National Guidelines

For Integrated Management of

Acute MalNutrition

Federal Ministry of Health
Department of Family Health
Nutrition Division
Abuja-Nigeria

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Dr. Salma Ibrahim Anas, MBBS, MWACP, FMCPH
Director, Family Health Department
February, 2022.

FOREWORD

Nigeria is among twenty countries accounting for 80% of undernourished children in the world and directly or indirectly contributing to over 50% of deaths among U-5 children. The community-based solution involves mobilization to ensure timely detection of acute malnutrition in the community, supporting outpatient care of non-complicated cases and providing Ready-to-Use Therapeutic Foods (RUTF) or other nutrient-dense foods at home. Properly combined with facility-based approach to managing malnourished children with medical complication and implemented on a large scale, integrated management of acute malnutrition can prevent deaths in several children.

The existing National Guidelines on Community Management of Acute Malnutrition (CMAM) sought to give a practical guide to health and nutrition workers to design, implement and evaluate management of severe acute malnutrition programmes. They were developed with local realities in mind and aimed at health practitioners and planners involved in support and supervision of CMAM activities. It is also intended for use by government institutions and donors supporting or implementing CMAM programmes. Technical specialists, field practitioners, Community-Based Organizations (CBO), Faith-Based Organizations (FBOs), Multilateral and Bilateral Agencies, who sought understanding of IMAM in practice also benefited from the protocol.

However, during a recent technical meeting on evaluation of the National CMAM guidelines, participants identified gaps which underscored the reason to develop a guidance protocol for management of Moderate Acute Malnutrition (MAM), as well as issues on humanitarian responses and emerging public health concerns in relation to the nutrition landscape. Hence the consensus to review the guidelines, which necessitated incorporating new chapters on supplementary feeding for management of Moderate Acute Malnutrition (MAM), Nutrition in Emergency and special circumstances, Supply Chain Management and update on Monitoring and Evaluation. The renaming of the National Guidelines on CMAM as "National Guidelines on Integrated Management of Acute Malnutrition (IMAM) as Volume one: Outpatient Care (OPC) and Volume two: Inpatient Care (IPC) becomes evident in line with global nomenclature and the realities of national perceptions in Nigeria.

Furthermore, emerging public health concerns also necessitated adaptation of interventions in special circumstances comprising people in difficult situations, chronic disease conditions and emerging public health concerns like Covid-19, Lassa, Ebola etc, as they relate to nutrition, into the IMAM guidelines, in line with prevailing global best practices in Nutrition, with simplified protocols.

This document has been simplified and made user-friendly for Health Workers, Partners, Donors, Academia and interested stakeholders in national socioeconomic development. I recommend it as a reference work for relevant information for preventive, promotive, curative and rehabilitative management of Acute Malnutrition at Primary health system level, while the National Guidelines on IMAM Volume Two-Inpatient Care is useful for inpatient management of complicated SAM or MAM at referral health facilities.

Dr. Osagie E. Ehanire, MD, FWACS
Honourable Minister of Health,
February, 2022.

RATIONALE FOR THE GUIDELINES REVIEW

The guidelines are aimed at standardising the identification, treatment and management of acute malnutrition among children, and pooling adequate resources for management of malnutrition. The guidelines also provide guidance for the special circumstances of the conditions of chronic illnesses including HIV and emergency settings. Compliance with the guidelines would contribute to improved care and overall reduction of child mortality as well as saving lives in special circumstances.

What is new in this version of Integrated IMAM guidelines?

There is integration of all IMAM components (community mobilisation, OTP, IPC) with inclusion of targeted supplementary feeding management for MAM among children 6-59 months, as well as a chapter on special circumstances that captures vulnerable groups such as pregnant and lactating women and a chapter on the nutrition programmatic adaptation to the context of any public health outbreak/pandemic like COVID-19, Lassa fever, Ebola, etc. Ultimately, this is now called **National Guidelines for Integrated Management of Acute Malnutrition Volume I: Outpatient Care**. Additionally, a number of job aids and monitoring tools have been introduced and updated.

Who should use the Guidelines?

The guidelines will be a valuable tool for implementers at outpatient care level of Nigeria's health system. They include community oriented resource persons (CORPs) for community mobilisation component, health workers of all categories at the primary health care level, as well as service providers in special circumstances.

Policy makers and programme managers including NGOs, CSOs and FBOs responsible for programmes and policy related tasks in the management of acutely malnourished children and the vulnerable population in special circumstances will find this document beneficial.

ABBREVIATIONS & ACRONYMS

AAH	Action Against Hunger
ACT	Artemisinin-based combination therapy
BSFP	Blanket Supplementary Feeding Programme
CbRPs	Community-based Resource Persons- CHIPS Agents/CORPs/CVs
CCCM	Camp Coordination and Camp Management
CHIPS Agents	Community Health Influencers Promoters and Services Agents
CM	Community Mobilisation
CMAM	Community Management of Acute Malnutrition
CMV	Combined Mineral and Vitamin mix
CORPs	Community Oriented Resource Persons
COVID-19	Corona Virus Disease of 2019
CVs	Community Volunteers
DQA	Data Quality Assessment
EPI	Expanded Programme on Immunisation
FGD	Focus Group Discussion
FHI 360	Family Health International-360
FMOH	Federal Ministry of Health
GAM	Global Acute Malnutrition
GMP	Growth Monitoring and Promotion
Hb	Haemoglobin
HF	Health Facility
HIV	Human Immunodeficiency Virus
HWs	Health workers
IANM	Inter-Agency Nutrition Meeting
IDPs	Internally Displaced Persons
IM	Intramuscular
IMAM	Integrated Management of Acute Malnutrition
IMCI	Integrated Management of Childhood Illnesses
IPC	In-Patient Care
IV	Intravenous

IYCF	Infant and Young Child Feeding
JANSFA	Joint Approach for Nutrition and Food Security Assessment
KII	Key Informant Interview
LLINs	Long-Lasting Insecticidal Nets
MAM	Moderate Acute Malnutrition
MIRA	Multisector Initial Rapid Assessment
MNP	Micronutrient Powder
MUAC	Mid Upper Arm Circumference
NACS	Nutrition Assessment Counseling and Support
NDHS	Nigerian Demographic and Health Survey
NFSS	National Food Safety System
NiE	Nutrition in Emergency
NNHS	National Nutrition and Health Survey
NPHCDA	National Primary Health Care Development Agency
OPD	Outpatient Department
OTP	Outpatient Therapeutic Programme
PCR	Polymerase Chain Reaction
PHC	Primary Health Centres
PLW	Pregnant and Lactating Women
RDT	Rapid Diagnostic Test
ReSoMal	Rehydration Solution for Malnutrition
RMNCAEH+N	Reproductive Maternal New-born Child Adolescent Elderly Health plus Nutrition
RUSF	Ready-to-Use Supplementary Food
RUTF	Ready-to-Use Therapeutic Foods
SAM	Severe Acute Malnutrition
SARI	Severe Acute Respiratory Illness
SCM	Supply Chain Management
SDGs	Sustainable Development Goals
SFP	Supplementary Feeding Programme
SMOH	State Ministry of Health
SQ-LNS	Small Quantity Lipid-based Nutrient Supplements

TB	Tuberculosis
TSFP	Targeted Supplementary Feeding Programme
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
VCMs	Voluntary Community Mobilisers
WASH	Water Sanitation and Hygiene
WFH	Weight-for-height
WFL	Weight-for-length
WFP	World Food Programme
WHO	World Health Organisation

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CHAPTER ONE: INTRODUCTION

Malnutrition is recognised as a global and national problem which weakens the immune system and worsens illnesses. It is the underlying cause of about half the deaths of children under five years of age in Nigeria.

The Nigerian Demographic and Health Survey (NDHS) 2018 revealed that 7% of children under the age of five in Nigeria are wasted, with 2% severely wasted, while 23% of all children under the age of five years are underweight and 8% are severely underweight. The stunting rate of 37% has remained the same between 2013 and 2018 as reported in the 2013 NDHS and 2018 NDHS reports. Also, the data agrees with National Nutrition and Health Survey (NNHS) from 2018 which puts the national prevalence of global acute malnutrition (GAM) among children aged 6-59 months at 7%. These fall within the World Health Organisation's (WHO) malnutrition prevalence classification of serious levels for stunting/chronic malnutrition and critical, severe, acute malnutrition respectively in Nigeria.

In addition, infant and young child feeding (IYCF) practices are suboptimal, according to the NDHS 2018, which reported that only 29% of children less than 6 months were exclusively breastfed. In addition to breastmilk, 39% of these infants consume plain water, 4% consume non-milk liquids, 4% consume other milk, and 22% consume complementary foods, as well as 15% of infants under 6 months of age being bottle-fed with a nipple. These poor IYCF practices were also reported as evidence for the implementation of the Integrated Management of Acute Malnutrition (IMAM) model to ensure therapeutic and preventive measures for the management of acute malnutrition that is associated with increased risk of illnesses in children. 72% of children aged 6-8 months receive timely complementary foods, yet only 11% of children aged 6-23 months meet minimum standards with respect to IYCF practices.

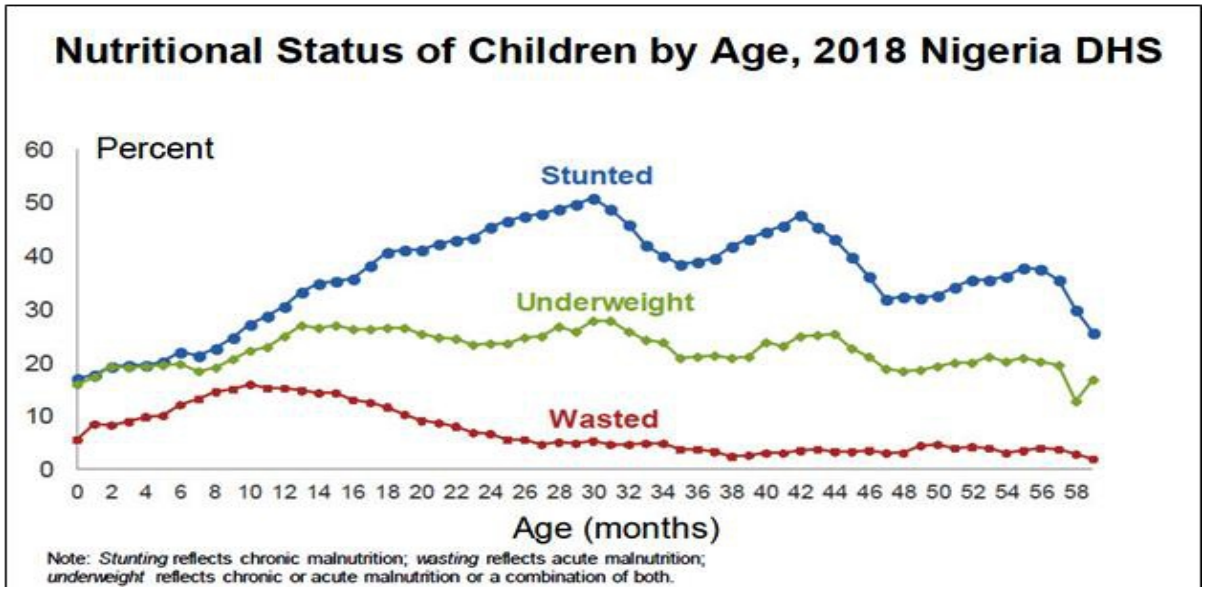


Figure 1.1: Nutritional status of children by age (NDHS, 2018)

The emergency nutrition response in North-East Nigeria since 2016 has shown that the prevalence of acute malnutrition in Internally Displaced People (IDPs) and host communities require the inclusion of guidance on special circumstances for Nigeria according to the WHO classification (MOH, UNICEF, UNHCR and WFP, 2017). Therefore reports from North-East humanitarian response for GAM is between >10% and < 15% with aggravating factors as a result of insurgency, flood, violence and general insecurity that are either man-made or natural.

In Nigeria, based on the 2015 United Nations Children's Fund (UNICEF) report, about 2.6 million children suffer from severe acute malnutrition (SAM) annually. SAM can be a direct cause of death and can indirectly increase fatality rates in children with common childhood illnesses such as diarrhoea, pneumonia and malaria, thus making SAM a major cause of death of children less than five years of age in Nigeria.

Previously, treatment of children with SAM was restricted to hospital-based approach, thus limiting access and coverage to the large numbers of children affected. In addition, health facility-based treatment often came with unbearable direct and

indirect costs for the family of the sick children. Developments over the past decade, and emerging evidence show clearly that most of these children can be screened, diagnosed, and treated in their communities without being admitted to a health facility or a therapeutic feeding centre.

The integrated approach involves early detection of moderate and severe acute malnutrition cases in the community and provision of treatment for those without medical complications who pass the appetite test. The appetite test is done with appropriate foods such as ready-to-use therapeutic foods (RUTF), ready to use supplementary foods (RUSF), small quantity lipid-based nutrient supplement (SQ-LNS) or other nutrient-dense foods at home. If combined with a facility-based approach for malnourished children with medical complications and/or with poor appetite and implemented on a large scale, integrated management of acute malnutrition could prevent the deaths of hundreds of thousands of children.

Nutrition is an integral component of the Sustainable Development Goals (SDGs). At least 12 out of the 17 Sustainable Development Goals contain indicators that are closely related to nutrition which reflects nutrition's central role in achieving the SDGs. Evidence shows that about 90% of children with SAM, identified through active case finding, or through sensitising and mobilising communities to access centralised services, can be treated at home. With cognisance of these facts, the 2007 WHO/WFP/SCN and UNICEF Joint Statement on Community Management of Acute Malnutrition (CMAM) has led many countries to embrace the integrated approach for management of acute malnutrition.

Training for in-patient management of SAM started in the first quarter of 2009, followed by a pilot for the CMAM approach, which commenced in the second quarter of 2009. The pilot programme observed high caseloads with effective treatment outcomes.
This IMAM guidelines lay the foundation for a nationwide scaling up of the integrated approach in the management of acute malnutrition in a harmonised and coordinated way. This involves the critical IMAM component for management of MAM and is linked

with other key Reproductive Maternal Newborn Child Adolescent Elderly Health plus Nutrition (RMNCAEH+N) interventions.

OVERVIEW OF IMAM IN NIGERIA

The IMAM programme implementation started in Nigeria in 2009 as a hospital-based in-patient care and CMAM at the community level. However, the roll out has not been at scale and not integrated, with several children suffering severe forms of acute malnutrition, being treated exclusively at the hospital level. Several elements informed the shift to a community-based integrated approach aimed at improving coverage for the treatment of SAM cases. These include the following:

- RUTF is a therapeutic food (medicine) in form of a paste with similar nutrient composition to F-100, which is the therapeutic milk used in phase 2 of in-patient care[1]. The advent of RUTF allows beneficiaries to be treated at home. RUSF is used for MAM treatment. RUTF and RUSF do not need to be cooked or processed with water before utilisation and can be consumed as presented, thus limiting bacterial contamination due to its low water activity.
- The new classification for acute malnutrition allows treatment adaptation according to the patient's medical and nutritional conditions as shown in Figure 1.2.

[1] For details of F-100 refer to IMAM National Guideline: Volume 2 on In-Patient Management of Severe Acute Malnutrition.

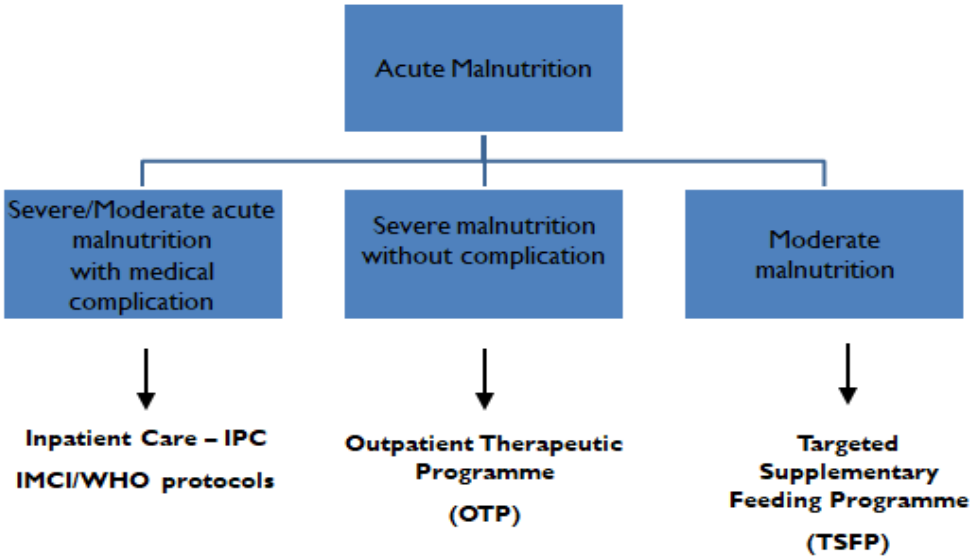


Figure 1.2: Classification of acute malnutrition

TARGETI GROUPS FOR IMAM

Although these guidelines are primarily intended for the management of acute malnutrition in children from 6 months up to 59 months of age, pregnant and lactating women (PLW) in emergency situations, nutrition in emergencies and other special circumstances are also highlighted.

* Infants under 6 months of age with SAM should be exclusively treated in the in-patient facilities

COMPONENTS OF IMAM

The following are the four components of IMAM:

i. Community mobilisation to raise awareness and ensure community involvement.
ii. Outpatient Therapeutic Programme (OTP) for the management of SAM without medical complications with services integrated in the health facility or outreach.
iii. In-patient Care (IPC): hospital-based management of complicated SAM and MAM cases for stabilisation.

iv. Targeted Supplementary Feeding Programmes (TSFP): nutritional care for the management of MAM cases.

The IMAM programme is not a stand-alone set of services; other interventions are necessary and can be "nutrition-specific" or "nutrition-sensitive" interventions - together, they can be referred to as the IMAM environment. The relationship among the different components of IMAM and their integration with other RMNCAEH+N services is shown in the figure below.

