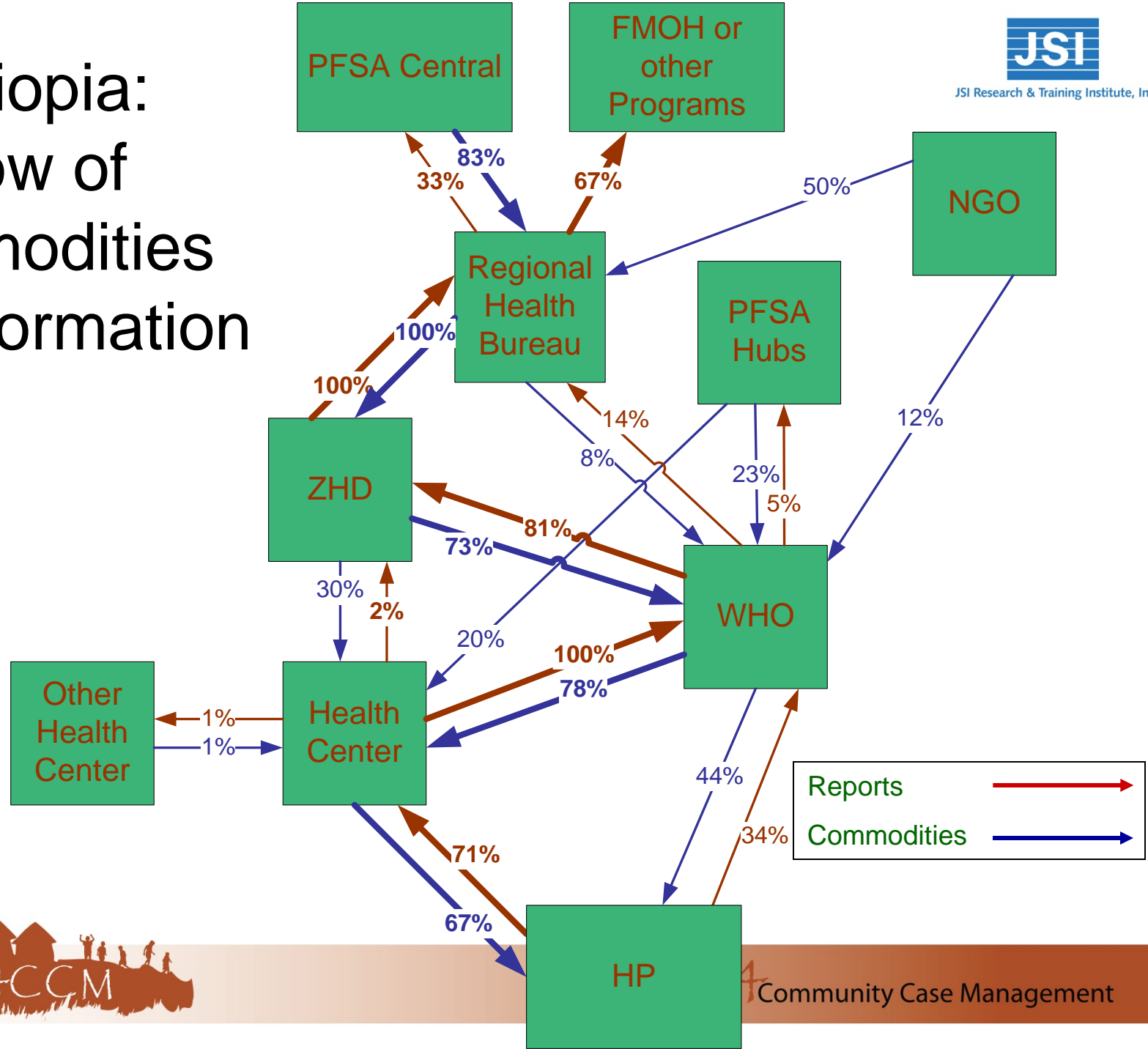


# Use of standardized forms can still be improved in both countries, especially Ethiopia



Malawi

# Ethiopia: Flow of Commodities and Information



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

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

- HSAs on average score **high** on storage conditions (**mean=6 conditions**), although scores drop as the number of products an HSA manages increases
- HEWs on average score **low** on storage conditions, with the majority fulfilling **3 conditions or less**





