

# Guideline on Simplified and Combined Approach for the Treatment of Wasting in Emergencies in Ethiopia

Program adaptation for treatment of wasting

#### **Foreword**

In Ethiopia, noteworthy progress has been made in improving and scaling up the treatment of acute malnutrition in the past decades. the management of Severe Acute Malnutrition (SAM) has been included in the National Nutrition Plan since 2008 and has been successfully scaled up and integrated as part of routine health program delivery within the Health Extension Package (HEP). Further, the current guideline for the management of acute malnutrition endorsed by the GoE in 2019 includes both MAM and SAM in the same document, which was treated separately before, whereby the delivery of MAM and SAM services are integrated at the facility level ensuring the continuum of care.

A simplified and combined approach is intended to simplify and unify the treatment of wasting (uncomplicated severe and moderate acute malnutrition) for children ages 6-59 months in an emergency context into one protocol that aims to improve the coverage, quality, continuity of care and cost-effectiveness of acute malnutrition treatment. These simplifications are proposed upon the standard protocol management of acute malnutrition which includes MUAC and edema-based admission and discharge criteria, treatment with a solitary product, reduced dosage, reduced follow-up visits for stable children, and expanded admission criteria. The simplification allows for more efficient triage and patient flow reducing the workload and burden on staff and caregivers.

The Ministry of Health adopted and developed this guideline, in addition to the existing standard acute malnutrition management guideline; aiming at providing standardized guidance on how to apply the proposed simplifications to the management of uncomplicated SAM and MAM and the contexts for which these will be applied. Evidence supports that simplifying and streamlining the management of acute malnutrition in such situations will improve both coverage and quality of care and decreases mortality, particularly in emergency contexts where there is an extremely high caseload and resources are limited differing contexts, including in acute and chronic humanitarian emergencies.

I would like to accentuate that, implementers of this guideline including RHBs, UN agencies, INGO's, and others gain approval from MoH at the national level before the application of these approaches when the need arises. During the implementation of one or more of the combinations of the simplified approaches, implementing partners need to closely monitor progress and evaluate the implementation to decide on how and when to deactivate the approaches and transition to the standard routine guideline for the management of acute malnutrition. Meanwhile, the guideline will also be piloted through rigorous research studies of various contexts to generate evidence for supporting the simplified and combined protocols and on future decisions regarding the integration of the approaches into the national guideline for the management acute malnutrition management protocols.

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## **Acknowledgment**

This simplified and combined approaches guideline is prepared for the adaption of wasting treatment in emergency context. In the emergency settings, the food shortage, unavailability of food and access to basic services will lead to acute food shortage and acute malnutrition. Therefore, implementing the standard treatment protocol may be is difficult to reach more children and save lives in an emergency setting. These approaches will be used to address the magnitude in an emergency setting.

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## Scope of the guide

The simplified and combined guideline for the management of acute malnutrition will only be applied in specific contexts where there is a significant increase in rates of acute malnutrition, a high burden on child mortality due to emergencies such as conflict, drought, or others beyond the capacity of the routine system. This is particularly so when barriers to providing the full continuum of care for acutely malnourished children in such situations, such as supply or capacity constraints, or in contexts with a high caseload and lack of resources or system failure faced, which can be addressed through these temporary measures.

These modifications to the management of acute malnutrition provide temporary options for treating wasting in the absence of TSFP and/or OTP and are meant for acute crises only (rapid onset or protracted crisis with a significant unexpected spike in caseload). The guideline will be applied through integration with primary and secondary healthcare or different platform to address the needs of a large number of children with malnutrition in an acute humanitarian crisis and areas with limited access for both providers and beneficiaries.

The application of the guideline will be time-bound where there will be shifting to the routine guideline once the situation is over and case management can be managed with the routine health system.

## **Abbreviations and acronym**

AM	Acute malnutrition	
CHV	Community Health Volunteer	
CHW	Community Health worker	
СМАМ	Community-based Management of Acute Malnutrition	
EDHS	Ethiopia Demographic Health Survey	
GAM	Global Acute Malnutrition	
GAP	Global Action Plan	
HEW's	Health Extension Workers	
МАМ	Moderate Acute Malnutrition	
MDHS	Mini Demographic Health Survey	
MUAC	Mid upper Arm Circumference	
ОТР	Outpatient Therapeutic feeding Programme	
RUTF	Ready to Use Therapeutic Food	
SAM-	Severe Acute Malnutrition	
SNF	Specialized Nutritious Foods	
TFSP	Targeted Supplementary Feeding Program	
UNICEF	United Nations International Children's Fund	
WHO	World Health Organization	
WoHo	Woreda Health office	
ZHD	Zonal Health Department	

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### Introduction

Globally 45.4 million children suffer from wasting and 149.2 million children suffer from stunting (World Bank Group Joint Child Malnutrition Estimates). Malnutrition is a major public health problem contributing to the deaths of approximately three million children aged under five years each year (1). Conflict and the occurrence of repeated emergencies is a major driver of acute malnutrition, particularly in Africa, where countries experiencing protracted conflict have undernourishment rates twice as high as those not affected by conflict. Malnutrition is the most common risk factor in child deaths and will continue to be a major public health concern as the world experiences conflicts and emergencies due to political crises, migration, climate change, and other causes (2).

