

# cMAMI: Stronger evidence towards future scale up via a cluster RCT in Ethiopia

Key stakeholder meeting, Addis, Ethiopia

9<sup>th</sup> October, 2019

## Internal Meeting Report

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Thanks to the Eleanor Crook Foundation for funding this consultation as part of the MAMI RISE research project. Documentation of the meeting proceedings was supported by Kelsey Grey (LSHTM).

*Recommended citation: Stronger evidence towards future scale up via a cluster RCT in Ethiopia. Key stakeholder meeting, Addis, Ethiopia. 9<sup>th</sup> October, 2019. Internal Meeting Report.*

## Summary

A one-day meeting of key stakeholders in the upcoming research on community management of at-risk mothers and infants under six months (cMAMI) in Ethiopia was held in Addis Ababa on October 9, 2019 co-hosted by the London School of Hygiene and Tropical Medicine (LSHTM), Jimma University, GOAL, and the Emergency Nutrition Network (ENN). A series of presentations on the MAMI approach, the proposed research, the policy environment and the Ethiopian context set the scene for working groups and plenary discussion throughout the day. Participants identified barriers and opportunities related to the research implementation in Ethiopia and key considerations for the formative research phase. Overall, the three top barriers and opportunities identified were the stretched health system capacity (*barrier*), the strong political will/policy environment/leadership in Ethiopia (*opportunity*), and that this research fills both local and global evidence gaps (*opportunity*).

### 1. Overview

#### ***MAMI vision***

***Every infant aged <6month, at every healthcare/community-level contact point, is nutritionally assessed and appropriately supported to survive and thrive.***

In 2010, the ENN produced the MAMI Project Report highlighting a significant global burden of undernutrition in infants under six months of age, gaps in policy guidance, inconsistent and inadequate case management, and poorer programme outcomes than for older children<sup>1</sup>. This catalysed an informal collaboration amongst concerned programmers, policy makers and researchers to address these challenges. The ten years since has seen significant policy and programme shifts, including WHO guidance update to include community-based management for this age group, programming innovations and operational research. However, uptake of normative guidance by national governments has been hampered by lack of robust evidence on impact of interventions, scalability and sustainability. A nationally driven research programme was identified as a critical next step to address both national and international interests.

To address this, the London School of Hygiene and Tropical Medicine (LSHTM), Jimma University Clinical and Nutrition (JUCAN) Research Partnership, the Emergency Nutrition Network (ENN) and GOAL Ethiopia will embark on a four year research programme in Ethiopia, entitled "*Community management of at risk mothers and infants <6 months (cMAMI): Stronger evidence towards future scale up via a cluster RCT in Ethiopia*". It is planned for Jimma Zone and Deder Woreda, East Hararghe Zone. This is funded by the Eleanor Crook Foundation (ECF) RISE (Research, Innovate, Scale, Establish) implementation research programme.

Between 6<sup>th</sup> and 13<sup>th</sup> October 2019, a series of key stakeholder meetings were convened by the research team in Addis, Jimma and Deder to secure early engagement and key inputs to help shape research plans, complement and leverage existing health and nutrition services, and so maximize project impact and chances of success and ensure These meetings mark the beginning of a one year period of formative research.

## 1.1 Objectives

The overall aim of the meeting was to engage with key stakeholders in the upcoming research on community management of at-risk mothers and infants under six months (cMAMI) in Ethiopia. The objectives were to:

1. Introduce key stakeholders to cMAMI, including the long-term vision and short-term plans for a randomised controlled trial (RCT)
2. the process of co-creating cMAMI details together with key stakeholders
3. Identify key challenges and opportunities for the RCT and long-term scale-up
4. Shape details of formative work to address the 'opportunities' identified

The morning session comprised a series of presentations setting the scene for working groups and discussion in the afternoon. Opportunities were identified and developed in plenary. The agenda is included in Annex 1.

The meeting was attended by 38 delegates from the Federal Ministry of Health of Ethiopia, Jimma University, LSHTM, Eleanor Crook Foundation (CF), GOAL Global, Save the Children, UNICEF, Action Against Hunger, World Food Programme, DFID, St. Paul's Hospital in Addis Ababa, Medical Research Council (MRC) CHANGE study researchers, the University of Copenhagen, the University of Cambridge, Ghent University, and the University of the West Indies (the participant list in included in Annex 2).