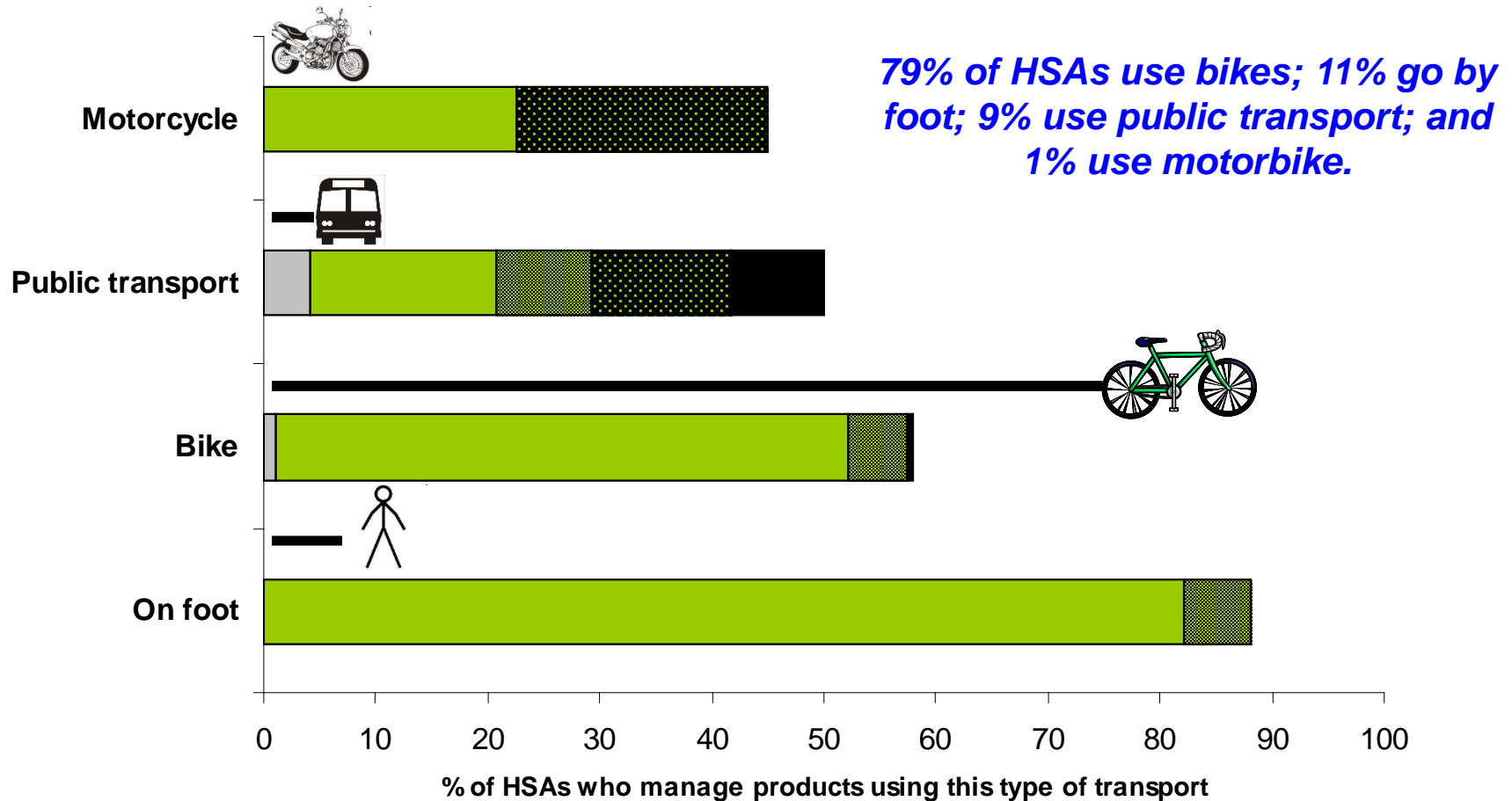
# PRECONDITION 4: Goods are routinely transported between resupply points and CHWs