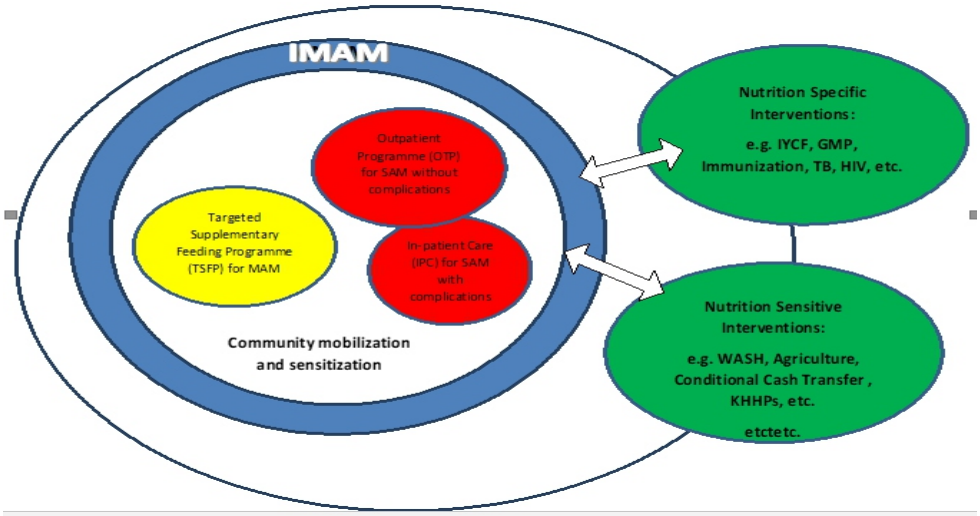


Figure 1.3: IMAM Environment

1.3.1 Community Mobilisation

Community mobilisation involves social and behavioural change communication strategy for participation and ownership of IMAM programming. It can be undertaken as a single activity or integrated in community health and nutrition activities. At the core of community mobilisation is the early detection, referral, care and follow-up of cases of malnutrition by community-based resource persons for adequate linkages such as CORPs/CVs/CHIPS Agents/VCMs, etc., trained for the identification of malnourished children through the measurement of the mid upper arm circumference (MUAC) and the assessment of bilateral pitting oedema. Community mobilisation is the link between prevention and treatment.

1.3.2 Outpatient Therapeutic Programme (OTP)

Children 6-59 months with SAM without medical complications and with appetite, are treated in OTP sites in Primary Health Care (PHC) facilities, or outpatient department of referral health facilities. Enrolment of beneficiaries starts with a screening process, which mostly starts in the community and finishes at health facility level.

Children corresponding to established admission criteria (which are based on anthropometric and clinical parameters), receive appropriate nutritional and medical care for home-based treatment. Every week, children visit the closest OTP (primary health care facility) for monitoring of their medical and nutritional status. During the visits, health and nutrition education is given to mothers and caregivers. Evidence has shown that 90% of SAM cases can be treated in PHC facilities if treatment protocols are adhered to.

1.3.3 In-Patient Care (IPC)

Children 0 - 59 months suffering from SAM with medical complications and/or unable to eat RUTF or failing to recover as expected in OTP, are referred to an in-patient facility within hospital paediatric services to manage the medical complication and initiate treatment to improve their nutritional status. The difference between IPC and other paediatric care is that children in IPC receive special therapeutic milks and RUTF to stabilise the abnormal nutritional and physiological status.

1.3.4 Supplementary Feeding Programme (SFP)

As an integral component of IMAM, SFP aims to provide treatment for children 6-59 months with MAM without medical complications, to prevent them from progressing to SAM and other vulnerable groups such as PLW in emergency settings. Targeted Supplementary Feeding Programme (TSFP) which involves nutritional treatment is provided through specialised nutritious foods, such as RUSF, SQ-LNS or fortified blended flours. In the absence of a full TSFP, those with MAM should receive nutritional counselling, deworming and verification of vaccination status along with treatment of

any underlying infections and subsequently, linked and referred to Blanket Supplementary Feeding Programmes (BSFP), as available, and/or household livelihood or food security support.

Chapter 8 provides detailed adaptation of the IMAM key programmes in various special circumstances including during emergencies, HIV infection, lack of adequate supplies or interventions of OTP/TSFP and in the context of any public health concerns such as COVID-19, Lassa fever, Ebola. IMAM programme managers may need to make references to other national guidelines to assist in adapting the programme to any special circumstances.

CHAPTER TWO: STEPS IN SETTING UP IMAM PROGRAMME, ROLES AND RESPONSIBILITIES

2.1 INTRODUCTION

Adequate resources such as financial, human, material, and coordination capacity, are required for the successful implementation of IMAM programme. This is key for sustainability through engagement of stakeholders at all levels. The roles and responsibilities of key stakeholders at federal, zonal, state, LGA and ward levels involved in the implementation of IMAM activities are clearly defined to foster acceptability and ownership.

2.2 STEPS INVOLVED IN SETTING UP IMAM PROGRAMME

1. *Planning*

High level planning involving development of macro and micro plans is required in setting up IMAM. Resources involved are planned and mapped. External resources and personnel are leveraged to maximize outcome. There must be a lead government agency pushing for the set-up, usually, the Federal Ministry of Health (FMOH), National Primary Health Care Development Agency (NPHCDA), State Ministries of Health/State Primary Health Care Boards, local authorities, NGOs and CBOs/FBOs. Setting up involves evidence-based data, showing geographic distribution of malnutrition cases within a defined geographical area.

2. *Selection of Sites*

Meetings of key stakeholders at the community level to select sites. The objectives of the meetings are to discuss issues concerning IMAM set up, identification of roles and responsibilities of various stakeholders, selection of sites and CORPs/CHIPS Agents/CVs, and plans for the roll out of IMAM. Selection criteria of the sites also depend on the location of the Health Facility (HF), which are central within the catchment area.

3. *Pre-Assessment of Selected Sites*

The selected sites will be assessed for their suitability in terms of caseload, accessibility, personnel, water and sanitation, security and community support mechanisms. Health facilities with good physical infrastructures, including the availability of water, sanitation, health workers and community support are selected.

4. *Stakeholders' Meeting*

The outcome of the pre-assessment is presented at this meeting with the objective of gathering support towards addressing findings for effective implementation.

5. *Community Mobilisation*

Community mobilisation is conducted to sensitize, inform, and educate the community on the IMAM programme. This would create more awareness on nutrition in the community, helping them to actively participate in nutrition activities carried out by the health system.

6. *Personnel Training (Minimum requirement)*

i. Five health workers (HWs) per selected HF are to be trained by certified IMAM facilitators.
ii. Ten CORPs/CHIPS Agents/ CVs selected from catchment areas within each facility are to be trained by certified IMAM facilitators and the trained head (in charge) of the HF.
iii. Two store officers of the HF and main stores (e.g., LGA store) are to be trained on stock and data management to support IMAM services.

7. *Setting Up of OTP and TSFP*

The IMAM training facilitators should join the trained HWs in starting the process of admitting referred children from the community in OTP and TSFP. The facilitators at this point, should put in place all the requirements for OTP/TSFP set up.

8. *Follow Up at OTP and TSFP*

The IMAM training facilitators along with other trained HWs should conduct the first follow up visit, in addition to mentoring, coaching and supportive supervision.

2.3 ROLES AND RESPONSIBILITIES

Roles at different levels for the implementation of IMAM are as follows:

Federal Level

i. Planning for roll out, training and supplies.
ii. Coordination of programme and stakeholders involved in IMAM.
iii. Development of national protocols and guidelines for conducive operational environment.
iv. Harmonisation of IMAM intervention with other minimum health care delivery packages.
v. Monitoring, evaluation and supportive supervision for quality service delivery.
vi. Institutionalising IMAM database.

Zonal, State and LGA Levels

i. Planning for roll out, training and supplies.
ii. State Ministry of Health and relevant agents should be responsible for pre-assessment of selected sites.
iii. Planning and commitment for implementation and logistics.
iv. Community dialogue for participation, involvement and ownership.
v. Monitoring the distribution and accounting for the materials.
vi. Training of HWs, CbRPs like CORPs/CHIPS Agents/CVs and store officers at implementation levels.
vii. Roll out of activities for IMAM delivery.
viii. Monitoring, supportive supervision and evaluation of IMAM at service delivery points.
ix. Establishment and management of IMAM database at service delivery points.

Health Facility Level

i. Check and confirm whether cases identified and referred should be admitted to OTP/TSFP/IPC.
ii. Provide medical and nutritional treatment through OTP to SAM cases without medical complications, IPC for complicated SAM and TSFP for MAM cases without complications.
iii. Provide counselling and demonstration services on IYCF, MNP, SQ-LNS and other key household practices.
iv. Coordinate and support community structures.
v. Systematically report the outcomes of IMAM activities to the LGA nutrition focal person.
vi. Maintain a sustainable logistic system for all resources to ensure quality care.

CHAPTER THREE: MEASUREMENT AND DIAGNOSIS OF ACUTE MALNUTRITION

3.1 INTRODUCTION

Acute malnutrition is classified either as SAM or MAM based on distinct clinical parameters and anthropometric measurements. This chapter reviews the different types of acute malnutrition and how to identify them.

3.1.1 Acute Malnutrition

1. Severe acute malnutrition is defined by:
    a. Presence of bilateral pitting oedema and/or
    b. Mid-Upper Arm Circumference (MUAC) of < 11.5 cm and/or
    c. Weight-for-Height (WFH) or Weight-for-Length (WFL) of < -3 z-scores
2. Moderate acute malnutrition is defined by:
    a. No oedema of nutritional origin
    b. Mid-Upper Arm Circumference (MUAC) of 11.5-12.4 cm and/or
    c. Weight-for-Height (WFH) or Weight-for-Length (WFL) of ≥ -3 to < -2 z-scores

The term severe acute malnutrition refers to two different entities with different clinical and pathological characteristics: *wasting* and *oedema*. The most evident clinical feature in wasting is the loss of muscle and fat mass, resulting in low MUAC and/or low WFH. Patients are emaciated with thin, flaccid skin and prominent scapulae, spine and ribs. Cases also present with associated infections and behavioural changes (apathy and irritability). Care must be taken to undress the child for examination since the face may be well preserved and be misleading as a visual cue to suspect malnutrition. This is referred to as marasmus.

The following terms are used to describe the clinical manifestations of SAM:

- Marasmus: characterised by severe visible wasting as a result of the body breaking down fat and muscle for energy.
- Kwashiorkor: characterised by bilateral pitting oedema (affecting both sides of the body) in the feet and lower legs which as it progresses, becomes more generalised to the arms, hands and face. Oedema is the excessive accumulation of fluid in body tissues which results from severe nutritional deficiencies.
- Marasmic-kwashiorkor: characterised by a combination of severe visible wasting and bilateral pitting oedema.

If not detected early during the course of malnutrition children with SAM may develop anorexia and medical complications, which require specialised interventions to prevent death.

	
Child with severe wasting	**Oedematous malnutrition**

3.2 IDENTIFICATION OF ACUTE MALNUTRITION

Identification of cases of acute malnutrition is a critical activity for the success of services treating this condition. Early identification allows for finding children before severe malnutrition becomes serious and complications arise, hence making it easier to treat.

	Non-Communicable Diseases (NCDs)			
		Male	Female	Total
158	Road traffic accident (RTA)			
159	Domestic (home) accident			
160	Coronary heart disease new cases			
161	Diabetes mellitus new cases			
162	Hypertension new cases			
163	Sickle cell disease new cases			
164	Snake bites new cases			
165	Asthma new cases			
166	Athritis new cases			
167	Stroke new cases			
168	COPD new cases			
169	Breast Cancer new cases			
170	Cervical Cancer new cases			
171	Prostate Cancer new cases			
172	Colo-rectal Cancer new cases			
	Sexually transmitted infections			
		Male	Female	Total
173	STI new cases seen			
174	STI new cases treated			
175	Male Urethritis new cases			
176	Male Urethritis new cases treated			
	Laboratory			
	Antenatal care attendees only			Total
177	Number of ANC anaemia tests done (heamoglobin/packed cell volume - HB/PCV)			
178	Number of ANC anaemia test positive			
179	Number of ANC proteinuria test done			
180	Number of ANC proteinuria test positive			
	Inpatient care (IPC)			
				Total
181	Functional beds			
182	Inpatient days			
183	Inpatient discharges			

		Male						Female						Total
		0-28 days	29d - 11 mths	12 - 59 mths	5 - 9 yrs	11 - 19 yrs	20 yrs+	0 - 28 days	29d - 11 mths	12 - 59 mths	5 - 9 Yrs	10 - 19 yrs	20 yrs+	
184	Number of patients addmitted during the index month													

Figure 3.1: Flow chart for identification of children with acute malnutrition

(Please follow Covid-19 and other emerging public health protocol in the implementation)

Identification is done in different ways, as follows.

Active screening at the community level: Active case finding is done at the community level by community-based resource persons, CbRPs like CORPs/CHIPS Agents/CVs, etc., trained to take MUAC measurements and assess for oedema. Children presenting a "yellow" or "red" MUAC or having bilateral pitting oedema are referred to the nearest health facility. Other screening avenues might be available at the community level, such as "Family MUAC/Mother-led MUAC", where mothers and eligible family members are trained to measure the MUAC of their children. In addition, mothers support groups or other key community figures that have been sensitised and/or trained to identify signs of malnutrition are also trained to measure MUAC of children. Children identified by "other sources" will be referred to CbRPs like CORPs/CHIPS Agents/CVs, etc., for verification. If MUAC is "yellow" or "red" and/or if bilateral pitting oedema is present,

the child will be referred to the health facility where measurement will be retaken to confirm the diagnosis of acute malnutrition.

Malnourished children under 6 months are often overlooked in the community because MUAC screening is used only for children 6-59 months old. During active case finding, community workers should identify children visibly wasted and ask the mother about breastfeeding and illness. Such infants should be referred to the nearest health facility for further investigation and be linked with the IYCF counsellor (if difficulty in breastfeeding is reported or noted).

Mobile sites for TSFP/OTP: A mobile team in some settings visits villages that are difficult to reach. During the visit, the team may also screen new children for acute malnutrition using MUAC and assess for oedema some mobile teams are also equipped with a weighing scale and height-board and WFH z-scores are calculated. Children identified to be acutely malnourished are then referred to the health facility for confirmation of the preliminary screening.

Passive screening in health facilities: In health facilities, HWs also screen by taking MUAC, weight and height measurements, and assessing for oedema for all children arriving at the facility including those who are growth faltering or registered in HIV or TB programmes. Children identified as underweight or growth faltering at the facility, are re-screened for acute malnutrition. This is regarded as a standard element of assessment and done during regular child facility visits (Immunisation session, growth monitoring & promotion, etc.) or when children are sick and attend other consultations.

3.3 MEASUREMENTS

Refer to Chapter 8, section 8.3 on the measures to take while taking anthropometric measurement in the context of other public health concerns e.g. COVID-19 pandemic.

3.3.1 Assessing Bilateral Pitting Oedema

Bilateral pitting oedema is swelling from excess fluid in the tissues. It is usually seen in the feet and lower legs and arms. In severe cases it may also be seen in the upper limbs and face. Bilateral pitting oedema is verified when thumb pressure applied on top of both feet for three seconds leaves a pit (indentation) in the foot after the thumb is lifted. Nutritional oedema always starts from the feet (pedal).

Procedures

1. While the child is sitting, hold both feet in your hands. Apply a firm thumb pressure to the tops of both feet for three full seconds (count, 1001, 1002, 1003). Remove the thumbs.
2. If the depression from your thumbs remains on both feet, then the patient has bilateral pitting oedema. It may be easier to feel this depression than to see it.
3. If tops of feet are oedematous, repeat the process on the shins and hands.
4. If the shins / hands are oedematous, observe for oedema around the eyes.

Oedema is nutritionally significant if it is present on both feet. However, bilateral pitting can also be caused by medical conditions such as nephritic syndrome. Medical causes are first ruled out before the diagnosis of nutritional oedema is made.

Accessing Bilateral Pitting Oedema

Grade 1 (+)	Grade 2 (++)	Grade 3 (+++)
Mild: both feet/ankles	Moderate: both feet, plus lower legs, hands, or lower arms	Severe: generalized oedema including both feet, legs, hands, arms and face

The three grades of nutritional oedema

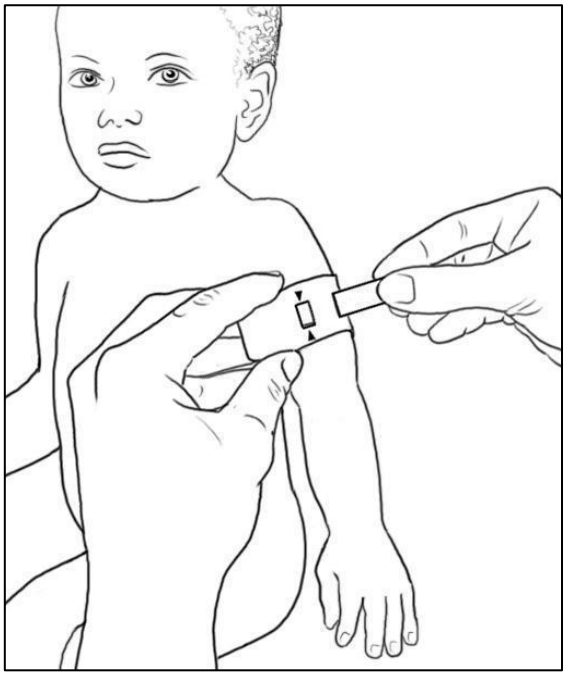
3.3.2 Measuring MUAC

The mid-upper arm circumference is measured using a MUAC tape. The tape is usually numbered and colour coded. MUAC is used for children 6-59 months old and PLW to measure thinness.

Following the last evidence on family MUAC[2], procedure could be further simplified without significantly impacting (negatively) on the accuracy of the measurement.

Findings that indicate no difference on MUAC measurements:

- Between the left or right arm.
- Using arm mid-point determination technique outline above or estimating the half-way point by eye.