## 2. Welcome remarks

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<sup>1</sup> Reference.

Carlos Grijalva-Eternod (LSHTM) opened the meeting by welcoming participants and giving an overview of the day's agenda. Alemseged Abdissa (Jimma University) then introduced the Jimma University Clinical and Nutrition Research Center (JUCAN) and thanked the ECF for their support. He also discussed the importance of engaging key stakeholders in the cMAMI vision. Ferew Lemma Feyissa (FMOH) welcomed participants and discussed his appreciation for this effort to generate evidence for an initiative aimed at tackling malnutrition and supporting maternal and child health. He also thanked ECF for their support. Nicki Connell (ECF) thanked the government and other partners and gave an overview of ECF's work, emphasising that cMAMI is a key area in the accomplishment of the Sustainable Development Goals (SDGs) as there are short- and long-term benefits to optimising health and nutrition in infants under six months.

### **3. Challenges**

#### *3.1 Presentations*

A presentation by Marie McGrath, ENN on the history of cMAMI set the scene for the meeting by describing the global burden of undernutrition in infants under six months, the creation of the cMAMI network and its vision, and the current state of cMAMI initiatives globally.

Marko Kerac, LSHTM then presented on why scaling matters in the context of cMAMI and gave an overview of the upcoming research plans in Ethiopia. He answered questions from:

- a. Ferew Lemma Feyissa (FMOH) noted that the plans don't include interventions on maternal nutrition which may impact breastfeeding and therefore child nutrition. Marko responded that maternal health has a key role in the cMAMI approach and mentioned that there is mixed evidence on the effectiveness of feeding mothers to improve child nutrition. While emphasising the importance of pregnancy experience to post-birth infant outcomes, the cMAMI approach is currently focused on post-birth issues, rather than pregnancy interventions which are often delivered too late to be effective.
- b. Stanley Chitekwe (UNICEF) questioned the effectiveness of promoting exclusive breastfeeding alone. Marko responded that cMAMI is about digging deeper beyond breastfeeding problems and looking at other issues (e.g. clinical issues, maternal depression/disability etc.)
- c. Filippo Didari (WFP) asked about managing incentives to ensure sustainability and how cMAMI can be linked to nutrition-sensitive programming. Marko responded that use and nature of incentives will be examined closely in the formative phase. cMAMI welcomes leveraging and linking to wider initiatives.

A presentation by Hatty Barthorp on GOAL's experiences of cMAMI in Ethiopia described the organisation's efforts to implement cMAMI programming in two refugee camps, including the use of the cMAMI tool, MAMI-adapted MUAC tapes, educational breastfeeding videos, and digital data management as well as challenges related to the identification of at-risk mother-infant pairs.

Melkamu Berhane (Jimma University) then gave a presentation on why cMAMI matters for child survival in which he outlined global data showing the increased vulnerability of infants under six months compared to older age groups as well as the causes and long-term consequences of malnutrition in infancy.

A presentation by Mubarek Abera (Jimma University) on the links between cMAMI and maternal mental health described the key role of maternal mental health in infant malnutrition and how it impacts on newborns by leading to inadequate care and feeding practices. He emphasised the importance of strengthening the delivery of maternal mental health services to ensure that infants survive and thrive.

### 3.2 Working groups

Marko Kerac introduced the working group activity to brainstorm potential barriers/challenges to implementing the cMAMI research in Ethiopia and pointed out that we can choose to see the opportunities in every challenge. Tsinuel Girma (MOH) facilitated the activity. Four working groups (randomly selected participants) brainstormed on barriers and challenges to generate a longlist (Annex 3) and then presented the top three to plenary (shortlist, Table 1).

