CCM Supply Chain
Quarter 1 (Q1) Monitoring Results
Malawi 2012

JSI Research & Training Institute, Inc.

Objectives

- Share Q1 monitoring data to:
  - Share first quarter results with CCM stakeholders
  - Identify and discuss interesting observations, issues, and challenges demonstrated by the data and develop action plan on addressing challenges
  - Identify opportunities and risk factors moving towards Q2
  - Review current CCM product and data flow between HC – HAS and discuss opportunities for alignment of partner support with MOH CCM SC

Background

- The SC4CCM project seeks to find affordable, simple and sustainable supply chain solutions to address the unique challenges of Health Surveillance Assistants (HSAs) so they can treat children with pneumonia, malaria, and diarrhea (among other conditions)
- Project intervention roll out commenced July 2011
- Six focus districts: Kasungu, Machinga, Mulanje, Nkhatabay, Nkhotakhota, and Nsanje

SC4CCM Core Indicators

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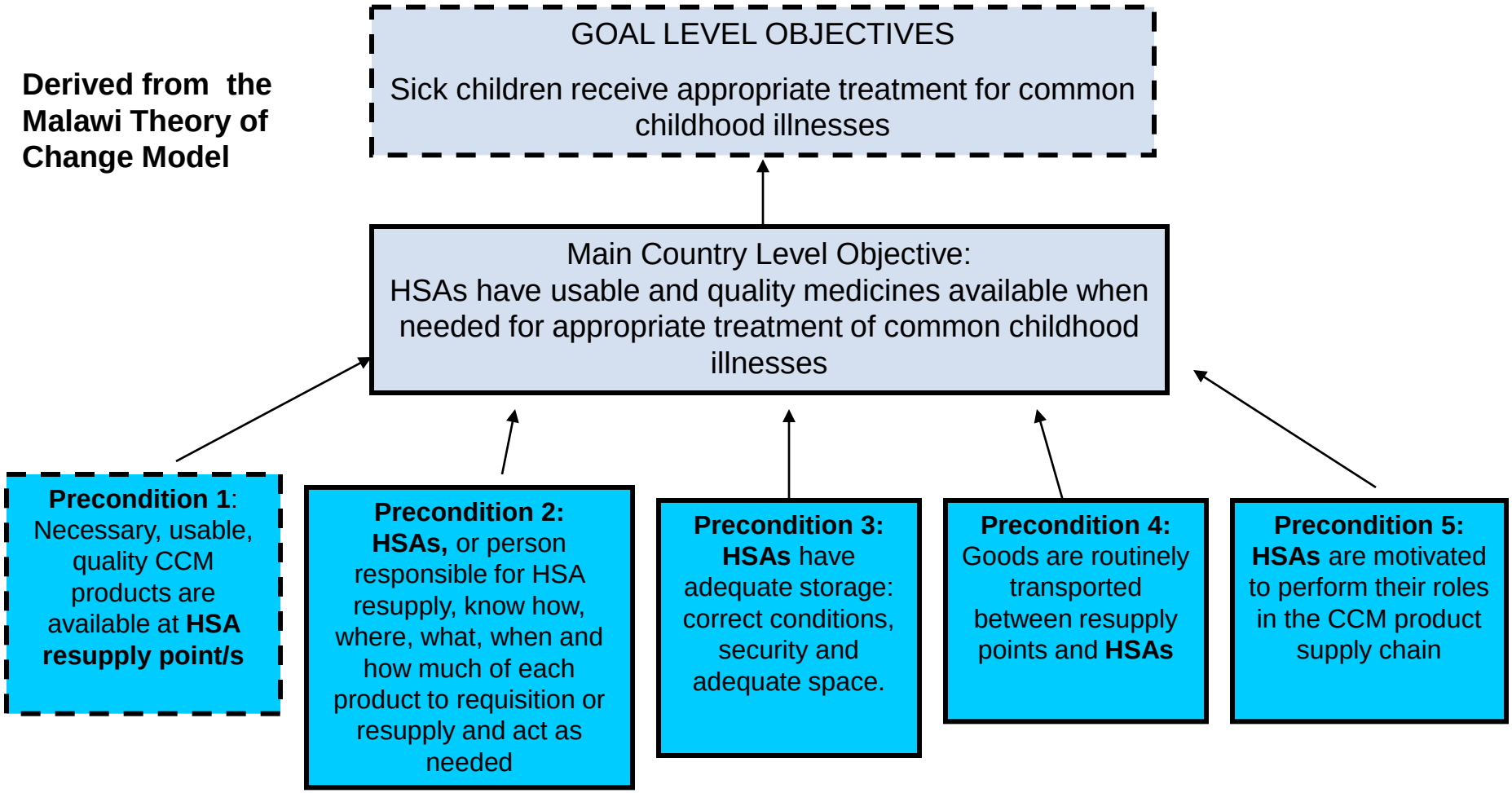
Derived from the Malawi Theory of Change Model

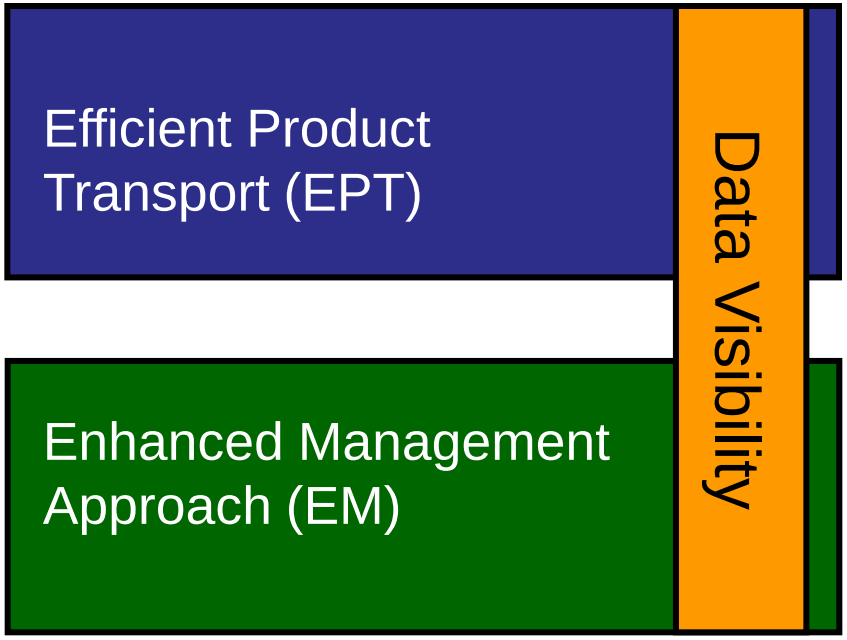


Baseline Assessment 2010

- **Product availability** - of the HSAs who managed health products **27%** had the 4 tracer drugs* in stock on the day of the visit
- **Poor data visibility- 43%** of HSA did not report logistics data to health facility
- **Transportation between resupply point & HSA -** 80% of HSAs depended on bike to collect products; Key challenge – *'the transport was always broken'*
- **Low motivation** among HSAs