[2] Blackwell N, Myatt M, Allafort-Duverger T, Balogoun A, Ibrahim A, Briend A. Mothers Understand And Can do it (MUAC): A comparison of mothers and community health workers determining mid-upper arm circumference in 103 children aged from 6 months to 5 years. *Arch Public Health*. 2015;73(1):26. Published 2015 May 18. doi:10.1186/s13690-015-0074-z. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4436117/

How to Measure MUAC:

- Take the arm that the mother spontaneously presents to you (left or right).
- Ask the mother to remove clothing that may cover the child's arm.
- Bend the child's elbow to make a right angle.
- Visually estimate the midpoint of the child's upper arm. If necessary, mark the midpoint with a pen on the arm.
- Straighten the child's arm and wrap the tape around the arm at the midpoint. Make sure the numbers are right side up. Make sure the tape is flat around the skin.
- Inspect the tension of the tape on the child's arm. Make sure the tape has the proper tension and is not too tight so that the skin is not compressed, or too loose that the tape does not make contact the skin all the way round the arm.

Correct tape tension **Tape too tight** **Tape too loose**

- When the tape is in the correct position on the arm with correct tension, read the measurement to the nearest 0.1 cm.
- Immediately record the measurement.

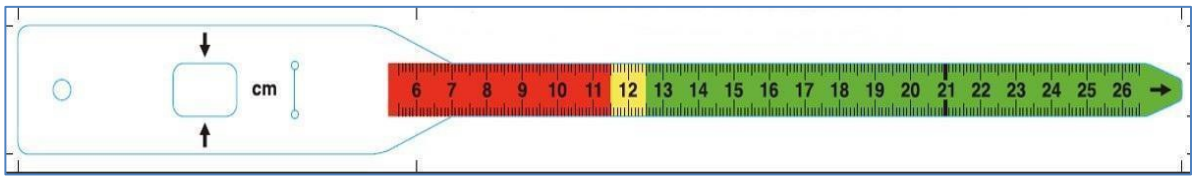
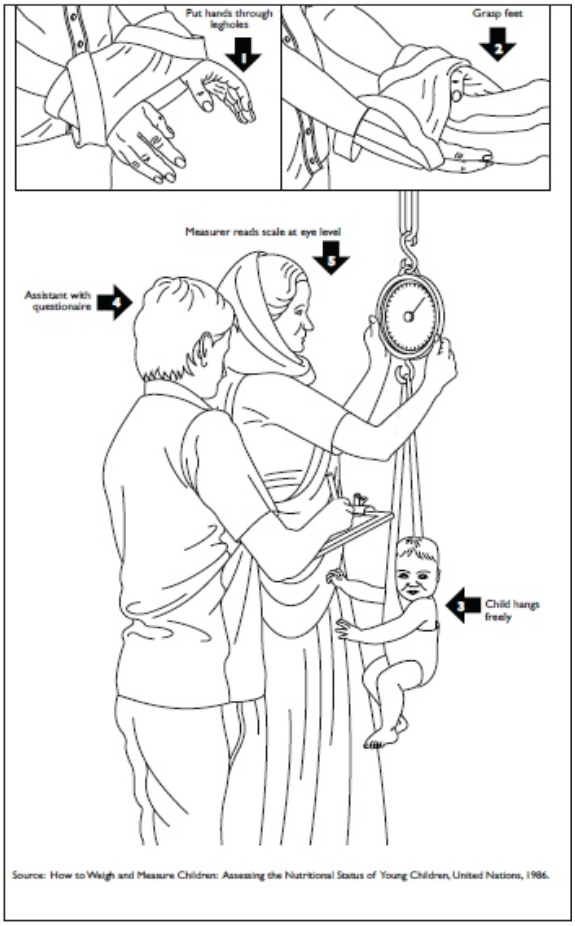


Table 3.1: MUAC cut-offs for acute malnutrition

Colour coding	Measurement	Indicator
Red	< 11.5 cm	Severe Acute Malnutrition
Yellow	11.5 - 12.4 cm	Moderate Acute Malnutrition
Green	≥ 12.5 cm	No acute malnutrition

3.3.3 Measuring weight using weighing pants

- Children are weighed with a 25 kg hanging sprint scale.
- Before weighing the child, take all his/her clothes off.
- Zero the weighing scale (i.e., make sure the arrow is on 0 after placing the weighing pants).
- Ensure that the weighing scale is at eye level.
- Place the child in the weighing pants.
- Make sure the child is not holding on to anything.
- Read the child's weight. The arrow must be steady.
- Record the weight in kg to the nearest 100g, e.g., 6.6 kg.
- Do not hold the scale when reading the weight.



Weighing children who are held by their mothers

1. Turn on the scale. Move your foot across switch window.

2. Ask the mother to step on the scale by herself. She can give her child to you or another person to hold.

   Make sure her feet or clothes do not cover the switch window. You will see the mother's weight in the display, for example:

   58.3

3. With the mother on the scale pass your foot slowly across the switch window. Then wait a couple seconds.

   00.0

4. Ask the mother to step off the scale. You should see:

   --.-

5. Ask the mother to step back on the scale with her child. You should see the child's weight.

   5.4

6. Ask the mother to step off the scale. You should see:

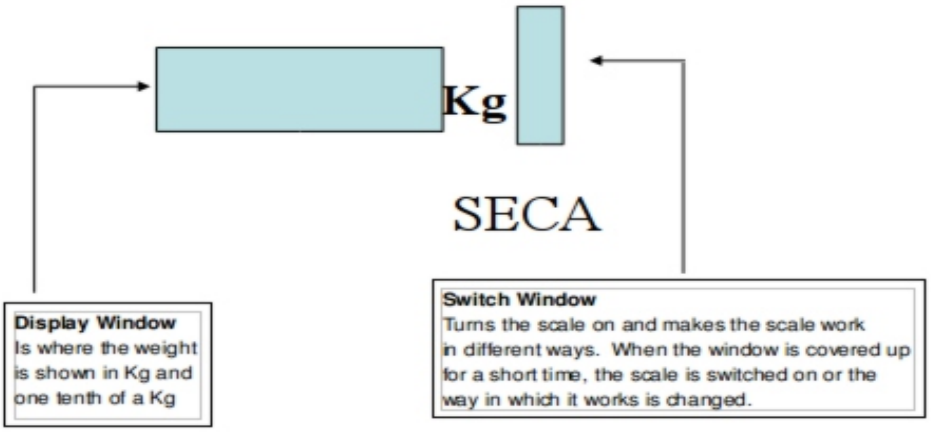
   --.-

7. Pass your foot across the switch window to reset the scale before weighing the next other. You should see:

   0.0

Using the electronic scale

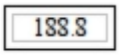
How to use the ELECTRONIC /UNISCALE - display and switch window

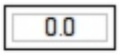


Using the switch window

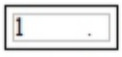
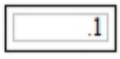
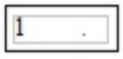
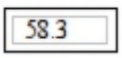
The best way to cover the switch window is to use your foot:

- Pass one foot close over the top of the switch window from one side to the other.
- DO NOT step on or touch the window. It is not a push button switch.

1. Put the scale on the floor. Choose the flattest, most level surface you have. Do not stand on the scale yet.
2. Look at the display window. It should be blank. 
3. Move your foot quickly across the switch. The scale will switch on and you will see: 

4. In 5 seconds, the scale will adjust itself to zero. You are ready to weigh a person. 

5. Stand on the scale. Stand still. Make sure that feet or clothes do not cover the switch window. You should see:

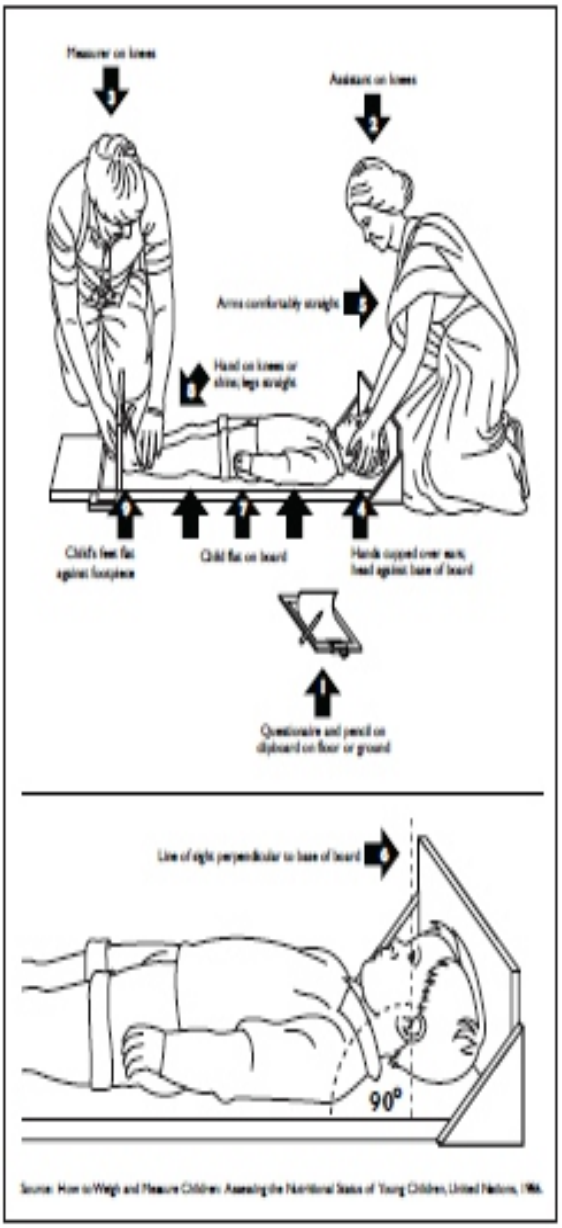
    and then  and then 
6. The 1 will move back and forth from side to side to show you the scale is working. The you should see the weight in the display , for example: 

3.3.4 Measuring length and height

Taking a child's length

For children less than 2 years old, the measuring board is placed on the ground. You will need two people to take a good measurement. If there is no assistant, the mother may help by holding the head straight.

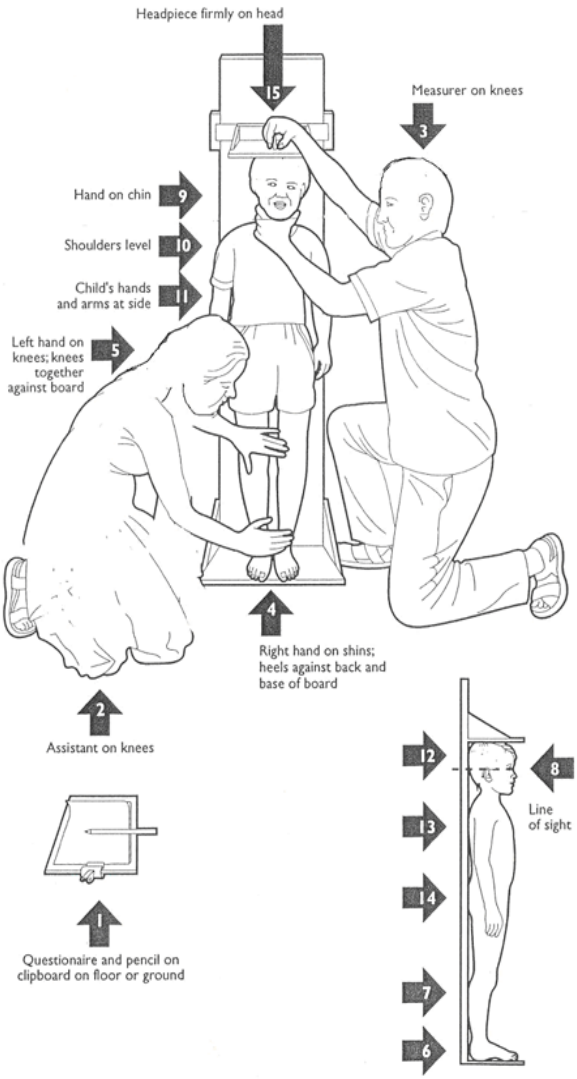
- The child is placed lying down along the middle of the board.
- The assistant holds the sides of the child's head and positions the head until it firmly touches the fixed headboard with the hair compressed.
- The measurer places her hands on the child's legs, gently stretches the child and then keeps one hand on the thighs to prevent the child bending the leg.
- While positioning the child's legs, the sliding footplate is pushed firmly against the bottom of the child's feet.
- To read the length measurement, the footplate must be perpendicular to the axis of the board and vertical.
- The length is read to the nearest 0.1 cm.



Taking a child's height

For children aged 2 years or older the measuring board is fixed upright on level ground.

- The child stands upright against the middle of the measuring board.
- The assistant holds the child's head, shoulders, buttocks, knees, and heels against the board.
- The measurer positions the head and the cursor.
- The height is read to the nearest 0.1 cm.
- The measurement is recorded immediately.



Measuring length/height to increase accuracy and precision, two people are always needed to measure length and height. Children aged 2 years or older are measured standing up, while those under 2 are measured lying down. If the age is difficult to

assess, children being at least 87 cm tall (WHO standards) are measured standing, and those less than 87 cm are measured lying down. If children aged 2 or older or at least 87 cm tall are measured lying down, 0.7 cm is subtracted from the measurement. If children aged less than 2 years or shorter than 87 cm are measured standing up, add 0.7 cm to the measurement and convert it to length.

3.3.5 Determining Weight-for-Height z-scores

Most children who are healthy have a WFH that falls within a normal range. When children's weight is less than normal weight for the corresponding height, they are considered to be malnourished. This can be measured and classified into z-scores. WFH z-scores are used to assess whether children are moderately or severely malnourished and admits them into the different nutrition programmes. If a child is dehydrated because of severe diarrhoea, weight should be taken again once the child is well hydrated and Z-scores recalculated. The WFH z-scores are summarised in WHO tables as in annex 1 and are prepositioned in nutrition sites for reference during day-to-day programming.

The process to follow for checking WFH z-scores for each case is as shown below:

1. Write down the weight, height/length and sex of the child.
2. Select the chart that corresponds to the child's sex and age in months. The charts are categorised into two: less than 24 months, and 24-59 months. Each chart is further disaggregated into sex i.e., boys and girls.
3. Select the chart to use:
   - Length: If the child was measured lying down (children less than 2 years).
   - Height: If the child was measured standing (children 24 to 59 months).
4. In the height column, scroll down through the numbers until you reach the height value that is closest to the height of the child:
   - Example 1: If the height of the child was 55.7, choose 55.5.
   - Example 2: If the height of the child was 55.8, choose 56.
5. Now you have selected the line that is going to be used to check the child's weight.

6. Using the selected height, scroll sideways (it is recommended to use a ruler, to be sure that you do not move to a different line) and check where the weight of the child you are assessing lies. The columns of the charts are labelled using z-scores and are colour coded red, yellow and green.
7. If the weight falls exactly on a specific column, check the heading of the column to obtain the WFH z-score of the child. If the weight falls between two z-score columns, record the z-score as either >-2, <-2 or -3.
8. Write the result and compare to the z-score cut offs for SAM and MAM

Interpretation of WFH :

< -3 z-scores ----------> Severe acute malnutrition

≥ -3 - < -2 z-scores ----------> Moderate acute malnutrition

≥ -2 z-scores ----------> No acute malnutrition

3.3.6 Note on use of Weight-For-Height

WFH is an independent admission criterion to identify SAM in addition to MUAC and bilateral oedema. Assessment of WFH is time consuming. If resources (staffing, training and weighing scale and height board equipment) are adequate, weight and height measurements can be taken, but if not, and if numbers of admissions are high, it is recommended to just use MUAC and bilateral pitting oedema for admission and discharge and in addition, monitor weight changes at each visit to the health facility. CORPs/CHIPS Agents/CVs/VCM do not use WFH z-score for screening in the community.

3.4 DECISION MAKING

After checking the anthropometric measurements of the child, the health worker decides whether the child is acutely malnourished or not. All WFH z-scores are based on WHO 2006 growth standards.

Table 3.2: Decision making for classification of nutritional status

Ask	*Look & Feel*		*Classify*		*Classify*	*Referral Point*

1. Has there been any weight loss in previous months/ /failure to gain weight as per WHO weight velocity standards? 2. Does the individual have appetite? 3. Does the individual have any medical condition that will impair his nutritional status? 4. Is the breastfeeding child suckling well?	Check MUAC Weight, Height/ length, Bilateral-oedema (See Annex 2) Determine WFH Look at the shape of the growth curve 1. Has the child lost weight? 2. Is the growth curve flattening ?		Severely Acutely Malnourished	→	No Appetite → With complications**	Refer patient to inpatient care
					Good Appetite → No complications**	Refer or admit patient for outpatient therapeutic care (OTP)
			Moderately Acutely Malnourished or 'at risk'	→	→	Refer or admit patient for management of moderate malnutrition and nutrition counselling
			Healthy		→	Treat any infections. Congratulate the mother and give nutrition counselling

* Severe oedema (+++) is associated with a high risk of death. All children with severe oedema should be referred to in-patient care even if there are no medical complications.

** Severe wasting (MUAC <11.5cm or WFH < -3 z-scores), plus the presence of oedema of any grade. All children with this condition should be referred to in-patient care even if there are no medical complications due to the associated high risk of death.

Children with Severe Acute Malnutrition should undergo medical assessment to decide if treatment in OTP or IPC is most suitable.

Three new elements support this decision:

- Absence or presence of medical complications: medical complications should be assessed by a thorough medical examination and accurate medical history with the caregiver.
- Good appetite or child being unable to eat RUTF: evaluated through the "appetite test".
- Absence or presence of severe oedema (+++).

The figure below summarised the various steps of triage as well as the admission criteria for each category.