<b>Table 1: Results of working group activity: barriers/challenges to implementing cMAMI research (long-list results in Annex 3)</b>
<b>Group 1:</b>
Too much data collection, community fed up with new initiatives
Need to understand community perceptions of illness etc before beginning
Adding to workload of health workers
<b>Group 2:</b>
Cultural factors that affect participation, especially of mothers (e.g. are mothers open to breastfeeding in public)
Health system capacity in terms of infrastructure to take on this programme, capacity of health workers to identify at-risk children or to provide breastfeeding counselling support. Not very high trust in health care system currently.
Cost effectiveness of programme: at scale who will fund all the incentives that are being proposed. How much more effective should this programme be than standard care to justify spending? Need economic evaluation to ensure it's justified.
<i>Feedback on this challenge from Moffat Nyirenda, MoH: capacity needs to be developed beforehand but this isn't always realistic. Also, the low level of trust in the healthcare system prevents health care seeking behaviour and encourages alternative health care.</i>
<b>Group 3:</b>
Attrition and rotation of healthcare staff prevents buy-in/continuity
Competing priorities of mothers and health care workers
Disparities between control site service delivery could influence outcomes
<i>Feedback from Tsinuel Girma on this challenge: data shows little variation in quality of services across Ethiopia in terms of child/maternal health service delivery</i>
<i>Response from Hatty Barthorp: suggested it may be possible that the lack of variation in services across Ethiopia could be due to services being reported as available even if they don't actually exist in a given health centre</i>
<b>Group 4:</b>
Incentives - who, how, where? How to ensure that incentives are adequate to ensure quality research implementation but also thinking forward to scale-up and sustainability in this regard. Need to consider the amount that must be adequate to incentivize without creating confounding effects by allowing mother to access better nutrition, for example.

<i>Marko Kerac input on this challenge: need to choose an amount that removes the barrier of transport cost without undue incentive, need creative idea to create a win-win situation (e.g. baby boxes, mosquito nets)</i>
Political changes associated with election next year and movement of the population (refugees, internally displaced) may make follow-up a challenge. If the political party changes, we need buy in from new government.
<i>Feedback from Tsinuel Girma on this challenge: political situation beyond our control</i>
cMAMI checklist- how can it be incorporated into work of healthcare staff? We need to ensure simplicity/user friendliness of tool.

#### 4. Opportunities

Before beginning this session all attendees briefly introduced themselves. Melkamu Berhane introduced the working group activity to brainstorm opportunities in cMAMI implementation. The short-list results are shared in Table 2.

<b>Table 2: Results of working group activity: opportunities in implementing cMAMI research (long-list results in Annex 4)</b>
<b>Group 1:</b>
Strong political commitment and leadership of government in nutrition-related issues
This research will fill a critical gap
Partnerships already exist with non-governmental organisations (NGOs), government etc.
<b>Group 2:</b>
There is strong demand for evidence from government, strong policies and programmes to support the research
Desire for Ethiopia to lead in adopting cMAMI programming as they did with community-based management of acute malnutrition (CMAM)
Existing partnerships with NGOs, universities etc.
<b>Group 3:</b>
Early contact with mother may support improved health seeking practices later in life, potentially leading to a perpetuation of improved health seeking
To use existing successful CMAM scale model to apply to the MAMI approach
Longer term potential positive impact (i.e. reduced cost of care for the other services such as Maternal & Child Health (MCH), CMAM, non-communicable disease (NCD))
<b>Group 4:</b>
Clinical and government buy in to ending malnutrition, existing food and nutrition policies, existing systems in place to integrate with
Global and local priority to establish this evidence
Existing health system, no need to create parallel system

Marko Kerac introduced a voting activity to select the most important barriers and opportunities identified by participants. Each participant had five votes to apply to prioritised barriers/challenges and opportunities. More than one vote could be applied to a single priority. Results are presented in Section 7.

#### 5. Context/landscape

Marko Kerac welcomed participants back and outlined activities for the afternoon.

A presentation by Carlos Grijalva Eternod on the epidemiology of small/at-risk infants in Ethiopia outlined the prevalence of malnutrition and the various anthropometric indicators used to assess it. He discussed the low acceptance of using weight-for-length (WFL) and the importance of considering age when deciding on cut-offs to define malnutrition.

After the presentation, Marko Kerac asked for input from participants on considerations regarding use of MUAC and weight for age (WFA) rather than WFL to assess undernutrition in infants less than six months in this research. He noted that WFA is already used in routine growth monitoring programmes.

- a. Lesley Ann Devereux (GOAL) responded that there may be potential unacceptability by Ethiopian government of using MUAC in the community.
- b. Hatty Barthorp (GOAL) mentioned that in practice, there may be more opportunistic screening for referral purposes than consistent growth monitoring at health facilities.
- c. Mekitie (St Paul’s Hospital) suggested that growth monitoring data is often inconsistent and not used appropriately but added that he does not work in the field.
- d. Taye Wondimu (ORMB) emphasised the need to use the simplest methods of anthropometric assessment as there is often missing data (even weight) in health records.

