15th GENERAL MEMBERSHIP MEETING of the REPRODUCTIVE HEALTH SUPPLIES COALITION
20-24 OCTOBER
MEXICO CITY

meXico 2004-2014 REPRODUCTIVE HEALTH SUPPLIES COALITION

cSTOCK: IMPROVING PRODUCT DATA VISIBILITY AT THE COMMUNITY LEVEL IN MALAWI

AVAILABILITY

Alexis Heaton

SALUD SECRETARÍA DE SALUD

Reproductive Health SUPPLIES COALITION 10 YEARS

JSI

SC4CCM

cStock: Improving Product Data Visibility at the Community Level in Malawi

SC4CCM Project

SC4CCM is a learning project to identify **proven, simple, affordable** solutions for the unique supply chain challenges faced by CHWs.

Unique Challenges faced by CHWs:

- Remote, rural locations, difficult geography:
  - transit to resupply points can be long and difficult
- Limited transportation options, often non-motorized:
  - such as bikes, foot, donkeys, public transport
- Low literacy among CHWs:
  - challenges in reporting, recording and submitting data
- Lack of infrastructure:
  - often no dedicated facility to work from
  - Limited storage space
- At the end of the supply chain
  - when shortages of essential medicines exist, CHWs often miss out on supplies

Malawi Overview

Country Context

- Heath Surveillance Assistants (HSAs) introduced in 1970s for health promotion and sanitation activities, CHWs in hard to reach areas provide CCM since 2008
- HSAs are paid cadre of MOH
- There are currently over 3,000 village clinics
- HSAs can manage up to 19 products for CCM, FP and HIV Testing

Baseline Findings (2010)

- Only 27% of HSAs had all CCM products* needed in stock DOV
- 43% of HSAs reported they submit a report containing logistics data to HCs
- 94% of HSAs surveyed had a mobile phone, 85% had network coverage at least sometimes

*cotrimoxazole, LA1x6 and/or LA2x6, ORS

Private Sector Approach

Problem:

- Timely data not available
- Data not used consistently for decision making
- Lack of "data culture"
- Challenges with product availability
- HSAs geographically dispersed

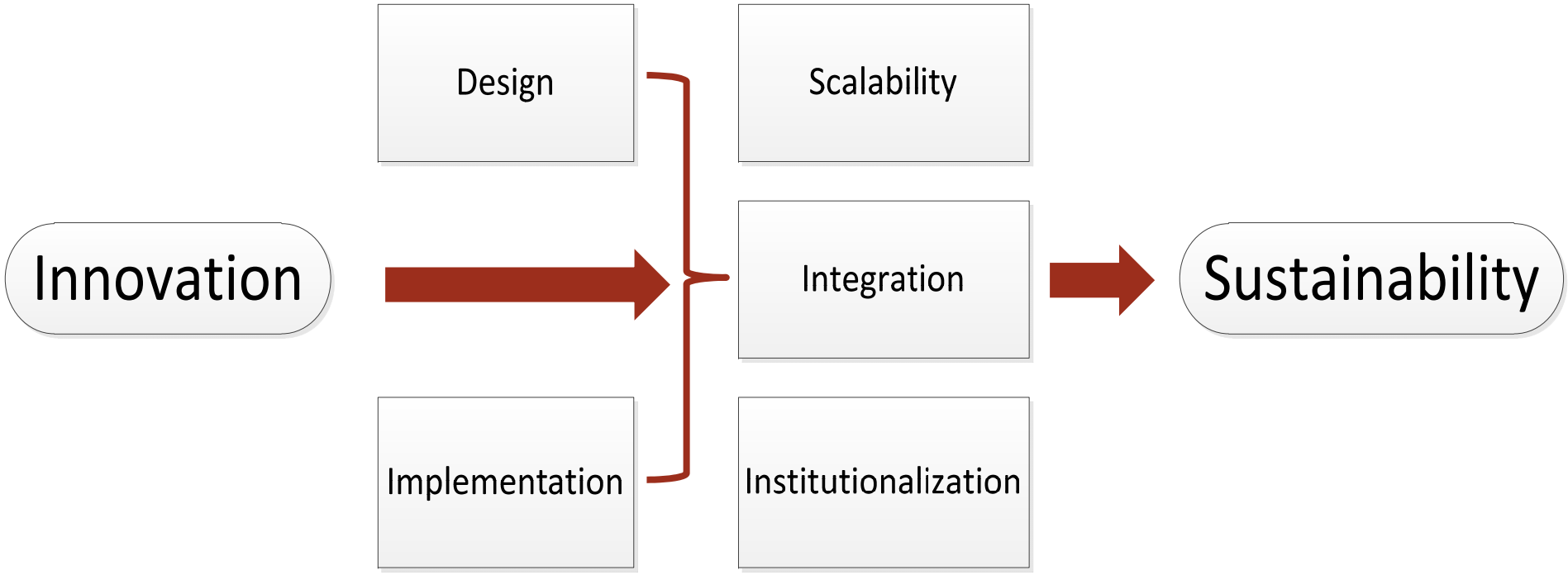
Approach:

- Increase supply chain information visibility
- Use technology to inform decisions and increase efficiency
- Build teams between actors involved in supply chain management
- Monitor key performance indicators (KPIs)

Solution:

- SMS-based system to manage reporting and resupply process: cStock
- District Performance Availability Teams (DPAT)
- Sustainability and transition plan

SC4CCM – Designing for Sustainability



To sustain an innovation, issues of scalability, integration and institutionalization must be considered from the **start**, during the design and implementation phase.

cStock: Data and Product Flow

District, Zonal and Central staff access HSA logistics data via **dashboard**

Health Center receives resupply quantities for each HSA via SMS and notifies HSA either "order ready" or "out of stock"

Product flow

cStock data flow

HSA sends SMS with stock on hand each month

The database calculates - months of stock and resupply quantities, reporting rates, number and duration of stock outs, displays on **dashboard**

District Product Availability Teams

In addition to cStock, SC4CCM introduced **District Product Availability Teams (DPATs)** that use the increased **data visibility** to improve performance

Enhanced Management (EM)

DPAT/HPAT Meetings

- Quarterly District Meetings with District staff and HSA supervisors
- Monthly HC Meetings with HC and HSAs
- Topics discussed include
  - Performance plans & recognition
  - Reporting timeliness and completeness
  - Stock management , expiries & overstocks, and product availability

Performance Plan

- Supply chain performance indicators and targets
- cStock data and resupply worksheets used to track performance
- Formal recognition system to drive SC performance
- Management diaries used to track issues and actions taken

cStock Data

Simple Design of cStock

Scalability	Integration	Institutionalization
Uses basic GSM phones •HSAs and HC staff use their **personal phones** to report data via SMS on a toll free phone line **Collects minimum data** •HSAs in Malawi manage up to 19 products •stock on hand and receipts data **Hosting data on *The Cloud*** •inexpensive, reliable and easy to manage for a small system like cStock	**Streamlines existing resupply process** •Calculates quantities for HCs, reducing the burden of calculation •Advises HSAs when stock is available for collection preventing unnecessary travel to the HC •When HCs cannot fulfill orders, districts get immediate SMS alerts to facilitate timely replenishment	**Iterative approach to dashboard design** •simple, easy-to-use dashboard reports designed with input from the users 6 months after implementation **District Product Availability Teams (DPAT)** •Introduction of DPATs created a structure for using data making cStock data important to their every day work

Results

*cotrimoxazole, LA1x6 and/or LA2x6, ORS

Product Availability

- ✓ **62%** of HSAs had the 4 tracer drugs* in stock day of visit (compared to 27% BL)
- ✓ HSAs in districts using cStock and DPATs had had **significantly lower mean percent stockout rates** of 6 iCCM products **(5-7%)** than HSAs in cStock only districts (10-21%)

Data Visibility

- ✓ More than **80% of HSAs** report logistics data to **cStock** every month (vs. 43% at BL)

Use of Data

- ✓ **91% of Drug Store in Charges** use cStock to inform resupply quantities
- ✓ **56% of HSA supervisors** use cStock data for performance monitoring

Teamwork

- ✓ **100% of District & HSA Supervisors** reported finding product availability teams useful
- ✓ **92% of HSA Supervisors** know their recognition plan

Translating Evidence into Action

Data Validation Workshops

- Presentation of intervention specific results to selected HSAs, HC, district staff from intervention districts
- Review of key data, interpretation within local context
- Discussion on effectiveness, affordability, value of intervention considering results and experience