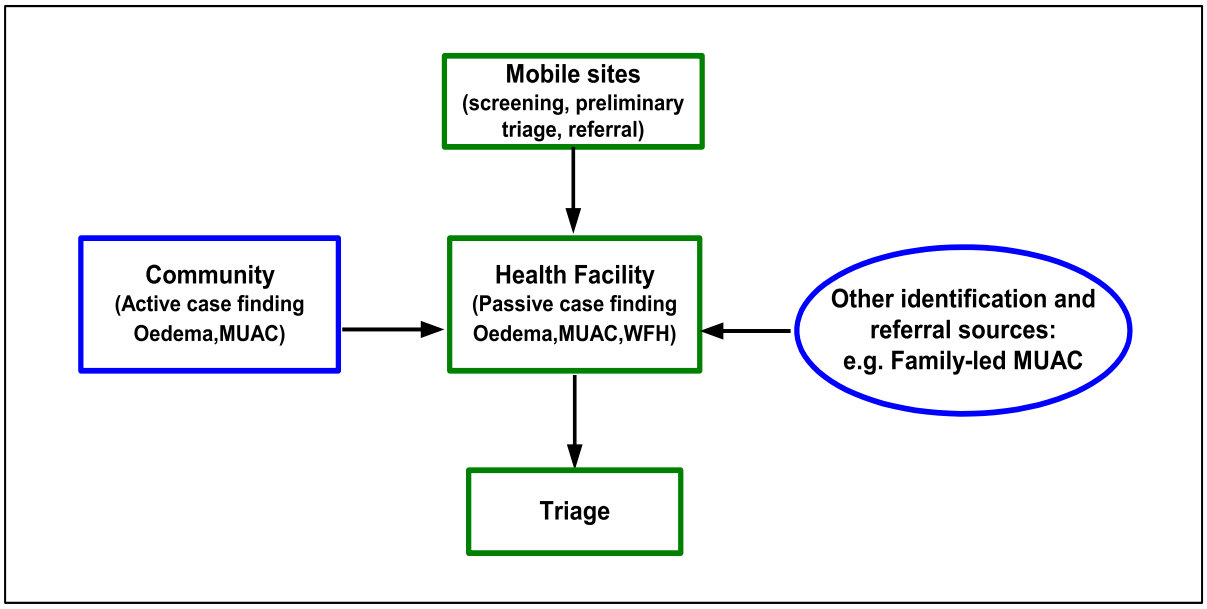


Figure 3.2: Criteria for outpatient or in-patient care for acute malnutrition

3.5 MANAGEMENT OF CHILDREN UNDER 6 MONTHS

All children less than 6 months must be referred to in-patient care as the infants are exclusively breastfed and RUTF is not suitable for children of this age.

Criteria for referral of children less than 6 months to in-patient care:

- WFH < -3 Z-scores
- Bilateral pitting oedema

- Infant is not gaining weight or is losing weight on breast milk (despite counselling the caregiver on proper positioning and attachment)
- Infant is too weak to suckle effectively

Assessment in these cases may be more subjective relying on identification of visible wasting and recent history of weight loss. Signs of visible wasting in infants include "baggy pants" (reduced or absent buttocks), prominent ribs, scapulae and spine, thin appearance and "old man's face".

CHAPTER FOUR: COMMUNITY MOBILISATION

4.1 OVERVIEW

Community mobilisation aims to inform and engage the community about acute malnutrition and IMAM to achieve and sustain good coverage. The various activities in the mobilisation process allow IMAM health care providers to understand and anticipate challenges and constraints to community participation and access to service and uptake.

Community mobilisation efforts should be adapted under special circumstances including in the context of emerging public health concerns like COVID-19. Please refer to Chapter 8, section 8.3 for more details.

The key objectives for community mobilisation are:

i. Providing accurate information about IMAM services.
ii. Strengthening early case-finding and referral of new SAM or MAM cases and follow-up of problematic cases.
iii. Identification of children under 6 months at risk of malnutrition.
iv. Increasing service access and uptake to achieve maximum coverage.
v. Follow-up of absentees and defaulters from the programme.
vi. Mobilising and utilising of community resources for IMAM.
vii. Creating sense of active involvement and ownership of the programme at a community level.
viii. Identify and address barriers to access.
ix. Link prevention and treatment services at community level whenever possible, in order to address the underlying causes of malnutrition.
x. Strengthening the links between health care providers and the community.

4.2 STAGES OF COMMUNITY MOBILISATION

1. Planning
2. Assessment of community
3. Formulating community mobilisation strategy
4. Developing messages and materials
5. Implementation phase
6. Monitoring and evaluation

4.3 PLANNING

A community mobilisation strategy should be planned and implemented before the start of treatment activities in the health facilities and OTP/TSFP sites. Assigning responsibility for community mobilisation is essential to ensure adequate planning, implementation and monitoring of activities. An initial assessment and the subsequent development of adapted messages and materials and planning for community mobilisation strategy, is the responsibility of the LGA in collaboration with the state, federal and development partners. The implementation of the strategy for raising community awareness on acute malnutrition and IMAM services is shared by planners (all levels) and health facility staff.

Community based Resource Persons or CHIPS Agents or CVs

Community based Resource Persons (CbRPs) e.g., CORPs/CHIPS Agents/CVs, etc., are trained and supervised by state and/or LGA managers, in collaboration with health facility staff. These CbRPs/CORPs/CHIPS Agents/CVs, etc., are trained on overview of malnutrition (definition, causes, symptoms, types), IMAM services (OTP, TSFP, IPC), detection of oedema and MUAC measurements (for case finding) and home follow-up of cases. CbRPs/CORPs/CHIPS Agents/CVs, etc., are the link between the population and the OTP/TSFP site.

Specific roles and responsibilities of the CbRPs/CORPs/CHIPS Agents/CVs, etc., *include:*

- Community awareness about IMAM

- Sensitize the community to promote understanding of the various services (TSFP, OTP and IPC), including objectives and specificities (target population, admission and discharge criteria, treatment given, etc.)

- Active case finding in the community
  - Identify cases of acute malnutrition in a timely and effective way and refer to health facility.
- Follow up of cases
  - Investigate reasons for absence and defaulting and encourage return to the programme.

Monitoring and evaluation of community activities follows the same channels of responsibility as the care/treatment activities. Care/treatment activities integrate health promotion and community actors at all levels (national, zonal, state) and health facility staff. The officer in charge of the health facility and the LGA nutrition focal person will be responsible for coordination of trained CbRPs/CORPs/CHIPS Agents/CVs, etc., on the above listed topics.

4.4 COMMUNITY ASSESSMENT

A community assessment is the first task and the learning phase in preparation for community mobilisation. It will provide planners with an idea of how the community is organised, how under-nutrition is understood there, how the new service is likely to be received, and how the community can best support the IMAM services. The assessment provides the opportunity to update and supplement existing knowledge. This assessment should not be bypassed due to assumed prior knowledge of the local community.

Information should be collected from lay people in the beneficiary communities and from staff and caregivers of young children at selected health facilities using qualitative methodologies. It is important to explore the following features of the community, which are likely to impact on service delivery, demand and access:

- Community perceptions of malnutrition and health-seeking behaviour

- Key community figures (community leaders, religious leaders, opinion moulders, etc.)
- Existing community-based organisations and groups
- Potential candidates for CbRPs/CORPs /CHIPS Agents/CVs, etc., role
- Existing links and communication systems between health facilities and the community
- Formal and informal channels of communication
- Formal and informal community structure
- Barriers to access

4.5 FORMULATING A COMMUNITY MOBILISATION STRATEGY

Devising a strategy does not need to be complicated. Every operational setting will have some unique features. To maximise the effect of community mobilisation, the results and insights from the community assessment should be systematically reviewed and translated into a mobilisation strategy. The strategy will define the way that mobilisation activities, especially case-finding, are to be carried out and sustained. The community mobilisation strategy should:

- **Address the barriers to access, identified in the assessment:** Ensure cooperation of key community figures (gate keepers) to gain community participation, including the participation of marginalised populations, so as to maximise access and coverage. Identify how this can best be achieved. Identify cultural practices that exist which may prevent children attending treatment.
- **Build case-finding around the skills and resources identified during the assessment:** Designate health staff (state, LGA, health facility) to take responsibility for supervising case finding efforts. Assign health facility staff to make periodic home visits (e.g., for health or nutrition education) and active case finding, including for malnourished infants under 6 months of age. Community case-finding can be carried out during Community-GMP, immunisation session at outreach level, house to house, relevant community meetings and during other opportunities at village level.

4.6 DEVELOPING MESSAGES AND MATERIALS

The use of simple, standardised messages to explain IMAM (why, how, to whom and when it is offered) will help to replace misconception with accurate information. Messages need to be informative but concise. If necessary, they can be designed to be read aloud to an illiterate audience. Messages can be translated into the relevant local languages and adapted as is necessary for different audiences. Core information to be communicated in most settings includes the following:

- Description of the beneficiary children, using local descriptive terms for wasting (very thin) and bilateral pitting oedema (swelling). Care should be taken to identify and avoid the use of local terms, which may be associated with stigma.
- Explanation of the benefits of IMAM, noting that children with MAM and SAM who are not sick can be treated at home meaning that caregivers no longer need to leave the family.
- Explanation about the identification and referral process by CbRPs/CORPs/CHIPS Agents/CVs, etc., in the community, noting that very thin children can also self-refer to the nearest health facility to be checked.
- The time and date of OTP/TSFP sessions at the nearest health facility.

4.6.1 Visual aids for SAM

Particularly for the identification of children affected by SAM, visual aids enhance the impact of messages. Pictures depicting children with SAM with the most easily recognisable symptoms of oedema and wasting, will strengthen communication, and are an important means of avoiding some of the cultural and linguistic obstacles to describing the target population in the community.

4.6.2 Selecting a local term/name for RUTF/RUSF/SQ-LNS

Identify and use an appropriate term in the local language to communicate that the RUTF, RUSF and SQ-LNS are medicinal foods. This will help to minimise misunderstanding about the services and the products used for treatment. In a country with several major language groups, different terms may need to be used. All messages, visual aids and

suggested local names for RUTF/RUSF/SQ-LNS should first be tested with the community to ensure they are comprehensible and appropriate.

4.7 IMPLEMENTATION

4.7.1 Raising community awareness

The community needs to be informed about the IMAM services available. If community members are unaware of the service, or the type of children it treats, or are confused or misinformed about its purpose, they may not benefit from it or may even prevent others from benefitting.

Raising community awareness works best through existing channels, organisations and structures within the community. The overall challenge is to provide access to IMAM in the most effective way. As new services are initiated, ineligible children should be discouraged from coming, while as many eligible ones as possible must be encouraged to come. Rejection of referred children on presentation at health facilities is a common cause of ill feeling in the community and can rapidly impact on participation. Handling inadmissible children and their caregivers in a positive and informative way is paramount and can also contribute to raising awareness.

The following is a suggested order of priority through which IMAM awareness raising activities may initially be carried out:

- Start with key community figures and conduct a meeting to orient them on IMAM.
- Use selected formal channels of communication e.g., village meetings, committee meetings, health days/campaigns and education sessions, church services or mosques, medicine retailer outlet.
- Use informal channels e.g., weddings, funerals, markets, water-points and naming ceremonies.
- Encourage caregivers of beneficiaries to bring other thin or swollen children that they know.

During sensitisation meetings, the CbRPs/CORPs/CHIPS Agents/CVs, etc., should deliver key messages on malnutrition to the community and, if possible, facilitate the sensitisation.

Training of case finders
Practical training is a prerequisite for all those who will be directly involved in IMAM case-finding in the community. Training should be organised at community level.
The selection of CbRPs/CORPs/CHIPS Agents/CVs etc for training should not be restricted to those who are literate only.

Key Messages

- ✔ Malnutrition is caused by inadequate food intake and/or diseases. It can be prevented by breastfeeding and provision of nutritious food for a child. Proper breastfeeding and consumption of nutritious foods also prevents diseases.
- ✔ Malnutrition can now be treated at home and only a few children will need hospital care for a short period.
- ✔ All severely malnourished children should follow the treatment by visiting the health facility weekly until they are declared to be cured. If malnourished children do not follow the appropriate treatment, they will become very sick or get worse.
- ✔ Moderately malnourished children are referred to a Targeted Supplementary Feeding Programme (if available in the area).
- ✔ In order to identify malnourished children, regular screening is done at the community level by CbRPs/CORPs/CHIPS Agents/CVs, etc., and suspected children are sent to the health facility for diagnosis or confirmation and to get the appropriate treatment.
- ✔ All children suspected of malnutrition should take the referral paper from the CbRPs/CORPs/CHIPS Agents/CVs, etc., before going to the health facility.
- ✔ All the severely malnourished children who started the treatment are visited every week at home by the CbRPs/CORPs/CHIPS Agents/CVs, etc., to check whether they are following the treatment.

4.7.2 Case finding

Early detection of acutely malnourished children is essential for the success of their treatment and should be done at community level and in health facilities. Health

workers play a critical role in confirming the eligibility of children referred by the community and ensuring they are enrolled in the appropriate service (nutrition/medical). In IMAM, case finding is categorised into active or passive. Active case finding refers to the identification at an early stage of acutely malnourished children done by the CORPs at household level, in villages and communities. Passive case finding refers to the opportunistic identification of acutely malnourished children done by health workers during routine child visits and/or consultation at the health facility.

When IMAM activities have been long established in an area and the community has been adequately mobilised, most cases will arrive spontaneously at health facilities for screening and treatment. Self-referral will usually become the greatest source of new cases.

4.7.3 Active case finding and referral at community level

At community level, active case identification of acute malnutrition is done by trained CbRPs/CORPs/CHIPS Agents/CVs, etc. Identification is based on MUAC measurement and identification of nutritional oedema. In addition to measuring the level of acute malnutrition, MUAC identifies those children at increased risk of mortality. It is easy to use during outreach activities as it does not require sophisticated or heavy equipment. Oedema checks can also be easily and rapidly carried out.

In addition to children aged 6-59 months, community identification also includes infants under 6 months of age. If an infant looks wasted (very thin), the CbRPs/CORPs/CHIPS Agents/CVs, etc., should question the mother about breastfeeding (difficulty to suckle effectively), not gaining weight or any health problems affecting the child. Depending on the problem, he/she will decide whether to refer the child to the health facility or provide breastfeeding counselling to the mother. If an infant presents bilateral pitting oedema, he/she needs to be immediately referred to the health facility for further investigation and treatment.

Active case finding in the community should be conducted on a regular and appropriate basis. Each health area should adopt an adapted strategy balancing the

need for regularly covering all under five years children and the "working" capacity (time) of CbRPs/CORPs/CHIPS Agents/CVs, etc.

- A targeted approach of prioritising the measurement of children who exhibit relevant signs and symptoms for malnutrition and/or associated illnesses is usually more effective in promptly finding cases than a 'blanket screening' approach where all children under five years are measured.
- Measurements can be performed during scheduled outreach activities (e.g. Growth Monitoring and Promotion; Maternal, Newborn and Child Health Weeks) and in an unscheduled way at community events and gatherings where children will be present. This can be done by both trained active CbRPs/CORPs/CHIPS Agents/CVs, etc., and health facility staff whenever they go out into the communities.

Growth Monitoring and Promotion

Growth Monitoring and Promotion (GMP) is a prevention activity comprised of GM linked with promotion (usually counselling) that increases awareness about child growth, improves caring practices and increases demand for other services such as need for treatment in children with any form of acute malnutrition, as needed. GMP serves as the core activity in an integrated child health and nutrition programme when appropriate.

Note: *Repeatedly (and unnecessarily) seeking to measure healthy children who are then not referred may lead to 'screening fatigue' and discourage caregivers, who assume their children can never benefit from the service (especially if this happens more than three times in succession). Screening for acute malnutrition should be coordinated and integrated at every opportunity into community-based health activities such as Maternal Newborn and Child Health Week.* The data collected during the week should be collated by the Nutrition Focal Person.

REFERRAL: CbRPs/CORPs/CHIPS Agents/CVs, etc., should refer all children presenting with bilateral pitting oedema or with MUAC <11.5cm (RED) to the closest health facility or any other relevant service delivery points that provides OTP treatment and children

with MUAC ≥11.5cm to <12.5cm (YELLOW) to TSFP if available. If no TSFP, referral to BSFP (as available) and IYCF programme.

4.7.4 Follow up activities

An essential element of support in the community is in the follow-up of beneficiaries at home by CbRPs/CORPs/CHIPS Agents/CVs, etc. Follow up may be requested by the health staff for the following reasons:

- Absenteeism
- Defaulting
- Death
- Children recently discharged from in-patient care
- Children not progressing as expected during treatment in OTP/TSFP
- Relapse

The outcome of follow up visits should be documented by the CbRPs/CORPs/CHIPS Agents/CVs, etc., and noted on the OTP/TSFP card or register by the health worker. If the CbRPs/CORPs/CHIPS Agents/CVs, etc., cannot write, then verbal reports should be documented by the health worker.

4.8 MONITORING AND EVALUATION

Sustained monitoring and evaluation activities are necessary to ensure the uptake of IMAM services at the community level. This includes monitoring of quantitative programme indicators and qualitative data gathered through regular contact with community stakeholders, beneficiaries and CbRPs/CORPs/CHIPS Agents/CVs, etc.

Coverage is the best indicator of the effectiveness of a programme. It consists of innovative coverage methods able to provide the coverage estimate of IMAM services but also robust information regarding the barriers and boosters to service access[3]. This

[3] https://www.coverage-monitoring.org/

information allows implementers to address gaps and thus improve coverage and service quality. Chapter 10 provides more information about M&E for the community component.

Please refer to Chapter 8, section 8.3 on how to conduct monitoring and evaluation in the context of emerging public health concerns like COVID-19 pandemic including remote monitoring.

CHAPTER FIVE: OUTPATIENT THERAPEUTIC PROGRAMME FOR UNCOMPLICATED SEVERE ACUTE MALNUTRITION

5.1 INTRODUCTION

The Outpatient Therapeutic Programme (OTP) is for SAM cases without medical complications and who have passed the appetite test. OTP should become a routine activity for all health facilities and any other structures in the national primary health care network. Clinics or Outpatient Paediatric Departments (OPD) located in hospitals should also integrate OTP for children with SAM without complications, into their existing services.