Nega Jibat (Jimma University) presented on the planned initial formative work that will inform subsequent phases of the cMAMI research. He described the different work packages and reviewed the topic guides that will be used to interview stakeholders. He was asked several questions by:

- a. [Unidentified person] asked if the qualitative study will include interviews with health workers as well as caregivers; Nega responded that health workers will be interviewed.
- b. Alice Burrell (GOAL) mentioned the importance of also exploring perceptions of risk and infection and the fact that interpretations of stress and anxiety differ a lot depending on context; we need to make sure we are accurately capturing this in the Ethiopian context.

## 6. Formative work – what are the key questions to address?

A final working group activity was used to elicit participants’ ideas for the formative work phase and preparation for the RCT. The results discussed in plenary are shared in Table 3, a more detailed list is included in Annex 5.

Table 3: Results of working group activity: formative work/preparation (long-list results in Annex 5)
<b>Group 1:</b>
Engage traditional healers, pharmacies, and vendors during formative assessment- what do they do if they come across a malnourished infant less than six months of age?
What are the barriers and enablers for mothers to seek care?
How do mothers feel about participating in the RCT? <i>Feedback from Alemseged Abdissa: is this a valid question at this point in the formative work?</i> <i>Response from Carlos Grijalva-Eternod: Yes, it is important to understand and is also a platform to convince them of the benefits of participating</i>

Health care absenteeism as an important issue
Use drop out/loss-to-follow-up rates of other programmes as a proxy for cMAMI
Assess perceptions of community about quality of nutrition support services
There may be information contamination from other programmes active in the area
We should capture mothers' perceptions of what neighbours do if an infant is malnourished
Who is making decisions on health care seeking?
Who do mothers visit first if the child has a nutritional problem?
<b>Group 2:</b>
Explore ways of engaging with carers to increase impact and support health workers to engage in a more beneficial way
How can we ensure that health workers know what to do and how to support mothers?
Understand what motivates carers to seek care after initial contact (e.g. prevent loss to follow up)
Explore how health extension workers are working currently and how much time they have to implement this programme
Potential for information contamination, especially in Deder (GOAL research area) because it is a small area
Assess other projects that might be interacting with programmes for infants u6m <i>Feedback from Alemseged Abdissa: need to capture information from other groups like traditional healers who are in contact with carers</i> <i>Feedback from Mubarek Abera: possibility of control groups being exposed to information from other programmes</i> <i>Feedback from Alemseged Abdissa: need to document any ongoing projects in study areas</i> <i>Feedback from Mirkuzie Woldie at MOH: need to document well what is happening in control areas to capture any potential changes over the study period</i>
<b>Group 3:</b>
Perception of community on quality of health services
First-time mothers- consider them as higher risk
Caring and feeding practices in the community (looking at positive practices as well)
Assess decision-making power in the household (control of resources, health care seeking decisions), influencers <i>Feedback from Alemseged Abdissa: need to consider role of grandparents in childcare</i>
Key barriers in the community to implementing cMAMI
Focusing on early childcare and development in policy
What are the sources of food and water for the mother?
Place of birth of child <i>Feedback from Taye Wondimu: need to consider continuum of care from prenatal to postnatal care</i>
Good opportunity to map the capacity of the staff you will be dealing with (do they have counselling skills and infant and young child feeding (IYCF) training?)
<b>Group 4:</b>
Stakeholders to include in the research: actors in nutrition, Emergency Nutrition Coordination Unit (ENCU) located within MoH, other research institutions (e.g. Harar University)
Survey implementation at appropriate timing for the study area (e.g. seasonal considerations)
Involve community members as research advisory board at community level
Risk to researchers- need a mitigation strategy
Identification of policies most relevant to malnutrition

Type of evidence we need to consider to convince policy makers to make decisions

National Disaster Risk Management Commission (NDRMC): Key national forum that integrates Nutrition Cluster for coordinating nutrition actors



## 7. Closing remarks

Marie McGrath presented the results of the vote on top barriers and opportunities identified by participants (Table 4).