Scale Up Package and Plan

MOH and partner consensus on elements of intervention to implement nationally

A Structured, Planned Approach to Scale Up and Institutionalization

The Pathway to Supply Chain Sustainability Tool

- Developed as a planning tool for scaling and institutionalizing innovations within public sector supply chains
- Participants assess "readiness" for scale up and institutionalization of the innovation on a scale of 1-5 and then develop action plans for how to move to the next level
- Five domains assessed: Organizational Coordination, Organizational Capacity, Funding & Resources, Community & Staff Preparation, and Tools & Technology

Scale Up And Institutionalization

Partnering to Scale

- Important for sustainability as builds broader/joint ownership and capacity that lasts after project ends

Current Status of Scale up

- 29 of 29 districts have been trained: 9 WHO, 5 Save the Children, 2 IWG, 6 SSDI, and 7 SC4CCM

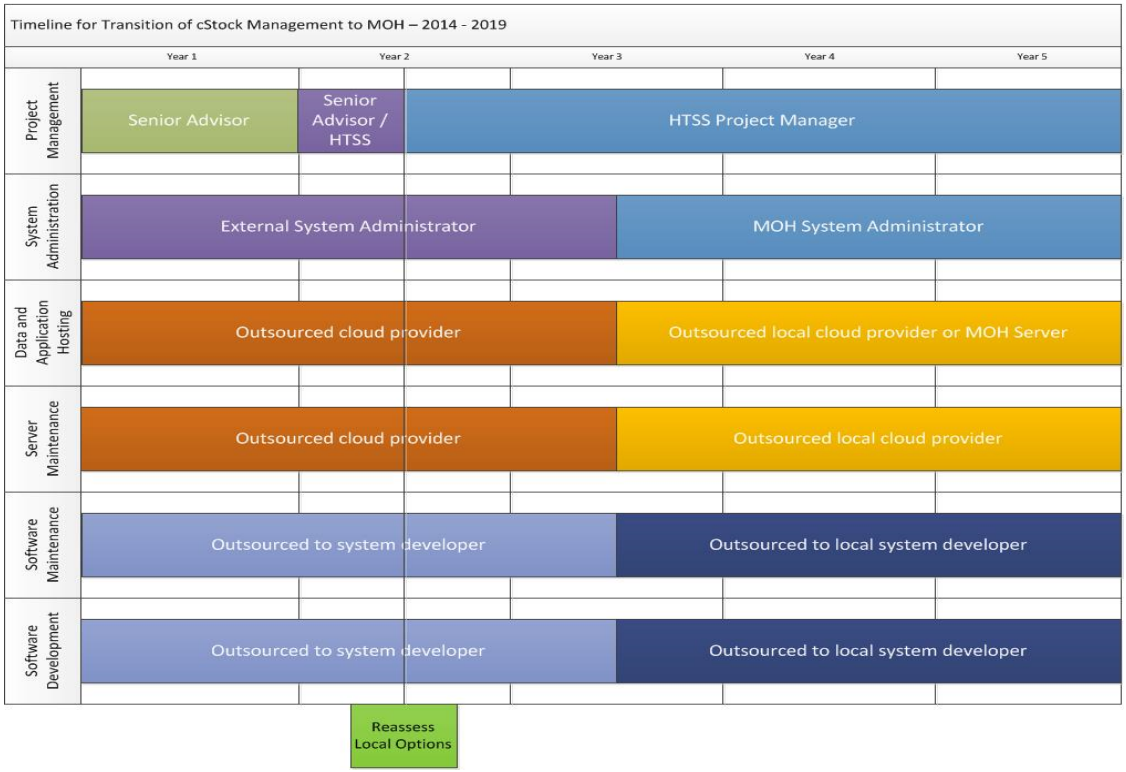
Operationalzing MOH ownership of the innovation package

- Formation of a **taskforce** (MOH chair) dedicated to the scale up and sustainability of SC innovations
- Finding **champions** in MOH by having central level advocates and trainers in every districts
- **Capacity building** of MOH to provide management and leadership
- Development of comprehensive, multi-year cost estimates for resource mobilization, in the short term, and a transition plan to eventually cover all costs through the MOH