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

Nature and Purpose of Intervention Strategies



Two Interventions to improve SC performance:

- **EPT** to address transportation barriers between resupply points and HSAs
- **EM** to create a customer service oriented supply chain by aligning objectives and motivating SC staff

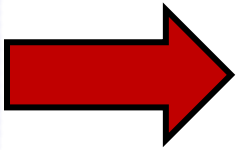
cStock:

- to improve data visibility
- support problem-solving
- enhance quality of decision making

to meet customer needs

Efficient Product Transport

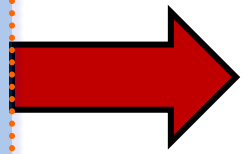
Bicycle maintenance skills



*Facilitating collection of products from HF

*Increased use life of bicycle

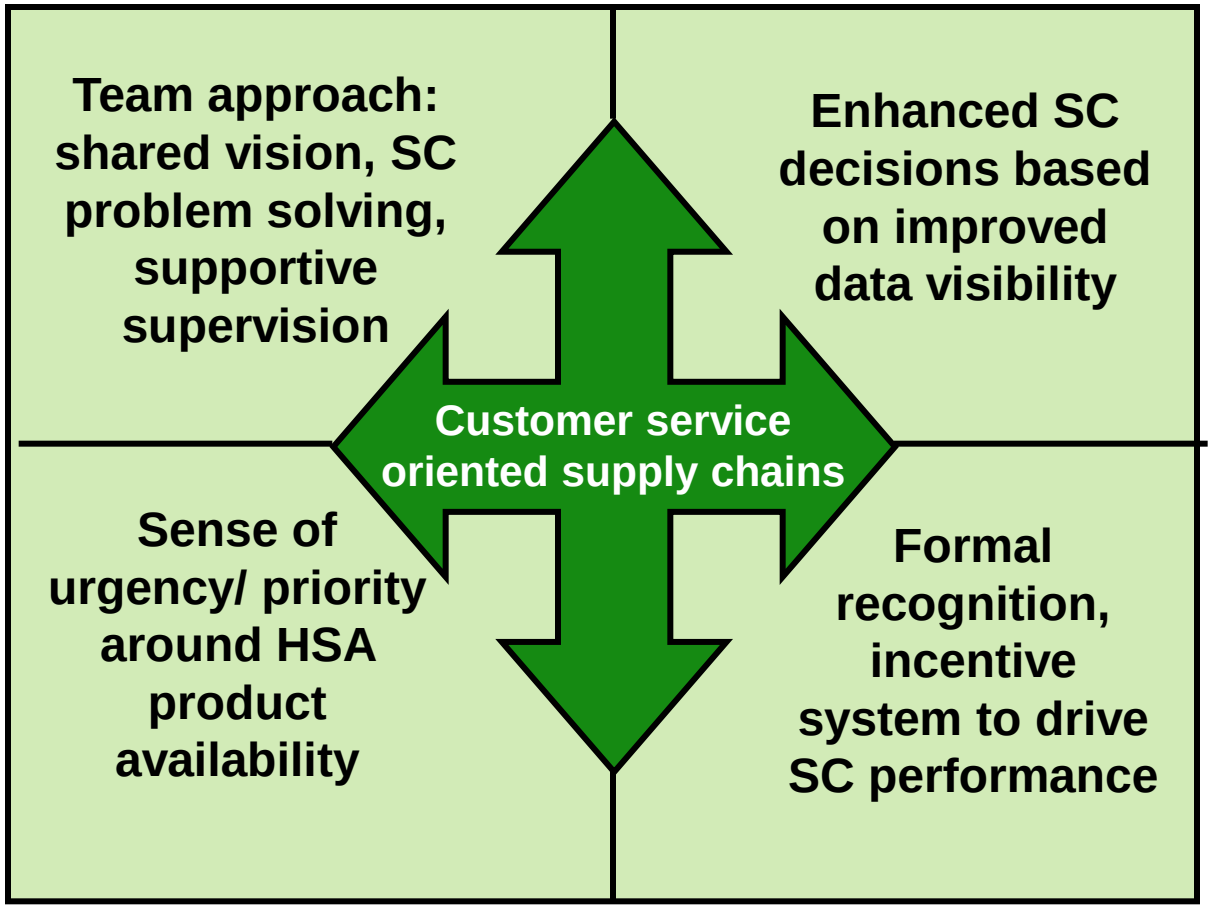
Continuous review inventory control system



*Maximize efficiency of HSAs' time

*Minimize volumes of products carried on bikes

Enhanced Management Approach



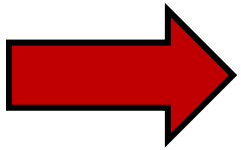
Key Features:

- District Product Availability Teams (DPAT)
  - District
  - Health Centers
- SC performance targets
- Recognition Plan
- Foster use of data for decision making

Major Assumption: by creating a customer service oriented supply chain, product availability will be significantly improved at the HSA level

Data Visibility

cStock: an SMS web based reporting & resupply system



- Improved SC monitoring
- Data for decision making
- Data for planning
- Data for improved partner support and coordination