<b>Table 4: Top-voted barriers and opportunities to cMAMI implementation identified by participants:</b>
<b>Opportunities (101 votes):</b>
<ol style="list-style-type: none"><li>1. Strong political will/policy environment/leadership in Ethiopia (36)</li><li>2. cMAMI research fills local and global evidence gap (17)</li><li>3. Research can be Informed by experiences of CMAM scale-up in Ethiopia (11)</li></ol>
<b>Barriers (87 votes):</b>
<ol style="list-style-type: none"><li>1. Stretched health system capacity (staff work overload/competing commitments of staff/staff attrition or turnover) (41)</li><li>2. Cost effectiveness (9)</li><li>3. Impact of payment of incentives (12)</li></ol>
<b>Overall top three barriers and opportunities:</b>
<ol style="list-style-type: none"><li>1. Stretched health system capacity (barrier)</li><li>2. Strong political will/policy environment/leadership in Ethiopia (opportunity)</li><li>3. cMAMI research fills local and global evidence gap (opportunity)</li></ol>

Marko Kerac warmly thanked attendees and discussed how Ethiopia will be pioneers of the cMAMI approach as they were with CMAM. Alemseged Abdissa thanked attendees and said that their inputs will be used going forward to improve the formative work and RCT.

## 8. Meeting evaluation

Results from immediate post meeting evaluation amongst participants (anonymised) were positive. Ninety per cent of participants rated the meeting as “very good” or “excellent”. All participants were either “satisfied” or “extremely satisfied” with the meeting content, administration and logistics. Highlights included learning about the planned work and its potential to inform local and global policy, early active stakeholder involvement and engagement nurturing participation and ownership in the research, strong coordination and valuable networking.

## Annex 1: Agenda

### Stronger evidence towards future scale-up via a cluster RCT in Ethiopia

Wednesday, October 9<sup>th</sup>. Harmony Hotel, Addis Ababa

#### AGENDA:

Time	Topic	Presenter
09:00 – 09:20	Welcome / Opening Remarks	Alemseged Abdissa, MOH Ferew Lemma, MOH Nichola Connell, ECF
09:20 – 09:30	<i>History of MAMI</i>	Marie McGrath, ENN
09:30 - 09:50	<i>The cMAMI randomised controlled plan (PICO) &amp; Pathways to scale</i>	Marko Kerac, LSHTM
0950 - 10:00	<i>Questions &amp; clarifications</i>	Plenary discussion
10:00 – 10:25	<b>Opportunities:</b> <ul style="list-style-type: none"><li>• <i>MAMI in Ethiopia</i></li><li>• <i>Survive – MAMI and child mortality</i></li><li>• <i>Thrive – Infants (Development &amp; NCDs) &amp; Maternal (mental health, social)</i></li></ul>	Hatty Barthorp, GOAL Melkamu Berhane, JU Mubarek Abera JU
10:25 – 10:55	Coffee break	
10:55 – 11:40	<b>Challenges</b>	WGs and plenary feedback
11:40 -12:30	<b>Opportunities (incl key stakeholders)</b>	WGs and plenary feedback
12:30 – 13:30	Lunch	
13:30 – 14:00	<b>Context / Landscape:</b> <ul style="list-style-type: none"><li>• <i>Epidemiology of small/at risk in Ethiopia</i></li><li>• <i>cMAMI formative work</i></li></ul>	Carlos Grijalva-Eternod, LSHTM Nega Jibat, JU
14:00 – 14:45	<b>Formative work:</b> <ul style="list-style-type: none"><li>• <i>What are the key questions to explore?</i></li><li>• <i>Who needs to be involved?</i></li></ul>	Group discussion
14: 45 – 15:15	<i>Next steps and closing remarks</i>	Group discussion
15:15	Coffee	
18:00	GROUP DINNER	

ECF: Eleanor Crook Foundation; ENN: Emergency Nutrition Network; JU: Jimma University  
LSHTM: London School of Hygiene and Tropical Medicine; MOH: Ministry of Health