Please refer to chapter 8, section 8.3 on how to conduct OTP activities in the context of emerging public health concerns like COVID-19 pandemic.

5.2 OBJECTIVES

- Reduce morbidity and mortality of children aged 6-59 months with SAM by providing timely diagnosis and effective treatment.
- Increase coverage and access to treatment for SAM children by providing the appropriate care within or closer to the communities.

5.3 OTP ADMISSION CRITERIA

All children 6-59 months old with a weight ≥ 4.0 kg enrolled in OTP should meet at least one of the criteria listed in Table 5.1.

Table 5.1: Admission criteria to OTP

Bilateral pitting oedema + or ++ OR
MUAC < 11.5 cm OR
WFH < - 3 z-scores *(where feasible)*
Pass the appetite test for RUTF
No medical complications

Bilateral pitting oedema, MUAC and WFH are independent criteria for admission to OTP. Meeting any one of these three criteria is sufficient to define SAM.

As mentioned in Chapter 3, while all health facilities will use bilateral pitting oedema and MUAC criteria, if sufficient capacity and resources are available WFH can also be used to determine eligibility for OTP.

5.3.1 Types of admissions

There are two categories of admissions in OTP, new and old cases.

Table 5.2: Types of admission to OTP

New cases	**New admission: Child 6-59 months who meets the SAM admission criteria and has not been under treatment elsewhere for this episode of SAM.** **New admission also includes:** **Relapse: Child 6-59 months re-admitted to OTP after having been successfully discharged as recovered within the last two months (this is a new episode of SAM). A new OTP card / register entry should be completed but a post fix _2 should be added to the new SAM card number to differentiate it).**
Old cases	**Returned Defaulters: child who defaulted from treatment (absent for more than 3 consecutive weeks) before recovery, returns to continue treatment within 8 weeks .**
	Referred from IPC: child who was managed in in-patient and transferred to OTP to continue treatment.
	Transfer from another OTP site: Cases that started treatment for SAM at a different OTP site and are then transferred to a new site to continue treatment. Add 'R' to the registration number to indicate that the child is a referral from another OTP, e.g. 001R.
	Returned referrals: SAM cases who were referred to a hospital/health facility for medical investigation (not in any nutrition programme) and return within their OTP treatment period, to continue treatment

	for SAM.

Note:

***<u>Returned defaulters within 8 weeks of defaulting</u>*: A return defaulter has defaulted from the programme (absent for three consecutive visits) and has returned to the programme to continue treatment. The continuing care should be documented on the same OTP card as used before default (old case).**

For *cases of <u>defaulters retuning after 8 weeks of defaulting</u>*, and satisfying OTP admission criteria, a new card will be opened and a post fix _3 added to the new card number to differentiate it in order to be treated as new case. If the child is now MAM (MUAC ≥ 11.5 - <12.5 cm), refer to TSFP (if available) and treat according to Chapter 7.

Special Case: Multiple Births
In the case of twins, triplets etc. it is important that the mother does not share RUTF rations amongst her children because it could negatively affect treatment and recovery. The procedures below should be followed for each scenario. Examples are given for twins but the same procedure is used if more than 2 children.

1. **Both children have SAM:**
   - **Both children will receive the same amount of RUTF (the dose will be calculated based on the child who weighs the most). Both children are admitted to OTP as two new admissions.**

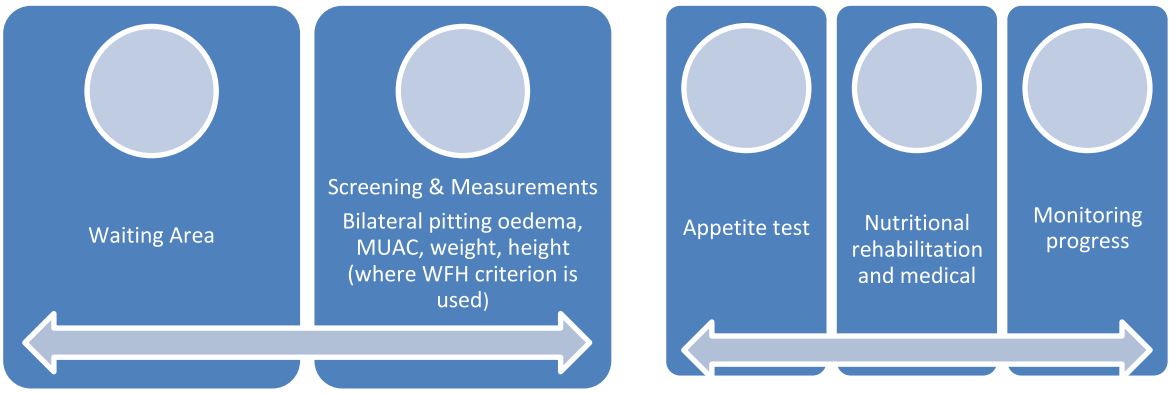
2. **One child has SAM and one child has MAM:**
   - **Both children will receive the same dose of RUTF (the dose will be calculated based on the weight of the child with SAM).- Register the MAM child in TSFP. If no TSFP, give a ration card indicating the same identification number as his twin with the mention "twin". He will not receive the routine medication.**

3. **One child has SAM and one child is not malnourished:**
   - **Both children will receive the same dose of RUTF (the dose will be based on the weight of the child with SAM).**

It is important to note that the non-malnourished child <u>will not be registered in the registration book</u> and will not have an OTP card and an identification number; however, he will be given a ration card indicating the same identification number as his twin with the mention "twin". He will not receive the routine medication.

5.4 ADMISSION PROCEDURES

The admission processes at OTP are divided into five major areas:



Please refer to chapter 8, section 8.3 on how to conduct admission procedures in the context of emerging public health concerns like COVID-19 pandemic.

1. WAITING

In the waiting area, triage the patients and explain the purpose of OTP, and give guided nutrition and health education talks on IYCF and WASH to the caregivers in the waiting area (see Chapter 7, section 7.9). If the child is obviously sick, fast track the child. Give 50ml (10% sugar solution) of sugar water (1 tea spoon of glucose/sugar in 50ml of safe water =3 table spoons of water) to any cases with SAM suspected to be at risk of hypoglycaemia.

2. SCREENING AND MEASUREMENTS

Children fulfilling the admission criteria in Table 5.1 should be admitted into the programme. Measurements should be taken according to the procedures described in chapter 3, oedema classification, MUAC reading, weight and height (when WFH

criterion is used) and other data should be recorded on a pre-numbered small hand slip for screening and given back to the caregiver.

3. APPETITE TEST

An appetite test should be done for all SAM children to differentiate complicated SAM from uncomplicated SAM. The appetite should be tested during admission and repeated at each follow up visit to the health facility. Points to consider when conducting an appetite test are:

- Conduct the appetite test in a quiet separate area.
- Provide an explanation regarding the purpose of the test to the caregiver and describe the procedure.
- Observe the child eating the RUTF during the 30 minutes and decide if the child passes or fails the test.
- Advise the caregiver to:
  - Wash his/her hands and that of the child before giving the RUTF
  - Wash the child's face
  - Sit with the child in lap and gently offer the RUTF
  - Encourage the child to eat the RUTF without force feeding
  - Offer plenty of clean water to drink from a cup when child is eating RUTF

Table 5.3: Appetite test

Weight	PASSES APPETITE TEST	FAILED APPETITE TEST
4kg and above	**The child eats at least one-third to half of a sachet of RUTF (92g).**	**The child does not eat at least one-third to half of a sachet of RUTF (92g)**

A child who fails the appetite test should be admitted to in-patient care. Failure of an appetite test at any time is an indication of need for full evaluation and probable transfer for in-patient assessment and treatment. If the appetite is "passed" during the

appetite test and weight gain at home is poor then a home visit should be arranged because this indicates a social problem at household level or extensive sharing of the RUTF.

4. MEDICAL EXAMINATION AND TREATMENT

Diagnose any medical complications (see section 5.6 below).

For all new SAM cases, take a brief history of feeding practices, assess for signs and symptoms of medical complications, and any health-related conditions. In addition:

- Ensure all new cases with SAM undergo a medical check.
- A trained clinician or other qualified health care provider should conduct the medical check.
- DO NOT repeat a medical check for cases that have already been seen and have clinical notes from other care points at the health facility.
- Analyse the findings (anthropometric measurements, appetite and medical complications) and decide on the type of treatment.

NOTE: Any child with generalized oedema (+++) and or severe wasting and any grade of oedema must be referred for IPC. In the absence of IPC, the child should be referred to the nearest paediatric unit.

5. MONITORING PROGRESS

Nutritional rehabilitation should be monitored at each visit. Based on how the child responds to treatment, appropriate action should be taken, including a home visit and referral to IPC.

5.5 NUTRITIONAL MANAGEMENT

5.5.1 RUTF

RUTF are high-energy, lipid based, micronutrient enriched combined food and medicine made essentially from groundnut, vegetable oil, sugar, milk powder and

vitamin and mineral mix. It is used in any cultural setting for the treatment of SAM. The nutritional composition is similar to the traditional F-100 milk-based diet used in the in-patient care management of severe acute malnutrition with medical complications.

RUTF comes in sachets of 92g, each sachet contains 500 kcals of energy. Locally manufactured approved RUTF brand is already in the country.

5.5.2 Ration of RUTF and key messages

The amount of RUTF to be consumed per child per day and per week, calculated according to the child's weight at a dose of 200 kcal/kg/day is summarised in the table below:

Table 5.4: RUTF Daily and Weekly Ration Based on Child's Weight

Weight (in kg)	RUTF (paste of 92g sachet)	
	Sachets per day	Sachets per week
4.0 – 5.4	2	14
5.5 – 6.9	2 ½	18
7.0 – 8.4	3	21
8.5 – 9.4	3 ½	25
9.5 – 10.4	4	28
10.5 – 11.9	4 ½	32
≥ 12	5	35

Note:

i. Children weighing more than 12 kg should still receive a maximum of 5 sachets of RUTF per day.
ii. Children > 6 months and < 4.0 kg should not receive RUTF and are to be referred for in-patient care.
iii. It is recommended to encourage caregivers to bring empty sachets back each week.
iv. Empty packets do not necessarily mean that the SAM child has eaten them. Therefore, consumption should be compared with the weight gain for that week.
v. All children less than 6 months must be referred for in-patient care as the infants should be exclusively breastfed and RUTF is not suitable for children of this age.

Key Messages

To ensure the proper use of RUTF, some important educational messages are also given. The health worker goes through the key messages with the caregiver after giving the prescribed weekly dose of RUTF.

1. RUTF is a food and medicine only for very thin or swollen children like yours. Do not share it.

2. Sick children often do not like to eat. Give small regular meals of RUTF and encourage the child to eat often (if possible, eight times per day). Your child should have the number of recommended packets per day.
3. For children who are breastfed, continue to breastfeed. Offer breast milk first before every RUTF feed.
4. RUTF is the only food sick and thin/swollen children need to recover during their stay at OTP. A child has to finish the daily ration of RUTF before other family foods, such as pap, *kunu*, *ogi, akamu*, or other meals.
5. Always offer plenty of clean water or breast milk to drink while consuming RUTF. Children will need to drink more water than normal.
6. Use soap and water to wash the child's hands and face before feeding.
7. Store RUTF in a clean airtight container. Unfinished RUTF should also be stored in air-tight container.
8. Caregivers shall also use soap and water to wash their hands prior to feeding.
9. Sick children get cold quickly. Always keep the child covered and warm.
10. For children with diarrhoea, continue feeding. Give them extra food and water.
11. Return to the health facility whenever the child's condition deteriorates or if the child is not eating sufficiently.

As well as receiving these messages, the caregiver can also benefit from any health/nutrition promotion sessions being given at the health centre or at home in the community (See Chapter 7, section 7.9 – IYCF).

5.6 MEDICAL EXAMINATION AND TREATMENT

The steps to take are outlined on the individual OTP card (Annex 2). Complete the patient's biodata, enter the admission anthropometry, take a brief medical history, and conduct physical examination to complete your assessment.

Table 5.5 below summarises the main signs due to medical complications for SAM. Signs marked (*) are IMCI danger signs. Any complication requires immediate referral to IPC.

All children with any medical complication, including those with generalised oedema (+++), those having MUAC <11.5cm or WFH <-3 z-scores and any grade of oedema should be transferred to IPC. If the medical examination is delayed, then treat the child to prevent hypoglycaemia as specified below.

Table 5.5: Case definitions of medical complications for referral to IPC

Medical complication	Case definition
Intractable vomiting*	Child vomits after every oral intake
High fever (Hyperthermia)	High body temperature, or axillary temperature ≥ 38.5°C, rectal temperature ≥ 39°C
Hypothermia	Low body temperature, or axillary temperature < 35.5°C, rectal temperature < 36 °C
Lower respiratory tract infection	>50 respirations/minute (child between 2 and 12 months old) >40 respirations/minute (child between 1 and 5 years old)
Severe anaemia	Child has palmar pallor or unusual paleness of the skin (compare the colour of the child's palm with the palm of the caregiver or Hb< 7g/dl if lab services are available) and conjunctiva paleness
Skin lesion	Broken skin, fissures, ulceration of skin
Unconsciousness*	Child does not respond to painful stimuli
Lethargy, not alert*	Child is difficult to awaken. Ask the mother if the child is drowsy, shows no interest in what is happening around him/her, and cannot be roused easily
Hypoglycaemia	Drowsiness is often the only sign of hypoglycaemia. Eye-lid retraction (child sleeps with eyes slightly open) may be present or glucose level< 54mg/dl or <3mmol/L where lab services are available
Convulsions*	Ask the mother if the child had convulsions during this current illness (eye rolling, twitching, lip smacking, muscle stiffening & stretching of hands and legs)

Severe dehydration	For children with SAM, diagnosis of severe dehydration is based on clinical signs such as recent changes in appearance reported by the caregiver associated with a history of diarrhoea, vomiting, and high fever. Note: The skin pinch to test for skin turgor is not reliable in children with SAM
Generalised Oedema (+++)	Oedema all over the body, showing on the face
Any grade of oedema with MUAC < 11.5 cm or WFH < -3 z-scores	A child having severe wasting and oedematous malnutrition together

How to treat the Child to Prevent Low Blood Sugar (Hypoglycaemia) on Referral:

If the child is able to breastfeed: Support **the mother to breastfeed the child.** ***If the child is not able to breastfeed, but is able to swallow:*** **Give expressed breast milk, or if not available, give sugar water. Give 50-100 ml of milk or sugar water before departure.**

How to prepare sugar water (10% dilution)

- *Take clean drinking water (if possible, slightly warm to help it dissolve). Add required amount of sugar and shake or stir vigorously.*

Quantity of Water	Quantity of sugar	Local equivalent
100 ml	10 g	2 level teaspoons (1 sugar cubes)
200 ml (average cup)	20 g	4 level teaspoons (2 sugar cubes)
500 ml (small bottle)	50 g	10 level teaspoons (5 sugar cubes)
1 litre	100 g	20 level teaspoons (10 sugar cubes)

- *Provide sugar water solution to children while they are waiting to be referred to IPC. Especially when the weather is very hot, make clean water available to all children attending OTP at all times. Provide a shaded waiting area for children and their caregivers.*

5.6.1. Routine medications

Children who are severely malnourished have lower immunity and are highly susceptible to illness and infection. Since they do not always show signs of underlying infections, there is need to provide systematic treatment, therefore it is important that the management of SAM includes careful medical assessment and treatment. Underlying infections and conditions should be treated so that the child's recovery is quicker and more effective.

The following table gives the schedule for routine medications.

Table 5.6: Schedule for routine medication in OTP

Medication	When
Antibiotic: Amoxicillin	At admission
Anti-malaria (refer to National Malaria Treatment Guide)	Test at admission and give if positive
Measles vaccination *(if not already given at 9th and 15th months)*	At admission
Deworming (Albendazole or Mebendazole)	Single dose 2nd visit
Note: Children who have been transferred from IPC should not receive routine medications that have already been administered during hospital stay	

Antibiotics

A first-line antibiotic (amoxicillin) should be in OTP at admission for all admissions. If the child shows signs and symptoms of a diagnosed infection without danger signs, re-assess the progress of the child and treat according to IMCI protocol for other antibiotics. If a child shows infection with danger signs (Table 5.5) or had a repeat course of antibiotics without improvement, then refer to IPC for further investigations.

Amoxicillin

- Give oral antibiotic treatment for a period of 7 days (2 times per day) to be taken at home (give 10 days if needed), according to table 5.7
- The first dose should be taken during the admission process under the supervision of the health care provider. An explanation should be given to the caregiver on how to complete the treatment at home.

Table 5.7: Dosage of Amoxicillin

AMOXICILLIN DOSAGES - To be administered twice daily for 7 days			
Weight	**Dose (125mg/5ml syrup)**	**Dose (250mg / 5ml syrup)**	**Dose (250mg tablets)**
4.0 – 4.9 kg	**7.5 ml**	**4 ml**	**1 tab**
5.0 – 6.5kg	**10 ml**	**5 ml**	**1 tab**
6.6 – 7.9 kg	**12.5 ml**	**6 ml**	**1.5 tab**
8.0 – 9.9 kg	**15 ml**	**8 ml**	**1.5 tab**
10 – 13 kg	**20 ml**	**10 ml**	**2 tabs**
Note: Always check information on bottles for dosages and dilution of syrups as this can change between different manufacturers.			

Malaria

There are two classifications of malaria:

Uncomplicated Malaria

Malaria with no life-threatening manifestations and presents with such symptoms as fever, malaise, loss of appetite, headache, body aches, joint pains, nausea and vomiting, coke colour urine, etc.

Severe Malaria

When malaria becomes life threatening and manifests with complications such as convulsion, coma, inability to stand or sit, severe anaemia, jaundice, inability to pass urine, pulmonary oedema, generalized bleeding, etc., it is severe. Severe malaria needs transfer to IPC.

Diagnosis of malaria

- All individuals presenting with clinical symptoms as described above should be tested for malaria using microscopy or Rapid Diagnostic Test (RDT) kits.