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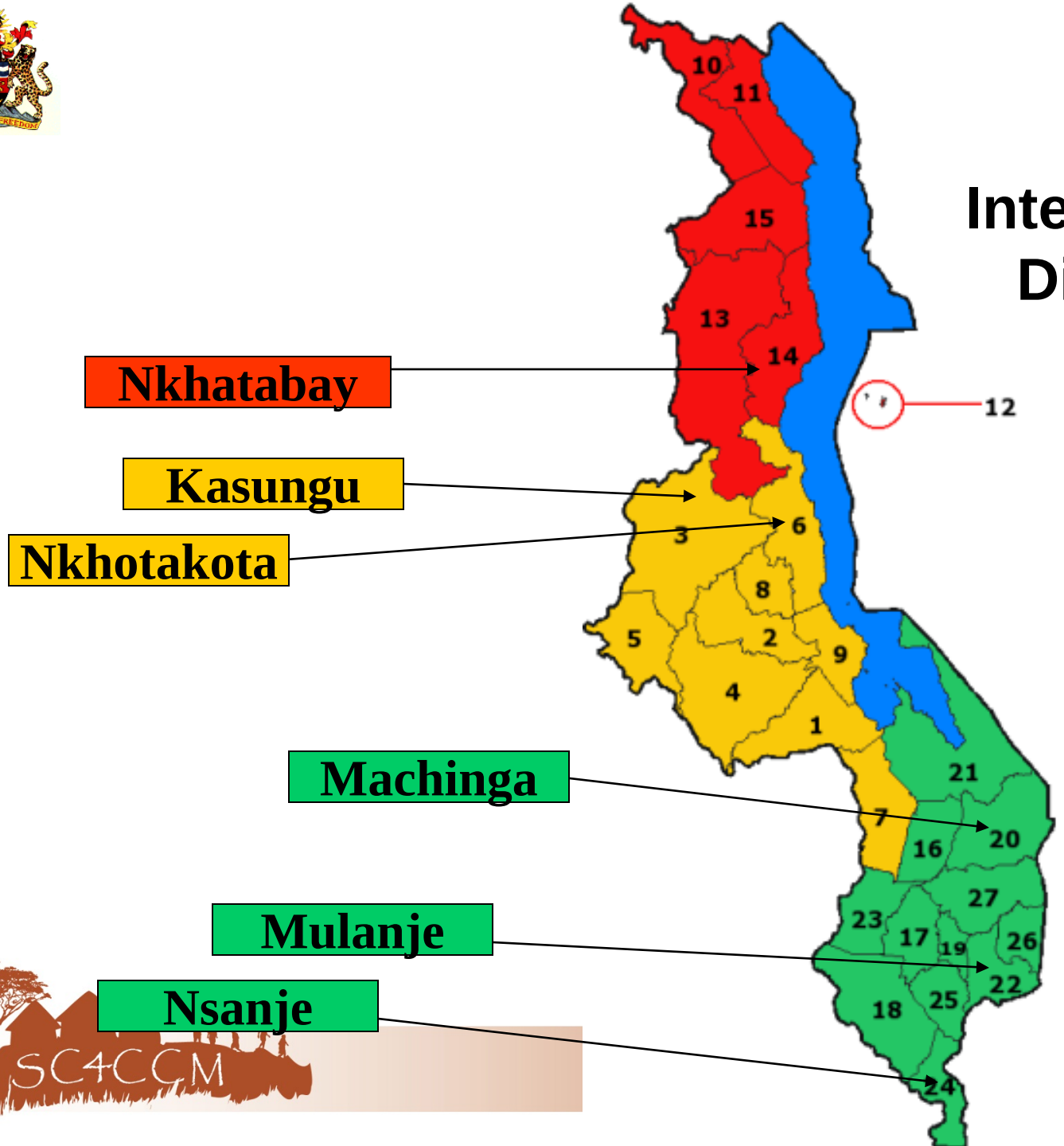
Intervention Districts



SC4CCM

Case Management

Intervention Monitoring: Overview of sampling methodology used

- Random selection applied in selecting HFs and HSAs:
  - Total # of HFs participating in cStock formed HF sample population
  - From the population, 2 HFs selected randomly, using random number generator/formula
  - From the selected facilities, 3 HSAs managing village clinics randomly selected using same formula

Q1 Monitoring: Methodology & Sample

System Level	EM	EPT
District health office and pharmacy	3	3
Health Centres	6	7
HSAs	18	18
Total # of HSAs in HTR areas registered in cStock per group from which sample was drawn	337	256

Sources of monitoring data

- Data that is about to be presented came from following sources:
  - Personal interviews (HSAs, HSAs supervisors, HF Drug store In-Charges, District Pharmacy, IMCI Coordinators) using structured phone-based data collection forms and monitoring log books
  - Observations
  - cStock data

How data was analyzed

- Data populated in M&E Workbook:
  - Data divided into sections by pre-conditions and assigned to teams
  - Teams shared key messages and observations from their analyses for comments and clarification
  - Team analyses consolidated
  - Consolidated copy plus M&E Workbook shared with MOH for discussion and comments


Q1 Monitoring Results
by Precondition

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

Of registered† HSAs who manage health products

61% had the **4 tracer** drugs* in stock compared to 27% at baseline on DOV

Key Takeaway:

- **More than two-fold increase since baseline (BL); most of gains likely driven by targeted product support by partners to community level**

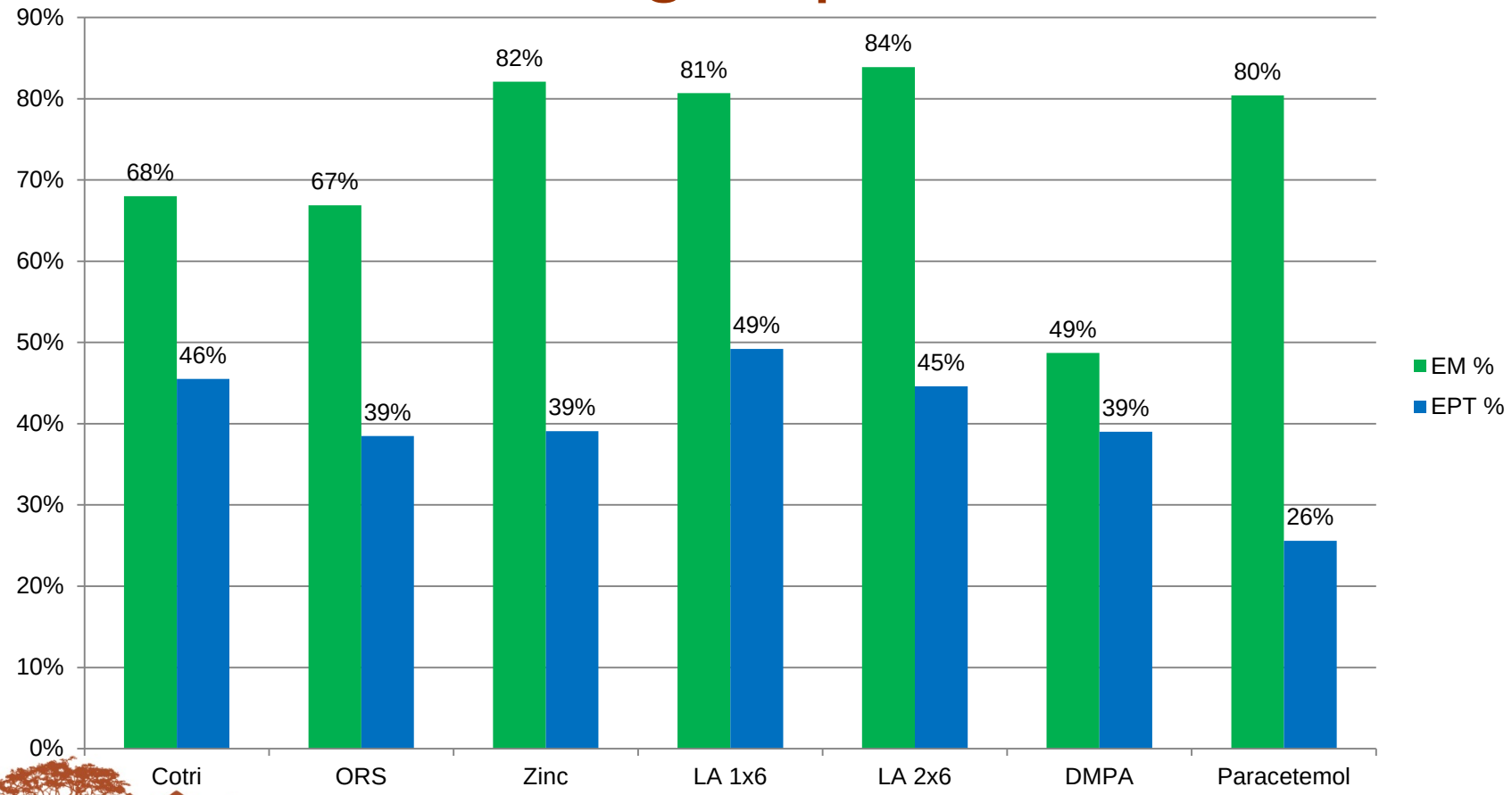
† Registered in cStock
*cotrimoxazole, LA 1x6, LA 2x6, ORS