## Annex 2: Participants list

Name	Affiliation	Profession
Ambachew Amare	Save the Children	PH
Benedikte Grenov	University of Copenhagen	PhD/research
Alemseged Abdissa	Jimma University	PhD
Mehret Dubale	LSHTM	Health/research
Ferew Lemma	MOH	Nutrition (PH)
Chytanya Kompala	ECF	Nutrition
Kelsey Grey	LSHTM	Nutrition
Nicki Connell	ECF	Technical director
Carlos Grijalva Eternod	LSHTM	Nutrition
Nega Jibat	Jimma University	
Mahteme Mikre	GOAL	Deputy country director
Hatty Barthorp	GOAL	Nutritionist
Mubarek Abera	Jimma Uniiversity	Child development
Mekitie Wondafrash	SPHMMA	Nutrition
Filippo Dibari	WFP	Nutrition
Teshome Yima	ACF	Nutrition DP
Helina Tista	GOAL	Nutrition
Alice Burrell	GOAL	Nutrition advisor
Anteneh Tadele...	GOAL	Media comms officer
Alemayew Beri	GOAL	SCPO
Bekek Negussie	UNICEF-ENCU	Coordinator
Yared Tadesse	MOH/MCHD	NB & CHTA, MD
Mulat Migus Alemu	FMOH	EPI/MCHD
Mulugeta Haily	GOAL	MEAL Manager
Debbie Thompson	Uni of West Indies/SickKids	Clinician/researcher
Moffat Nyirenda	LSHTM/MRC Uganda	Scientist
Bryan Gonzales	Ghent University	Researcher
Albert Koulman	Uni of Cambridge	Head of laboratory
Kiddus Yitbarek	Jimma Uni	Health systems
Stanley Chitekwe	UNICEF	Chief of nutrition
Nebiyu Ayelew	MCMDO	Nutrition program
Banchiliyew Getahun	UNICEF	Nutrition specialist
Dinkneh Asfaw	GOAL	CD
Mideksa Mekonin	ACF	DTA MHCP
Alice Hooper	DFID	-
Taye Wondimu	ORMB	Nutritionist
Mirkuzie Woldie	FMOH	SRA
Marko Kerac	LSHTM	Researcher
Carlos	LSHTM	Researcher
Marie McGrath	ENN	Nutritionist

### **Annex 3. Long-list results of working group activity: barriers/challenges to implementing cMAMI research in Ethiopia**

#### **Group 1:**

1. Community fatigue
2. Additional burden on the nurses and health extension workers
3. Opportunity cost for the mother
4. Infrastructure
5. Weather/rainy season
6. Articulating the concept of risk
7. Adherence to the actual intervention
8. Availability of the mother
9. Mother and baby might not be together
10. Cultural barriers (e.g. God's will)
11. Integration with other programmes
12. Monitoring the scale-up process
13. Optimal functionality of primary health care units

#### **Group 2:**

1. Cost-effectiveness on both project level and government level (resource allocation)
2. Capacity of health workers
3. Capacity of health system
4. How to identify at-risk children, enrolment based on perception of caregiver
5. Caregivers' commitment
6. Cultural factors (e.g. affecting breastfeeding practices etc)
7. Community trust on the quality of care, community commitment
8. Quality of care

#### **Group 3:**

1. Additional workload perceived by health workers
2. The incentive needs to be aligned with existing context (predominantly of the mother), how will this impact attendance
3. Staff attrition and there is also normal staff rotation to other units
4. Competing priorities of health workers
5. Control services may be poor as there's an assumption there are 'standard' services provided but this may not be the case. We may even see disparity between control sites.
6. Buy in from FMOH
7. Commitment of health service staff
8. Loss to follow up

#### **Group 4:**

1. Ensure all major stakeholders are aware- know them! (to avoid interruptions to the project)
2. Incentives- transport money- will this be a barrier to participation when not present- can they be up-scaled?
3. Shorten the length
4. Site differences- within and between them
5. Ethics approval- especially for blood taking (intervention is behavioural)
6. Incentives- might we introduce confounders? Need to measure food intake.
7. Intervention for pre-conception

8. Other therapeutic/supplementary foods for mothers and infants could be a confounder
9. Checklist- does it capture all the relevant information? (eg rainy season)
10. Effect of conflict and maternal displacement (and other external factors)
11. Chronic food insecurity secondary to drought – effect?
12. Increased workload on community workers (effect)
13. Effect of migration
14. Who are the ideal health care workers (nurses?) Other groups?

## **Annex 4. Long-list results of working group activity: opportunities in implementing cMAMI research**

### **Group 1:**

1. A strong political commitment and leadership by the government
2. An existing health structure at community level
3. A strong network of multiple stakeholders (NGOs, academia, UN, and donors)
4. It fills a critical gap
5. It will make Ethiopia a role model for cMAMI approach
6. Practical experience in a scale-up of community-based interventions (CMAM)- lessons learned from successes and challenges
7. Potential to address long-term NCD risks
8. Study settings are suitable for the research