According to the mini-EDHS 2019, about 7.7 percent of children under five years were wasted and 21 percent are underweight (Mini EDHS 2019). Nationwide, admissions for severe wasting for the first half of 2021 were 7 percent higher than the same period the previous year. Similarly, admissions for moderate wasting in the first half of 2021 were also 30 percent higher than in the same period in 2020. The worsening nutrition situation can be attributed to factors such as the negative consequences of the Covid-19 pandemic, desert locust infestation, recurrent drought, conflicts, high food prices, and disrupted rainfall patterns all leading to acute food insecurity (ENCU monthly synopsis – May 2021 data and other Nutrition-related information).

In Ethiopia, in the past decade, the Government has applied a two-pronged approach to address malnutrition. The first aspect of the approach focuses on increasing access and availability of food through improved economic growth, better agricultural production systems with promotion of good nutrition practices and prevention of malnutrition. The second aspect aims to strengthen early warning systems and timely emergency response, including wide-scale delivery of services for the management of acute malnutrition (3).

However, management of wasting during emergencies using the routine service remains low and, adopting a simplified approach may contribute to increasing access to treatment for all wasted under-five children. The Global Community of practice has defined 'Simplified Approaches' as the different 'simplifications to the existing national and global protocols for the treatment of child wasting'. This simplification is done to improve effectiveness, quality, and coverage, and reduce the costs of caring for children with uncomplicated wasting, mostly in resource constrained. Most of the studies on the simplified approaches have been done in non-emergency settings. However, these strategies can also be useful in emergency contexts where standard protocol may be impracticable due to hampered coverage or compromised quality of care. Adopting these approaches may ensure better access to wasting treatment services and mitigate against potential excess mortality due to the emergencies.

## **Rationale**

During emergencies, health facilities' functionality will be affected, the health workforce and the health system will be challenged, commodity availability for the service provision will be compromised and resource limitations due to competing priorities will be faced. Moreover, an emergency condition by itself is a very demanding situation that will incur an intensive investment when planning an intervention.

- Emergencies are major drivers of acute malnutrition
- Implementing standard protocol is challenging in emergencies
- Context-specific temporary adaptations to treatment protocols
- Several adaptations rather than one adaptation
- Aiming at improving coverage and reducing cost

Although limited in scope, context, and small-scale, evidence from previous implementations in different countries showed that applying simplified protocol in emergency settings has promising nutrition intervention outcomes (An executive briefing from a technical consultation). According to the single-arm proof-of-concept trial in Burkina Faso, Programme outcomes exceeded Sphere standards (Daures et al 2020. https://pubmed.ncbi.nlm.nih.gov/31818335/).

In another intervention in Niger, the on integrated protocol in response to an emergency, the data suggested effective treatment of MAM with RUTF, low defaulting, and reduced admissions for SAM due to earlier treatment (https://www.ennonline.net/fex/31/rutfinniger).

Hence, the rationale for adopting simplified protocols in Ethiopia is to save lives when the wasting management protocol could not be implemented, to reach more children with malnutrition, to treat MAM to prevent SAM, to use MUAC & edema as an admission criterion only for diagnosis to address limited human resource capacity and improving efficiency during emergencies. It also helps to support national coordination platforms to lead on the use and documentation of simplified approaches to the treatment of child wasting in emergencies, where warranted.

#### In what context can the Simplified Approach be applied?

These options are meant to be explored in the context of strengthening the quality and outreach of SAM and MAM treatment programs, interventions to prevent malnutrition, and health system strengthening during an emergency. They describe minimum options to deliver services, with the intent to work towards in the implementation of the minimum package of treatment services in line with national standards.

These measures provide temporary options for treating wasting in the absence of TSFP and/or OTP and are meant for acute crises only (rapid onset or protracted crisis with a significant unexpected spike in caseload). It is intentionally flexible to allow for context modifications and is meant to be adapted at country the level through the coordination mechanism of the nutrition cluster. These options provided may not reflect all the possible configurations that may be possible in different contexts, this temporary protocol is to ensure that wasting treatment is not compromised. The options mainly focus on treatment of uncomplicated wasting in the OTP/TSFP, while treatment of complicated wasting will be in the stabilization center or for when a referral is not possible in an emergency set up inpatient care management will be established (e.g., tent, school classroom, etc) temporarily.

The alternative measures should only be applied in extremely specific contexts with a significant increase in rates of acute malnutrition, a high burden on child mortality & conflict area, etc

Experience demonstrates that time-bound, flexible provision of services, use of specific nutrition products, and the shifting of basic admission/discharge criteria may be appropriate and necessary in certain situations. This is particularly so when barriers to providing the full continuum of care for acutely malnourished children, such as supply, or capacity constraints can be addressed through these temporary measures.

