Shaping the five-year path for all stakeholders towards sustainable delivery of integrated community case management (iCCM) in Malawi



Roadmap for Sustainable iCCM services in Malawi

2017 - 2021

IMCI Unit, Ministry of Health

List of Acronyms

ADC Area Development Committee
AEC Area Executive Committee

AEHO Assistant Environmental Health Officer AIDS Acquired Immunodeficiency Syndrome

ARIS Acute Respiratory Infections
BTDHO Blantyre District Health Officer

CBDA Community Based Distributing Agent CBO Community Based Organization

CCO Chief Clinical Officer

CHAM Christian Health Association of Malawi CPHC Community-based Primary Health Care

CPIPHC Community Participation in Primary Health Care

CSO Civil Society Organisation

DA District Assembly

DCDO District Community Development Officer
DDPHS Deputy Director Preventive Health Services

DEC District Executive Committee

DEHO District Environmental Health Officer
DHMT District Health Management Team

DHO District Health Office

DHS Demographic Health Survey
DIO District Information Officer
DIP District Implementation Plan

DPD Director of Planning and Development

DTT District Training Team

EHO Environmental Health Officer
EHP Essential Health Package
EHU Environmental Health Unit
FBO Faith Based Organization
HAC Hospital Advisory Committee

HCAC Health Centre Advisory Committee

HEU Health Education Unit

HIV Human Immunodeficiency Virus
HSA Health Surveillance Assistant
HSSP Health Sector Strategic Plan
HTC HIV Testing and Counseling

HTSS Health Technical Support Services

IEC Information Education and Communication
IMCI Integrated Management of Childhood Illness

ISC Intersectoral Collaboration

MDG Millennium Development Goal
MDHS Malawi Demographic Health Survey
MHEN Malawi Health Equity Network

MoH Ministry of Health

MoLGRD Ministry of Local Government and Rural Development

MP Member of Parliament
MSF Médecins Sans Frontières

NCHS National Community Health Strategy NGO Non-Governmental Organization

NHP National Health Policy

NHSRC National Health Services Research Committee

NICE National Initiative of Civic Education

NSO National Statistics Office

PEHO Principal Environmental Health Officer

PHC Primary Health Care

RACE Rapid Access Expansion Program

SHSSO Senior Health Service Strengthening Officer SSDI Support for Services Delivery Integration

STANCH Senior Technical Advisor Newborn and Child Health

TA Traditional Authority

TB Tuberculosis

TBA Tradition Birth Attendant

VDC Village Development Committee

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I. Statement from Ministry of Health

The integrated community case management programme (iCCM) has arisen out of efforts by the Ministry of Health since 2007 to scale evidence-based high impact interventions to reduce under-5 mortality. In 2013, the World Health Organization (WHO), through the Global Malaria Programme, launched the Rapid Access Expansion (RACE) Programme in five countries—Democratic Republic of the Congo (DRC), Malawi, Mozambique, Niger, and Nigeria—to increase access to treatment for malaria, pneumonia, and diarrheal disease among children under five years through scaled-up iCCM programmes. These efforts have contributed to a reduction in under-5 mortality rate of 60% between 1990 and 2013 and which has continued to fall through 2015.

With the RACE project coming to an end in March 2017, the IMCI programme, which oversees the implementation of iCCM for the MoH, has developed this 5-year roadmap to secure the gains made through iCCM delivery and address key challenges that have emerged. This roadmap was developed with extensive stakeholder engagement and has also integrated with other key MoH strategic processes including the development of the HSSP II and the National Community Health Strategy. The ultimate aim of this Roadmap is to move Malawi closer to its vision for iCCM which is that is by 2021 all children under 5 in hard to reach areas with pneumonia, diarrhea, and malaria receive prompt treatment around the clock from an HSA who is well trained, properly resourced, and community supported to attain zero avoidable under-5 deaths.

Malawi's vision for iCCM is that is by 2021 all children under 5 in hard to reach areas with pneumonia, diarrhea, and malaria receive prompt treatment around the clock from an HSA who is well trained, properly resourced, and community supported to attain zero avoidable under-5 deaths.

The iCCM Roadmap is made up of 5 core components which are Issues, Activities, Stakeholders, Benchmarks, and Timing. There were 12 priority issues identified as part of the process with each containing multiple activities to address the underlying causes. Relevant stakeholders were assigned to lead each activity while benchmarks were allocated to track progress. Given the limited human and financial resources of the health sector, it is not practical to implement all activities simultaneously and so they were ordered across the five years based on priority, their interaction and contribution to future activities, and the number of activities the lead stakeholder was already committed. The stakeholders outlined in the roadmap are the IMCI Unit, the cPHC Unit, District teams, other MoH teams (predominately CMED, HTSS, and HEU), and development partners. The roadmap contains a section dedicated to each of these stakeholder groups outlining activities, current activities to-date, and key partners for that activity.

These activities, which focus specifically on supporting the iCCM programme, are meant to complement other initiatives occurring simultaneously in the MoH especially around health system strengthening that will go towards supporting the broader health system and will also benefit iCCM delivery. This document is meant to guide all involved in the delivery of iCCM in their role towards ensuring its sustainability and improvement over the next five years with a coherent, integrated roadmap of specific activities which the IMCI team will be responsible for coordinating across the MoH and partners. Much has been accomplished, yet as this Roadmap demonstrates much is left to be done.

Below is the summary table outlining the 12 priority issues, the nearer-term activities identified, and the benchmarks to assess progress.

Issue	Activity (start Year)	Benchmark
HSAs residing outside catchment area	 Lobby district council and stakeholders to support structure construction (Y1) Mobilize communities to construct homes and clinics (Y1) Review and reinforce policy on residency for HSAs (Y1) Review recruitment policy and district deployment strategy (Y2) Introduce hardship allowance (Y3) Provide solar to HSA homes (Y4) 	 Residency Rate # village clinic structures # of homes constructed Policy reviewed and reinforced # of HSAs homes with solar # of stakeholders supporting infrastructure
2. Insufficient monitoring and supervision	 Develop integrated supervision checklist based on core indicators (Y1) Allocate funding for maintenance of vehicles (Y2 annual) Launch integrated supervision and strengthen mentorship (Y2) Review HR policy and retention in relation to supervisors and mentors (Y3) 	 % of HSAs supervised quarterly % of integrated supervision conducted Number of facilities with active Mentors Number of providers mentored by quarter
3. Lack of medicines availability	 Work with Telco companies (TNM/Airtel) on coverage to increase band width (Y1) Work with HSAs by training them in community medicines forecasting (Y1) Health facilities include HSA needs in medicines forecast (Y1) C-stock includes health facility commodities (Y2) Revise LMIS to include community drugs (Y3) Integrate community drug procurement at health facility level (Y3) 	 % village clinics reporting on time and on stock outs Revised LMIS stocks with Village Clinic drugs included # village clinics with functional c-stock
4. Low data quality	 Incorporate data quality assessment into supervision (Y1) Create data validation checks in DHIS2 (Y1) Incorporate M&E better into training curriculum and refreshers (Y2) Bring in use of data display template (Y3) Review meetings on data management and DHIS2 (Y2) 	 # of providers trained and refreshed on data management Revised supervision checklist to include DQA Proportion of HSA using data charts
5. Low community utilization of iCCM	 Increase training of HSAs on iCCM (Y1) Introduce and scale up multimedia iCCM training platform (Y2) Review and orient VHCs on their TORs/SOW (Y1) Orientation on the role of iCCM at community level to VHC/VDC (Y2) Improve coordination between clinical and environmental health at all levels (Y2) 	 # of HSAs practicing iCCM in 5km catchment areas Revised TOR disseminated Proportion of VDCs/VHC oriented in iCCM
6. Lack of Local Govt ownership in a decentralized system	 Community mobilization on iCCM of chiefs, elders, and general population (Y1) More inclusion of ADC/VDC through training and mobilization (Y2) Reach out to ward counsellors to support clinics (Y2) Consistent and sustained iCCM funding at national level (Y3) 	Political structures strengthened
7. HSAs not trained in other community health programs	 Developed targeted training and coordinated schedule to package service delivery of country (Y2) 	Proportion of iCCM HSAs trained in other community health programs

8. Lack of quality assessment of services	Integrated job aids developed and distributed (Y2)	 % integrated supervision conducted # intergrated Job aids developed distributed No of programs in integration
9. Inefficient referral system	 Development of referral duplicate booklets and distribution (Y1) HSAs make follow ups with clinicians/nurses (Y1) Nurses/clinicians orientated on referral and feedback (Y1) Integrate HSA services on referral forms (Y2) MHealth/digital health for community and referral system developed and harmonised (Y3) Provision of bicycles for Village Health Committees (Y4) 	 Proportion of assisted referrals done Proportion of feedback received Proportion of referral duplicate books developed and distributed Proportion of clinicians / nurses oriented
10. Lack of HSA transport	 Create database of HSA transport data (Y1) Provide HSAs with more durable bikes (Y2) Provide spare parts for bicycles (Y2 annual) Create transport policy guidelines (Y2) Integrate HSA material & supply provision (Y3) Motorbikes for supervisors (Y4) 	 Proportion of HSAs provided with durable bicycles # of spare parts provided % of Senior HSAs with motorbikes
11. Uncoordinated implementation by partners	 Complete consultation between stakeholders and IMCI unit quarterly (Y1) Reinforce buy-in of MoH strategies by partners quarterly (Y1) 	 # of review meetings conducted between MOH and partners # of partners participating in TWGs
12. Community mobilization and communication	Improve HEU coordination Ensure community mobilization is part of supervision monitoring Reporting tools for community mobilization Develop and distribute BCC tools for iCCM	Community mobilization reporting tools developed and in place # of ICCM BCC tools developed and distributed

The Ministry of Health would like to encourage all partners to support the implementation of this roadmap for improving and sustaining iCCM services in Malawi.

