iCCM: The Malawi Experience

RAcE Multi-Country Dissemination Meeting
24-27 October 2017

Malawi demographics make community health critical to the health system

Ministry of Health

Malawi's population is 17 million

84%
Rural

+24%
Not within 5km of health facility

53%
Of deaths caused by top 4 illnesses
(Pneumonia, Diarrhea, Malaria, Malnutrition)[1]

4%
Rural access to power

61yrs
Life expectancy

Health profile: under five children

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- NMR- 27/1000 (DHS 2015-16)
- IMR - 42/1000
- <5 MR 63/1000
- 76% Basic vaccination coverage
- 61% Exclusive breastfeeding
- Stunting is 37%
- 439 is Maternal Mortality

	1992 MDHS	2000 MDHS	2004 MDHS	2010 MDHS	2015-16 MDHS
Under-5 mortality	234	189	133	112	63
Infant mortality	135	104	76	66	42
	41	42	27	31	27

iCCM - Introduction

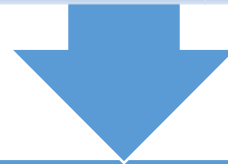
- 2008 introduced
  - Through Community Health Workers called Health Surveillance Assistants (HSAs)
  - WHO simplified algorithms and adaptation to country context
    - Fever(malaria), diarrhea, fast breathing(pneumonia), red eye, malnutrition
  - Started with 10 districts supported by World Health Organization
- 2010 scaled up to 8 more districts
- 2011 nationwide scale up – all 29 districts covered

- ICCM services exists within an MoH governance structure
  - IMCI unit - MoH coordinates iCCM implementation and convenes a national IMCI sub-Technical Working Group
    - Operationalized by District Health Management Teams
  - Use standardized training protocols and guidelines , treatment registers and reporting tools
    - *Using the generic WHO protocols, tools and guidelines*

COORDINATION

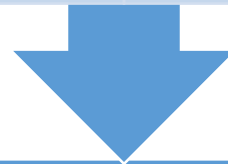
District Health Management Team -DHO

District Environmental Health Officer	Hospital Administrator



District IMCI Coordinator

HMIS	PHARMACY



HEALTH CENTRE INCHARGE

Senior HSAs, Village Health Committee	HSA - iCCM

Key tasks of HSAs in iCCM

- Treatment of sick children
  - mRDTs
  - Waste management
  - Undernutrition assessment
- Data management
  - DHIS2
  - Data utilization templates
- Supply chain
  - cStock

Current ICCM Data Flow

HSA → HSA Register, Form 1 A, C-Stock

Form 1 A → Supervisor (SHSA)

Supervisor (SHSA) → Form 1 B

Form 1 B → DISTRICT IMCI Coordinator and HMIS Officer

DISTRICT IMCI Coordinator and HMIS Officer ↔ DHIS II Database

DHIS II Database → M&E Partners, MOH M&E IMCI Unit

M&E Partners → Partners, MOH M&E IMCI Unit

Partners → MOH M&E IMCI Unit

HSAs completes **Village Clinic Register – monthly** summarizes information into ***Form 1 A***.

The **SHSA** collates the **HSA** information and summarizes into ***Form 1 B and submits to the district***.

The **District** enters the data from **form 1 B into the DHIS II database** by **facility**

MoH and all other partners access data from **DHIS II**

cStock: Data & Product Flow

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

Health Center supplies the HSA based on SMS message

HSA sends SMS with SOH each month

Product Flow

Data Flow

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

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Health Surveillance Assistants

Malawi Story

Community Health in Malawi

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Formal community health workers have existed in Malawi since the 1970s

Cholera Assistants and other Volunteers

Health Inspectors

Primary Health Nurses

In early 1980s the MOH changed the cadre from Cholera Assistants to Health Surveillance Assistants

Since then until today community health has primarily been delivered by Health Surveillance Assistants (HSAs)
CENTURY TEXTILES