- If diagnosis is not possible, treat all SAM children at OTP for malaria if they live in a malaria endemic region.
- If the child vomits within 30 minutes of swallowing the medicine, repeat the dose.
- Encourage the mother to complete the course of treatment even if the child feels better.
- If there is any reaction that the mother considers unusual (such as rashes and itching, difficult breathing or cough, restlessness, etc), assist/support the mother or caregiver to take the child to the nearest health facility.
- According to WHO 2015 guidelines on the management of malaria, there is no specific indication to treat children less than 5 kg with ACT, and normal dosage should be given according to the prescription on the package.
- Counsel the mother or caregiver on use of LLINs and environmental sanitation.

Deworming

Parasitic worms contribute to anaemia among children in sub-Saharan Africa, the predominant species being the hookworms – *Ancylostoma Duodenale*, *Necator Americanus*, *Ascaris Lumbricoides* and *Trichuris Trichuria*. Preschool-aged children (2-5 years) in poor sanitary conditions are particularly vulnerable to these worms as they typically harbour the heaviest worm loads in communities. Hookworm has been shown to be a major contributor to iron deficiency anaemia in children. In Nigeria, worm infestation prevalence can be as high as 73% (7 out of 10 children).

Table 5.8: Albendazole / Mebendazole dosages

Age (Weight) of the child	Albendazole 400 mg tablet	Mebendazole 500mg tablet
6-11 months (< 1 year)	NO	NO
12-23 months (or <10 kg)	200mg or ½ Tablet	500mg or 1 Tablet
≥ 24 months (or ≥10 kg)	400mg or 1 Tablet	

5.6.2. Additional medications

Other medical conditions present may require additional medication as outlined in the table below.

Table: 5.9: Additional medications

Name of Product	When to Give	Prescription	Special Instructions
Tetracycline eye ointment	For treatment of eye infection. Systematic treatment for malnourished children with measles	Apply 3 times a day - morning, afternoon and at night before sleep	Wash hands before and after use. Wash eyes before application. Continue for 2 days after infection has gone
Nystatin Drop	For treatment of candida	100,000 units (1 ml) 4 times a day after food (use dropper and show the caregiver how to use it)	Continue for 7 days
Benzyl Benzoate	For treatment of scabies	Apply over whole body. Repeat without bathing on following day. Wash off 24 hours later	Avoid eye contact. Do not use on broken or secondary infected skin
Gentian Violet	For treatment of minor abrasions or fungal infections of the skin	Apply on lesion	Can be repeated at next visit and continued until condition resolved
Paracetamol	Precaution should be taken in prescribing Paracetamol to SAM children		

5.6.3 Immunisation: Measles immunisation

Measles and malnutrition are closely associated with each condition increasing the risk of the other. All children 9 months and older should be vaccinated on admission if they cannot provide the Child Health Card showing vaccination has been received. Check if the other siblings have been vaccinated, if not, recommend caregiver to take them to the nearest PHC to receive other routine vaccination especially in the case of children between 6 to 9 months. Also, take advantage of the child's contact with the health structure for completing other vaccinations.

5.6.4 Other medical treatments

Due to the association between acute malnutrition and micronutrients deficiencies, other conditions have to be carefully assessed e.g., anaemia and diarrhoeal diseases leading to dehydration. The treatment of these conditions for SAM differs in some respects to the treatment given in IMCI.

a. Anaemia

Folic acid or iron does not need to be supplemented as RUTF already contains the daily required doses. Moderate anaemia can be treated through consumption of RUTF. For severe anaemia refer to IPC. If laboratory facilities exist, refer children with a haemoglobin (Hb) < 7 g/dl for IPC.

Do not give iron: Due to reductive adaptation, the severely malnourished child makes less haemoglobin than usual. Iron that is not used for making haemoglobin is put into storage. Thus, there is "extra" iron stored in the body, even though the child may appear anaemic. Giving iron in treatment will not cure anaemia as the child already has a supply of stored iron and daily iron supply through RUTF. Giving iron early in treatment can also lead to "free iron" in the body. Free iron can cause problems in three ways:

i. Free iron is highly reactive and promotes the formation of free radicals which may engage in uncontrolled chemical reactions with damaging effects.
ii. Free iron promotes bacterial growth and can make some infections worse.
iii. The body tries to protect itself from free iron by converting it to ferritin. This conversion requires energy and amino acids and diverts these from other critical activities.

b. Diarrhoea

Children identified with SAM commonly have diarrhoea but should not be given Oral Rehydration Salts (ORS) as these are too high in sodium. ORS in a child with SAM will invoke sodium overload and enhance bilateral pitting oedema possibly leading to cardiac failure and death. It is safer to provide RUTF and water for children in OTP or, for those with poor appetite, 10% sugar water while awaiting transfer to IPC.

RUTF also contains zinc. Additional zinc supplements (e.g. Zincfant) should not be prescribed for diarrhoea for the child in OTP receiving RUTF. Children with SAM and severe dehydration with a diagnosis based on recent history of profuse watery diarrhoea and recent change in child's appearance (sunken eyes) are referred to IPC and receive Rehydration Solution for Malnutrition (ReSoMal) instead of ORS. ReSoMal contains less sodium and more potassium than ORS. ReSoMal should not be given in OTP. Inappropriate use of ReSoMal can also easily lead to cardiac failure and death.

5.7 MONITORING PROGRESS IN OTP (FOLLOW UP)

Children admitted into OTP should return to the health facility every week (on the same day) in order to be re-evaluated by the health workers to follow up their health and nutritional progress. However, admission could be done at any day the children are presented. Table 5.10 outlines the frequency of measurements and checks during follow up.

Table 5.10: Frequency of measurements and checks during OTP visits

Activity	Frequency
Appetite test	Each week
Weight	Each week
Check for oedema	Each week
MUAC	Each week
Height (when WFH is used)	Every 4 weeks
Clinical examination	Each week
Medical history	Each week
Health / Nutrition education	Each week
Evaluation of RUTF consumption	Each week
Provision of RUTF	Each week
Routine medical treatment	According to protocol
Home visit	As needed according to protocol indicated in Table 5.11
Vaccinations	As needed according to vaccination schedule

According to the outcomes of each visit, the health worker will need to decide whether the child is making good progress or has deteriorated such that in-patient referral is required or, if deterioration is less severe, a home visit. The outcome of the weekly visit should be marked in the appropriate place on the OTP Card.

The following indicate the different criteria to assist the health worker to decide what actions to take for the beneficiary during weekly follow up:

5.7.1. Children responding to treatment

Indications of children responding to treatment and making good progress include gaining weight, MUAC increasing, decreasing oedema, good appetite, no severe medical complications, and regular attendance of weekly follow-up visits. They should continue in OTP until they reach the criteria for discharge.

5.7.2 Children not responding to treatment

Possible causes for non-response are outlined below.

Common causes related to the SAM children or family

- RUTF: insufficient RUTF given to the sick child or is taken/shared by siblings or caregivers.
- Unwilling caregivers or caregivers overwhelmed with work and/or other responsibilities.
- Pathophysiological reasons: malabsorption of nutrients, altered metabolism rumination, infections (e.g., diarrhoea, dysentery, malaria, pneumonia, tuberculosis, urinary infection, otitis media, schistosomiasis, leishmaniasis, hepatitis/cirrhosis).
- Other serious underlying diseases: congenital abnormalities, neurological damage.
- Psychological trauma.

Common causes related to the treatment facility

- Inappropriate selection of patients to be treated in OTP (not adhering to admission criteria).
- Poor assessment of presence of appetite.
- Inadequate/incorrect instructions given to caregivers.
- Wrong ration of RUTF dispensed.
- Excessive time between distributions.

If the children are not responding to treatment nutritionally or clinically according to weekly checks, the health worker should take the actions as summarised below:

1. Re-assess consumption and possibility of sharing of RUTF.
2. Assess for possible infection preventing response to treatment according to IMCI protocols for a diagnosed infection and testing/treating for malaria.
3. Arrange a home visit to see if there are social issues including ration sharing or poor environmental conditions.
4. Arrange prompt referral to in-patient services where counselling and referral for Human Immunodeficiency Virus (HIV) or tuberculosis (TB) testing is available.

Before the children deteriorate and require transfer to IPC, social causes of a non-response to treatment should be investigated through a home visit by the CbRPs/CORPs/CHIPS Agents/CVs etc. The home visit should be made at the request of the clinician according to the criteria presented in the table below.

Table 5.11: Criteria for home visit

Parameter	Outcome of the weekly visit
General	**All transferred from IPC (during first week)** **Weekly appointments are not respected or followed regularly (absences)** **Defaulter's tracing** **Family refuses IPC despite health worker's advice**
Weight and oedema evolution	**Weight loss for two consecutive visits** **Static weight for three consecutive visits**

Appetite	**Eats less than ¾ (75%) of the prescribed daily ration of RUTF**

5.7.3 Home visit

Health facility staff will identify problem cases and they or the CbRPs/CORPs/CHIPS Agents/CVs, etc., can visit the SAM children's home to investigate and report back to the facility. It is important that a reliable system of communication is established for follow up visits and that the findings from those visits are documented, particularly with respect to reasons for defaulting or children not progressing well. Where possible, adopt communication systems which are already in use and have proved effective. The facility should implement the following methods to notify case finders of the name of a child requiring follow up:

- CbRPs/CORPs/CHIPS Agents/CVs, etc., report to the health facility on a regular basis and collect the names of children who require follow up.
- Health facility staff, pass messages to the CbRPs/CORPs/CHIPS Agents/CVs, etc., via caregivers/reliable community members.

Children who are Absentees and Defaulters

The children should attend each OTP session for monitoring of progress towards recovery. If children are absent from OTP session, ideally the children should be followed up immediately by a CbRP/CORP/CHIPS Agent/CV etc., to encourage the caregivers to attend the OTP. Absence means that the children will not receive the necessary RUTF for that week.

Children that are absent for two consecutive weeks at OTP should be followed up at home by a CbRPs/CORPs/CHIPS Agents/CVs etc as a matter of urgency. The caregivers should be encouraged to return and the reason for non-attendance identified. The health worker may be able to suggest a plan of continued care, which is acceptable to the caregivers. Identification of reasons for non-attendance will assist managers to improve the IMAM service to enhance access (and hence coverage) to the local community.

Children that are absent for three consecutive weeks at OTP are considered defaulters and are consequently discharged from the programme. It is essential that defaulters are followed up since this may be hiding excess mortality in the OTP service.

Defaulting is a particular problem which may be related to:

- Health facility schedule making OTP service inaccessible
- Poor attitude of health care staff
- Lack of understanding by caregiver
- Cultural barriers (e.g., male permission/male relative needed to attend OTP)
- Migration to another location
- Death of the child
- Physical or climatic barriers
- Harvesting/planting season
- Distance
- Cost of transport

Alternative plans of care should be considered to attempt to resolve these difficulties. Examples may be to adjust the clinic schedule or allow biweekly (every two weeks) visits to OTP for stable children. Cultural barriers can be investigated and mitigated by effective sensitisation and mobilisation in the community.

Note: To be considered for biweekly visits, the children must have good appetite for RUTF, be gaining weight and have no underlying illnesses.

5.7.4 Referral to IPC

Poor progress may indicate the need for IPC referral. Criteria for referral during treatment in OTP are noted in Table 5.12 below.

Table 5.12: Criteria for referral to IPC

Parameter	**Outcome of the weekly visit**
Weight and	**Weight loss for three consecutive visits (not related to loss of**

oedema changes	**oedema/for non-oedematous child)** **Static weight for four consecutive visits** **Onset of oedema when previously absent** **For cases admitted on WFH or MUAC: weight at week 3 lower than weight at admission** **Oedema is not disappearing at week 3**
Appetite	**Anorexia and failed appetite test**
Clinical condition	**Fever > 39°C or hypothermia < 35°C** **Severe dehydration** **Repeated vomiting** **Severe respiratory distress (IMCI criteria)** **> 50 respirations/minute (child between 6 and 12 months old)** **> 40 respirations/minute (child between 1 and 5 years old)** **Chest in-drawing** **Severe pallor with respiratory distress (signs of anaemia)** **Malaria with signs of severity** **Abscess or extended skin lesions (needing IM or IV treatment)** **Very weak, apathy, unconscious** **Convulsions or fits**

5.7.5 Emergency procedures for referral to IPC

Sometimes the distance between outpatient and in-patient services can be far, or families delay in order to inform key family members, obtain permission or basic materials. If the child is acutely unwell, immediate emergency interventions can improve the chance of the child surviving the journey to hospital for IPC.

Table 5.13: Procedures for referral to IPC

ISSUE	RECOMMENDED PROCEDURES
Hypoglycaemia	*If the child is able to breastfeed,* - Support the mother to breastfeed the child. *If the child is not able to breastfeed, but is able to swallow,* - Give expressed breastmilk, or if not available, give sugar water. - Give 50 – 100ml of milk or sugar water before departure.
Hypothermia	*Teach the mother how to keep the child warm on the way to the hospital. Use 'kangaroo technique':* Remove wet clothing, including nappies. Dress the child in a warm shirt open at the front, a nappy, hat and socks. Place the infant in skin to skin contact on the mother's chest. Cover the infant with mother's clothes (and a warm blanket in cold weather). When not in skin-to-skin contact, keep the child clothed or covered as much as possible at all times. Dress the young infant with extra clothing including hat, gloves and socks, loosely wrap the child in a soft dry cloth and cover with a blanket. Check frequently if the hands and feet are warm. Breastfeed the infant frequently (or give expressed breast milk by cup) or sugar water.
Hyperthermia	Remove clothing and repeatedly damp-sponge the child with tepid water (avoid cold water as this could cause shock). If >39°C give one tablet of paracetamol crushed in clean water (avoid aspirin as this may cause Reye's Syndrome in a child < 12 years with fever).
Infection	If possible, give first dose of antibiotic.
Referral Form	Complete a form (Annex 3) listing the key problems, medicines provided and action already given to facilitate appropriate

	stabilisation care.

If a child has been receiving treatment in OTP for a period of 12 weeks and has still not reached discharge criteria for cured, and when the health worker didn't identify a family/social problem, then the child must be transferred to IPC for further investigation. The lack of progress may be due to an undiagnosed underlying infection. The child in IPC can receive the necessary medical tests and have direct observation of RUTF consumption.

Only when all actions to investigate why the child is not responding to treatment have been exhausted (including home visits and transfer to IPC) and a treatable cause has not been found, can the beneficiary then be discharged as "non-recovered".

5.8 OTP DISCHARGE CRITERIA

Table 5.14: Criteria for discharge as cured from OTP

Criteria of admission	Criteria of discharge
Bilateral oedema	• **No oedema for 2 consecutive visits** • **MUAC ≥ 12.5 cm** • **Clinically well**
MUAC < 11.5cm	• **MUAC ≥11.5cm for 2 consecutive visits** • **Sustained weight gain** • **Clinically well**
WFH <- 3 z-scores (if used)	• **WFH ≥ -3 z-scores for 2 consecutive visits** • **Clinically well**
*** When the service is available, children discharged as cured from OTP will be transferred to TSFP for two months to prevent relapse.**	

5.8.1 Types of exits

Table 5.15: Types of exits from OTP

Discharged from OTP	**Type**	**Description**
	Cured	**Reached recovery discharge criteria (based on admission criteria)**
	Died	**Death occurring during the course of treatment**
	Defaulter	**Child was absent for 3 consecutive visits**
	Non-recovered	**Has not reached discharge criteria within 12 weeks**
Transfers	**Referred to IPC**	**The child fulfils criteria for referral to IPC; he is expected to return to OTP after his condition is stabilized**
	Transfer to another OTP	**The child is moving to another OTP site while continuing treatment**

5.8.2 Discharge procedures

At discharge ensure the following:

- Completed OTP card
- Completed all medications
- Provide 7 sachets of RUTF to help the child wean gradually from RUTF to family food
- Health and nutrition education sessions should be completed
- Immunisation schedule is updated, especially measles
- Adequate arrangements for linking the caregiver and child with appropriate community initiatives are made (e.g., supplementary feeding, TSFP, food security or welfare initiatives)
- The caregiver is aware he/she should return to the health facility if any deterioration is noted

5.9 FOLLOW UP AFTER DISCHARGE

Children discharged cured from OTP should be periodically monitored to avoid relapse. If there is a TSFP, children will be referred for continuing the nutritional support for another three months. The ration should be the same as the standard TSFP ration. The TSFP registration book will include OTP follow-up children in a separate section. If there are no CbRPs/CORPs/CHIPS Agents/CVs, etc., and no TSFP near to the beneficiaries' home, the follow-up at the nearest health centre should be organised.

Where available, SQ-LNS should be given to prevent relapse. The child should be present at the Monthly Growth Monitoring and Promotion (GMP) session and given 30 sachets of SQ-LNS monthly for three months duration to avert relapse to SAM or MAM.

Caregivers should receive IYCF counselling and encouraged to make use of locally available nutritious foods.

CHAPTER SIX: IN-PATIENT CARE FOR CHILDREN

6.1 INTRODUCTION

This chapter describes an overview of in-patient treatment of children 0-59 months with SAM and medical complications and/or poor appetite for RUTF. Detailed treatment protocol is provided in in-patient care for SAM children with complications 6-59 months, children older than 6 months and below 4.0 kg, and infants less than 6 months.

Please refer to chapter 8, section 8.3 on the adaptation of the in-patient treatment in the context of emerging public health concerns like COVID-19 pandemic.