Signed

Dr Charles Mwansambo

CHIEF OF HEALTH SERVICES

II. Introduction

Malawi made significant improvement in its under-five mortality rate between 1990 and 2013, being one of nine low income countries that reduced their under-five mortality rate by 60% or more in that time period (UNICEF, 2013¹). More recent statistics from the 2015-2016 Malawi Demographic and Health Survey found a further reduction in under-five mortality to 64 per 1000 live births, a decline of 72.6% since 1992.²

Recognizing the importance of further reducing under-five mortality, the Ministry of Health in Malawi (MOH) in collaboration with other partners working under the Accelerated Child Survival and Development strategy, has been scaling up a package of evidence-based high-impact interventions since 2007. The leading causes of child death in Malawi have been malaria (13%), AIDS (13%), pneumonia (11%), diarrhea (7%) and neonatal conditions (31%) (Bryce and Requejo, 2010³). The government strategy built on the programme for integrated management of childhood illness (IMCI) aimed to improve diagnosis and treatment of common childhood illnesses at facility level (WHO 1997). Due to linkages to the IMCI programme, the term integrated community case management (iCCM) is synonymous with community IMCI. iCCM initially fell under the 5-Year Strategic Plan for Accelerated Child Survival and Development which was established in 2007. The goal of the Strategic Plan was to reduce childhood morbidity and mortality by focusing on high impact interventions for prevention, treatment and issues affecting the social and mental development of children under five. A series of policies and events preceded the roll-out of iCCM which are summarized by Rodriguez, Banda and Namakhoma (2015) below:

Table 1: Abbreviated timeline for iCCM policy development in Malawi⁴

Date	Event	Reference (Document)
1995	Start of drug revolving fund in Malawi	Masuku 2006 ⁵
1998	Adoption of the IMCI strategy	Ministry of Health 2006 ⁶
1999	IMCI introduced and started operating	MLW01-Government official
	Bakili Muluzi Health Initiative to introduce HSAs is launched	Ministry of Health 2007b ⁷
2000	Community IMCI baseline survey	Government of Malawi 20008
2004	IMCI health facility survey	UNICEF/WHO/MALAWI Government 2004
2006	Multiple indicator cluster survey	National Statistics Office and UNICEF 2008
	Development of early childhood development strategic framework	Ministry of Health 2007a.
2006/2007	Cross sector senior level meetings to assess child survival strategy and	MLW011-Multilateral agency
	iCCM.	MLW02-Government official
2007	Five year national strategic plan for accelerated child survival and	Ministry of Health 2007a.
	development in Malawi	
2008	MoH engaged WHO about readiness to allow health surveillance assistants	MLW02-Government official
	to provide community-level treatment and adaptation of the facility IMCI	
	algorithms.	
	Global generic guidelines for iCCM adapted for Malawi.	MLW011-multilateral agency
	Manual for health surveillance assistants developed.	Ministry of Health 2008 ⁹
2009	MoH IMCI unit begins roll out of community IMCI (or iCCM)	Fullerton et al. 2011 ¹⁰
2013	Child Health Strategy continues from ACSD strategy (ACSD)	Ministry of Health
	5, 7	·

¹ UNICEF. Committing to Child Survival : A Promised Renewed. Progress Report 2013

² National Statistical Office (NSO) [Malawi] and ICF International. 2016. Malawi Demographic and Health Survey 2015-16: Key Indicators Report. Zomba, Malawi, and Rockville, Maryland, USA. NSO and ICF International.

³ Bryce J, Requejo JH. 2010. Countdown to 2015 Decade report (2000–2010): Taking stock of maternal, newborn and child survival. New York, Countdown to 2015 for Maternal, Newborn and Child Health.

⁴ From Rodrigues D.C, Hastings, B and Namakhoma, I. 2015. Integrated community case management in Malawi: an analysis of innovation and institutional characteristics for policy adoption.

⁵ Masuku H. 2006. Review of the Performance and Impact of Community Drug Revolving Funds in Lilongwe District. Master of Public Health, University of Malawi.

⁶ Ministry of Health. 2006. IMCI approach policy for accelerated child survival and development in Malawi. Lilongwe, Malawi.

⁷ Ministry of Health. 2007b. Malawi National Health Accounts (2002–2004) with sub accounts for HIV and AIDS, Reproductive and Child Health.

⁸ Government of Malawi. 2000. 2000 Baseline Survey on Community Child Care Practices. Lilongwe: Government of Malawi.

⁹ Ministry of Health. 2008. HSA training manual iCCM. Lilongwe: Ministry of Health, Malawi.

¹⁰ Fullerton J, Schneider R, Auruku A. 2011. USAID Malawi Community Case Management Evaluation Washington DC: Global Health Technical Assistance Project.

The roll-out of iCCM started in 2009 and focused on hard-to-reach¹¹ areas to complement fixed or scheduled facility-based services. Malawi's iCCM program trains and supports health surveillance assistants, a cadre of worker already present in the health system, to assess, classify, treat and/or refer sick children aged 2-59 months. The programme includes "promoting timely, appropriate care-seeking; case management for symptoms of fever/malaria, fast breathing/pneumonia and diarrhoea, with referral of severe illness and acute malnutrition; and appropriate home care". In 2011, Malawi's national treatment policy was revised to recommend parasitological-based diagnosis and treatment of uncomplicated malaria for patients of all ages. This coincided with the national roll-out of rapid diagnostic tests for malaria to all facilities in July of 2011.

In 2013, the World Health Organization (WHO), through the Global Malaria Programme, launched the Rapid Access Expansion (RACE) Programme in five countries—Democratic Republic of the Congo (DRC), Malawi, Mozambique, Niger, and Nigeria—to increase access to treatment for malaria, pneumonia, and diarrheal disease among children under five years through scaled-up integrated community case management (iCCM) programmes.

WHO awarded a grant to Save the Children to work with the MoH in Malawi in eight districts—Dedza, Ntcheu, Rumphi, Nkhata Bay, Mzimba North, Ntchisi, Lilongwe, and Likoma. Since its inception, RAcE has been a partnership with the MoH with the goal to strengthen national and local health authorities' capacity to manage, implement and finance iCCM activities.

III. Purpose

The purpose of the iCCM Roadmap is to help achieve Malawi's vision for iCCM by:

- Describing actions related to the gradual withdrawal of external resources and transition of responsibilities for service provision to local entities.
- Identifying critical iCCM issues and propose a resolution, taking advantage of opportunities to collaborate
- Describing required or preferred implementation arrangements that
 - Clearly describe roles and responsibilities
 - o Identify where activities will happen to ensure each district is well represented
 - Identify when actions should occur
 - Identify priorities and how they will be addressed

The target audience of the document is iCCM implementers, such as district health management teams and supporting partners, policy makers in the related technical areas of the Expanded Immunization Programme, Malaria, Environmental Health, community Primary Health Care (cPHC), and Nutrition, and civil society, as well as stakeholders interested in strengthening the primary health system and the HSA programme.

¹¹ Hard to reach area are defined as more than an 8 kilometer radius from a health facility.

IV. Process

The RACE Project supported iCCM implementation from October 2009 to March 2017. WHO and the Ministry of Health determined it was necessary to develop and document a shared vision for the iCCM Programme and address issues impacting the effectiveness of the programme to maintain the health outcomes achieved under the RACE Programme.