Scenario	Recommendation	Exit Criteria
If both SAM and MAM treatments are available.	Continue with national protocols	As per the national guideline
If SAM treatment is available however MAM treatment is not available.	As a short-term measure, the recommendation is to use expanded admissions criteria to admit children 6-59 months classified with both SAM and MAM into the OTP (MUAC <125mm without lower limit), as a temporary measure in emergencies through Rapid Response Mechanisms. The dosage of RUTF recommended for Children in this document is <115mm (SAM) are treated with 2 RUTF sachets/day, and children 115-<125mm (MAM) are treated with 1 RUTF sachet/day until they are full fill the discharge criteria.  *If the program is being run through the health facility or mobile teams with sustained access, routine medications should be supplied as the likelihood of completing the routine medication schedule is higher.	Transition to regular protocol when both OTP and TSFP become available  If not, consider  -MUAC>12.5 cm for two consecutive weeks.  -Clinically well  -Minimum stay of 3 weeks  -No edema for 2 weeks.

The presence of one or more of the conditions/scenarios listed below will be used as the trigger for activating and applying the simplified and combined approaches. The Federal Ministry of Health will make this decision.

S.N	Conditions / Scenarios	Definition/ operational definition	Magnitude to consider as an
1	Health facility functionality	Physical access to the health facility, presence health workforce, and commodity availability (essential lifesaving medicines and supplies)	emergency  At least half of the health facilities in that specific area are nonfunctional (this can be verified in MIRA or Rapid assessment).  Unavailability of the human resource-health workforce at health facilities.
2	Disease	Disease out-break can aggravate wasting caseloads in the district.	Outbreaks like measles, cholera, malaria, and others.
3	Wasting prevalence		Wasting >15%
4	Wasting caseload	If it exceeds abnormally compared to the trend analysis in the past and peaks the number of admission /cases/	District wasting caseload exceeds the estimate by 50%  The admission rate exceeds the monthly trend by 50%
5	Food insecurity		Hotspot priority 1 Integrated food security phase classification (IPC) phases 4 and 5
6	IDP		Any displaced and isolated population lives in the schools and other IDP centers.  Any displacement and isolation of population beyond the capacity of local health care services.
7	Conflict/ instability		Armed conflict or prolonged security or access situation in the district.
8	Pocket areas difficult to access	Hard to reach areas due to road inaccessibility, flooding during rainy seasons, and other issues.	Any difficulty to reach the community in that area.

# When and how to switch Simplified Approach to Standard Guideline for the Wasting management.

The Simplified Approach needs to be switched to the standard acute malnutrition Management Guideline when the abovementioned considerations are improved.

- Functionality of health services restored, or regular health and nutrition services established.
- Wasting prevalence decreased to the acceptable range.
- Disease outbreak controlled.
- Wasting caseloads and admission rate return to acceptable range (<10%).</li>
- IDPs returned to their homes.
- Conflict and instability back to safe and secure conditions.
- Hard to reach areas can be accessible for routine health services.

## What are a simplified approach and its components?

The Simplified and Combined Approach is intended to simplify and unify the treatment of wasting for children ages 6-59 months into one protocol to improve the coverage and continuity of care. These approaches are designed to increase simplicity, which may be critical particularly in emergency contexts where they can be applied as a short-term strategy. These modifications are clearly defined and, highlight the elements of the standard protocol that have been modified and how they have been modified through the simplified approaches.

The most implemented and researched components of simplified approaches are:

- 1. Adjustment of Admission Criteria (for early case detection and treatment)
- MUAC and edema only: Admission, treatment, and discharge based on MUAC and/edema only
- Expanded admissions criteria: Systematic expansions of MUAC to include all children <125mm</li>

#### 2. Modifications on Product Use

- Use of a single treatment product: Use of RUTF for the treatment of all wasted children in need of treatment
- Simplified Dosage: Dosage of RUTF product modified throughout treatment
- 3. Change in case management approaches (for early detection, better coverage, and access)
- Family MUAC: Engaging family members to screen and refer their children
- CHW-led treatment of wasting: Management of wasting by Community Health Workers (health extension workers, other civil servants, volunteers)
- Reduced Frequency of Follow-up Visits: Reducing the number of appointments throughout treatment

When resources are scarce, this approach will:

- Eliminate the need for separate products, infrastructure, and administrative procedures for wasting treatment
- Enable earlier treatment of cases before deterioration into severe wasting treatment and
- Enable better continuity of care

## **Objectives**

- Improving coverage of wasting treatment in emergencies, especially for moderately wasted cases
- To improve early case detection of wasting at the community level, which is crucial for improving treatment outcomes.
- To prevent malnutrition, and health system strengthening during an emergency
- To rigorous research study to generate evidence for future policy change

## Management of acute malnutrition with a simplified approach

The national Acute Malnutrition treatment protocols put the treatment of both moderate and severe wasting but recommend different treatment strategies for each. Uncomplicated cases of SAM are treated with ready-to-use therapeutic food (RUTF). The Moderate acute malnutrition (MAM) component of Acute Malnutrition protocols relies on the use of ready-to-use supplementary food (RUSF) or Specialized Nutrient Foods (SNF).