## Transport is a challenge for CHWs

- On average HSAs are about **an hour by car** and majority HEWs are **about 30 mins** by car away from their resupply point
- In Malawi, **76 out of 139** HSAs report having problems collecting/receiving, with majority citing either resupply point stockouts and transport as their greatest challenges
- In Ethiopia, **80 of 121** HEWs who reported having problems collecting/receiving, cited **lack of transport** as the major constraint



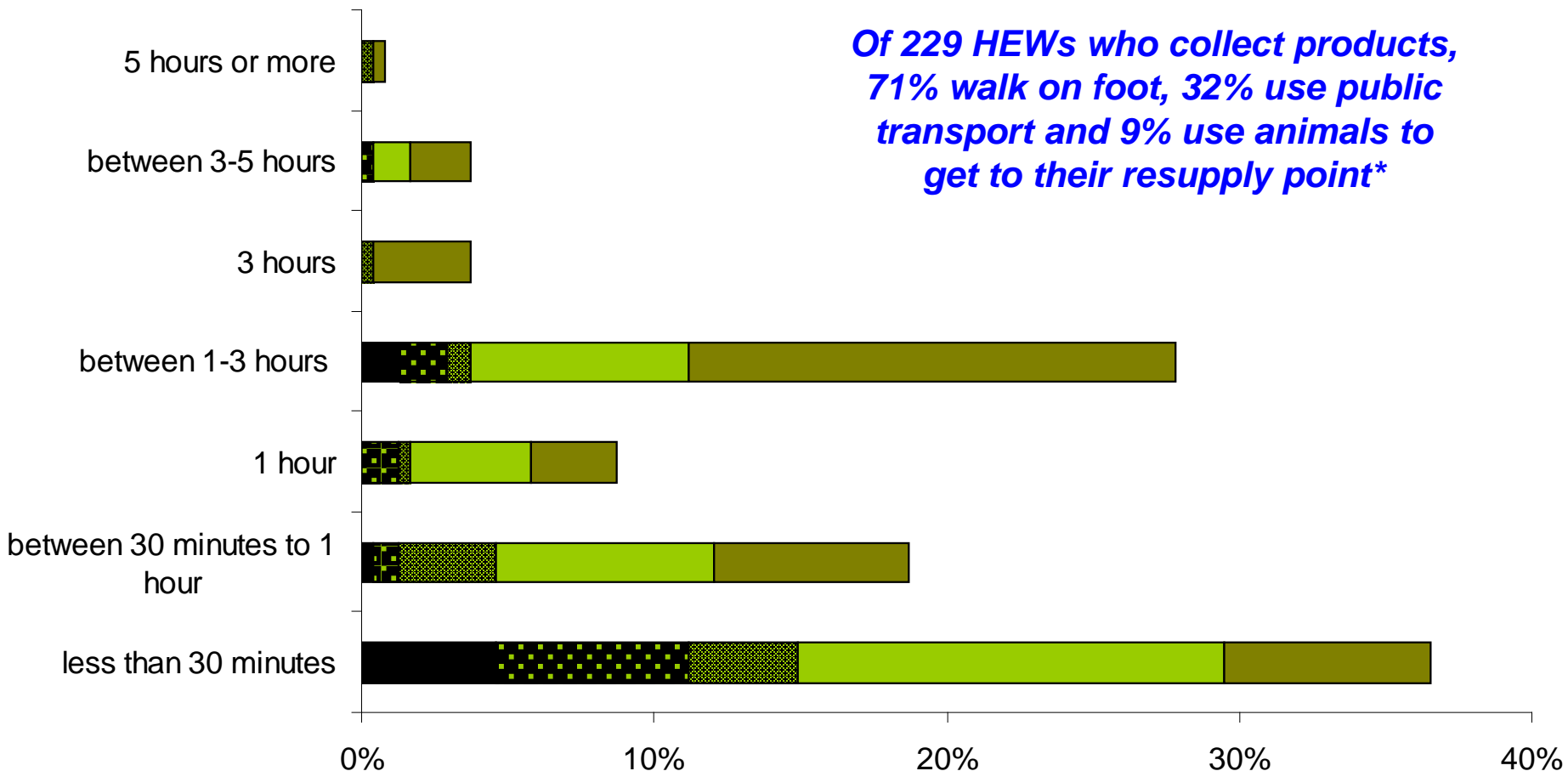
# Malawi Transport, Travel Time, Road Condition