5 Year Transition Plan

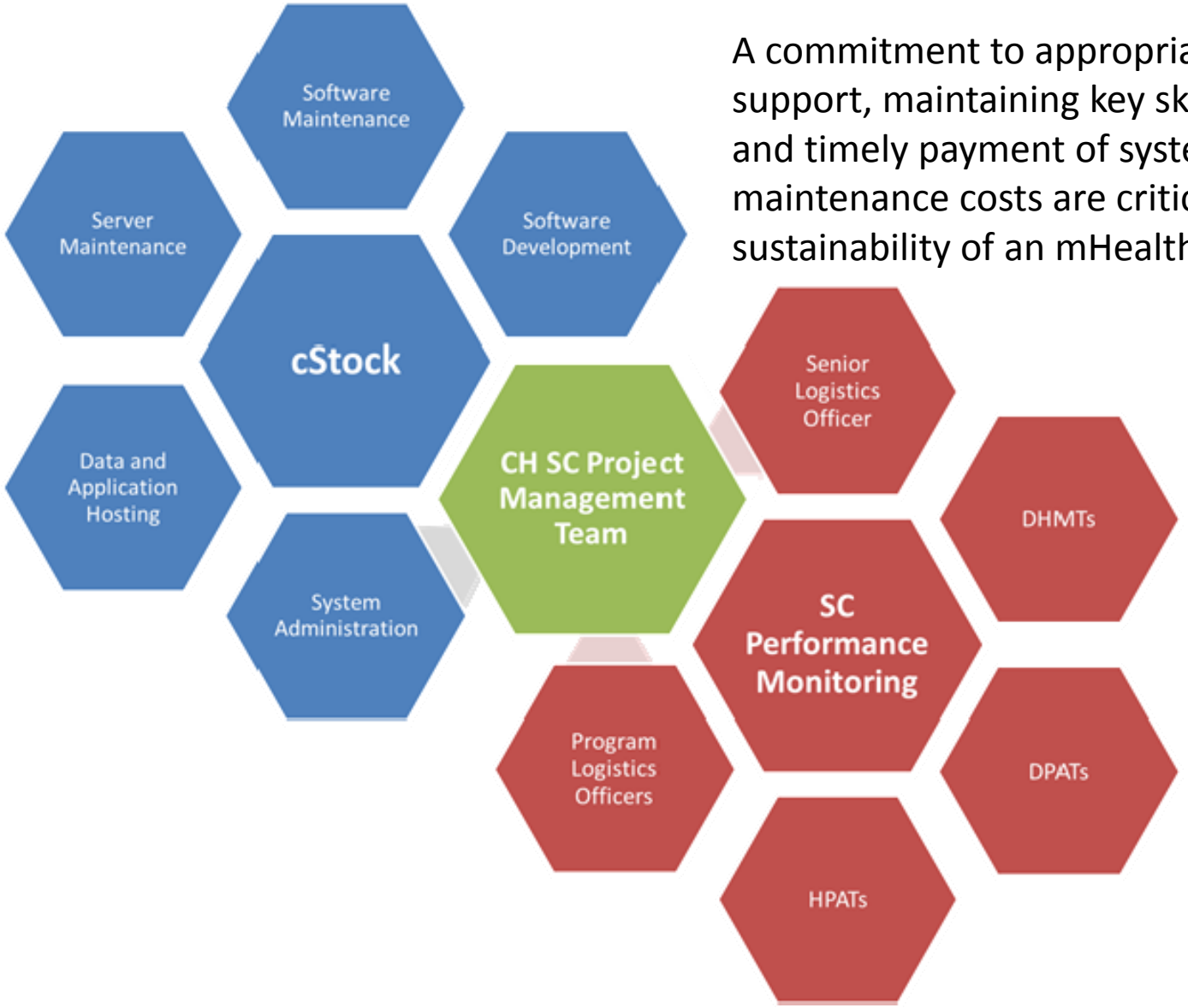
Purpose

- Provide a structured and thoughtful process on what is required to sustain cStock and the DPATs for the next five years to set a strong foundation for this technology and approach become a core business practice for the MOH.
- Highlights **key capacity building investments** required to address gaps in MOH institutional structures so that MOH is able to manage of cStock at the end of the 5-year transitional period.



Sustaining cStock and the DPATs

A commitment to appropriate institutional support, maintaining key skills and capacity, and timely payment of system hosting and maintenance costs are critical for sustainability of an mHealth system



Lessons Learned

- Consider sustainability - scalability, institutionalization and integration – from the design phase
- Keep the design simple and suitable for the context
- Plan to revisit some of design early in the pilot when users have experience to draw from
- Engage partners and MOH from the outset and considering partnering for scale up
- Cloud hosting is a cheap, reliable and easy to manage option for small scale systems
- Combining an mHealth solution with interventions that introduce structured processes for routine use of data so staff value the tool
- Develop a transition plan well before the end of the project and help set the ground work for sustainability