Ethiopia's IMAM protocol, based on global guidelines, clearly includes treatment of both Severe and Moderate Acute Malnutrition. The products to use are different for SAM and MAM. Therefore, having two products particularly in areas with complex emergencies increases the complexity of both supply and cases management systems.

Studies conducted on simplified and combined protocols from different countries for CMAM treat children with both severe and moderate wasting using RUTF. These combined protocols aim to expand coverage by reducing the complexity of implementation for healthcare practitioners,

as well as reducing the dosage of RUTF given to each child, which reduces treatment costs per child. By expanding admission criteria for CMAM programs to MUAC less than 12.5cm (rather than less than 11.5cm), combined protocols aim to treat more children, earlier before they reach the severe stage of acute malnutrition. CMAM programs using combined protocols treat both moderate wasting and uncomplicated severe wasting in an outpatient setting.

- Identifying severe and moderate wasting in the community, often by using HEW, Community health worker, or trained caregivers (usually mothers) to screen children using colored plastic tapes to measure the mid-upper-arm circumference (MUAC).
- Assessment of children who meet the criteria for uncomplicated severe or moderate wasting and referrals to Stabilization center for those children who have SAM with complications and/or infants under six months.
- Providing a standardized set of medical treatments for SAM children to reduce infections, speed up nutritional recovery and prevent mortality.
- Providing ready-to-use therapeutic food (RUTF) for treating malnutrition until children meet the criteria for discharge.

The common element that simplified approaches cover is the detection and treatment of both severe wasting and moderate wasting and acute malnutrition in program with one ready-to-use food (RUTF) product.

Also often have combinations of some of the below elements, which have the potential to further streamline the approach and increase coverage:

## 1. Admission and discharge based on MUAC or edema

Admit and discharge children to a treatment program using Mid-Upper Arm Circumference (MUAC) or edema. This can be a practical way to reach more children in the community with a diagnosis of acute malnutrition. The

approach is in line with National Guidance includes important components of the standard protocols like always screening for edema and for complications that would require inpatient treatment.

Table 3: Admission and Discharge criteria

Admission criteria for 6-59-month children	Discharge criteria
Moderate wasting  11.5 <= MUAC <12.5cm AND No Edema No	If admitted with bilateral pitting edema, discharge cured when: No bilateral pitting edema for 2 weeks with one-week ration.
medical complications Clinically well and alert	AND
	MUAC ≥ 12.5 cm
	AND
	Clinically well and alert.
Severe wasting	If admitted based on MUAC, discharge is cured
MUAC<11.5 or Bilateral pitting edema + or ++	when: MUAC ≥ 12.5 cm for two weeks with a one-week ration
AND	AND
No modical complications Clinically well and	No bilateral pitting edema
No medical complications Clinically well and alert Pass appetite test	AND
	Clinically well and alert.

## 2. Family MUAC

The 'Family MUAC' approach, also known as MUAC for mothers or Mother-MUAC, trains mothers and other caregivers to identify early signs of malnutrition in their children using a simple-to-use Mid-Upper Arm Circumference (MUAC) tape and by checking nutritional edema.

By moving this task to mothers (or other family members), who can do it as effectively as HEW, the cases are detected earlier, leading to fewer hospitalizations.

Mothers are empowered to manage their children's health and HEW has more time to conduct other tasks.

\*For the implementation of this approach refer the National piloting Family MUAC guideline.

## 3. Treat with a reduced dosage of RUTF as a specific product

Prescribes the same number of RUTF (2sachet) to all SAM children throughout their treatment until their MUAC reached 12.5cm.

Similarly, one (1) sachet of RUTF for MAM cases till their MUAC reaches 12.5cm. If effective, it could improve cost-effectiveness and treatment coverage.

#### Table 4: RUTF Dosage

Children < 11.5 cm and/or grade + or grade ++ oedema without medical complications.	Children 11.5cm - < 12.5cm without medical complications
RUTF: 2 Sacket/day/child	RUTF: 1sacket/day/child
(14 sachets/per child/week)	(7 sachets/per child/week).

## 4. Use Community Health volunteer-to treat wasting

Empower trained community Health volunteers to treat wasting without medical complications at the community level. This could be implemented as a last option when Health facilities are not functional, heath work force are not in the area and any partners are not accessing the area Community Health volunteer can manage wasting using simplified approaches and reduced dosage of RUTF approach without systemic treatment.