\*Length of bar indicates the distance an HSA has to travel to get to health center by car in minutes.

# Ethiopia Travel Time and Road Condition

*Of 229 HEWs who collect products, 71% walk on foot, 32% use public transport and 9% use animals to get to their resupply point\**



**% travel time to HP from HC by data collectors, mostly by car**



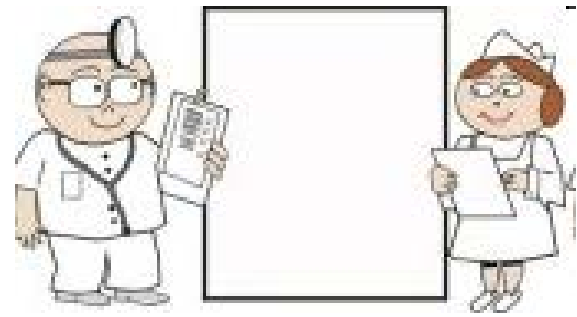
# PRECONDITION 5: CHWs are motivated to perform their roles in the CCM supply chain

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

96% supervisors reported providing supervision to HSAs every 3 months



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



96% supervisors reported providing supervision to HEWs every month



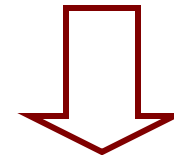
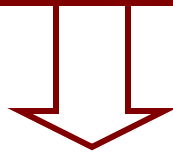
81% HEWs reported receiving a supervisory visit in last month