WHO contracted ICF International to facilitate a meeting with stakeholders to develop a strategy for transitioning activities currently under RAcE to the MOH to ensure continued iCCM services in the eight districts. A wide range of iCCM stakeholders including MOH, WHO, other donors, and implementing partners at both central and district level from all eight districts attended a meeting on August 17 -19, 2016 in Lilongwe. A sustainability framework for iCCM, explained in Appendix 1, guided the participatory workshop. Stakeholders contributed to defining a shared vision for iCCM in Malawi in 2021 followed by identifying steps to achieve the vision using the following questions:

- What are the strengths of the current program?
- What are the gaps that need to be addressed to achieve this vision?
- What will it take to address the gaps?
- How will you know if you have achieved it (the gap has been addressed)?
- What can you do at the district level to change this?

The outputs from the workshop form the foundation for the roadmap. The full output from these meetings is available in Appendix 2 of this document and provides the details behind the roadmap which includes benchmarks or milestones to enable tracking progress toward the shared vision.

A task force to continue to develop and add detail to the roadmap was identified at the end of the workshop. This group held additional meetings to finalize the roadmap and develop benchmarks. The roadmap included in this document reflects the contributions of stakeholders during the workshop and the additional meetings. The roadmap is considered a living document and it is expected that the task force and others working on iCCM in Malawi may update it further in the future.

The vision and roadmap in this document are intentionally focused on curative services for children under five since this has been the focus of RAcE. In addition, curative services require a level of health system support in terms of quality, commodity availability, supportive supervision, and record keeping to ensure that children receive the appropriate life-saving care when they need it. Malawi's vision for iCCM was collaboratively developed at a stakeholder workshop and is below.

Our Vision for iCCM in Malawi is by 2021 all children under 5 in hard to reach areas with pneumonia, diarrhea, and malaria receive prompt treatment around the clock from an HSA who is:

- Trained, equipped, resourced, supervised, mentored, and practicing iCCM
- Residing in the catchment area with a good house, adequate drugs supply, clinic structure, and functional referral system
- · Using data for planning and decision making
- · Within a knowledgeable and supportive community and enabling political environment

to attain **ZERO** avoidable under 5 deaths.

V. iCCM Roadmap

V.1 Overview

The iCCM Roadmap provides a path forward to sustaining and improving the delivery of iCCM by outlining the activities and interventions to be undertaken over a five-year period to address critical issues prioritized by stakeholders. This section defines the responsibilities of each stakeholder group and guides action to contribute towards the overall system. Although many of the issues and activities are tied to broader health systems strengthening, the scope of this roadmap is specifically iCCM sustainability.

The core components of the iCCM Roadmap were collected through multiple consultations with key stakeholders at national, district, and community level as described in Section IV.

The core components of the iCCM Roadmap are:

- Issues that have been prioritized by stakeholders in relation to successful iCCM delivery
- Activities to address these issues
- Stakeholders to lead and contribute to these activities
- Benchmarks for assessing the progress towards addressing the issues
- **Timing** indicating when the activities should take place over the five years

Issues: Stakeholders identified the current challenges faced in delivering iCCM services and the anticipated challenges with the conclusion of the RACE Project. Twelve issues were prioritized from a total of twenty-five. The prioritized issues in this roadmap would therefore ensure a concerted focus on solving the most important problems.

Activities: The iCCM specific activities that were identified exist both independently of the issues and in direct relationship to the priority issues. Many activities address more than one issue and these would require unpacking for efficient implementation. Activities that address key challenges but were judged to be either part of broader work streams such as the Health Sector Strategic Planning II or the National Community Health Strategy or already incorporated into adjacent programs, such as EPI, were excluded from the list. Thus, the activities identified here are those which are critical for improved and sustainable iCCM delivery and not already confirmed or belonging to other MOH initiatives.

Stakeholders: Stakeholders from within the MOH at a National and District level are assigned to lead each activity identified. While no activity can be done completely independently, the stakeholders identified are the ones responsible for leading the work, bringing together key partners, raising the issues, and monitoring progress on that respective activity. The primary stakeholders identified are the IMCI team, the cPHC team, and the District teams.

Benchmarks: Each priority issue has a related benchmark. The iCCM benchmarks are in line with the implementation strength indicators and appear as a set of follow up actions to assist in measuring progress of activities undertaken. These activities and actions to measure progress will be done in liaison with the primary coordination units of IMCI, and cPHC, Different activities both as part of this roadmap as well as part of other processes may contribute, but ultimately the MOH will react to and make decisions based on where things are improving and where issues persist for sustainable and improved iCCM.

Using this Roadmap: The roadmap will be used across all stakeholders to understand their role in working on the priorities for improving and sustaining iCCM services. Implementation of the Roadmap will emphasize and put much efforts on the interventions and issues that have been determined to be most important to iCCM within the context of Malawi's broader health system. The IMCI team own this document and will use it to guide, coordinate, and monitor progress on the key initiatives. The twelve priority issues, in order of importance, the activities, and the benchmarks are listed below. The following sub-sections are broken out by key stakeholder to recognize their respective role and responsibility in the five-year roadmap.

Issue	Activity (start Year)	Benchmark
	Lobby district council and stakeholders to support structure	Residency Rate
	construction (Y1)	# village clinic structures
	Mobilize communities to construct homes and clinics (Y1)	• # of homes constructed
1. HSAs residing outside	Review and reinforce policy on residency for HSAs (Y1)	Policy reviewed and
catchment area	Review recruitment policy and district deployment strategy	reinforced
	(Y2)	• #of HSAs homes with solar
	Introduce hardship allowance (Y3)	• # of stakeholders supporting
	Provide solar to HSA homes (Y4)	infrastructure
	Develop integrated supervision checklist based on core indicators (Y1)	% of HSAs supervised quarterly
	Allocate funding for maintenance of vehicles (Y2 annual)	% of integrated supervision
2. Insufficient	Launch integrated supervision and strengthen mentorship	conducted
monitoring and supervision	(Y2)	Number of facilities with
Supervision	Review HR policy and retention in relation to supervisors and	active Mentors
	mentors (Y3)	Number of providers
		mentored by quarter
	Work with Telco companies (TNM/Airtel) on coverage to	% village clinics reporting on
	increase band width (Y1)	time and on stock outs
	Work with HSAs by training them in community medicines	Revised LMIS stocks with
3. Lack of medicines	forecasting (Y1)	Village Clinic drugs included
availability	Health facilities include HSA needs in medicines forecast (Y1) Catach is abude a health facility agreement this (Y2)	# village clinics with functional actuals
	C-stock includes health facility commodities (Y2) Descript I NAIG to include a commodity description (Y2)	functional c-stock
	Revise LMIS to include community drugs (Y3) The graph of property drugs graphs at the path facility.	
	Integrate community drug procurement at health facility level (Y3)	
	Incorporate data quality assessment into supervision (Y1)	# of providers trained and
	Create data validation checks in DHIS2 (Y1)	refreshed on data
	Incorporate M&E better into training curriculum and	management
4. Low data quality	refreshers (Y2)	Revised supervision checklist
	Bring in use of data display template (Y3)	to include DQA
	Review meetings on data management and DHIS2 (Y2)	 Proportion of HSA using data charts
	Increase training of HSAs on iCCM (Y1)	# of HSAs practicing iCCM in
	Introduce and scale up multimedia iCCM training platform	5km catchment areas
	(Y2)	Revised TOR disseminated
5. Low community	Review and orient VHCs on their TORs/SOW (Y1)	Proportion of VDCs/VHC
utilization of iCCM	Orientation on the role of iCCM at community level to VHC/VDC (Y2)	oriented in iCCM
	Improve coordination between clinical and environmental	
	health at all levels (Y2)	

6. Lack of Local Govt ownership in a decentralized system	 Community mobilization on iCCM of chiefs, elders, and general population (Y1) More inclusion of ADC/VDC through training and mobilization (Y2) Reach out to ward counsellors to support clinics (Y2) Consistent and sustained iCCM funding at national level (Y3) 	Political structures strengthened
7. HSAs not trained in other community health programs	 Developed targeted training and coordinated schedule to package service delivery of country (Y2) 	 Proportion of iCCM HSAs trained in other community health programs
8. Lack of quality assessment of services	Integrated job aids developed and distributed (Y2)	 % integrated supervision conducted # integrated Job aids developed distributed No of programs in integration
9. Inefficient referral system	 Development of referral duplicate booklets and distribution (Y1) HSAs make follow ups with clinicians/nurses (Y1) Nurses/clinicians orientated on referral and feedback (Y1) Integrate HSA services on referral forms (Y2) mHealth/digital health for community and referral system developed and harmonised (Y3) Provision of bicycles for Village Health Committees (Y4) 	 Proportion of assisted referrals done Proportion of feedback received Proportion of referral duplicate books developed and distributed Proportion of clinicians / nurses oriented
10. Lack of HSA transport	 Create database of HSA transport data (Y1) Provide HSAs with more durable bikes (Y2) Provide spare parts for bicycles (Y2 annual) Create transport policy guidelines (Y2) Integrate HSA material & supply provision (Y3) Motorbikes for supervisors (Y4) 	 Proportion of HSAs provided with durable bicycles # of spare parts provided % of Senior HSAs with motorbikes
11. Uncoordinated implementation by partners	 Complete consultation between stakeholders and IMCI unit quarterly (Y1) Reinforce buy-in of MoH strategies by partners quarterly (Y1) 	 # of review meetings conducted between MOH and partners # of partners participating in TWGs
12. Community mobilization and communication	Improve HEU coordination Ensure community mobilization is part of supervision monitoring Reporting tools for community mobilization Develop and distribute BCC tools for iCCM	Community mobilization reporting tools developed and in place # of ICCM BCC tools developed and distributed