That is no medicines including antibiotics and deworming drugs will be used. CHV need to be trained on (anthropometric measurements, management of wasting, referral, reporting and supply management), be offer ongoing technical support, their tasks/ responsibilities clearly explained, and their performance to be followed up – training topics in the box beside.

# 5. Reduce Frequency of Follow-up Visits

Reducing the frequency of follow-up visits for wasted children admitted into treatment from weekly to every two weeks is recommended with a possible home visit in case of access difficulties.

This will reduce the burden of Health care providers and Community Health volunteers so that they can have more time to admit and manage a greater number of children.

Note: Follow-up visit for all edema cases should not be more than two weeks. If possible, better to follow up on such cases on weekly bases.

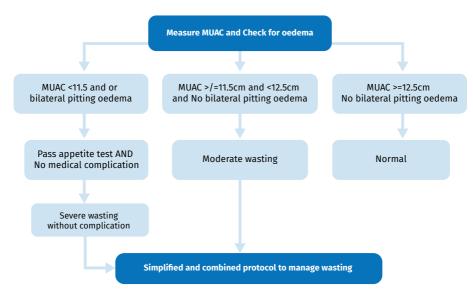


Figure 1: Summary of the triage for the simplified and combined protocol.

Table 5: Management of wasting with Simplified and combined protocol

Admission criteria	Severe Wasting	Moderate wasting	Severe wasting with complication
	Children with MUAC < 11.5cm and/or grade + or grade ++ oedema without medical complications Pass appetite test	Children with MUAC 11.5cm -<12.5cm without medical complications	Grade +++ edema and/or children with other medical complications Infants <6 months. Severe wasting with any grade of edema
RUTF Ration	RUTF: 2 sachets/ per/day/child Or 14 Sachets per week/ child	RUTF: 1 sachet/ per/day child/ Or 7 Sachets per week per child	
Systematic treatment *	Follow national acute malnutrition management guidelines  Deworming Amoxicillin Vaccinations Malaria treatment	Follow national acute malnutrition management guidelines	Refer to the stabilization center

Frequency of visit	Severe Wasting	Moderate wasting	Severe wasting with complication
	Weekly/Bi-weekly with a frequent home visit by HEWs or HWs or CVs	Bi-weekly/Monthly with a frequent home visit by HEWs or HWs or CVs	
Discharge criteria	-MUAC ≥12.5cm for two consecutive weeks -Clinically well -No edema for 2 weeks -Discharge with a one- week ration	MUAC ≥12.5cm for two consecutive measurements -Clinically well -No edema -Discharge with one- week ration.	Refer to the stabilization center

<sup>\*</sup>When managing wasting by community volunteers becomes mandatory, the systemic treatment does not apply. Community volunteers provide only RUTF without antibiotics or other medications.

## Stakeholders implementing the simplified and combined protocol.

Ministry of Health in coordination with partners at national, regional, zonal, and lower administrative levels is key. The government the overall coordinator of the program, UN agencies, ENCU, and INGO sill have their share of responsibilities.

Table 6: Roles and responsibilities of stakeholders

Stakeholder	Role and responsibility
Ministry of Health	-Provides national guidance on the implementation of the simplified and combined protocol
	-In collaboration with NDRMC facilitate initiation of a simplified approach when the routine system is failed to respond.
	-Ensures program quality through monitoring and supervision.
	-Coordinates national activities including orientations, training, and consultation workshops.
	-Mobilizes resources for the implementation of the simplified protocol
	-Ensures a continuous supply of essential commodities to all Regional Health Bureaus (RHBs
	-Review implementation guidelines based on emerging evidence and contexts.
	-Evaluates the routine system functionality and decides when to deactivate the Simplified and combined approach and transition to the routine treatment approach .

Stakeholder	Role and responsibility
Regional and Zonal Health bureaus	-Guides to the Zonal Health Department (ZHD) and Woreda health offices to initiate simplified protocol.
	-Conducts monitoring and supervision of the HCs, and HPs at the Woreda level.
	-Mobilizes resources for training at the Regional, Zonal, and Woreda levels
	-Ensures quality and timely reporting of activities within the Region and Zone.
Woreda Health Office	-Engage PHCU, community health volunteers, and caretakers on the implementation of the simplified protocol.
	-Coordinates and supports the training of health care providers and HEWs.
	-Ensures a continuous supply of essential commodities to all health facilities
	-Strengthens the referral and communication system between HCs and HPs.
	-Ensures that the HC service providers conduct regular supportive supervision of the HPs.
	-Conducts supportive supervision and regular review meetings with HCs and HPs.
	-Ensures timely reporting of activities to the ZHD.
	-Monitor the work of implementing partners on the simplified approach
The Primary Health	-Provides orientation for HEWs on the simplified protocol.
Care Unit (PHU)	-Ensures a continuous supply of RUTF to all HPs within the Kebele catchment area.
	-Conducts supportive supervision of the HPs.
	-Submits accurate and regular Statistics reports on the simplified protocol.