### **Group 2:**

1. Current policy (programs and systems) framework of the government to support the project
2. Evidence base already available and evidence the project will generate to support future policy
3. Existing platforms of staff and infrastructure
4. Active involvement of academia
5. Existing partnerships focusing on child mortality
6. Project could provide benefits to the study participants
7. Project is an opportunity for global discussion about MAMI
8. Previous experience of the country
9. Opportunity to empower women and involve women in policy making

### **Group 3:**

1. To use the existing health structure with established decentralisation to improve reach and access to the population in need
2. To use existing successful CMAM scale model to apply to the MAMI approach
3. Early contact with mother may support improved health seeking practices later in life, potentially leading to a perpetuation of improved health seeking and a reduction in people's scepticism (or other) of using formal health services.
4. May provide an opportunity to address some of the negative cultural practices
5. International recognition may be an opportunity
6. Support evidence base to improve international guidance required by governments to take such new initiative
7. And support an evidence base upon which the FMOH can update guidance to better address the MAMI demographic
8. Longer term potential positive impact (i.e. reduced cost of care for the other services such as MCH, CMAM, NCD)

### **Group 4:**

1. Opportunity for commitment from MOH. Helps MOH to achieve their strategic objective to end malnutrition by 2030.
2. Integrate MAMI guidelines into policy
3. Strengthen existing health care framework
4. Link to nutrition sensitive programming from other sectors → possible double impact
5. RCT will have global relevance, shape guidelines
6. Dissemination of lessons learned (hows and whys)
7. Addressing mental health of mothers – critical to outcomes

## **Annex 5. Long-list results of working group activity: formative research ideas**

### **Group 1:**

- Measuring the existing prevalence of stunting, wasting, underweight?
- Engaging traditional healers, private pharmacies, vendors
- What do private pharmacists do if they come across a small u6mo baby?
- How much do families spend on accessing private pharmacies and traditional healers?
- What do mothers feel in participating in the RCT?
- Enablers/barriers for mothers for care seeking behaviour
- Current staff absenteeism as a factor for service utilization?
- Looking into drop-out, loss to follow-up rate of other programs?
- Perception of community on service quality
- Level of information contamination
- Mother's perception of what neighbours do when they are faced with a child with malnutrition
- Who is deciding on care seeking?
- When do families visit traditional healers? Who do they go to first?
- Father engagement
- Health system readiness
- Ongoing projects in the study area

### **Group 2:**

- Explore different ways of engaging with carers to improve 'action'
- How can we better ensure health workers understand what to do/how to support at-risk mother-infant pairs
- Explore ways in which we can reduce loss to follow-up by understanding what motivates a mother and a father to support partners in accessing and continuing to access services even after there's no perceived need for PHC services
- We need to explore actually how HCWs are working, points of contact, coverage, how much time they have for support/counselling
- Understand the community network (i.e. Women's Deupt [sic] Army (WDA)) and how it interacts with the public health system
- We need to assess potential information contamination, especially in Deder
- We need to explore what services and the quality of services currently being provided for infants 0-6mo – don't always reflect national standards
- Look at/assess other projects either formal or informal that may be interacting with families with infants u6mo and/or supporting families that may be classified as having at-risk infant-mother pairs
- Look at different points of contact families have with informal health services or private entities

### **Group 3:**

- What is the local perception of HBW [sic]
- First time mothers... [illegible]
- What are the caring and feeding practices of the community?
- Who has the DM [sic] power in the HH?
- Who are the negative influencers of child feeding?
- What are the key barriers for child caring and feeding practices?
- What is the perception [illegible] of policy makers on feeding and caring (MAMI)?
- Policies and guidelines → ECCD [?]

- Source of food/water
- Health systems – referral
- Place of birth
- Map existing staff capacity to deliver counselling focused services, i.e. have they had IYCF training, have they had counselling support training etc. as this will significantly affect ability to deliver services in control and intervention sites

**Group 4:**

- Who has to be involved?
  - HWs staff: HEWs, nurses
  - Community engagement: Ms, Fs, GMs, HAD
  - Actors in nutrition (other than government)
  - MOH: woreda zone, ENCU
  - UN agencies for research [?]
- Policy and other analyses [?]
  - Involvement [?] of community members as advisory board [?]
  - Potential risk considered and mitigated
  - Identification of key actors (?)
  - Type of evidence needed to convince policy makers
  - Identify policies to be targeted
- Surveys:
  - Previous experiences of nurses
  - Survey period
  - Many children may not come to HC, CHP [?]