V.2 Prioritized Issues

V.2.1 HSA's in Catchment Area

The largest issue identified across stakeholders was consistently the challenge of HSA's residing outside their catchment areas. 51% of HSAs currently reside outside their catchment areas seriously undermining efforts to build relationships and trust with communities, be available for hosting and communicating village clinics, responding to acute child illness, and conducting home visits. Addressing the challenge of HSAs residing in catchment areas will require a multi-faceted approach with some activities represented and led through the iCCM roadmap while others are supported through other initiatives complementing these. These activities will primarily be led at a **District** and **cPHC** level and IMCI will provide relevant data that supports addressing the issue. This should begin immediately through District and community level engagement, commitment, and policy work.

We acknowledge that these activities have been tried before within IMCI unit. We however note that the HSAs residency issue is not directly an IMCI unit issue but cPHC issue which has just been re-established in MoH. They are carrying out a situation analysis to develop a community health strategy for which the activities highlighted in this section will be addressed. The community health strategy is expected to be ready by September 2017.

Hence, we found it necessary to repeat these same interventions with understanding that the platform of approach will be different

V.2.2 Insufficient Monitoring and Supervision

Monitoring and supervision are critical to ensure consistent and quality service delivery at community level as well as supporting motivation and engagement with HSAs. Unfortunately, fragmented supervision approaches and insufficient transport resources undermine efforts to conduct supervision. This issue will also be addressed through **cPHC** leadership who will develop integrated supervision approaches and **Districts** will mobilize, manage, and implement resources efficiently for integrated supervision.

V.2.3 Medicines Availability

iCCM's value to the community is highly dependent on drug availability to enable the delivery of basic curative services for under-five populations for issues such as Malaria, diarrhea and more. Without drugs and supplies HSA's are not as likely to host village clinics and community members are less likely to turn to them for solutions when they are consistently greeted with drug outages. Addressing challenges around drug availability is seen as a systems and coordination challenge with **IMCI**, **HTSS**, and **Districts** playing a leading role to better integrate parallel country supply chain systems, improve digital drug stock recording and ordering capacity, and incorporate community demand and usage into the broader health system more consistently.

V.2.4 Data Quality

Data quality was recognized as a challenge preventing both better health service delivery in addition to better allocation and management of resources. Addressing data quality issues begins with incorporating data quality assessment into supervision visits while also creating data validation checks with DHIS 2, Malawi's official health information system. Training on data quality and M&E practices should be better incorporated into HSA and related health worker curriculums and refresher courses. This task will be led by IMCI and cPHC but will be supported by CMED and districts for implementation and monitoring.

V.2.5 Low Utilization of iCCM by Community

Drivers of low utilization of iCCM by communities include both low access and low demand. Increased numbers of HSAs trained in iCCM, deployed, and residing in hard-to-reach areas can reduce some of the access barriers while orientation of communities and key community structures, such as Village Health Committees, can improve the demand for iCCM. This work will be led primarily by **IMCI** and the **Districts**. Community PHC will ensure that governance issues affecting HSAs work are being addressed, e.g. task shifting and HSAs competing priorities as well as HSAs work load.

V.2.6 Lack of Local Government ownership in a Decentralized system

Political will is vital to creating a sustainable iCCM model in Malawi where the delivery of iCCM services is prioritized and domestic resources are allocated to support implementation. This can be addressed through community mobilization, key local stakeholder group trainings, and advocacy at all government levels (national, district, area). These efforts will be led by **Districts** and **IMCI**.

V.2.7 HSA Program Training

HSA's have a wide range of responsibilities that include iCCM hence task shifting was adopted. Ensuring that HSA trainings are coordinated and that Malawi has a consistent, well-trained workforce to deliver iCCM and other interventions across the country is essential to achieving health equity. To do this, the **cPHC** team will coordinate targeted training where needed for the appropriate package of service delivery in Malawi.

V.2.8 Quality Assessment for Services

Quality assessment of services will come from quality of care assessment, data quality assessments, review meetings, mentorship and integrated supervision but there is also a need for an integrated job aid that can better prepare and guide HSA's with the significant workload and responsibilities they are managing. This integrated job aid will be led by **IMCI** but supported closely by cPHC and others.

V.2.9 Inefficient Referral System

iCCM must support the continuum of care especially for those in the most hard-to-reach areas and with this comes maintaining a quality and functioning referral system which is a real challenge. Activities identified to improve the situation include increasing the number of referral booklets available, improving coordination between HSA's and clinicians/nurses, revising referral forms to integrate HSA services, and eventually developing a mobile health referral system are. These activities will be led by **IMCI** and the **districts**.

V.2.10 HSA Transport

For the successful implementation of community health services and specifically iCCM, HSAs are required to travel significant distances to cover their catchment areas, conduct home visits, collect drugs and iCCM materials from health facilities, and travel to village clinics and outreach clinics. Completing the range of responsibilities placed on HSAs without sufficient means of transport is not realistic and will be addressed through identification of where most critical transport gaps are, securing means of transport for community activities, and developing policies to sustain and enforce this. These activities will be led by **cPHC**, **IMCI**, and the **districts**.

V.2.11 Uncoordinated Partner Implementation

A number of stakeholders are involved in iCCM delivery both within the Malawi government health system and with implementing partners, funding partners, educational institutions, local government, and more. **IMCI** will be responsible for planning and coordinating the appropriate forums to bring these players together to ensure an organized and efficient use of resources and knowledge sharing.

V.2.12 Community Mobilization and Communication

Community mobilization and communication will improve community ownership of iCCM programs and support the sustainability of their delivery. Improved coordination with the Health Education Unit, including community mobilization as part of integrated supervision, and developing reporting tools to track mobilization activities will all improve this. These activities will be led by **cPHC**, **IMCI**, and **HEU**.

V.2 IMCI Unit

IMCI unit is a section that manages most of child health issues within the Ministry of Health. It is responsible for the planning, facilitation, and coordination of IMCI activities and oversight of iCCM in Malawi. The MoH IMCI team at national level works with IMCI coordinators in every district on issues of iCCM management and delivery. As the lead on iCCM, IMCI will be involved in all activities relating to sustainability and improvement of services. However, some of these activities will be led by other stakeholders including the individual districts, the community-based Primary Health Care team, and more. The activities outlined here are those specifically to be led and coordinated through the national IMCI team. The successful delivery of iCCM countrywide requires system support and thus it is important to recognize that IMCI will not work independently on these activities and will still need to work with key partners both within and outside the MoH.

Year 1 - 2017			
Activities to be led by IMCI	Activities to date (existing)	Key Partners	Issue Addressed
Work with TNM and Airtel to address coverage and bandwidth challenges interfering with c-Stock functionality	IMCI already in discussions with both companies on improving bandwidth	IMCI, Telco companies, supporting partners	Drug Availability
Begin incorporating data quality assessments into all supportive supervision activity	Data collection review is done intermittently as part of iCCM supervision	IMCI, District, IMCI Coordinators, HMIS Coordinators	Data Quality
Create data validation checks in DHIS 2 to identify and correct data quality issues and improve usage of DHIS 2 and coordination with CMED	iCCM data management training for HMIS officers, sHSAs, and mentors	IMCI, CMED, DHMTs	Data Quality
Increase training of HSAs on iCCM with existing support from Global Fund to ensure all HSAs in hard-to-reach areas are trained	Global Fund resources already in place and HSA basic trainings done in 2016	IMCI, cPHC, World Vision	Low utilization by community
Develop, produce, and disseminate referral and duplicate booklets to for HSAs	Loose paper based reporting is in place. HSAs are also encouraged to document in the health passport in the absence of referral forms	IMCI, District IMCI Coordinators	Inefficient referral system
Emphasize importance of HSAs making follow ups with clinicians and nurses	District based review meetings, supervision and mentorship are periodically done	IMCI, District IMCI Coordinators, cPHC	Inefficient referral system
Plan, host, and ensure complete consultation of stakeholders and IMCI unit quarterly	Currently a Child Health IMCI sub-TWG meant to meet quarterly	IMCI, All relevant IMCI stakeholders	Uncoordinated implementation by partners
Reinforce core MoH strategies and policies with iCCM stakeholders	Currently a Child Health IMCI sub-TWG meant to meet quarterly	IMCI, All relevant IMCI stakeholders	Uncoordinated implementation by partners
Ensure community mobilization is part of support supervision activity	Community mobilization supervision is done separately or not at all	IMCI, HEU, District IMCI Coordinators	Community mobilization, communication