HSAs are full-time CHWs employed by MOH

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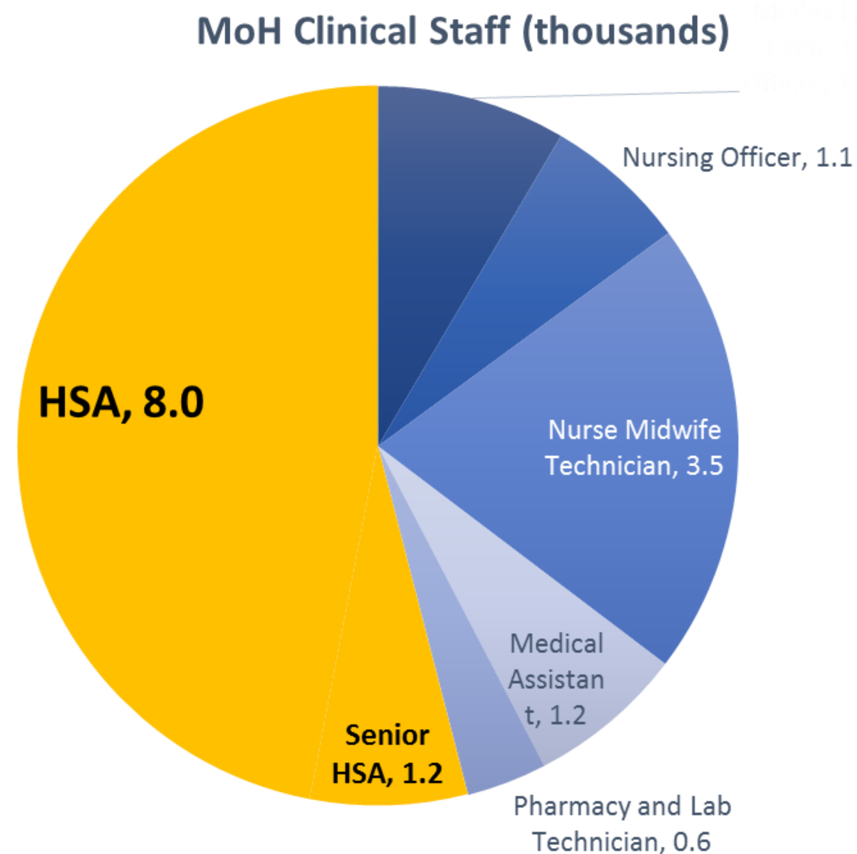
HSAs are meant to reside in their catchment area

The recommended HSA to population ratio is 1 to 1,000 people

HSA's & Senior HSA's are over half of MoH's health workers



HSAs play a key role in linking communities to the health system and local governance structures

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Related Ministries

MOH

DC

DHMT

ADC

HCAC

Health Centre

VDC

Community Health Team

CHAG

VHC

Community

Community Health Team

CHN

AEHO

CMA

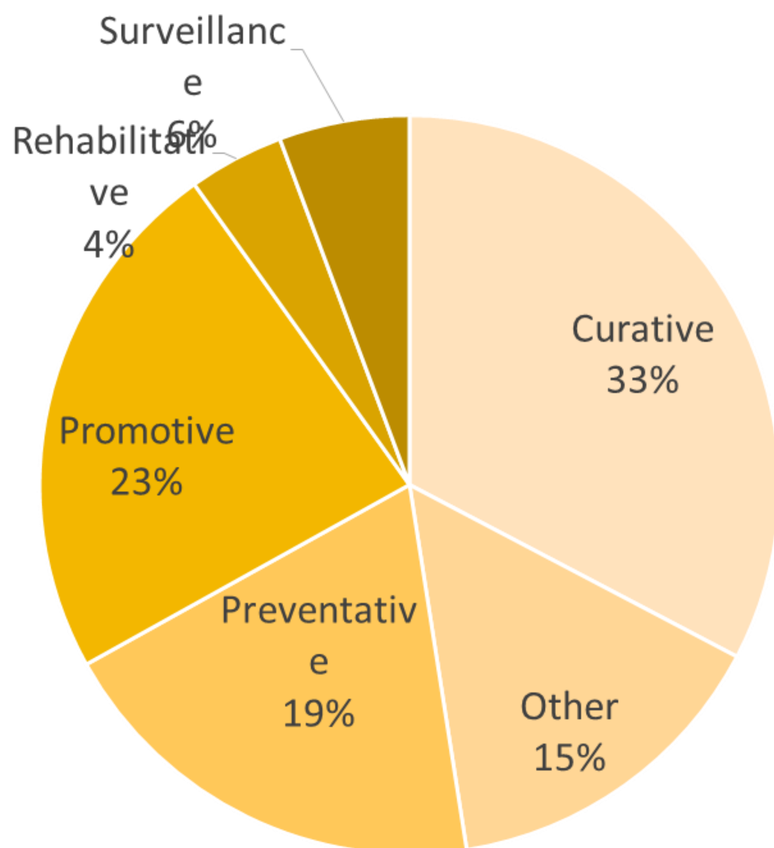
SHSA

HSA

CHVs

HSA tasks are extensive and critical to ensuring access to health services for all people in Malawi