# Malawi Access to Communication Technology: Resupply Points and HSAs

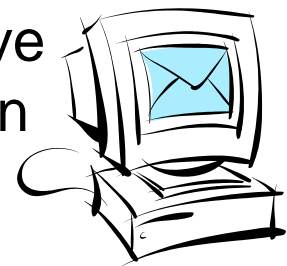


**89%** of HSAs who manage health products and their resupply point **BOTH** have mobile phones



**12%** both HSA and resupply point have network coverage at work all the time,  
**67%** at least sometimes

**5%** both HSA and resupply point have internet access on cell phone



# Ethiopia Access to Communication Technology: HEWs

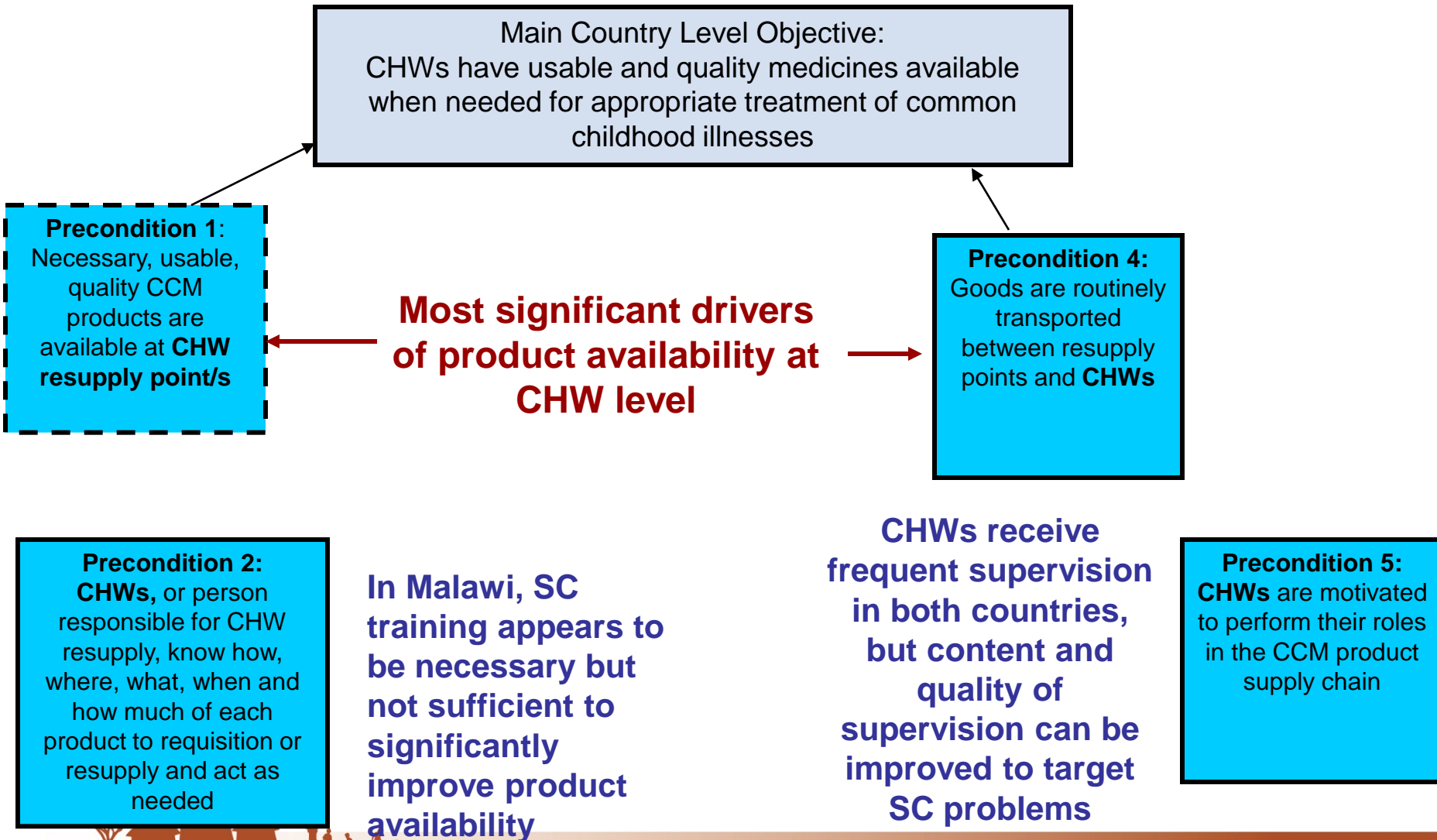
- Cell phones are widely (**89%**) available at HEW level

however...



- only **38%** of HEWs have adequate network coverage
- only **23%** of HEWs have a source to recharge their phones

# Preliminary Conclusions



**CHWs receive frequent supervision in both countries, but content and quality of supervision can be improved to target SC problems**