Partner-supported CCM Tracer Products: cotrimoxazole, LA, & ORS

	Intervention Group	Partner	Products Supplied during quarter
Nkhatabay	EPT	DEL	LA 1x6; LA 2x6
Nkhotakhota	EM	SC	LA 1x6; LA 2x6, CO, ORS
Kasungu	EM	DEL	LA 1x6; LA 2x6
Machinga	EPT	PSI	LA 1x6; LA 2x6, CO, ORS
Mulanje	EPT	SC	LA 1x6; LA 2x6, CO, ORS
Nsanje	EM	DEL	LA 1x6; LA 2x6

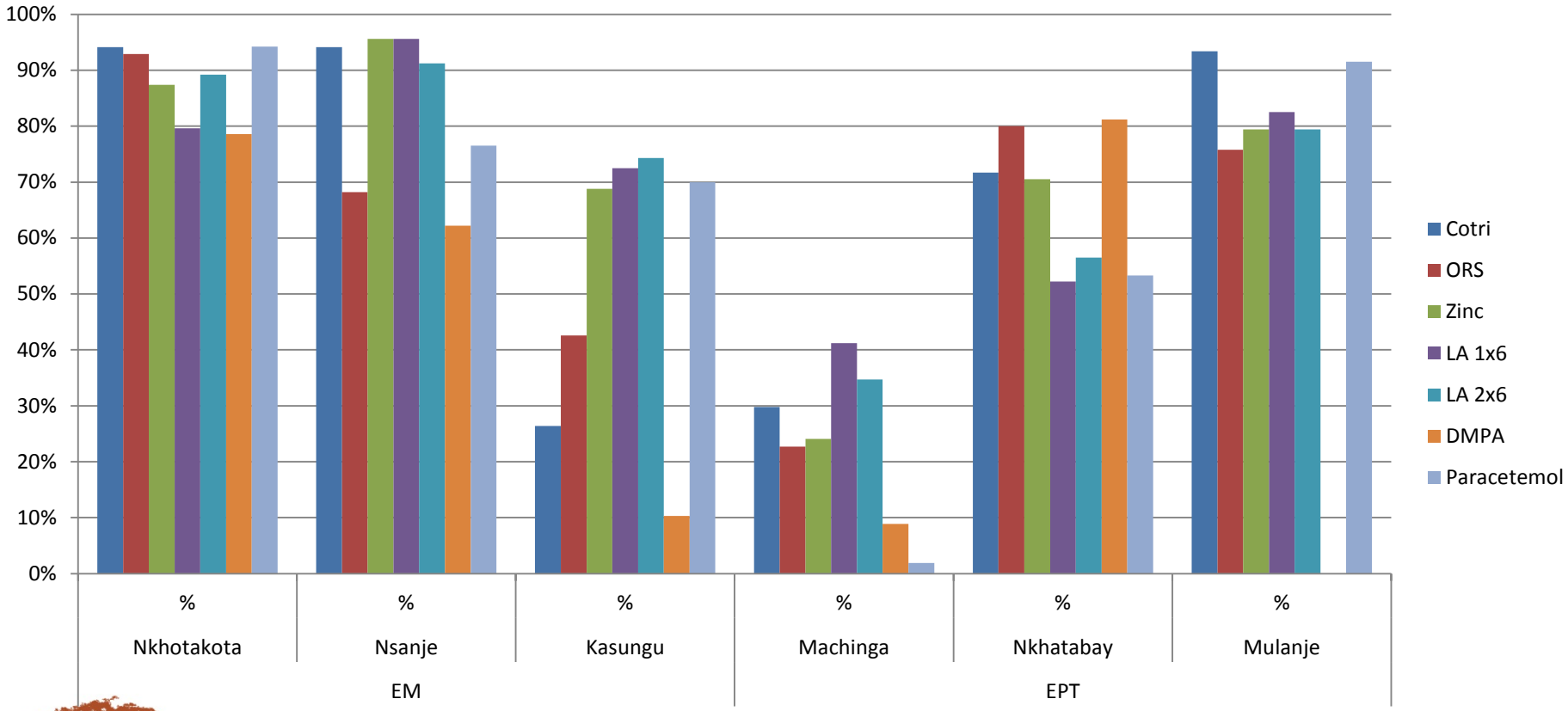
This list includes key tracer products routinely provided; UNICEF and others provide additional products on as needed basis