Year 2 - 2018			
Activities to be led by IMCI	Activities to date (existing)	Key Partners	Issue Addressed
Incorporate health facility commodities into c-Stock to integrate supply chain management and data systems	Discussion initiated to introduce digital health integrated package on supply chain DPAT and HPAT meetings	IMCI, HTSS, CMED, EPI, Districts. HealthEnabled	Drug Availability
Develop an integrated job aid for HSAs to improve quality and consistency of service delivery	District based review meetings and supervision	IMCI, cPHC, Environmental Health, Districts	Quality Assessment for Services
Develop revised referral forms that integrate HSA services	Loose paper based referral for danger signs of sick children	IMCI, cPHC, Districts	Inefficient referral system
Mobilize support and resources to provide HSAs with more durable bicycles	Procurements based on mapping of support from different partners	IMCI, cPHC, Districts	HSA Transport

Year 3 - 2019			
Activities to be led by IMCI	Activities to date (existing)	Key Partners	Issue Addressed
Revise logistics management information system to include community drugs	Form 1A and 1B reporting forms used by iCCM HSAs	IMCI, HTSS, CMED, Districts	Drug Availability
Integrated community drug procurement at health facility level	Complimentary procurement by partners, Centralized CMST procurements for DHMTs	IMCI, HTSS, Districts	Drug Availability
Develop and implement use of data display template for all levels of health system	Data templates in few districts	IMCI, CMED, cPHC	Data Quality
Develop and launch mHealth/digital referral system	Referral is done through individual facilitated arrangements	IMCI, CMED, cPHC, Districts	Inefficient referral system
Integrate material and supply provision for HSAs	HSAs deployed and supported vertically by mapped partners	IMCI, HTSS, cPHC, Districts	HSA Transport

Years 4-5 – 2020-21			
Activities to be led by IMCI	Activities to date (existing)	Key Partners	Issue Addressed
Achieve consistent funding for iCCM at national level	Vertical partner mapped funding	IMCI, Planning unit- MoH	Lack of Local Government ownership
Secure motorbikes for supervisors	Provision based on mapped partners	IMCI, CPHC, Environmental Health	HSA Transport

V.3 Community-based Primary Health Care (cPHC) Unit

The cPHC unit housed in the Ministry in the Health is responsible for ensuring consistent, integrated quality of services at the community level and thus is the leader within the MoH in coordinating and planning across programs for community level activity in addition to developing policies, guidelines, and strategies for community health in Malawi. In this role, cPHC will be vital to supporting cross-program coordination and activities that support both iCCM specifically as well as community health systems strengthening more broadly.

Year 1: 2017			
Activities to be led by cPHC	Activities to date (existing)	Key MoH Partners	Issue Addressed
HSA Residency MoH / HR Policy	Issue also identified in HSSP process	IMCI, HR, Environmental Health, Districts	HSAs residing in catchment area
Develop integrated Supervision Checklist	cPHC and UNICEF have begun this work	IMCI, EPI, Environmental Health, Nutrition	Insufficient monitoring and supervision
Create Database of HSA transport information	cPHC creating a database that includes transport access info	Districts, IMCI	HSA Transport
Improve HEU Coordination	Issue identified and discussed in Communication strategy	HEU, IMCI	Community mobilization and communication

Year 2: 2018			
Activities to be led by cPHC	Activities to date (existing)	Key MoH Partners	Issue Addressed
Incorporate M&E better into training curriculum and refreshers	Support for this initiative include in GAVI proposal from EPI	CMED, IMCI, EPI, Environmental Health, Nutrition, RHU	Data Quality
Targeted training to package service delivery across the country	Support for this initiative include in GAVI proposal from EPI	IMCI, EPI, Environmental Health, Nutrition, RHU, Districts	HSAs not trained in other community health programs
Create transport policy guidelines		HR, Planning	HSA Transport

Year 3 -5: 2019-2021					
Activities to be led by cPHC	Activities to date (existing)	Key Partners	Issue Addressed		
Introduce hardship allowance	No motivation arrangements other than programmatic system supports eg backpacks etc	HR, Districts, Stakeholders, IMCI	HSAs residing in catchment area		
Review HR policy and retention (in relation to supervisors and mentors)	Issue identified in HSSP process	HR, Planning, IMCI	Insufficient monitoring and supervision		

V.4 District

The MoH's policy of decentralization means districts have significant autonomy and responsibility for operationalizing the implementation of community health services. Commitment and participation from DHMT's, IMCI coordinators, and other players at a district level are absolutely essential to the success of iCCM. They are closest to the communities, best understand local context, and maintain connections with community and local government stakeholders.

Year 1 - 2017					
Activities to be led by Districts	Activities to date (existing)	Key Partners	Issue Addressed		
Lobby district council and stakeholders to support (LDF) structure construction	Many communities have already self-contributed to construction of homes and clinics	cPHC, HEU, MoLGRD, IMCI	HSAs residing in catchment area		
Communities mobilized to construct homes and clinics	Many communities have already self-contributed to construction of homes and clinics	cPHC, HEU, MoLGRD, IMCI	HSAs residing in catchment area		
Work with HSAs for community forecasting	Centralized approach to forecasting	IMCI, HTSS	Drug Availability		
Review and orient Village Health Committees on their TORs / SOW	MSF working on community capacity building	IMCI, cPHC	Low utilization by community		
Community mobilization on iCCM for chiefs, elders, and general population	MSF working on community capacity building SSDI Communication	cPHC, HEU, MoLGRD, IMCI	Lack of Local Government ownership		
Orientation of nurses/clinicians on referral and feedback	Mentorship for targeted health centre staff is currently done	cPHC, Nursing, Clinical, IMCI	Inefficient referral system		

Year 2 – 2018					
Activities to be led by Districts	Activities to date (existing)	Key Partners	Issue Addressed		
District deployment strategy	DHMTs responsibility but not fully decentralised	cPHC, IMCI, HR	HSAs residing in catchment area		
Allocate funding for maintenance of vehicles (annually)	Pool funding	МоН	Insufficient monitoring and supervision		
Integrated supervision	Joint MNCH supervision checklist is currently used cPHC working with UNICEF to develop integrated supervision checklist and curriculum	RHD, cPHC, IMCI	Insufficient monitoring and supervision		
Orientation on the role of iCCM at community level Village Health Committee and Village Development Committee	Sensitization and adhoc VHC meetings	IMCI, HEU	Low utilization by community		

Improve coordination between clinical and environmental health at all levels	Ad-hoc meetings take place	cPHC, Environmental Health, Clinical, IMCI	Low utilization by community
More inclusion of ADC/VDC through training and mobilization	Sensitization and adhoc VHC meetings	IMCI, HEU, cPHC, MoLGRD	Lack of Local Government ownership
Reach out to ward counsellors to support clinics	DHMTs share updates and progress at DEC meetings	MoLGRD, IMCI	Lack of Local Government ownership
Provide spare parts for bicycles (annually)		IMCI, cPHC	HSA Transport

Year 3 – 5: 2019-2021					
Activities to be led by Districts	Key Partners	Issue Addressed			
Districts providing solar to HSA homes	Partner and self-supported by HSAs	Cphc, IMCI	HSAs residing in catchment areas		
Provision of bicycles for Village Health Committees	Partner mapped based procurement is done	IMCI, cPHC	Inefficient referral system		

V.5 Other MoH National Stakeholders

Many national stakeholders within the MoH are both directly and indirectly involved with iCCM delivery and must continue to support efforts to ensure sustainability of the programme. HTSS will need to work closely with IMCI to move towards a more integrated supply chain that incorporates community level service delivery. HEU should work closely with both cPHC and IMCI to develop communication materials and communicate with communities about iCCM. CMED should work closely with IMCI, districts, and others to improve data quality at the community level and to ensure that data is accessible to improve decision making and service delivery. Other national stakeholders such as Environmental Health, EPI, and nutrition are also critical contributors and partners in the delivery of community health broadly and iCCM specifically. Their contributions have been crucial to the development of this roadmap and will be needed into the future. Any MoH group seeking to support or coordinate with iCCM should also refer to the priority issues and activities for guidance on which groups should be coordinated with and what activities have been considered important to pursue.