HSAs are primary point of responsibility for 263 tasks at community level[1]



Examples of Tasks include:

- Community case management including malaria, diarrheal, pneumonia treatment for under-5s
- Establishing Village Health Committees
- Supervising Community Health Volunteers
- Distributing and promoting family planning
- Screening and treatment for nutrition
- Providing Vitamin A supplementation
- Conducting HH sanitary inspections
- Administering Vaccines
- NTD campaigns

1. Role Clarity Guidelines, 2017 MOH

Supporting Environment

- Policies in place;
  - Child Health Strategy
  - Malaria National Malaria Strategic Plan
    - Recommends diagnostic testing and treatment for all age groups at the community and facility levels
- mRDT implementation at the community level started in May 2015
- WHO-GMP- RAcE districts supported the implementation in 8 districts by training HSAs, mentors and supervisors to support iCCM and quality of mRDTs implementation

SAVE THE CHILDREN

RAcE Project

Global Affairs Canada Affaires mondiales Canada

World Health Organization

Background

- Project Period: April 2013-March 2017
- No cost extension : April- September 2017
- Rapid Access Expansion : implemented in 8 districts (Dedza, Ntcheu, Mzimba North, Ntchisi, Rumphi, Nkhatabay, Likoma and Lilongwe)
- Implemented in collaboration with MoH-IMCI Unit, MCDI and D-Tree.
- Funded by GAC through WHO

RAcE implementation arrangements

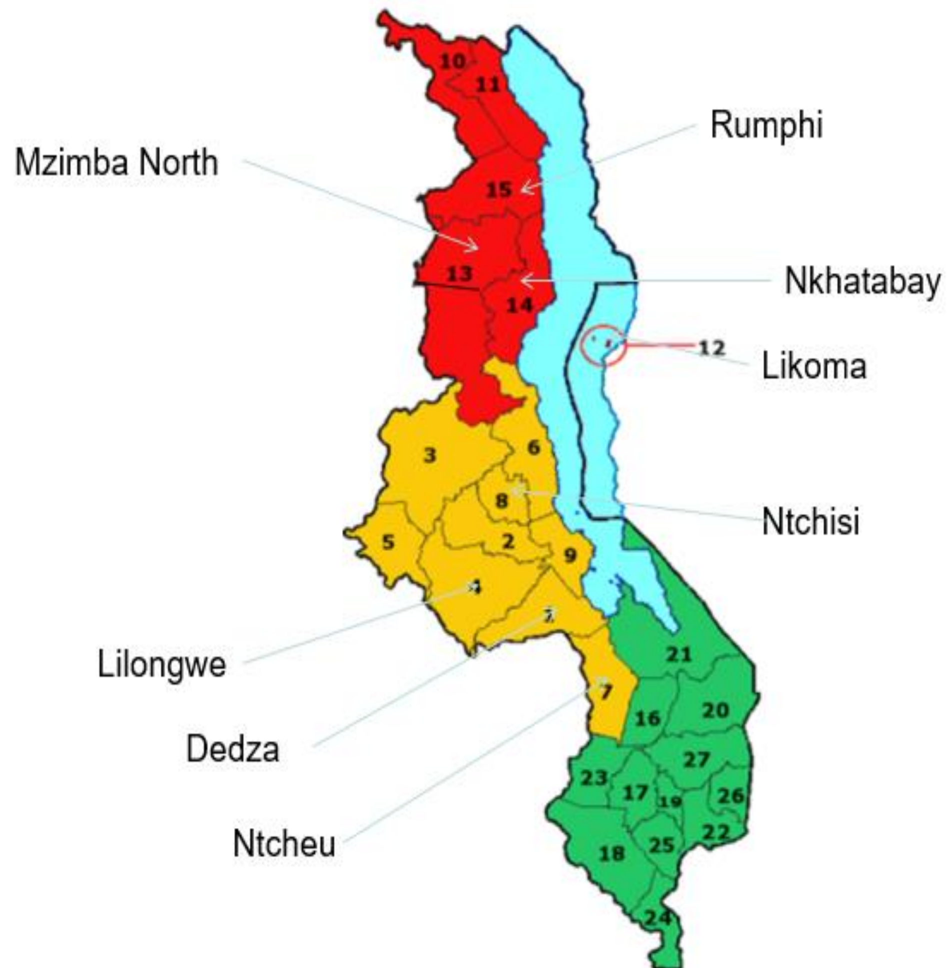
Institution	Roles
Save the Children	-Responsible for overall program results for district level implementation
	-Country level coordination
	Procurement and supply chain management of iCCM medicines and diagnostics
D-Tree	-Development and testing mhealth applications
MCDI	Quality assurance of malaria RDTs
SC US and SC Canada	Management and technical support
WHO	Desk Audit, Field visit assessments
Independent M & E Institution	Independent project monitoring and Evaluation
Ministry of Health- Overall country technical leadership to monitor activity progress	