HSAs with no stockouts over past 30 days of Q1 (Dec), by group



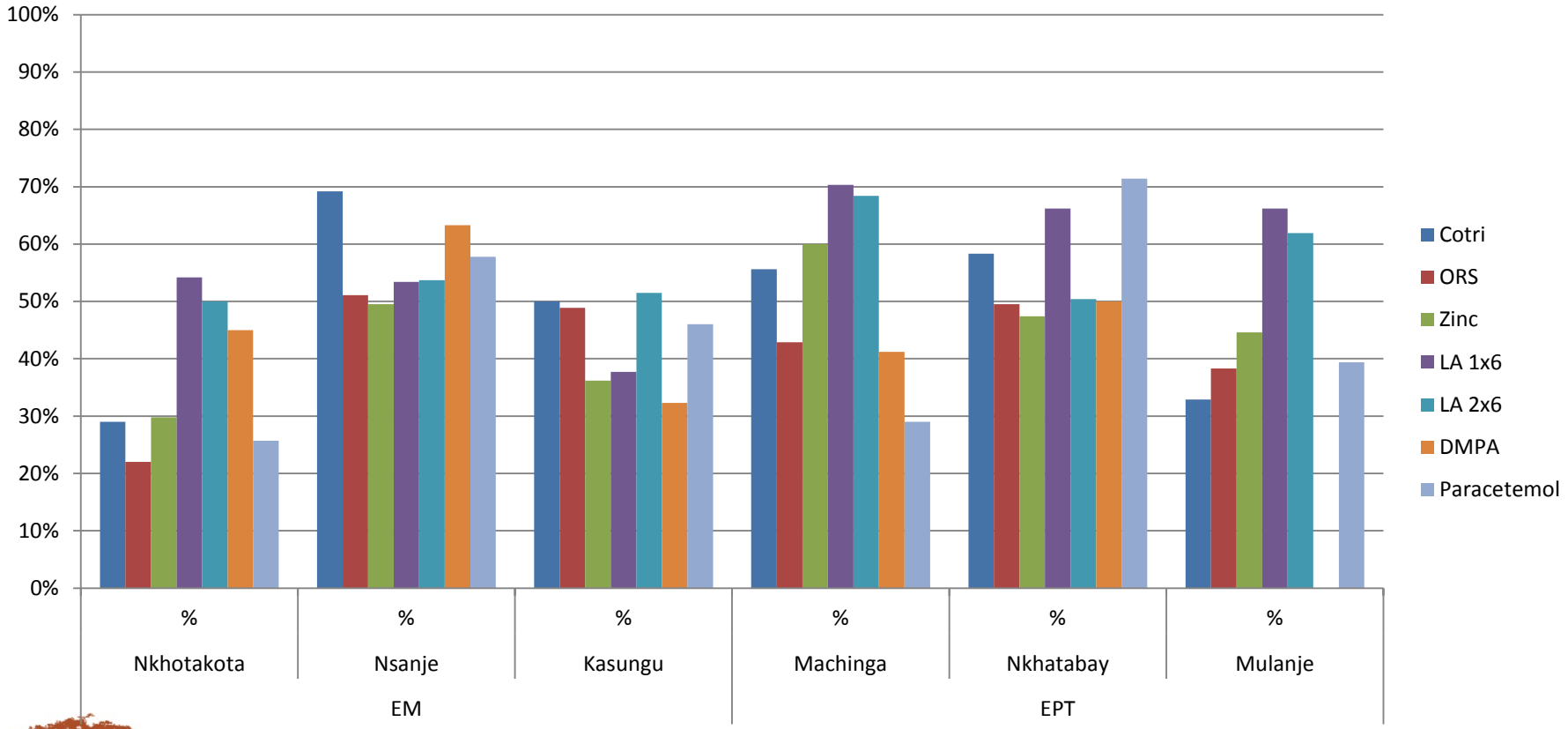
*Source: cStock M&E report

HSAs with no stockouts over past 30 days of Q1 (Dec) by product, by District and group



*Source: cStock M&E report

HSAs with adequate stock, by District and group (last day Dec'11)



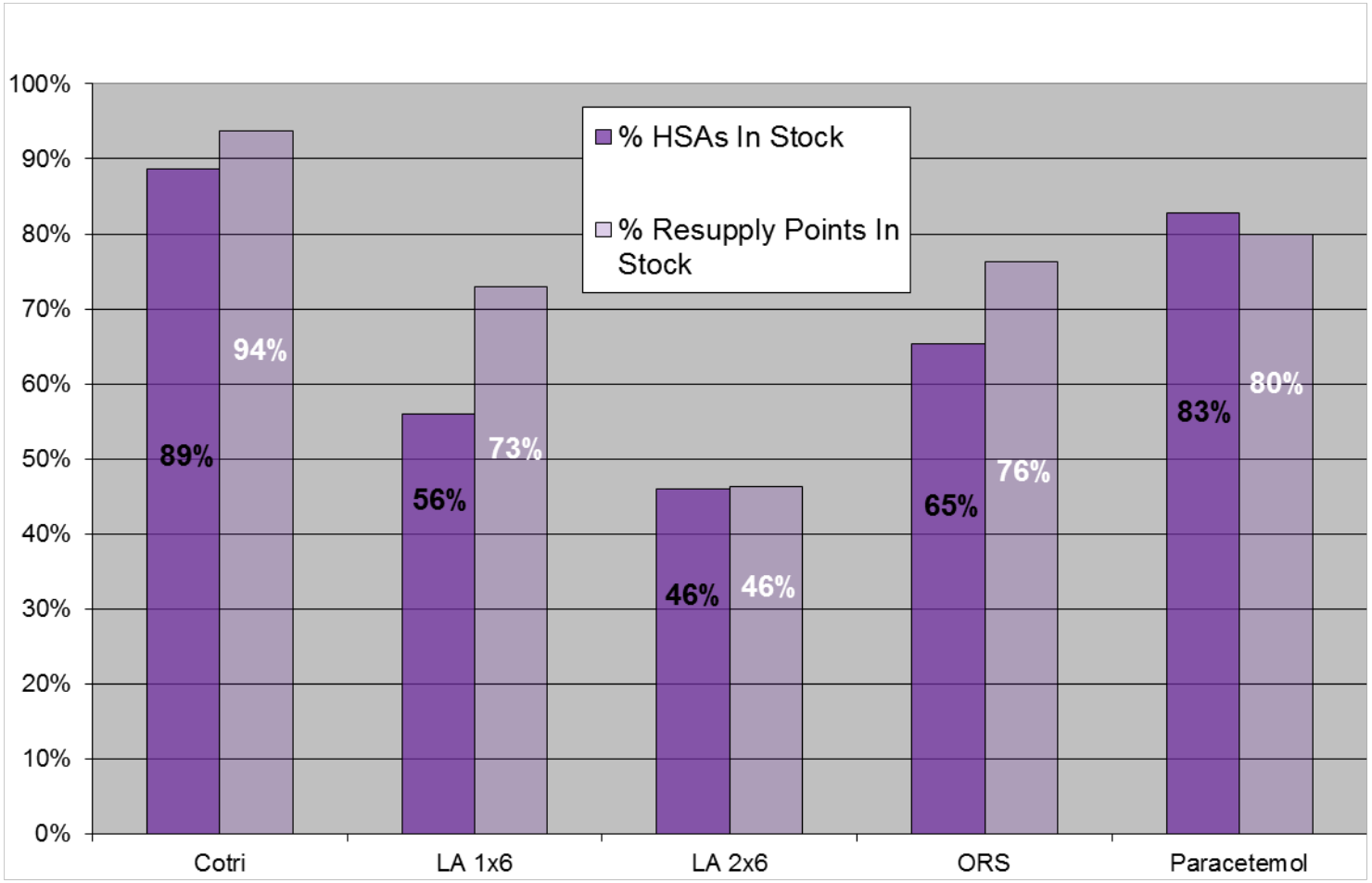
*Source: cStock M&E report

Necessary, usable, quality CCM products are available at HSA resupply points

Some improvement in product availability at re-supply point on DOV in quarter 1 compared to 2010 baseline data:

- 30% Product Availability on DOV at baseline, compared to 38% on DOV in quarter 1:
- Quarter 1 availability distribution by intervention group:
  - EM – 33% product availability
  - EPT – 43% product availability

% of HSAs and Resupply Points In Stock on Day of Visit - Baseline



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Supply Chains 4 Community Case Management