Stakeholder	Role and responsibility
HEWs	-Ensure quality implementation of wasting management activities.
	-Ensure continuous availability and proper utilization of the essential supplies for wasting treatment
	-Prepare and submit accurate and timely weekly and Monthly Statistical reports for the Management of waste.
	-Engage with and build the capacity of the HDA and CVs on how to conduct community mobilization, referral, follow-up, counseling, and support of patients with acute malnutrition.
	-Collaborate with the HDA and CVs to conduct home visits, follow-ups, and referrals of wasted patients.
	-Ensure PLW and families with wasting patients are enrolled in the Productive Safety Net Program and other relief programs.
The Health Development Army/	-Early detection and refer cases of wasting based on MUAC and Oedema
Health Development Group (HDA) and Trained caregivers	-Provide wasting treatment services where health care providers are not available
and Community volunteers	-Manage the nutritious supplies at the community level and report to the next level whenever it is functional
	-Conduct health promotion and counseling at the community level, and refer cases of wasting
	-Counsels and supports the caregiver with treatment compliance on the consumption of specialized nutritious foods and routine medications.
NDRMC/DRMC	-Coordinate and lead national and sub-national cluster coordination meetings.
	-Provides national guidance on the need and activation of the simplified protocol in consultation with FMOH.
	-Map out the scope and capacity of implementing partners and assign partners in case of emergency.
	-Mobilize resources.

Stakeholder	Role and responsibility
UN Agencies	-Advocate for the management of wasting, and children's rights to food and nutrition including the rollout of simplified and combined protocol in cases of emergency
	-Mobilize resources and provide funds for the implementation of the protocol.
	-Ensure availability of sustainable nutritious supplies
	-Provide technical support for the appropriate implementation of the simplified and combined protocol
	-Support the FMOH and RHB to implement their respective roles and responsibilities
Implementing Partners	-Provide technical support to the ZHD, Woreda health office, HCs, HPs, and communities to facilitate the management of waste in an integrated manner.
	-Support ZHD, Woreda health office, HCs, and HPs to implement their respective roles and responsibilities.
	-Where possible, involve indirect implementation of the simplified and combined protocol in consultation with FMoH and NDRMC

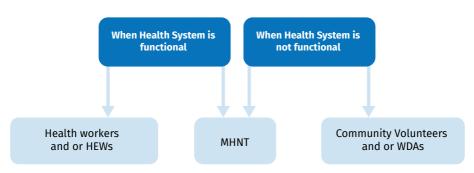
## Human resource, logistics and monitoring, and evaluation

1.1 Health workers and Health extension workers: The preferred staff structure for the simplified approach in an emergency context can include any health worker operating in health care service in a designated health facility such as a nurse or clinician, a nutritionist, midwife, and health officer. Health extension workers are trained health service providers at the health post level. In a context whether health system is active, the recommended simplified approach will be implemented and followed by health workers and health extension workers assigned to provide standard nutrition services. Nongovernment staff will provide technical support to government health workers to ensure the quality implementation of the recommended approach.

1.2. MHNT: A Mobile Health & Nutrition Team is comprised of technical personnel composed of at least one 1midwife, 1 nurse, 1health officer,1pharmasist, and 1 psychiatry nurse. The MHNTs work six days per week, traveling from location to location and setting up mobile clinics along the way. The MHNT can be run by the government or partners (UN agencies. INGOs). In areas where mobile health and nutrition teams are operating, especially in an emergency, the management of severe & moderate acute malnutrition (wasting management) through a simplified approach should be applied by the responsible MHNT. The MHNTs will schedule their movement/ distribution plan in such a way that children under follow-up for wasting will receive their regular follow-up treatment for SAM and MAM with a reduced dosage of Ready-to-Use Therapeutic Food (RUTF).

- 1.3 Volunteer: A community volunteer is a member of a community who is chosen by community members or organizations to provide basic health and medical care within their community and can provide preventive, promotional, and rehabilitation care to that community. In an emergency context where the health system is collapsed or challenged to provide routine health and nutrition services and where there is an access problem for a health worker or health extension workers, the recommended simplified approach will be implemented by identified and trained community volunteers who can read and write At least 6 community health workers (2 per zone/Gote/Village) need to be identified and trained per kebele. Available government health worker INGO/NGOs staff will provide logistic support, technical follow, and coaching to community health workers.
- 2. Capacity building for health workers, HEW, and Community volunteers: Formal training. short orientation, and On-the-job training are crucial before applying the recommended simplified approach In addition to the direct implementers of the simplified approach, the capacity building train needed to consider health workers expected to follow the proper implementation of standards or protocols for quality approaches. Health workers and HEW will be provided with formal training just to guide on the implementation of the procedure followed by on job training and consistent mentoring and follow-up to ensure quality service. Community health workers will be trained formally, coached, and supported by HEW or HW until they are equipped with the necessary knowledge and skill helps to implement the simplified approaches & combined protocol. The capacity building will also include supply management and a proper storage mechanism.