# 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





# Improving Product Availability at Resupply Point: A Management Intervention



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## Simple solutions

Reinforce roles, relationships

2 bin ICS

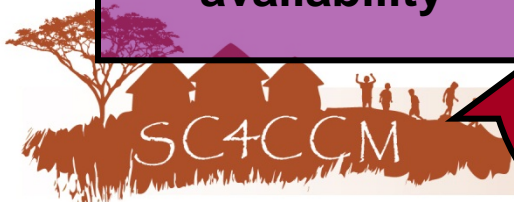
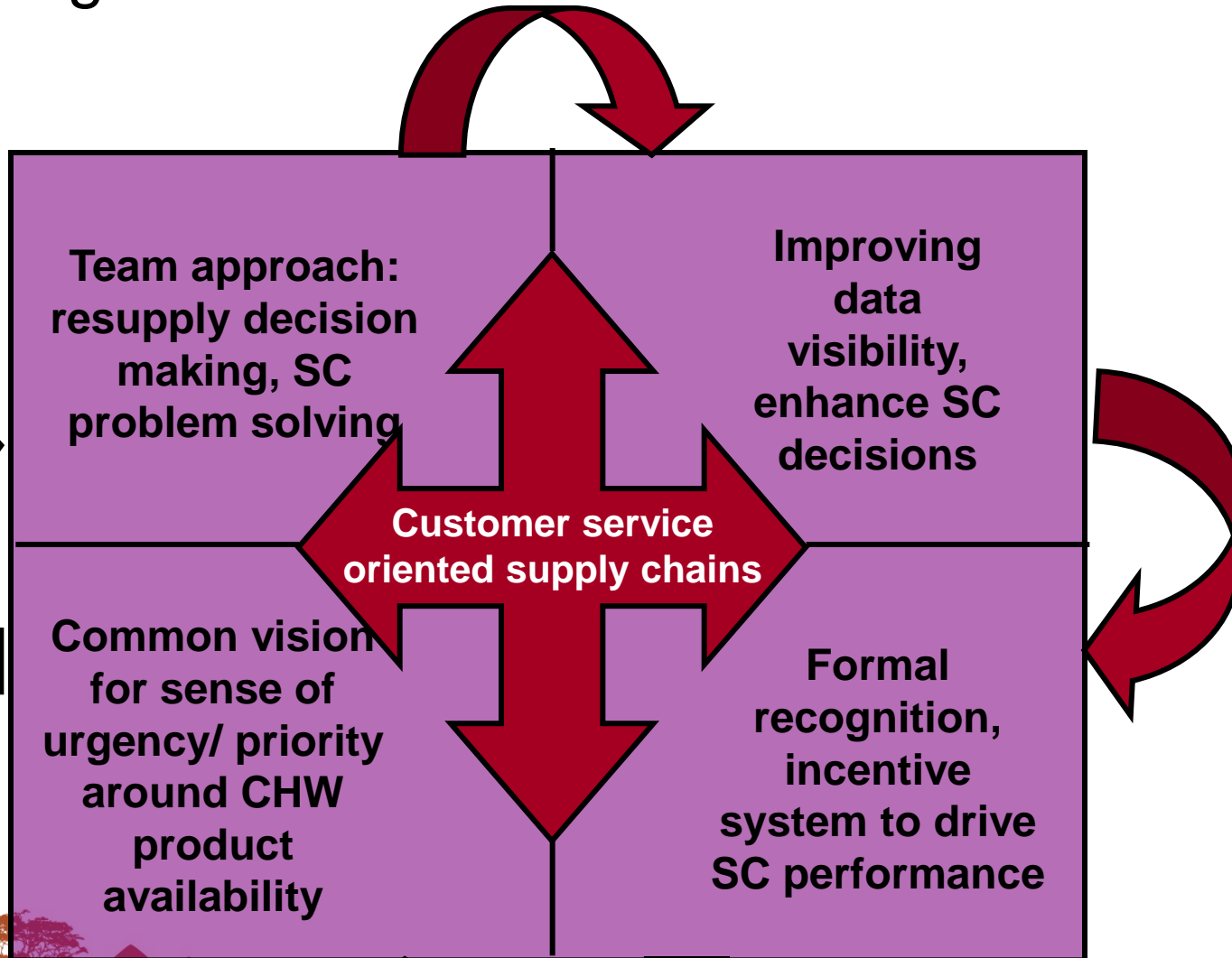
Higher min, resupply less often

Stock balance data only

EOP so CHW can initiate action

SMS for better communication, routine reporting

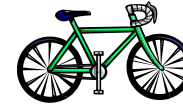
Public recognition CHWs, districts



# Improving Product Availability at Resupply Point: A Transport Intervention

- Vouchers

- Quarterly vouchers for bike maintenance



- Delivery to CHWs

- Direct delivery with motorcycles from resupply points
- Outsourcing to third party to deliver to CHWs on a regular basis
- Partnering with other supply chains to supply CHWs when emergency supplies needed



- Contingency plans for rainy season

- increase stock levels just before rainy season

- Reduce transport burden - increase reorder period

- If storage readily available, decrease to every other month resupply to reduce need for transport



# Thank You