% of HSAs and Resupply Points In Stock on Day of Visit – Q1

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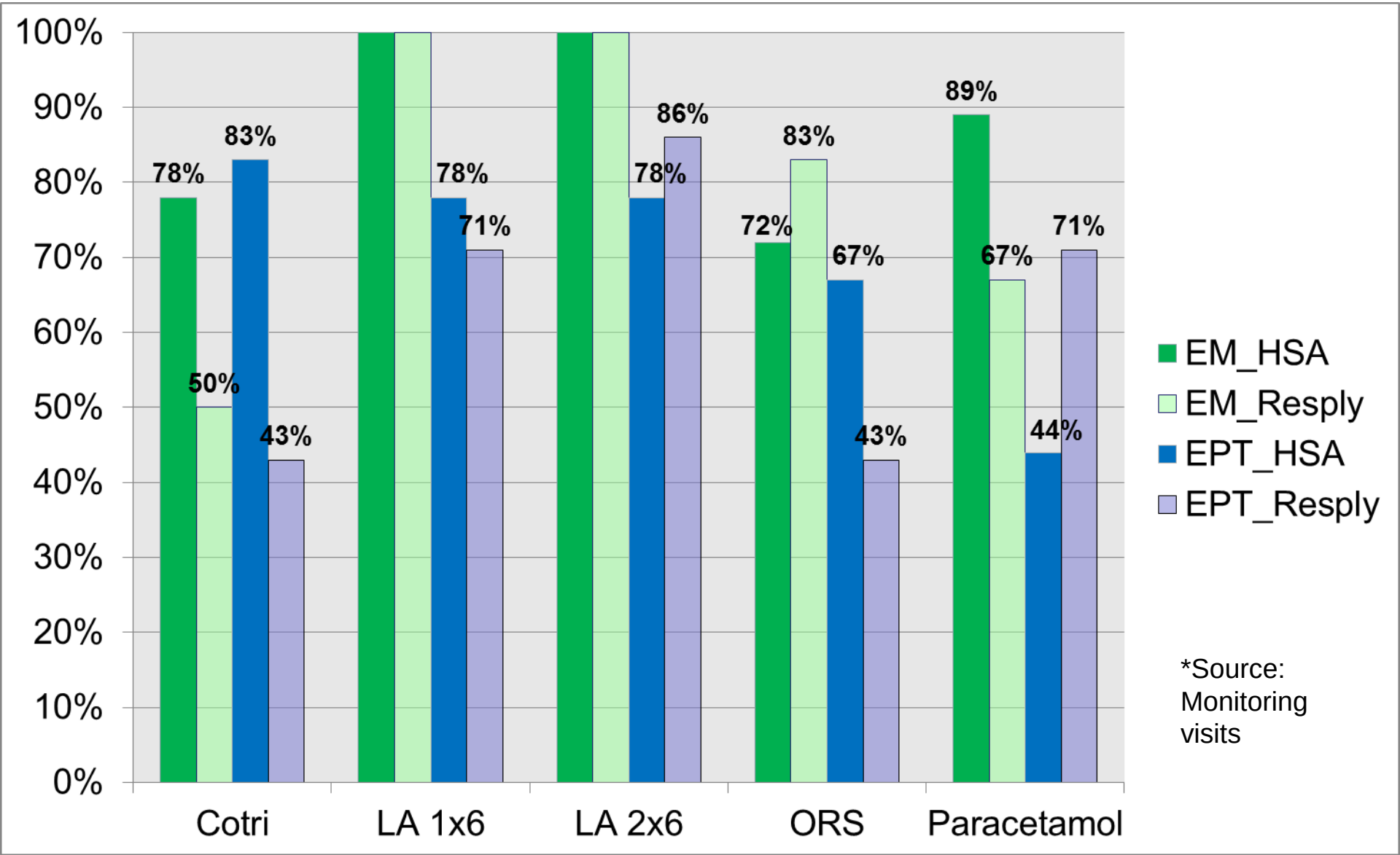
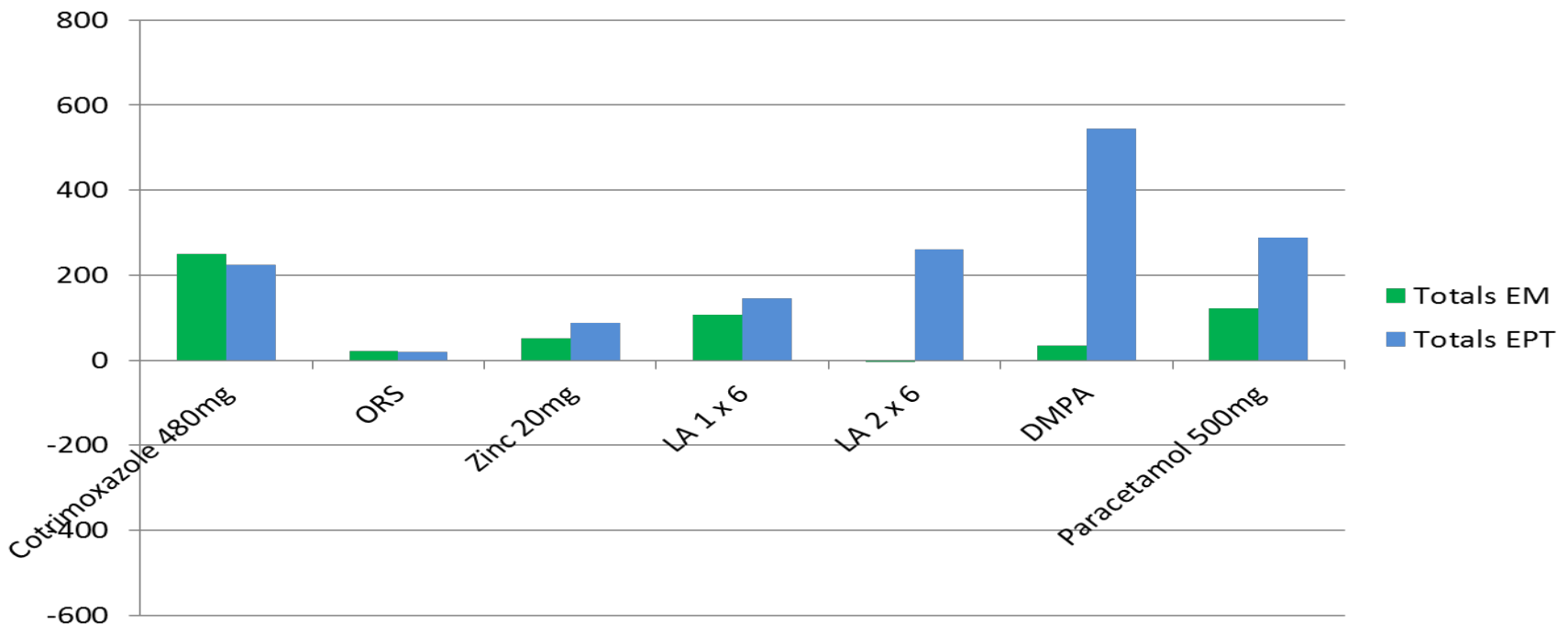