iCCM in the context of RAcE

- iCCM under RAcE was implemented by the MoH's HSAs; who are under the Preventive Health Directorate.
- RAcE supported increased support to Village Health Clinics:
  - HTRAs increased from 1,292 in 2014 to 1,727 in 2017
  - 84% of HSAs trained under RAcE are active.
  - RAcE technical support through supervision, trainings, data quality assessments, reporting and commodity procurement.

Parameter	Total
HSAs trained in iCCM	1,192
HTR areas with iCCM-trained HSAs	952
All iCCM-trained HSAs available and work in HTR areas	885
iCCM-trained HSAs providing iCCM services	885

Project area and population



- Implemented in 8 districts.
- Total geographical coverage per district.
- Total pop. in the targeted districts = 4,607,172.
- Hard-to-reach pop. in the targeted districts = 3,028,054
- Under five pop. targeted = 514,769.

Implementation of key activities: Training and Supervision

- Supported the MoH to review and update the training curriculum to include additional technical areas
  - e.g. mRDTs, treatment of fast breathing using dispersible amoxicillin, reporting in DHIS2, etc.
- All iCCM trainings included practical sessions with specific skill competency outcomes.
- Besides HSAs, VHC members also trained in community mobilization.

- Health Facility level supervision
  - Conducted by SHSAs monthly using standardized checklist.
- District supervision
  - Conducted quarterly by IMCI, Malaria Coordinators and Project Coordinators.
- National supervision
  - Conducted by IMCI Unit/MOH and RAcE staff

Implementation of key activities: Supervision

- Training of SHSAs in iCCM supervision:
  - To improve their technical competencies.
  - A total of 345 HSAs Supervisors trained.
- Refresher training of iCCM supervisors:
  - To discuss new approaches to treatment and supervision.
  - Total of 574 supervisors trained.
- RAcE supported with logistics i.e. fuel, per diem, stationery, etc.
- Strengthened clinical mentoring:
  - Health-facility based where HSAs walks in
  - Provided on the job training to iCCM HSAs.
  - Conducted by trained clinicians/nurses in mentorship.
  - A total of 425 mentors were trained.
  - Mentorship also focused on gaps identified during supportive supervision.

Mentorship trends

% HSAs mentored

Year	2013	2014	2015	2016	2017
% HSAs mentored	70%	74%	64%	55%	63%

- Factors that have affected mentorship include;
  - Mentors having multiple commitments at health facility level (workload)
  - High turnover of trained mentors
  - Some HSAs who have implemented iCCM for a long time consider mentorship as irrelevant

Implementation of key activities: Supply Chain

- Strengthened MOH's c-Stock.
- Improved stocking, tracking and re-supply of iCCM medicines including reporting through c-Stock:
  - Commodity quantification.
  - Due to challenges in the main SCM, RAcE warehoused and distributed to Health Facility level.
    - Worked with health facilities to ensure proper stocking and resupply of iCCM commodities to HSAs.