Year 1 – 2: 2017-2018						
Activities to be led by other MoH National stakeholders	Activities to date (existing)	Key Partners	Issue Addressed			
Health Facilities include HSA needs in medicines forecasts (HTSS)	Centralized forecasting meetings by HTSS	HTSS, IMCI, cPHC, Districts, planning	Drug Availability			
Reporting tools for community mobilization activities (HEU)	Program specific targeted tools used to mobilization activities	cPHC, IMCI, Districts	Community Mobilization and Communication			

V.6 Development Partners

iCCM delivery would not be possible without the continuous and integral support from development partners. The RACE project itself was possible because of input, guidance, and resources through WHO and Save the Children while many other development partners have played vital roles in the success of iCCM. All of their support will continue to be vital in order to improve iCCM and ensure it remains in place. Development partners are encouraged to use this Roadmap as a guide for where resources are needed, what activities are prioritized, and what groups they can work with to contribute to iCCM's sustainability.

VI. Key Indicators

The Ministry of Health recognizes use of various systems that are in place to effectively monitor progress of is programs. District Health Information Systems (DHIS2) is one of the many systems, the Malawi Ministry of Health uses to collect, validate, analyse, and present routine data for Health programs. IMCI unit benefits from using this tool to monitor progress of its activities at community level. Data are collected on monthly, quarterly and annual basis. The primary data collectors for IMCI are Health Surveillance Assistants (HSAs), they send data to health facility where they report and the senior HSA consolidates and send it to the district where it is captured for visibility into DHIS2.

Below is a snapshot of the indicators which are monitored during the above mentioned periods using the data being collected by the HSAs.

Routine Monitoring Indicators – MEASURING IMPLEMENTATION STRENGTH

Indicator	Definition	No of HSAs	No of HSAs	No of HSAs	Frequency of collection
		2014	2015	2016	Quarterly
HSAs available (deployed)	No of HSAs working at the time of assessment in the district	9907	9907	9907	Quarterly
HSAs trained in CCM	Number of HSAs trained in iCCM and deployed in the district	4572	4589	4589	Quarterly
Hard-to reach areas for CCM trained HSAs	No of HSAs areas that are 5km radius or more, geographical terrain for iCCM sites	4610	4610	6650	Quarterly
All CCM trained HSAs available and work in hard-to reach areas	No of iCCM trained HSAs working in hard to reach areas of the district	3190	3220	3631	Quarterly

ICCM HSAs with		No of HSAs w		319	90	3220)	3631		Quarter	ly
key drugs and s		adequate sto	cks of drug	gs							
the last 3 mont	•										
outs in last 7 da	iys)										
iCCM HSAs supe	ervised in	No of iCCM tr	ained HSA	s 183	32	1896	5	2372		Quarter	ly
the last 3 mont	hs	supervised in	the distri	ct							
iCCM HSAs mer	ntored in	No of HSAs cl	inical skill	s 982)	1459	<u> </u>	1614		Quarter	lv
the last 3 mont		supported by		3 30.	_	145	,	1014		Quarter	ıy
the last 3 mone	115	centre staff	ricaren								
		FEVER C	ASES		DIARRI	HEA CAS	ES	FAST BI	REATHING	G CASES	
Indicator		2014	2015	2016	2014	2015	2016	2014	2015	2016	
maioaio.								-0			
No of cases seen	No of sick	1245237	1228770	95250	269966	26501	197496	716526	670175	456699	Mont
each month by	children seen,			5		2					hly/Q
major condition	assessed by iCo										uarter
	diarrhea, fever	-									ly
	fast breathing	,									
No of cases	No of sick	1196286	1097339	77575	235187	22464	150178	671887	614384	414164	Mont
treated each	children receiv	ring		6		7					hly/Q
month by major	medicines by										uarter
condition	assessed conditions by										ly
	trained iCCM										
	HSAs										
No of cases	No of children	87564	131431	17674	34779	40365	47318	44639	55791	42535	Mont
referred each	with danger sig	gns		9							hly/Q
month by major	sent to neares	t									uarter
condition	health facility										ly

Most of these indicators are measured every 5 years for Malawi Demographic Health Surveys (MDHS) or 3 years for Multiple Indicator Cluster Surveys (MICS), below is the list of indicators that are used to measure progress on impact and outcome indicators in Malawi for IMCI

Impact indicators

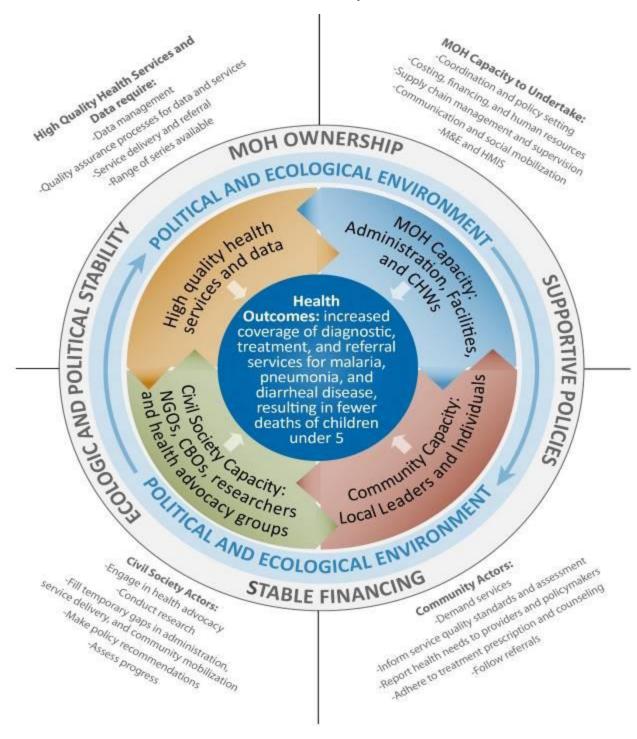
Indicator Name	Definition	Baseline Values	Target – 2021	Data Source	Frequency of collection
Neonatal mortality rate (NMR	Number of deaths during the first 28 days of life per 1000 live births in the last 5 years	27 per 1,000 live births	22 per 1,000	MDHS (survey- based)	3 to 5 years
Infant mortality rate (IMR)	Probability of a child born in a specific year or period dying before reaching the age of one year, if subject to age-specific mortality rates of that period.	42 per 1,000 live births	34 per 1,000	MDHS (survey- based)	3 to 5 years
Under-five mortality rate (U5MR) (survey- based)	Probability of a child born in a specific year or period dying before reaching the age of five, if subject to agespecific mortality rates of that period.	64 per 1,000 live births	48 per 1,000	MDHS (survey- based)	3 to 5 years

OUTCOME INDICATORS

Children under five years of age with diarrhoea receiving oral rehydration salts (ORS) packets	Percentage of children under five with diarrhoea in the past two weeks receiving oral rehydration salts (ORS) packets	64.7%	85%	MDHS, Child Health Strategy	3 to 5 years
Children under five years of age with diarrhoea receiving oral rehydration salts (ORS) packets and Zinc	Percentage of children under five with diarrhoea in the past two weeks receiving any oral rehydration salts (ORS) packets and Zinc	24.4%	No data	MDHS	3 to 5 years
Children under five years of age with diarrhoea receiving Zinc	Percentage of children under five with diarrhoea in the past two weeks receiving Zinc	28.1%	No data	MDHS	3 to 5 years
Children under five with diarrhoea for whom treatment was sought from a health facility/ provider2	Percentage of children under five with diarrhoea for whom treatment was sought from a health facility/ provider2	58.1%	NO data	MDHS	3 to 5 years

Appendix 1

RAcE Sustainability Framework



RACE Sustainability Framework Description

Each of the Components of the Sustainability Framework for RACE is explained in more detail below.

Component 1 (center of framework): **Health Outcomes**



In order to sustain increased coverage of diagnostic, treatment, and referral services for malaria, pneumonia, and diarrheal disease, resulting in fewer deaths of children under five, we need to ensure each of the following components.

Component 2 (upper left corner): High Quality Health Services and Data



High-quality iCCM health services and data result from data management, quality assurance processes for reporting and service delivery, and the availability and range of services.

Component 3 (upper right corner): **MOH Capacity**



MOH capacity to manage and deliver iCCM services, includes: coordination and planning, costing and financing, human resources, supply chain management, communication and social mobilization, supervision, monitoring and evaluation.

Component 4(lower left corner): Civil Society Capacity



Civil society capacity includes the ability to engage with the MOH and other stakeholders in order to continually assess progress, fill gaps in service delivery and community engagement, conduct research, and make policy recommendations.

Component 5 (lower right corner): Community Capacity



Community capacity includes the ability to use services, inform health service quality standards, engage with health providers about service needs, follow referrals, and adhere to treatment prescription and counseling.