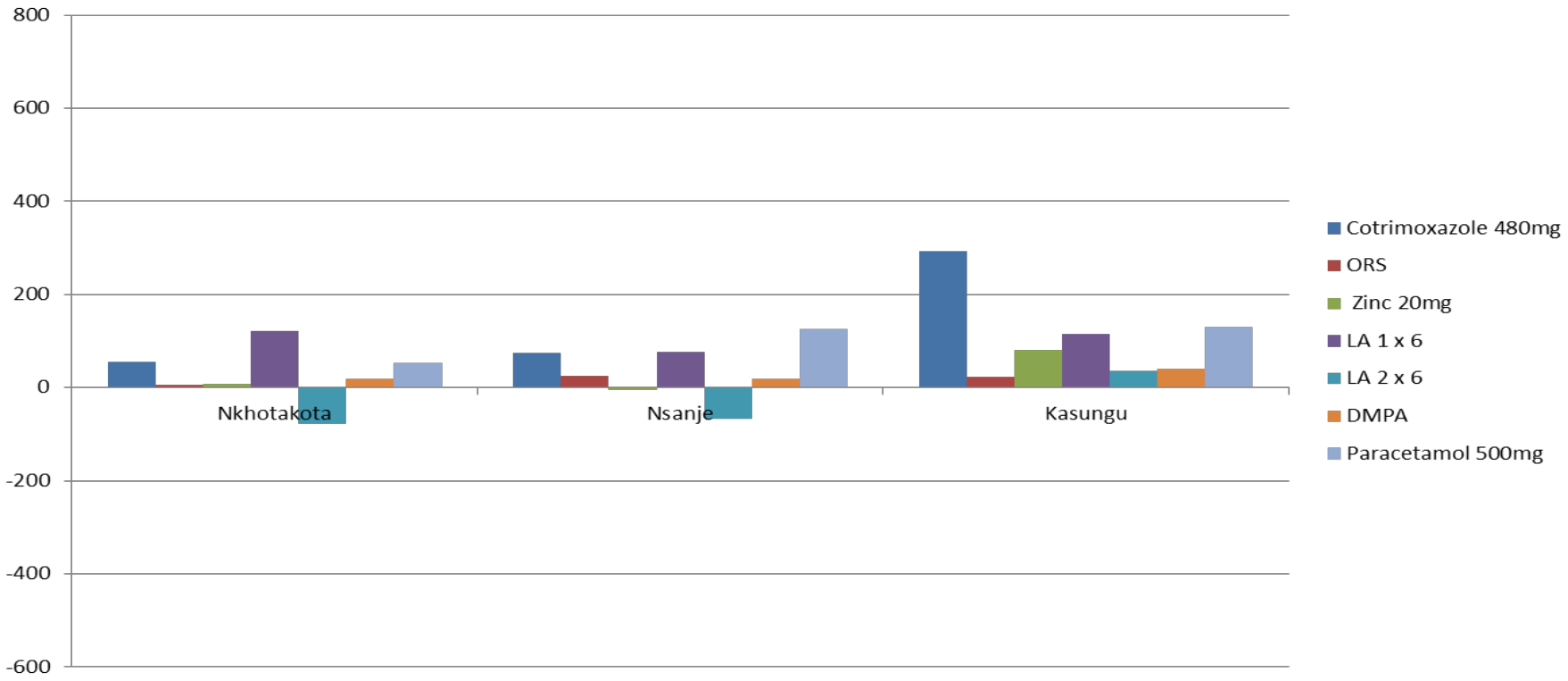
*Source: Monitoring visits

Order fill rate discrepancies, by Group, past 30 days Q1 (Dec)



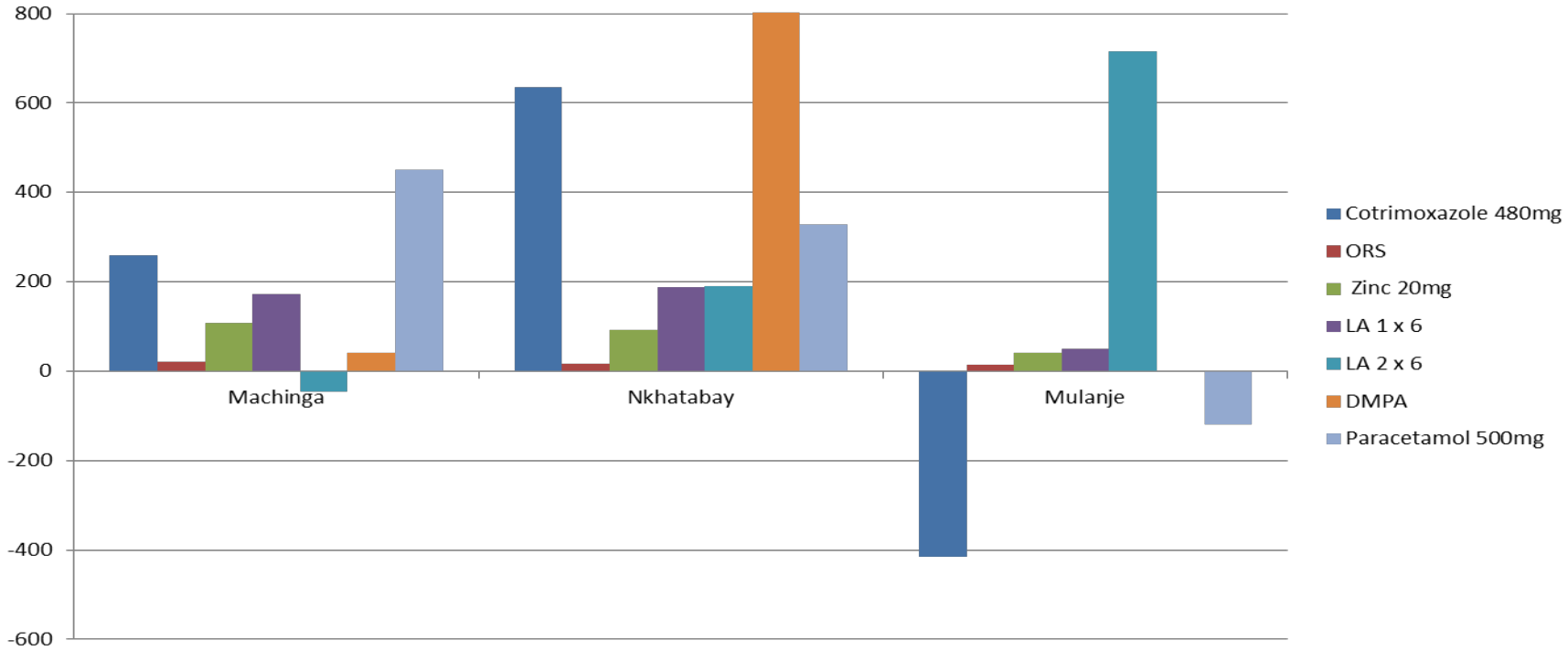
Key Takeaway: HSAs are being under-supplied for most products in all districts. EPT under-supplying problem worse compared to EM