- Trained HSAs and HSA Supervisors in c-Stock covering:
  - Enhanced management of drugs and commodities;
  - Reporting in c-Stock;
  - Normal and emergency ordering.
- Procurement of iCCM commodities to ensure minimal service disruption due to stock outs.
- Supported the formation/activation of DPAT/HPAT to enhance drug management governance.

Implementation of key activities: M&E

- iCCM data flow: reporting

Form 1A
- Aggregated monthly
- From HSA daily register

Form 1B
- Aggregated from all HSAs.
- At HF level

DHIS2
- Entered into an online system
- At district level

- Improved documentation for all cases seen.
- Improved report quality: completeness, accuracy & timeliness
- mHealth

- Improved capacity of SHSAs monitor reports for quality.
- Improved follow up on missing data/reports.
- Improved timeliness in report

- Capacity building to IMCI Coordinator:
  - Report quality;
  - Follow up of missing data/reports
- Improved coordination with HMIS Officer for data entry into DHIS2
- Evidence based decision making

Ensuring strong data management

- RAcE supported quarterly data quality assessments.
- Supported review meetings to review data.
- Strengthened decision making using data (through wall charts).
- Printed all the tools required by HSAs

Country achievements:
a) Programme and health system contribution

- Improved monitoring of child health interventions at community level
  - Immunizations, nutrition, cholera, etc.
- Community based Maternal and New-born care integration
  - Majority of iCCM HSAs were trained in CBMNC.
- Operations research on management of possible bacterial infections in young infants.
  - Preliminary results show management with Amoxicillin and Gentamycin had good treatment outcomes.

- Supported improvements in health care seeking among community members.
- Strengthened community structures supporting iCCM implementation.

HSAs and treatment numbers

a) Number of fever cases receiving mRDT vs treatment

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Number of cases who received an mRDT from HSA and Treated with ACT

180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
-

Oct-Dec 2015 | Jan- March 2016 | Apr-Jun 2016 | July-Sept 2016 | Oct-Dec 2016 | Jan-March 2017 | Apr-Jun 2017 | July to Sept 2017

1. Number of cases of fever among children 5-59 months who received RDT from HSA ACHIEVEMENT

2. Number of RDT+ cases among children 5-59 months treated with ACT by an HSA TARGET

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HSAs and treatment numbers: mRDTs vs ACTs

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1. Number of cases of fever among children 5-59 months who received RDT from HSA ACHIEVEMENT

2.Number of RDT+ cases among children 5-59 months treated with ACT by an HSA ACHIEVEMENT

Diarrhoea and fast breathing cases

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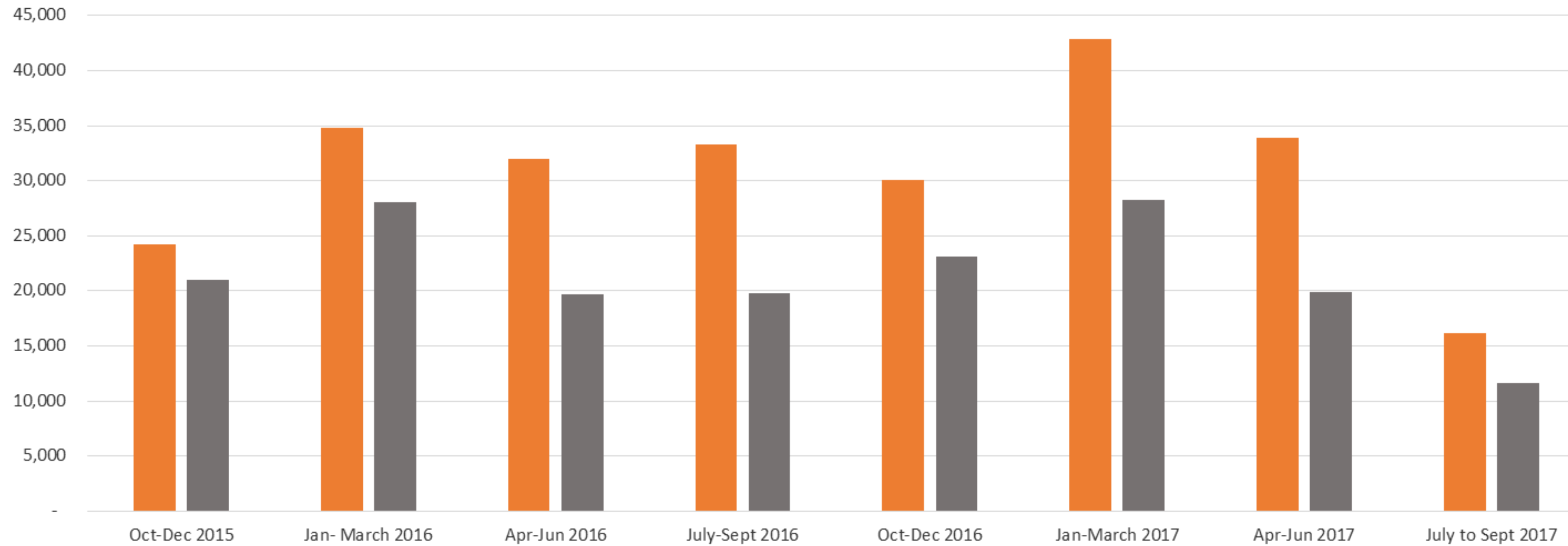