Component 6 (outer circle): **Political and Ecological Environment**



A supportive political and ecological environment is characterized by a high degree of MOH ownership of the iCCM program, supportive policies, stable financing and a low likelihood of unmanageable ecological "shocks" to the local system, such as weather events that damage food supplies and increase susceptibility to infectious disease through increased mosquito vectors or damaged water systems.

Appendix 2

Roadmap and Transition Planning Workshop Proceedings

Rapporteur Notes for Day One

Opening remarks were provided by chairperson, Mr. Humphreys Nsona, IMCI Unit Manager, for the first part of the morning before tea break. In his remarks, he emphasized that it is important for the participants to look into the following topics:

- Coverage of diagnostic, treatment, and referral services
- Achievement of high-quality iCCM health services and data management
- Definition of functionality of village clinics and the challenges of this functionality, such as the residency of health surveillance assistants (HSA)
- Community engagement and capacity, including the ability to use services, engage with HSAs and health services providers about service needs, follow referrals, and adhere to treatment prescription and counselling

Keynote speakers

The following speakers gave keynote messages.

David Melody, Director of Health and Nutrition, Save the Children

- Malawi has made tremendous progress in reaching children with iCCM, especially those in hard-to-reach areas.
- Partnerships are key to enhancing positive results in iCCM.
- MOH leadership has been crucial, and it still needs to play an important role to ensure that sustainability is achieved.
- Malawi needs to sustain the gains made so far as a country; however, financing still remains a big challenge.
- Outside forces like hunger and a lack of accountability by other government systems continue to pose a challenge to the success being registered.

Dr. Leslie Mgalula, World Health Organization

- Malawi has made a lot of progress in improving access to treatment for children, as evidenced by the
 attainment of Millennium Development Goal 3, as well as the many studies that have been conducted
 on access to treatment.
- WHO is interested and committed to working with MOH and partners to ensure that access to treatment continues to improve.
- Funding is inadequate for evidence-based interventions, such as iCCM, which poses a direct threat to the progress that has been made so far.
- Commended the hard work and effort put in by all the stakeholders in iCCM.

Mrs. Emma Mabvumbe, MOH Director of Planning, guest of honour

 Thanked everyone for accepting invitations and discussed the important issues surrounding iCCM in Malawi.

- The iCCM approach is a critical program for MOH and it is integral to improving child health outcomes in Malawi.
- MOH recognizes the role that child health projects are playing in improving child health outcomes in Malawi.
- While progress has been made in recent years in children's access to healthcare coverage through village clinics under the IMCI unit, there's still a gap in healthcare access, particularly in hard-to-reach areas.
- Acknowledged the financial and technical support received from WHO through the Save the Children Rapid Access Expansion (RAcE) iCCM programme.
- To achieve desired child health outcomes in Malawi in the next five years, the following components need to be considered:
 - Coverage of diagnostic, treatment, and referral services
 - o Achievement of high-quality iCCM health services and data management
 - Definition of functionality of village clinics and the challenges of this functionality, such as HSA
 - residency o Community engagement and capacity, including the ability to use services, engage with HSAs and health services providers about service needs, follow referrals, and adhere to treatment prescription and counselling
- Assured participants of the continued commitment of MOH to work with all the partners and provide the required leadership.

Presentations

- Objectives of the meeting
- Current iCCM update, presented by Mr. Humphreys Nsona
- Introduction to sustainability framework, presented by Ms.
 Sharon Arscott-Mills
- Group work: Vision of iCCM by 2021

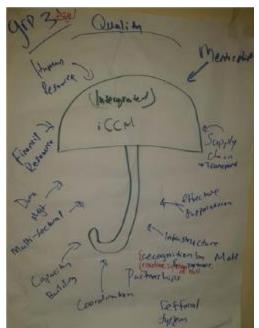
Groups were asked to create a vision of what they would want iCCM in Malawi to look like in 2021. Four groups were formed using random selection. Following are the visions from each group.

Group 1

Group 1 stated its vision for iCCM in the next five years is the reduction in under five mortality and listed the following components:

- Coverage: 95% functional and integrated
- Equity: everyone should have access, with full coverage 24/7
- Quality of service delivery





- · Total institutionalization of iCCM by MOH, including financial, human resources, and commodities
- Increased community engagement, Treatment seeking, Demand creation, Engagement of service providers, Prevention through normative behaviour promotion, Support for Village Health Committees (VHCs) such as housing

Group 2

Group 2 presented its vision in a diagram, with the following components:

- · Functional village clinics
- HSAs based at the clinic 24/7
- Community involvement in running the clinic
- Adequate drug supply
- · Functional referral system
- Supervision of HSAs
- Data quality and improved documentation
- Linkage among HSAs

Group 3

This group presented a diagram, similar to an umbrella, to represent an iCCM vision, with these components:

- Quality services
- Functional supply chain system
- Effective supervision
- · Good infrastructure
- Recognition by MOH and partners (routine system of MOH)
- High-quality referral system
- Proper coordination
- Capacity-building efforts
- Data management
- Multi-sectoral
- Available financial and human resources

Group 4

This group presented its vision for iCCM, with the following components:

- Ownership by the community
- Building of health post or clinic for iCCM
- 24/7 provision of services
- · Consistent drug supply
- 5 km coverage
- 100% training of HSAs
- Quality and timely reports

The group discussed the enablers of the vision as:

- Accommodation
- · Waste management
- Consistent drug supply
- Cordial working relationship with Village Development Committee

After the tea break, the groups discussed transition readiness, and each group was given a specific component for focus. The groups then completed roadmaps for their particular health system component, such as high-quality health services and data, and they listed the issues discussed and benchmarks to know that they have addressed the issue.

Roadmap template, sample section

High quality health services and data					
Issue	Benchmark				
In this column enter the issues that need to be addressed between now and March 31, 2017. Add more lines as needed.	Create a benchmark. How will you know you have progressed toward a sustainable iCCM program?				
•	•				
•	•				
•	•				
Describe the issues that need to be addressed in the next phase. Add more lines as needed.	Create a benchmark. How will you know you have progressed toward a sustainable iCCM program?				
•	•				
•	•				

During the lunch break, the group inputs were combined to incorporate the components, issues identified, and benchmarks. Each group shared their findings back to the larger group.

Day one review

- · The meeting started an hour late, which resulted in some sessions being rushed
- Participation was strong
- · The meeting presented no logistical challenges
- All objectives set for this day were met
- Participants in the day one meeting agreed that participants in the days two and three meeting should arrive at a vision statement before the day one vision was shared with them
- Participants agreed that the specific areas and gaps that need to be addressed in the next five years should be incorporated in the transition plan and roadmap

Day Two Rapporteur Notes

Following are the three objectives for days two and three:

- 1. To develop a shared vision for the future of iCCM in Malawi
- 2. To draft a roadmap for how to achieve the vision of iCCM
- 3. To create a draft transition plan in support of the roadmap for transitioning the RACE programme to MOH

David Melody, Dr. Leslie Mgalula, and Dr. Ben Chilima, Deputy Director of Public Health Laboratories, Preventive Health Services Department, gave opening remarks, which included the following points:

- Acknowledgment of the great work of all stakeholders in the area of child health
 Partnership as key
- Need for continued service delivery beyond 2017
- "Group of excellency" in child health
- Partners commitment to support child health in Malawi
- The solution to child health issues lies with each of us
- Assurance of MOH commitment to work with everyone
- Promise of continued fight until iCCM is fully implemented

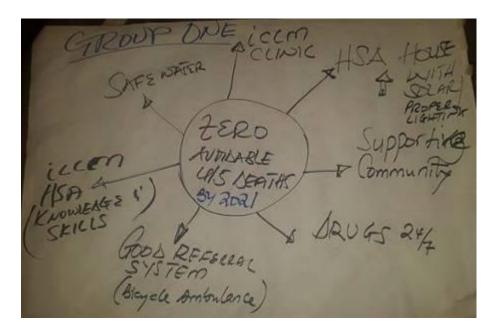
Mr. Nsona presented an overview of iCCM overview (See Attachment 3) and Mr. Emmanuel Chimbalanga gave a presentation on the RACE program and its results (See Attachment 4).

After the tea break, Ms. Arscott-Mills presented on the sustainability framework (See Attachment 2). District participants were divided into six groups and asked to come up with a vision for iCCM by 2021. The visions from each of the six groups follows.