Order fill rate discrepancies, EM Districts, past 30 days Q1 (Dec)



Key Takeaway: overall, Kasungu has highest discrepancy rate within EM group

Order fill rate discrepancies, EPT Districts, past 30 days Q1 (Dec)



Key Takeaway: Great variations in discrepancies per district per product in EPT group

HSAs, or persons responsible for HSA resupply know how, where, what, when and how much of each product to requisition or resupply and act as needed

- **Monitoring results show a significant adoption of cStock tool among HSAs in both EM and EPT groups**
  - Very high reporting rate of 97% achieved in both groups
  - Report quality measures are lower but still good
    - 80% of reports are complete
    - Timely reporting still remains a challenge for about half of HSAs, with about 50% in the EM group reporting by the 2nd of the month as required.

Key Takeaway: Visibility into HSA stock levels greatly improved, with high uptake and capacity in using cStock

Communication Technology and Enhanced Action

>89% of HSAs, HSA Supervisors, and Drug Store IC in both groups have cell phones

All HSAs and Most HSA Supervisors, Drug Store IC in both groups have network coverage

Key Takeaway:

- Timely availability of data can lead to timely collection of products. According to Supervisors, about half the HSAs (57% EPT and 56% EM) in both groups collected products from HF within 1-2 days of receiving 'ready' message

Using cStock to take appropriate SC action

	EM	EPT
% HSAs reported taking correct action when at emergency order point	**29%**	**16%**
% HSAs report "no waiting for products to be packed" at HF	67%	44%

Key Takeaway: Few HSAs and HF staff taking appropriate SC actions in both intervention groups

•3 of 7 HFs in EPT waited until all products available before packing

HSAs have adequate storage: correct conditions, security and adequate space

- Few HSAs still don't have a drug box (6% in EM and 17% in EPT)
- Almost half HSAs in both groups not storing all meds in drug box (backpack – for outreach; treatment at night; bulky products like condoms)
- Majority, but not all locking drug box with a key
- Some HF drug stores showed evidence of rodent activity

Key Takeaway: Generally good storage practices are in place, with a few areas for improvement

Goods are routinely transported between resupply points and HSAs

- Benefit of flexible inventory control system not yet realized because timing of HSA visits (EPT) does not always coincide with partner distribution of products
  - 44% HSAs report having to make special trips to HF to collect products from partners

Key Takeaway: Align partner systems to make products available at HF when cstock transmits the order

Bicycle maintenance & repair

	EM	EPT
% HSAs with maintenance materials	**29%**	**100%**
% HSAs who conducted bicycle maintenance themselves in past 30 days	36%	69%
% HSAs with functioning bicycles/HSAs who own bicycle	**71%**	**69%**
% HSAs who reported bicycle breakdown* in past 30 days/HSAs who own bicycle	21%	50%

Coincidentally, some HSAs in EM group received brand new bicycles prior to monitoring visit (eg. Nsanje, Nkhotakhota)

*Breakdowns reported as issues requiring minor maintenance as well as major repairs

HSAs are motivated to perform their roles in the CCM product supply chain

- Incentive component of EM yet to be implemented
- Despite 2/3 coordinators in EM group accessing cStock dashboard, HFs are yet to be provided with cstock facility performance print outs to support meetings at HF level
  - Clear that HFs not using cstock performance data to guide and improve HSAs performance
  - Supervisors not using cStock reports to inform supportive supervision

Recognition, motivation and incentives

	EM	EPT
% HSAs who have product availability performance targets /HSAs who attended performance plan meeting	**33%**	**11%**
% HSAs aware of recognition plan	61%	11%
% HSAs who attended a mtg to discuss performance targets	56%	17%
% HSAs who discuss recognition plan with Supervisor/HSAs who attended perf. meeting	40%	

Key Takeaway:

•HAS supervisors (EM) have not reinforced HAS knowledge on performance targets and recognition plan beyond training nor started using them

Knowledge and capacity of Coordinators and HSAs' supervisor in EM

	EM
Supervisors with a print copy of DPAT performance targets	3/6
Districts with a print copy of DPAT performance targets	1/3
Supervisors who can name at least 1 performance target for DPAT	1/6
Districts who can name at least 1 performance target for DPAT	1/3

Key Takeaway:

•More effort needed by district/supervisors in providing leadership to operationalize recognition/incentive aspect of EM, so that customer oriented mindset and changes in behavior can be achieved


Way forward

Strengthening cStock

- Continue to support districts in maintaining gains in cStock reporting
- Promote regular use of cStock data by districts and partners to solve supply problems
- Agree with partners on how new HSAs coming on board will be added to cStock, incl. financing issues
- In collaboration with MOH and partners, agree on transition plan to integrate SC systems and start using HF as natural HSAs' re-supply point and use cStock as a re-supply tool

Strengthening EM intervention

- Engage DHMTs to increase support and oversight to DPAT; address downstream DPAT issues (Mgt. Diary use, rewards to best performers, HF ability to implement DPAT plans autonomously)
- Provide technical guidance to Coordinators and support DPAT functions at facility level, lobby for mainstreaming this work in DIPs
- Develop sample best performer recognition criteria for EM district review/adoption
- Develop a structured way for central level MOH (CCM SC Performance Mgt Officer) to monitor district performance on a monthly basis

Strengthening EPT Intervention

- Conduct focus group meetings to understand factors driving high % of avoidable HSAs' trips to facility to inform appropriate action
- Refine monitoring tool to better assess severity of HSAs' bicycle breakdowns and quality of repair
- Advocate for Machinga DHMT to start providing paracetamol and TEO to community level

Comments & Reactions

Opportunities

- MOH commitment to get sick children treated in their communities: supports SC initiatives that improve product availability
- Partner commitment to support Government's CCM agenda
- PHC kit system to improve drug availability at HSAs' re-supply point at a time when CMS faces constraints

Opportunities

- Introduction of RDTs at facility level to improve rational use of LA, to hopefully drive down consumption and improve availability of supplies
- Strong partnership collaboration provides good framework to support innovative solutions
- Use of technology by HSAs is a great motivating factor

Risks

- Fuel unavailability significantly constraining supervision, drug delivery to re-supply points, and mobility to support DPAT at HF
- Constraints to CMS significantly affecting drug availability at re-supply point and ultimately at community level

Risks

- Lack of clear procedure for adding new HSAs to cStock likely to negatively affect cStock
- Limited DHMT drive on DPAT work can negatively affect uptake and ownership at implementation level
- Existence of multiple uncoordinated re-supply systems 'masking' weakness in MOH SC system at community level/constraining opportunities to address bottleneck in MOH systems

Thank you