6.2 LINKAGE BETWEEN OTP AND IPC

Children admitted into in-patient care will be referred back to OTP once medical complications are resolved, appetite has returned and/or oedema is reduced. The average time a child may spend in IPC is between 4 to 7 days. However, in some exceptional circumstances, children will complete the full treatment in IPC if:

- OTP is not available or too far from the family's address
- The child is unable to eat RUTF or continues to refuse it
- RUTF is not available
- Family refuses OTP

6.3 ADMISSION TO IPC

Table 6.1: Admission criteria to IPC

Generalised oedema (+++)
OR
Any grade of bilateral pitting oedema with severe wasting
OR
Weight < 4.0kg
OR
Child is less than 6 months with visible signs of severe wasting

OR

MUAC < 11.5cm or WFH <- 3 z-scores or bilateral pitting oedema (+) or (++) with:

- **Anorexia (failed appetite test or unable to eat RUTF)**

And/or the following medical complications:

- **Intractable/Continuous vomiting**
- **Convulsions, fitting or reported convulsion during this treatment**
- **Very weak, apathetic, lethargic, not alert or unconscious**
- **Hypoglycaemia**
- **High fever: Axillary temperature. ≥ 38.5°C, Rectal ≥39 °C**
- **Hypothermia: Axillary temperature. ≤ 35.5°C, Rectal ≤36.0 °C**
- **Severe dehydration based on history and clinical signs**
- **Severe respiratory distress (IMCI criteria)**

>60 resp./min for children < 2 months

>50 resp./min for children 2 to 11 months

>40 resp./min for children 12 to 59 months

- **Any chest in-drawing**
- **Very pale, severe anaemia**
- **Extensive skin infection or open lesion that requires IM/IV treatment**
- **Any condition that requires IV infusion or nasogastric feeding**

OR

Children referred from OTP with one or more of the following:

- **Progressive loss of weight for 3 consecutive visits in OTP**
- **Static weight for 4 consecutive visits in OTP**
- **Appearance of bilateral pitting oedema when previously absent**
- **Oedema not disappearing in the third week of admission**
- **Not cured at 12 weeks (non-recovered)**
- **Development of the IMCI complications above**

Table 6.2: Admission criteria for children under 6 months

Weight for length (W/L)	**Less than - 3 z-scores (<-3 z-scores)**
Bilateral Oedema	**Presence of bilateral oedema**
Presence of one of these signs	**Body weight less than 3 kg.**
	Too weak to suckle/feed
	Visible signs of wasting
Presence of any IMCI danger signs	**Refer to table 6.1**

6.4 CASE MANAGEMENT AND FOLLOW-UP IN IPC

6.4.1 Management of SAM in IPC

According to current WHO recommendations[3], hospital-based care for SAM is organised into phases:

- **Stabilisation phase:** treatment of infections, correction of electrolyte imbalance and start of cautious feeding (F-75). The child stays in the stabilisation phase until the appetite has recovered, and medical complications and/or oedema are being resolved.
- **Transition phase:** once the patient recovers appetite, main complications are under control and oedema is being reduced, he/she is prepared for discharge to OTP. The appetite for RUTF is first assessed and must be prioritised. If the patient is refusing RUTF or unable to take the required daily ration, then include F-100 until child can consume adequate RUTF daily ration.
    - Before therapeutic milk is given, offer RUTF.
    - If > 75% of the RUTF daily ration is consumed, continue with RUTF and water only.
    - Observe child eating RUTF for 24 hrs minimum (>75%) and prepare for referral to OTP.
    - If < 75% of the RUTF daily ration is consumed, continue with therapeutic milk.

- Continue to offer the RUTF to the child before each meal of therapeutic milk.

- **Rehabilitation phase or catch-up growth phase:** At this stage, the child is recovering and shall be referred to OTP. Only in exceptional circumstances will the child remain as in-patient until complete recovery.

ANNEX: 2 OTP CARD
ADMISSION DETAILS: OUTPATIENT THERAPEUTIC PROGRAMME

Child's Name				REG. Nº	__ __ __ __/__ __/__ __ __/__ __ __		
					STATE &LGA CODE/ HF NUMBER/ YY/MM/3 DIGIT No		
Address / Mobile Nº.				Date of Admission			
Age (months)		Sex	M	F	Caregiver's Name		
Admission	Referral from Community	Self-Referral	From other centre	From inpatient	Walking distance to home (hrs)	HOUSEHOLD SIZE: Total	<5 yrs
Admission Anthropometry							
Weight (kg)		Height (cm)		MUAC (cm)		Other	
Admission Criteria	Oedema	MUAC <11.5 cm	WFH <-3 ZS	Readmission Relapse		Yes	No
					Returned Defaulter	Yes	No
History							
Diarrhoea	Yes	No		Stools / Day	1-3	4-5	>5
Vomiting	Yes	No			Passing Urine	Yes	No
Fever	Yes	No					
Cough	Yes	No		If oedema, how long swollen?			
Appetite	Good	Poor	None		Breastfeeding	Yes	No
Reported Problems							
Physical Examination at Admission							
Respiration Rate (# min)	6-12m	< 50	12-59m	< 40	Chest In-drawing	Yes	No
		>50		> 40			
Temperature (ºC)					Conjunctivae/ Palmar Coloration	Normal	Pale
Eyes	Normal	Sunken	Discharge		Passing Urine	Yes	No
Thirsty	Yes	No			Dehydration	None	Moderate	Severe
State of Consciousness	Normal	Agitated	Irritable	Apathetic / Passive	Extremities	Normal	Cold
Ears	Normal	Discharge			Mouth	Normal	Sores	Candida
Lymph Nodes	None	Neck	Axilla	Groin	Disability	Yes	No
Skin Changes	None	Scabies	Peeling	Ulcers / Abscesses	RDT	+ ve	- ve
Routine Admission Medication & Immunisation							
Admission: Drug	*Date*	*Dosage (& type)*			*2nd visit:*	*Date*	*Dosage*
Antibiotic					Albendazole/ mebendazole		
					Immunization Measles	Yes	No
					Fully Immunised	Yes	No
Other Treatment							
	Date	+ve / -ve			*Other Drugs*	*Date*	*Dosage*
HIV Test/ART					Antimalaria		
TB therapy	Yes	No					
Cotrimoxazole prophylaxis	Yes	No					

Figure 6.1: Organisation of IPC

6.4.2 Discharge from IPC

Most of the children admitted in IPC will be referred to an OTP service to complete their rehabilitation. Only in exceptional circumstances (child refuses RUTF, family lives too far away from an OTP or no outpatient services are available) will children complete the full treatment in IPC.

Discharge Criteria

Discharge criteria for infants under 6 months:

- Infant is able to suckle effectively

AND

- Has an ascending weight curve on exclusive breast milk

AND

- Has no symptoms of a medical problem

Discharge criteria to OTP are as follows:

Table 6.3: Discharge criteria from IPC to OTP

Appetite for RUTF (eats at least 75% of daily ration)
Beginning of loss of oedema (+ or ++) (Normally judged by an appropriate and proportionate weight loss as the oedema starts to subside)
Complications are resolving (or chronic conditions are controlled)

If these conditions are not met after 7 days, a thorough medical examination should explore the reasons (e.g., an undetected medical complication, the child not taking meals correctly, etc.) and correct it. If the child's condition doesn't improve during the transition phase, the child should be put back in stabilisation phase.

Prior to discharge, the health worker should ensure that:

- An OTP is available close to the child's home.
- The caregiver is willing to continue the child's recovery at home and understands the importance of continuing the child's recovery in OTP.
- The caregiver understands how to give RUTF at home.
- Key messages for RUTF have been understood by the caregiver.
- Any medications for use after transfer have been explained to the caregiver.
- Caregiver knows the location of the OTP and date of next OTP session.
- Sufficient RUTF has been given to last until the next OTP session.
- A transfer slip has been completed. Caregiver should give this to the health worker at the next OTP session.
- Individual monitoring card and register has been completed.

When patients do not meet the requirements for referral to OTP, they will be discharged according to the criteria detailed in the table below.

Table 6.4 Discharge criteria for children remaining as in-patient until cured

Criteria of admission	Discharge Criteria (recovered)
All admissions with SAM	MUAC ≥12.5cm WFH ≥ -2 z-scores (*if used*)
	No Oedema for 3-4 days
	Sustained weight gain and Clinically well and alert

CHAPTER SEVEN: TARGETED SUPPLEMENTARY FEEDING FOR MODERATE ACUTE MALNUTRITION

7.1 OVERVIEW

The prevention and treatment of moderate acute malnutrition is a critical approach to reduce the impact on individuals and communities. Appropriate and timely treatment for those already acutely malnourished, and prevention for those not in treatment should be effectively linked in order to: reduce the number of acute malnutrition cases and subsequent strain on Nigeria's health and community systems and structures; increase the ability to effectively treat those who do fall into a state of acute malnutrition; and support an enabling environment for children, pregnant and lactating women, and other vulnerable groups to thrive.

There are two types of supplementary feeding programmes: preventive and curative. They are referred to as *Blanket Supplementary Feeding Programme* (BSFP) for prevention, and *Targeted Supplementary Feeding Programme* (TSFP) for prevention and treatment.

Please refer to chapter 8, section 8.3 on the adaptation of the TSFP and BSFP in the context of emerging public health concerns like COVID-19 pandemic.

7.1.1 Blanket Supplementary Feeding Programme

BSFP is the standard response to prevent malnutrition in an emergency context, particularly where there is a high prevalence of acute malnutrition in the population. Existing high food insecurity and/or high prevalence of chronic malnutrition and micronutrient deficiencies are mitigating factors. BSFP targets all members of a vulnerable group such as children 6 to 23 months and PLW. Enrolment into the BSFP is independent of an individual's nutritional status. See Chapter 9, for nutrition in emergencies.

7.1.2 Targeted Supplementary Feeding Programme

The aim of TSFP is to treat and prevent deterioration in nutrition status of MAM children 6 to 59 months, and where feasible, in other vulnerable groups such as PLW and persons living with chronic illnesses such as HIV and TB. As an integral component of the IMAM approach, management of moderate acute malnutrition through TSFP provides a continuum of care for SAM children discharged from OTP.

In this chapter, TSFP will focus on MAM children 6 to 59 months. This chapter also provides practical guidelines for the identification and management of MAM children 6 to 59 months who are at heightened risk of death in the medium and long-term state of malnutrition. The TSFP aims to manage the nutritional rehabilitation of MAM children 6 to 59 months with the provision of specialised nutritious foods, standardised medical care, and IYCF counselling for their mothers or caregivers.

7.2 OBJECTIVES

- To prevent morbidity and mortality in acute malnourished children 6 - 59 months.
- To manage and treat MAM in children 6 to 59 months, and prevent deterioration to SAM.
- To prevent relapse in SAM children 6-59 months discharged as cured from OTP.

7.3 ORGANISATION

7.3.1 Structure

TSFP activities are linked with a health facility. As feasible, and depending on caseloads, the activities can be internal or external to the facility. Large numbers of children enrolled into both OTP and TSFP could affect both the workload of the nutrition staff, and the quality of care provided. TSFP can be implemented in a secure, safe and hygienic structure or room. Careful consideration should be taken with respect to other health facility activities, and community events such as market days, to ensure good attendance and avert overcrowding in the health facility premises. Care must be taken

to adhere strictly to emergency public health concerns in order to prevent and control spread of diseases such as COVID-19 and other infectious diseases.

7.4 TSFP ADMISSION CRITERIA

All children 6 to 59 months that fulfil any of the admission criteria in the following table will be admitted into TSFP for MAM treatment:

Table 7.1: Admission criteria to TSFP

GROUP	ADMISSION CRITERIA
Children 6 to 59 months	▯ MUAC ≥11.5 cm to <12.5 cm or ▯ WFH ≥-3 z-scores to <-2 z-scores *(where feasible)* ▯ Passes appetite test ▯ Clinically well*

***MAM children with poor appetite or anorexia and/or with other medical conditions such as ARI or malaria should be referred to IPC for immediate medical care**

OTP follow up children
• SAM children 6 to 59 months discharged as cured from OTP are followed up in TSFP for 2 months, as resources permit, to prevent relapse. • These children are registered separately in the TSFP register.

7.4.1 Types of admission

Table 7.2: Types of admission to TSFP

New cases	New admission: MAM children 6-59 months who have not received treatment elsewhere for this episode of MAM. Discharges from OTP (follow up cases): Children 6-59 months who are discharged cured from OTP to continue treatment in TSFP. Discharges from IPC (follow up cases) include children 6-59 months who are discharged cured from IPC to continue treatment in TSFP, in the context where there is no nearby functional OTP. New admission also includes:

	Relapse: MAM children 6-59 months re-admitted to TSFP within two months after successfully discharged as cured (this is a new episode of MAM).
Old cases	**Returned Defaulters: MAM children 6-59 months who defaulted from TSFP before recovery but return to the programme within two months of discharge.**
	Transfer from another TSFP site: MAM children 6-59 months transferred while still under treatment from another TSFP location.

Note:

- If a *cured SAM* child loses weight during their follow-up period in the TSFP, and reaches the criteria for MAM, he becomes a new MAM admission in the TSFP.

If the child deteriorates to the criteria for SAM, he is transferred to the OTP, and recorded as a new admission-relapse.

- If a *MAM child* loses weight and reaches the criteria for SAM, he should be transferred to the nearest OTP, where they will be treated as a new SAM admission.

7.4.2 Steps for TSFP admission

1. Take the child's anthropometric measurements: MUAC, weight and height (if WFH is used), and assess for bilateral pitting oedema.
2. Explain to the mother/caregiver the reasons for the child's admission to TSFP, and how the treatment will be organised.
3. Examine the MAM child for any signs of medical illness. If the child has any complications, refer them to the nearest health centre immediately for clinical investigation and treatment. "Fast track" those children with obvious serious medical issues to the health centre - do not keep them waiting.
4. Systematically check for measles vaccination status according to National Guidelines, and refer the MAM child eligible for vaccination to the nearest health centre.

5. Enter the MAM child in the TSFP registration book, and provide a TSFP registration number, and TSFP ration card to the mother/caregiver. Enter all the admission information in the card.
6. Carefully explain the importance of the TSFP expectations to the mother/caregiver - regular attendance, no intra-family sharing of the RUSF, eating the RUSF between family meals, etc. - and ensure that she knows how and when to give the child the specialised nutritious food.
7. Provide the MAM child with the ration of specialised nutritious food. Record the distribution in the TSFP ration card.
8. Ensure the mother/caregiver knows when to return for the follow-up visit, and what to do if the child becomes ill.

7.5 NUTRITIONAL MANAGEMENT

Children with MAM need to consume a diet consisting of nutrient dense foods to meet their extra needs for nutritional and functional recovery. Ideally, this should come in the form of local nutritious foods where such foods are available and affordable. Nutrient dense foods are those high in nutrients relative to their calorific content i.e., they have a relatively high content of vitamins, minerals, essential amino acids and healthy fats. Examples of nutrient-dense foods include animal source foods, beans, nuts, and many fruits and vegetables.

For MAM children, dietary treatment involves the provision of specialised nutritious foods, such as fortified blended food or RUSF. The TSFP specialised nutritious food ration will provide sufficient energy, fats and nutrients to support recovery from MAM, and prevent deterioration to SAM.

Note: Children discharged from OTP should be given take home ration of SQ-LNS (for 3 months requiring monthly visits aligning with GMP) to prevent relapse.

Table 7.3: Example of typical ration sizes and doses for treatment of MAM

	Type of	Quantity

Age Group	Ration	grams/child/day	kg/2 Weeks	kg/4weeks
Children 6 – 59 months	Fortified Blended Flour	200	3.0	6.0
	RUSF	100 (1 Sachet)	1.5 (15 sachets)	3.0 (30 sachets)

7.6 ROUTINE MEDICATIONS

Table 7.4: Treatment protocols for MAM children

Name of Product	When	Age	Prescription	Dose
Vitamin A*	At Admission (if not using RUSF and if not taken in the last 3 month)	6-11 months	100,000 IU (Blue)	Single dose at Admission
		12-59 months	200,000 IU (Red)	
Note: - *Do not give Vitamin A* if it had been given over the past 3 months. Give children weighing less than 8 kg or 6-11 months old 3 drops of 200,000 IU Vitamin A (retinol) red capsules (OR one blue capsule containing 100,000IU retinol). . Give children weighing more than 8 kg or 12 – 59 months old one red capsule of 200,000 IU Vitamin A. - EXCLUDE: Those for re-admissions.				
Albendazole	At admission	6 - 11 months	DO NOT GIVE	Single dose at admission
		12-23 months	200 mg	
		24–59months	400 mg	
Note: Give anti-helminth again after last 3 months if signs of re-infection appear. Or another anti-helminth according to national guidelines: - Mebendazole is not recommended for < 12 months. - Give 500mg single dose on admission to children aged 12-59 months. - Give children weighing more than 9 kg, a single dose of 500mg tablet on admission.				
Measles Vaccination	At admission	≥9 months		Once
Note: - International guidelines on Integrated Management of Childhood Illnesses (IMCI) recommend that during emergencies measles vaccine should be given to children starting from 6 months because their immunity is likely to be compromised as a result of inappropriate dietary intake and/or increased levels of infections.				

- **It is also important to check each child's immunisation card for measles vaccination status and give measles vaccine if the child has not been vaccinated for measles. If child has no card or proof of vaccination against measles, assume that the child has not been vaccinated.**

7.7 TSFP FOLLOW-UP VISITS

On each return follow-up visit to the TSFP, the care for the MAM should follow the same steps in the admission procedures:

a) Take anthropometric measures: MUAC and weight, as well as bilateral pitting oedema.
b) Assess the MAM child's medical condition. Provide medications, as scheduled.
c) Explain the MAM child's nutritional status to the mother/ caregiver. Praise the mother when the child gains weight or explore further if a weight loss is noted to better understand the reason – do not scold the mother.
d) Distribute the child's specialised nutritious food and record their TSFP ration in the ration card.
e) Provide IYCF education, and messages on health, nutrition, WASH, and preparation of locally available nutritious foods, to the mother or caregiver.
f) Inform the mother or caregiver of the date for the next follow-up visit.

7.7.1 Failure to respond to MAM treatment

The following are maximum time limits for labelling the MAM child as failure to respond to treatment (in most circumstances action should be taken before these limits are reached):

1. Either none or trivial weight gain at 6 weeks in the TSFP, or at the 3rd visit.
2. Any weight loss by the 4th week in the TSFP, or at the 2nd visit.
3. Failure to reach discharge criteria after 2 months in the programme.