Group 1

Group 1 presented its vision in a diagram, with the outcome at the center in a circle and all the components on the outside, joined by an arrow to the outcome in the center:

- By 2021, to attain zero avoidable under five deaths, all HSAs in hard-to-reach areas
 - should be trained in iCCM
 - reside in the catchment area with a good house
 - be supplied with adequate drugs
 - rely on a good referral system within a supportive community



Group 2

Group 2 presented its vision with the following components:

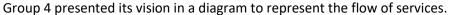
- 100% of iCCM providers (HSAs) residing in their catchment areas
- 100% of essential medicines and medical supplies in stock at every village clinic
- Strengthened and functioning village health clinics and village committees to support iCCM (referral system, infrastructure, water availability, sanitary facilities)
- 100% of iCCM sites supervised and 100% of providers mentored in a quarter
- All trained HSAs should be practicing
- 100% of mapped and established iCCM sites should be functional
- Practicing HSAs use their data for planning and commodity ordering
- iCCM tools, such as registers and reporting forms, are available

Group 3

Group 3 presented its vision, with the following components:

- All hard-to-reach areas will have a village clinic
- · Have an empowered community that can demand health projects in all hard-to-reach areas
- Every village clinic will have at least two HSAs
- All clinics will have an uninterrupted drug supply and well-developed structures
- All village clinics will have proper referral systems, such as one ambulance per village clinic
- All village clinic providers will be well motivated financially
- Village clinics and communities will use data and information generated at their facility
- Every village clinic will be supported by a community nurse

Group 4





Group 5

Group 5 presented its vision, with the following components:

- 100% of HSAs should be residing in their catchments areas
- Improved supplies in village clinics, such as drugs and diagnostic materials
- Fully integration of iCCM in MOH activities

Group 6

Group 6 presented its vision, with the following components:

- Increased accessibility of iCCM services
- All HSAs to reside in their catchment areas.
- Ensure all sick children under five receive treatment within 24 hours of onset of illness
- Community empowerment to demand and use iCCM services
- Political will to support iCCM

The visions from the two workshops were merged in the following vision statement:

Our vision for iCCM in Malawi is that by 2021 all children under five with pneumonia, diarrhoea, and malaria in hard-to-reach areas receive prompt treatment around the clock from an HSA who is:

-trained, equipped, resourced, supervised, mentored, and practicing iCCM

- -residing in the catchment area in a good house, with adequate drugs supply, clinic structure, and functional referral system
- -using data for planning and decision making
- -within a knowledgeable and supportive community and enabling political environment

to attain zero avoidable under five deaths.

After the vision statement, the next step was to identify the gaps and then develop the means to address the gaps. A list of the gaps that were jointly identified in the two workshops includes the following components:

- Residency—most of the HSAs do not reside in their catchment area
- Lack of clinic and housing infrastructure for village clinics
- Lack of human resources or an uneven distribution
- Drug and commodity availability
- · Attitude of HSAs and community
- · Lack of community ownership, engagement, and partnership
- Lack of community awareness
- Poor referral system
- · Inadequate supervision and mentoring
- · Poor data quality, lack of interpretation and use of data
- Lack of political will
- Lack of decentralized system to support iCCM

The groups were asked to answer the following questions:

- · What, if any, are the strengths of the current program?
- What are the gaps that need to be addressed to achieve this vision?
- What will it take to address the gaps?
- How will you know that the gap has been addressed?
- What can you do at the district level to address these gaps?

Gaps were grouped by common themes, and each group was asked to develop a roadmap and benchmark for each gap. These inputs were combined with day one inputs to create a draft roadmap, which was sent to MOH for review on September 2, 2016 (see Attachment 5).

Day Three Rapporteur Notes

Day three focused on transition planning. Groups were divided by districts and asked to discuss the issues that were identified during day two. The groups were asked to prioritize the issues that most affect their own districts and to complete the following template.

1: HSA Residency							
What gap/s will there be at the end of the RAcE program?	What can the Ministry of Health do to address this gap between now and the end of RAcE?	What can the DHMT do to address this gap between now and the end of RAcE?	How can RAcE address this gap before the end of the RAcE activities?	Comments			
2. Lack of human reso	2. Lack of human resources, high vacancy rate						
What gap/s will there be at the end of the RAcE program?	What can the Ministry of Health do to address this gap between now and the end of RAcE?	What can the DHMT do to address this gap between now and the end of RAcE?	How can RAcE address this gap before the end of the RAcE activities?	Comments			

After the lunch break, each group presented its work to the plenary, and the larger audience was given an opportunity to provide additional comments and feedback. ICF shared these inputs with Save the Children for use in completing the transition plan for each district.

Salim Sadruddin, WHO Global Malaria Programme, and Precious William Phiri, the Principal Environmental Health Officer, National Primary Health Care, and Humphreys Nsona, program Manager IMCI gave the closing remarks.

Appendix 3

Comparison of the iCCM Sustainability Framework with the iCCM Benchmark Framework

	iCCM Sustainability Framework	iCCM Benchmark Framework
Component 1	Health outcome to be achieved	
Component 2	High quality health services and data	
Elements	-Data management	
	-Quality assurance for data and services	-Performance quality assurance (Comp 7)
	-Service delivery and referral	-Service delivery and referral (Comp 5)
	-Range of services available	
Component 3	MOH capacity	
Elements	-Coordination and policy setting	-Coordination and policy setting (Comp 1)
	-Costing and financing	-Costing and financing (Comp 2)
	-Human resources	-Human resources (Comp 3)
	-Supply chain management	-Supply chain management (Comp 4)
	-Supervision	-Supervision and performance quality assurance (Comp 7)
	-Communication and social mobilization	-Communication and social mobilization (Comp 6)
	-Monitoring and evaluation and health information systems	-M&E and HMIS (Comp 8)
Component 4	Civil society capacity	
Elements	-Conduct health advocacy	
	-Conduct research	
	-Fill temporary gaps in administration, service delivery and community mobilization	
	-Make policy recommendations	
	-Assess progress	
Component 5	Community capacity	
Element	-Demand services	
	-Inform service delivery	

	-Report health needs to providers and policy makers
	-Adhere to treatment or support adherence
	-Follow referrals
Component 6	Political and ecological environment
Elements	-MOH ownership and leadership
	-Supportive policies
	-Stable financing
	-Low likelihood of shocks to the system (weather, disasters, civil unrest, war etc.)

Appendix 4: iCCM Roadmap

Key:	IMCI	District	HTSS	сРНС	HEU	Already in progress
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Priority #	Issue	Year 1 - 2017			Year 2 - 2018			Year 3 - 2019		
		Activity 1	Activity 2	Activity 3	Activity 1	Activity 2	Activity 3	Activity 1	Activity 2	Activity 3
1	HSAs residing in catchment area	Lobby District Council to support (LDF) structure construction	Communities mobilized to construct homes and clinics	Residency HR / MOH Policy	District Deployment Strategy			Introduce Hardship Allowance		
2	Insufficient Monitoring and Supervision	Develop Integrated Supervision Checklist			Allocate funding for maintenance of vehicles	Integrated Supervision		Review HR policy and retention (in relation to supervisors and mentors)	Allocate funding for maintenance of vehicles	
3	Drug Availability	Work with TNM/Airtel on coverage	Work with HSAs for community forecasting	Health Facilities include HSA needs in forecast	C-stock includes health facility commodity			Revise LMIS to include community drugs	Integrate community drug procurement at health facility level	
4	Data Quality	Incorporate data quality assessment into supervision	Create data validation checks in DHIS2		Incorporate M&E better into training curriculum and refreshers				Take up use of data display template	
5	Low utilization by community	Increase training of HSAs on iCCM	Review and orient VHCs on their TORs/SOW		Orientation on the role of iCCM at Community level to VHC/VDC	Improve Coordination btwn clinical & Environmental Health at all levels				
6	Lack of political will	Community mobilization on iCCM of chiefs, elders and general population			More inclusion of ADC/VDC through training and mobilzation	Reach out to ward counsellors to suppor clinics				



Ministry of Health Preventive Health

Кеу:	IMCI	District	HTSS	сРНС	HEU	Already in progress
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Priority#	Issue		Year 1 - 2017		Year 2 - 2018			Year 3 - 2019		
		Activity 1	Activity 2	Activity 3	Activity 1	Activity 2	Activity 3	Activity 1	Activity 2	Activity 3
7	HSAs not trained in other community health programs				Targeted training to package service deliver of country					
8	Quality Assessmetn for services				Integrated job aids developed					
9	Inefficient referral system	Development of referral and duplicate booklets	HSAs make follow up with clinicans and nurses	Orietnation of nurses/clinicians on referral and feedback	Revise referral forms to integrate HSA services			mHealth Referral System developed		
10	HSA Transport	Create database of HSA transport information			Provide HSAs with more durable bikes	Provide spare parts for bicycles (annual)	Create transport policy guidelines	Integrate material and supply provision for HSAs	Provide spare parts for bicycles (annual)	
11	Uncoordinated implementation by partners	Complete consultation between stakeholders and IMCI Unit Quarterly	Reinforce buy-in of MoH strategies by partners quarterly							
12	Community Mobilization Communication	Improve HEU Coordination	Ensure community mobilization is part of supervision monitoring		Reporting tools for community mobilization activities					