Trends in fast breathing and diarrhoea cases in RAcE HSAs

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Trend of showing no. of cases of cough/difficult breathing and diarrhoea treated by HSA

45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-

Oct-Dec 2015 | Jan- March 2016 | Apr-Jun 2016 | July-Sept 2016 | Oct-Dec 2016 | Jan-March 2017 | Apr-Jun 2017 | July to Sept 2017

Number of cases of cough and/or difficulty breathing among children 2-59 months treated with amoxicillin by an HSA ACHIEVEMENT

Number of cases of diarrhoea among children 2-59 months treated by an HSA ACHIEVEMENT

b) Contribution to national iCCM vision and scale-up

- Improved service delivery outcomes on:
  - Assessment of the sick child and correct classification.
  - Use of iCCM medications: ORS, zinc, antibiotics, anti-malarials
  - Counseling for adherence to treatment
  - Referral of severely ill children
  - Printing of tools for implementation across the country.
    - Data templates, training manuals, supervisors guidelines, SOPs, etc.
  - Strong link between the community and DHMT.
  - Burden of disease has become a collective responsibility: community mobilization.

Lesson Learnt

- Training supervisors in iCCM and supervisory skills improves performance
- Creation of a mentorship program for periodic skills reinforces HSAs competence
- District based village clinic review meetings strengthens implementation
- C-stock system improves drug availability, data visibility and reporting
- Development of integrated checklists incorporating key elements of sick child recording form ensures provision of quality of care

Lessons learnt – what worked for Malawi

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- Clear leadership of the Ministry of Health, and an understanding of partners about their roles and responsibilities
  - Recognition of HSAs as formal members of the health work force
  - Orientation of DHMTs, mapping of hard-to-reach areas, and joint planning – Including MoH district focal persons
- Engagement of the national IMCI technical working group in the process
  - Proper coordination of available limited support and collaboration of partners to roll out activities in assigned/mapped districts
- Quality of care assessments

- Devolution of HSAs training to district level
- Leadership of district IMCI coordinators and engagement of DHMT members
- Appropriate case load in district hospitals for inpatient and outpatient clinical practice during training
- Assignment of specified responsibilities to various cadres of staff (senior HSA, environmental officer, community nurse)

Constraints to implementation

- Increased ‘access’ of village clinics
  - HSAs’ other tasks, holidays (Human resource factor)
- Availability of medicines
- Village clinic infrastructure
  - Residency and housing for HSAs
- Competing priorities for HSAs at commun level;
  - Supervision,
  - Inadequate Mentorship

The iCCM Road Map and National Community Health Strategy provides a plan to address those challenges to support HSAs and improve the CH system for the next generation

Phase 1

Clarify roles and teams for CHWs

Harmonize data collection

Establish standard CHW supply list

Recruit Community Health Officers

Purchase bicycles for HSAs

Phase 2

Recruit and train more HSAs

Train HSAs on integrated service

Provide all HSAs with critical supplies

Build CHW housing and Health Posts

Develop mHealth tools

Ongoing system assessment and M&E

Thank you!!!