#### An organogram shows human resources to implement the simplified protocol



N.B: a combination of any of the human resource can be used as the context permits

# Supply chain management for treatment of child wasting through a simplified approach:

Provision of quality services in the management of waste needs to establish a good supply chain system. In applying the simplified approaches and combined protocol, management procedure, it is imperative to ensure consistent availability of supplies at the health facility level, MHNT, or community level. The essential nutrition commodities for implementation of simplified wasting treatment procedures are RUTF, anthropometry equipment (MUAC tape including simplified MUAC tape for Family MUAC, printing materials (protocols, quick references, patient follow up cards, registration books, reporting forms, and referral slips stock management cards /bin cards and stock register).

- 2.1. Quantification and procurement:
  Procurement of the selected products and other essential supplies should follow national and international emergency standards and regulations. The number of supplies needed depends on the SAM or MAM caseload, the amount normally used in each period (e.g., each quarter), the frequency of requests, and the existing storage capacity.
- 2.2. Organizing the Store and stock Management: At in an area whether re health system is functional the routine supply management system will be followed. But in emergency context where there is no functional health facility in the area or there is an access challenge, supply system will be managed in IDPs, MHNT, and in kebele offices by the community volunteers When community health workers/volunteers are selected to implement the simplified approach, one trained community health worker will be selected from each kebele

to take responsibility for nutrition supply management (storage, stock management, report, and request for supply, dispense supply for distribution) Transportation of supply and management to/at site will be supported by government or partners (NGOs) in the area to support emergency nutrition response using simplified approaches and combined protocol. Health workers (from government or NGO staff) will supervise and ensure proper storage, proper utilization of the supply, proper recording system and stock management. Mobile health and nutrition team/ static clinic can use their own storage system or can directly dispatch and utilize the supply on daily basis from available nearby health system storage.

Nutrition supplies should be stored based on the standards of practice in supply storage or in a clean, dry and well-ventilated room to protect from pests, rodents and spoilage using pallets/plastic sheets. Ensure that RUTF and other medicines are not stored together with harmful chemicals. The store should be lockable, well ventilated, has shelves or wooden pallets (can be prepared locally), supply should not have exposed to direct sunlight, expired, damaged, or items no longer in use should be separated. At kebele level available government institution such as health post, farmer training centre (FTC) or kebele admin store can be used to store the supply.

2.3. Monitoring proper utilization of supply: To ensure minimize /avoid miss utilization of supply especially when the simplified approach is implemented by community health workers, it is crucial to overview proper utilization as frequently as possible, compare the registered cases with distributed product recorded on bin card.

Government health workers or partners staff who provide technical support has to visit cases recorded (sample), see their nutritional status, ask for history of treatment to identify and support if there any gap.

## 3. Monitoring and evaluation (recording and reporting tools)

The standard management of acute malnutrition recording, and reporting tools will be used to record and report service provided through simplified and combined approach.

#### 3.1. Recording tools

- To ensure an adequate implementation, performance and treatment outcomes, reporting for those children treated using the simplified approaches and combined protocol will be separate from routine nutrition reporting and will be overseen by emergency data management system.
- Adopt existing CMAM registry, including, screening register, SAM register and MAM register
  - In the screening register, a separate additional column will be included to identify who performed the screening using the key which represent the code of each performer
  - In SAM/MAM register, additional columns to be included to capture who managed the treatment, product used and treatment dosage of the product.
  - A single register adopted from routine SAM/MAM register will be used to record both Sever wasting and moderate wasting cases of children 6-59 months
  - To record frequency, the existing OTP/ TSFP card will be used (frequency of visits will be as per the simplified and combined protocol).

#### 3.2. Reporting tools

- Adopt the existing routine reporting form to reflect the simplified approach:
  - Some elements of data from the reporting form will be removed (including, weight for height, and weight for length)
  - Additional information to be captured, including by whom the screening is done; who managed wasting treatment; frequency of follow-up visits; if admission, treatment, or discharge is based on MUAC and/or edema; the admissions criteria used, product; and treatment dosage of the product.
  - Under the service column, OTP/TSFP and SC elements will be replaced by a single simplified and combined protocol.
- To capture evidence of coverage, effectiveness, and efficiency of the simplified approach for decision making, the analysis will be done using secondary data retrieved from the adopted forms.
- Reporting and accountability hierarchy
  - If the health system exists, CHW will report to the nearest health facility (health post, health center) while mobile health and nutrition team will directly report to the nearby PHCU/ woreda health office.
  - If the health system is not functional in the area, the report will be compiled and sent to the functioning level of the government health system (zone, region, or federal).

3.3. Proposed indicators with definition and frequency of reporting

Indicator	Definition	Frequency	Disaggregation	Data source	Reporting level when the health system is functional	Reporting level when the health system is not functional
Proportion of children 6-59 months screened for malnutrition through simplified approach	Total number children Biweekly addressed with nutrition and Monthly screening during the reporting period divided by total eligible under 5 years children in the area		Disaggregated Sex (Boy/girl), Age MUAC readings in cm Oedema (0, +, ++, +++)	Simplified and combined protocol Register	Simplified Health Post Volunteers and combinedHealth center MHNT Wored protocol Woreda HO—Zonal HOZonal HD Register HDRegional HB RHBMOHMOH	Volunteers MHNT Woreda HOZonal HD RHBMOH
The proportion of children 6-59 months severely wasted	The total number children of 6-59 months severely wasted divided by the total number of 6-59 months screened using a simplified and combined approach during the reporting period	Biweekly and Monthly	Disaggregated Sex (Boy/girl), Age	Simplified and combine protocol Register	Health Post VolunteersHealth center MHNT Wored; Woreda HO—Zonal HOZonal HD HDRegional HB RHBMOHMOH	Volunteers MHNT Woreda HOZonal HD RHBMOH
The proportion of children 6-59 months moderately wasted	The total number of children of 6-59 months moderately wasted divided by the total number of 6-59 months screened using a simplified and combined approach during the reporting period	Biweekly and Monthly	Disaggregated Sex (Boy/girl), Age	Simplified and combine protocol Register	Health Post VolunteersHealth center MHNT Woreda Woreda HO—Zonal HOZonal HD HDRegional HB RHBMOHMOH	Volunteers MHNT Woreda HOZonal HD RHBMOH

Indicator	Definition	Frequency	Disaggregation	Data source	Reporting level when the health system is functional	Reporting level when the health system is not functional
Treatment outcome for Severe wasting	****	Monthly	Disaggregated by type of outcome (Recovered, died, defaulted, non-respondent, medical transfer, and transfer out	Simplified and combine protocol Register	Health Post VolunteersHealth center MHNT Woreda Woreda HO—Zonal HOZonal HD HDRegional HB RHBMOHMOH	Volunteers MHNT Woreda HOZonal HD RHBMOH
Treatment outcome for Moderate wasting	****	Monthly	Disaggregated by type of outcome (Recovered, died, defaulted, non-respondent, medical transfer, and transfer out	Simplified and combine protocol Register	Health Post VolunteersHealth center MHNT Woreda Woreda HO—Zonal HOZonal HD HDRegional HB RHBMOHMOH	Volunteers MHNT Woreda HOZonal HD RHBMOH
Number of RUTF carton in stock	Total number of RUTF s carton in stock for the reporting period	Monthly or/and Biweekly		Supply management register	Health Post VolunteersHealth center MHNT Woreda Woreda HO—Zonal HOZonal HD HDRegional HB RHBMOH	Volunteers MHNT Woreda HOZonal HD RHBMOH

### References

- 1. Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, de Onis M, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet. 2013; 382:427–51. https://doi.org/10.1016/S0140-6736(13)60937-X PMID: 23746772)
- Naoko Kozuki, Mamoudou Seni et al. Adapting acute malnutrition treatment protocols in emergency contexts: a qualitative study of national decision making. BMC 2020 Conflict and Health (2020) 14:47 https://doi.org/10.1186/s13031-020-00293
- 3. National Guideline for the Management of Acute Malnutrition in Ethiopia, 2019
- 4. Technical Brief: Simplified approaches to the treatment of wasting, UNICEF/Malawi 2020

# Annexes

# Annex I: Costing template

Simplified Protocols Caseload Calculation	load C	alculation									
Target Population				100,000	20%	20,000	N		8	Sex disagregated	
Children age 6-59 months:					% Basis	% Basis Prevalence Incidence	Incidence	Target	Boys	Girls	Total
Screening: # of children 6-59 months of age (15% of total population)	of total popu	lation)			15.0%	7,500		7,500	3,600	3,900	005'2
SAM: # of Severe Acute Malnourished children (3% of 6-59 months children)	of 6-59 mo	nths children)			3.0%	225	1,508	1,733	832	901	1,733
MAM: # of Moderate Acute Malnourished children (12% of 6-59 months children)	2% of 6-59	months children)			12.0%	006	2,340	3,240	1,555	1,685	3,240
Calculations are based on assumptions and can be changed as per the contextual	changed	s per the contextual	SAM	MAM							
Proposed length of stay (LOS) of wasted child in programme to be cured (# of days)	grammeto	be cured (# of days)	06	120							
# of RUTF sachets per child / month			2	1							
S# Description	Unit	Required Qty	Unit Cost \$	Total Value (\$)	Remarks/Notes	otes					
Therapeutic supplies needed for Simplified protocols	ls s	-									
1 Therapeutic spread, sachet 92g/CAR-150	CAR	4,671	20.00	233,550							
Anthropometric Equipments and other supplies used	pe										
2 MUAC, Child 11.5 Red/PAC-50	PAC										
				,							
	2	Total Supply, Iten	Total Supply, Items Amount (US\$)	233,550							



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