7.7.2 Reasons for failure to respond to treatment

1. Problems with the application of the protocol: this should be addressed first.

2. Nutritional deficiencies are not being corrected due to an underlying physical condition/ illness.
3. Home/Social circumstances of the MAM child and other causes that require further investigation.

7.8 DISCHARGE CRITERIA

Table 7.5: Criteria for discharge as cured from TSFP

Criteria for admission	Criteria for discharge
MUAC ≥11.5 cm to <12.5 cm	• **MUAC ≥12.5 cm for 2 consecutive visits** • **Good appetite and clinically well**
WFH ≥-3 z-scores to <-2 z-scores	• **WFH ≥ -2 z-scores for 2 consecutive visits** • **Good appetite and clinically well**

7.8.1 Types of exit from TSFP

Table 7.6: Types of exit from TSFP

	Type	Description
Discharged from TSFP	Cured	Reached discharge criteria (based on admission criteria)
	Died	Death occurring during course of treatment
	Defaulter	The patient is absent for 2 consecutive visits
	Non-recovered	Has not reached discharge criteria after 3 months of treatment
Transfers	Referred to OTP	The child fulfils criteria for referral OTP. If referral to IPC is necessary, it will be done by OTP staff
	Transfer to another TSFP	The child is moving to another TSFP site while continuing treatment

The parents and caregivers whose children become malnourished generally come from the poorest sections of society. The knowledge of basic facts about breastfeeding, complementary feeding, WASH, sexually transmitted diseases and HIV, reproductive health and the ill effects of some traditional practices are either not known or ignored.

Please refer to chapter 8, section 8.3 on the adaptation of the IYCF activities in the context of emerging public health concerns like COVID-19 pandemic.

7.9.1 National recommendations for infant and young child feeding

The national recommendation for infant and young child feeding stipulates:

1. Initiate breastfeeding within 1 hour of birth and continue exclusive breastfeeding (without water and other foods) for six months from birth.
2. Give appropriate complementary foods to all children from 6 months of age.
3. Give children 6-23 months MNP if available to improve the micronutrient status of their complementary diet.
4. Continue breastfeeding for up to 2 years and beyond.

7.9.2 Small Quantity Lipid-Based Nutrient Supplement

SQ-LNS is a fortified lipid-based paste/spread that is intended to complement the diet of children aged 6 months and older with essential nutrients. As such, it contributes to preventing undernutrition, in particular, micronutrient deficiencies and stunting. It is to be consumed directly from the package or by mixing with other foods. One package contains one daily dose of 20g. It is NOT a breast-milk replacer but complementary to breastmilk.

SQ-LNS belongs to a group of complementary food supplements (CFS) designed to provide multiple micronutrients within a food base that also provides energy, protein and essential fatty acids, and are targeted towards the prevention of malnutrition. While RUTF has revolutionized strategies for *treatment* of malnutrition, there are limited options with regards to effective strategies for *prevention* of malnutrition. To address

this, SQ-LNS was developed and provides about 100-120 kcal/day. The proportions of these energy needs provided by SQ-LNS are approximately one-half at 6–8 months, one-third at 9–11 month, and one-fifth at 12–23 month, leaving room for other complementary foods in the diet and breastmilk.

SQ-LNS combination of macro- and micro-nutrients has the potential to address multiple nutritional deficiencies simultaneously, thus reducing undernutrition.

- Recommended daily dose: 1 sachet (20g) per day, per child.
- Usual presentation: 20g sachet, approximately 107 kcal for management of dietary intake.
- Instructions for use: the product can be eaten or fed directly from the sachet with no prior cooking, dilution or preparation.
- Appearance: light brown coloration, smooth, homogeneous texture (no grittiness, no lumps). It is easy to squeeze out of the sachet and presents minimal oil separation.
- Shelf life: minimum 24 months without refrigeration.
- Target Population: The product has been formulated based on the needs of children aged 6-23 months (MUAC ≥ 12.5 cm).
- Duration: Monthly visits for at least three (3) months.

Table 7.7 Nutritional Composition of SQ-LNS

Nutritional composition for 100g of product			
Moisture content	2.5% maximum		
Water activity	0.2 to 0.5		
Energy	530-545 kcal		
Proteins	11.8g-14.5g		
Lipids	30.9g-37.8g		
Trans-fatty acids	<3% total fat		
Vitamins		Minerals	
Vitamin A	2.0mg-3.0mg	Sodium(Na)	290 mg maximum
Vitamin B1(Thiamine)	1.5mg-3.0mg	Potassium (K)	700-850 mg
Vitamin B2(Riboflavin)	2.0mg-2.6mg	Calcium (Ca)	450-650 mg
Vitamin B3(Niacin)	20mg-28mg	Phosphorous (P)	400-500 mg
Vitamin B5(Pantothenic acid)	8.0mg-14 mg	Magnesium (Mg)	70-90 mg

7.9.3 National IYCF Recommendations in Context of HIV

Start antiretroviral (ARV) treatment during pregnancy. Mothers known to be HIV positive should be provided with lifelong ART if eligible or ARV prophylaxis to reduce HIV transmission through pregnancy, labour, delivery and breastfeeding. Health workers should counsel women during pregnancy as to their infant feeding options, the benefits and management of breastfeeding, MTCT and the importance of adhering to ARV regimen:

- Initiate breastfeeding within 1 hour of birth for all infants. Pay particular attention to the positioning and attachment to prevent conditions such as cracked nipples and mastitis which increase the risk of HIV transmissions.
- Start the baby on Nevirapine (NVP) prophylaxis from birth. For infants born to HIV positive mothers who received ARV prophylaxis and are breastfeeding, NVP prophylaxis should be given from birth until 1 week after cessation of breastfeeding.

For infants born to HIV positive mother who are on ART during the entire period of breastfeeding NVP prophylaxis should be given until 6 weeks of age.

- Test the infant for HIV infection by 6 weeks of age. All infants who are HIV positive should be referred to ART clinic and started on ARVs. If the test result is negative and the child breastfed within 6 weeks of the test, a 2nd DNA PCR test should be done 6 weeks after cessation of breastfeeding.
- Breastfeed exclusively all infants from 0–6 months.
- Give appropriate complementary foods to all children starting at 6 months of age.
- For HIV-negative infants, continue breastfeeding for 2 years or beyond.
- For HIV-positive infants, continue breastfeeding until the infant is 12 months old. After 12 months, breastfeeding should be stopped only if nutritionally adequate and safe diet, which includes source of milk can be provided.
- The following conditions for appropriate complementary feeding must be met: Affordable, Feasible, Acceptable, Safe and Sustainable (AFASS).

7.9.4 Principles for optimal complementary feeding

Complementary feeding practices should reflect the FATVAH principles:

- Frequency of feeding
- Amount/quantity of food
- Thickness of food
- Variety of food
- Active feeding
- Hygiene

FREQUENCY

Ensuring appropriate feeding frequency is essential because:

- If a child eats too few meals, s/he will not meet his/her energy requirements.
- If a child eats too many meals, s/he will reduce his/her breast milk intake, which may reduce the child's overall nutrient intake as many complementary foods are less nutritious than breast milk.

Frequency of feeding is dependent on:

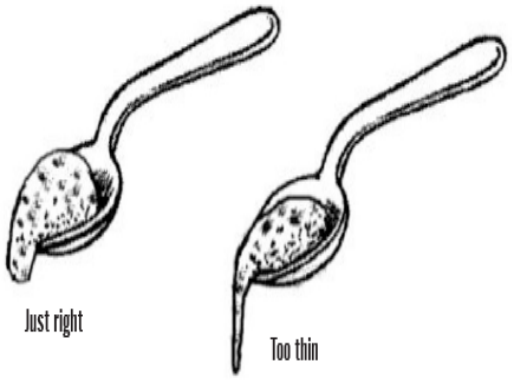
- Stomach size: Infants have small stomachs (≤ 200 ml) and can only eat small amounts at each meal.
- Energy requirements: Older infants/children will need more meals to meet their requirements.
- Energy density of the food: Foods that are less energy dense must be provided in larger quantities and more frequent meals.

AMOUNT

- The stomach of a young child is small and at 8 months of age (~8 kg) the stomach can hold about 240 ml (1 cup) at one time.
- The amount given to a child should increase as the child grows.
  - Start with 2–3 tablespoonful of food twice a day and increase gradually.

THICKNESS

- Complementary food should be thick enough so that it stays on a spoon and does not drip off.
- Generally, foods that are thicker or more solid are more energy- and nutrient-dense than thin, watery or soft foods.
- As a child develops, the child is able to handle increasingly more solid foods that are finely chopped.



VARIETIES

- Complementary foods from plant sources alone will not meet infant and young child iron and zinc requirements.
- Varied tastes and textures also prevent the diet from becoming monotonous, which can decrease a child's appetite.
- Note that when complementary feeding is started, a child needs time to get accustomed to

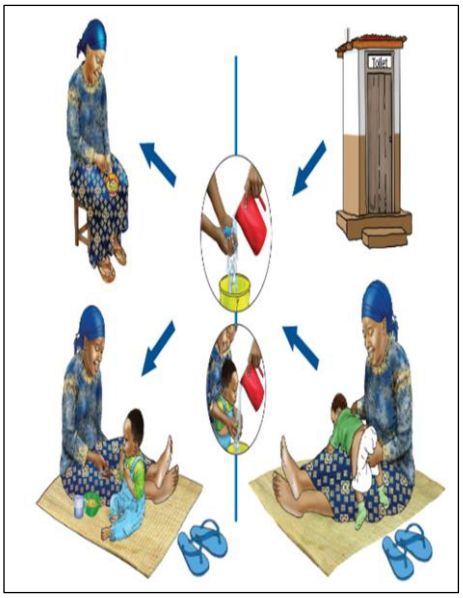
the taste and texture of new foods.

- A variety will ensure proteins, carbohydrates, fats, vitamins and minerals:

  - Serve foods with a range of colours—yellow, red, orange, brown, green, and white.
  - Plant and animal sources will help ensure that the child is getting variety of nutrients.

ACTIVE FEEDING

- How, when, where, and by whom the child is fed are important.
- Active feeding (also called 'responsive feeding') means engaging a child while feeding to encourage the child to eat.
- A child should have his or her own plate or bowl so that the caregiver knows if the child is getting enough food. A clean utensil such as a small spoon, or just a clean hand, washed with soap/ash and water, may be used to feed a child.



HYGIENE

Practice good hygiene when preparing food and feeding children:

- Always wash hands with soap or ash, and clean flowing or poured water before preparing food and feeding baby.
- Use only treated water for drinking and mixing into food.
- Store treated drinking water in a covered container and serve by pouring.
- Cover food when storing.

Hygiene includes **WASH:**

- *Water*—access, quantity, and quality.
- *Sanitation*—safe handling and disposal of human excreta, management of waste, and control of disease vectors (such as mosquitoes and flies).

- *Hygiene*—hand washing with soap/ash, treatment and safe storage of drinking water, safe preparation and storage of food.

7.9.5 IYCF 3-Steps counselling skills

The IYCF 3-step counselling/reaching-an-agreement process provides information and support to the mother/caregiver and involves the following steps:

1. Assess age-appropriate feeding: ask, listen and observe.
2. Analyse feeding difficulty: identify difficulty and, if there is more than one, prioritise.
3. Act – discuss, suggest small amount of relevant information, agree on feasible option that mother/ caregiver can try.

Step 1: Assess

- Greet the mother/caregiver and ask questions that encourage her/him to talk, using *listening and learning*, *building confidence and giving support* skills.
- Ask the following questions:

a) What is your name and your child's name?

b) Observe the general condition of mother/caregiver.

c) What is the age of your child (in completed months): 0-5; 6-8; 9-11; 12-23?

d) Ask mother/caregiver if you can check child's growth card.

- Is growth curve increasing?

- Is it decreasing, levelling off? (If decreasing or levelling off, mark 'no' to question: is growth curve increasing?).

e) Ask about breastfeeding:

- About how many times/day do you usually breastfeed your baby? = frequency.

- How is breastfeeding going for you? = possible difficulties.

- Observe mother and baby's general condition.

- Observe baby's attachment, baby's position.

f) Ask about complementary foods:

- Is your child getting anything else to eat? = what type/kinds.

- How many times/day are you feeding your child? = frequency.

- How much are you feeding your child? = amount.

- How thick are the foods you give your child? = texture (thickness/consistency).

g) Ask about other milks:

- Is your child drinking other milks?
- How many times/day does your child drink milk? = frequency.
- How much milk? = amount.

h) Ask about other liquids:

- Is your child drinking other liquids? = what kinds?
- How many times/day does your child drink "other liquids"? = frequency.
- How much? = amount.
- Does your child use a feeding bottle?
- Who assists the child to eat?
- Has the child been sick recently?

Step 2: Analyse

- Identify feeding difficulty (if any).
- If there is more than one difficulty, prioritise difficulties.
- Answer the mother's questions (if any).

Step 3: Act

- Depending on the age of the baby and your analysis (above), select a small amount of INFORMATION RELEVANT to the mother's situation. (If there are no difficulties, praise the mother for carrying out the recommended breastfeeding and complementary feeding practices).
- For any difficulty, discuss with mother/caregiver how to overcome the difficulty.
- Present options/small do-able actions (time-bound) and help mother select one that she can try, to overcome the difficulty.
- Ask mother to repeat the agreed upon new behaviour to check her understanding.
- Let mother know that you will follow-up with her at the next weekly visit.
- Suggest where mother can find additional support (e.g., attend educational talk at IMAM site, IYCF Support Groups in community, and refer to Community Volunteer).
- Refer as necessary.

- Thank mother for her time

CHAPTER EIGHT: NUTRITION IN SPECIAL CIRCUMSTANCES

8.1 NUTRITION IN EMERGENCY

8.1.1. Definition of Emergency: "Any situation where there is an exceptional and widespread threat to life, health and basic subsistence, which is beyond the coping capacity of individuals and the community." It could be natural or man-made and the situation can be classified using the crude mortality rate or prevalence of wasting (Table 8.1).

Table 8.1 classification of nutrition in emergency

Classification system	Level	Mortality and malnutrition indicator
UN SCN thresholds 1995	**Alert**	**CMR 1/10,000/day** **U5MR 2/10,000/day** **Wasting 5–8%**
	Severe	**CMR 2/10,000/day** **U5MR 4/10,000/day** **Wasting >10%**

Complex Emergency: This refers to major humanitarian crisis of a multi-causal nature, essentially from internal or external conflict which requires an international response that extends beyond the mandate or capacity of any single agency.

Definition of Nutrition in Emergency (NiE): Any situation where the Global Acute Malnutrition (GAM) rate is ≥ 15% or ≥10% to <15% with aggravating factors like severe food shortage combined with disease epidemics, with underlying factors of poverty, urban pressures, climate change, chronic food insecurity and poor infrastructure, sudden events such as natural disasters, conflict, political crisis, economic shocks and food price increases can trigger a nutrition emergency.

Table 8.2: Internationally used emergency thresholds

Acute Malnutrition level (WHZ score)	Nutrition classification
<5%	Acceptable
5 - 9%	Concern
10 – 14%	Serious
≥ 15%	Critical

Table 8.3: Prevalence range to classify levels of malnutrition

LABELS	PREVALENCE THRESHOLDS (%)		
	WASTING	OVERWEIGHT	STUNTING
VERY LOW	<2.5	<2.5	<2.5
LOW	2.5 - <5	2.5 - <5	2.5 - <10
MEDIUM	5 - <10	5 - <10	10 - <20
HIGH	10 - <15	10 - <15	20 - <30
VERY HIGH	≥15	≥15	≥30

8.1.2 Activities in nutrition in emergency

a. Coordination – Activation of Coordination Mechanism

The government holds overall coordination responsibility for all sectors in an emergency, to ensure effective service delivery and avoid duplication of roles and services among partners. They are responsible for organising joint emergency needs assessments, information sharing, discussion of technical issues among nutrition partners, collection and collation of nutrition survey results and reports and development of the guidelines and working tools. The government also strengthens partnership among actors, leads advocacy and closely monitors the response.

b. Nutrition Assessment

This may include multi-sector, nutrition and other in-depth assessments. The assessment helps to establish the baseline nutrition and mortality indices, identify gaps and the available resources, which are essential in planning.

Some recommended assessments include:

i. Rapid assessments – Multisector Initial Rapid Assessment (MIRA), MUAC screening and eliciting for Oedema, Key Informant Information (KII), Focus Group Discussion (FGD), Transect walk, rapid SMART.

ii. In-depth assessments – SMART survey, Joint Approach for Nutrition and Food Security Assessment (JANFSA), National Food Safety System (NFSS), Nutrition Knowledge Attitudes Practices (KAP) & Barrier studies etc.

c. Nutrition Response in Emergency - Selecting Appropriate Response

Table 8.4: Classification Level and Response in Emergency

	Classification	Response
Food availability at household level/General Ration <2,100 kcal/person/day	**GAM ≥ 15% (Critical)** **OR** **GAM 10 to < 15% (serious) in the presence of aggravating factors**	**EMERGENCY** *** General Food Rations** ***Blanket Supplementary Feeding Programme (BSFP) for all members of vulnerable groups (children 6 to 59 months** *** Targeted Supplementary Feeding Programme (TSFP) for MAM (children 6 to 59 months** *** Therapeutic Feeding Programs (OTP and IPC) for SAM children** *** IYCF-E, Micro-nutrient supplementation, SQ-LNS.**
	GAM 10 to < 15% (serious) with no aggravating factor **OR** **GAM 5 - < 10% (moderate) in the presence of aggravating factor**	**ALERT** *** General food rations and TSFP for vulnerable groups (children 6 to 59 months** *** Therapeutic Feeding Programmes (OTP and IPC) for SAM children** *** IYCN-E and Micro-nutrient supplementation**
	GAM 5 - < 10% (moderate) with no aggravating factor **OR** **GAM < 5 (mild) with**	**ACCEPTABLE** *** No need for population intervention individual attention for malnourished individuals through regular community**

	aggravating factor	**services** *** Therapeutic Feeding Programmes (OTP and IPC) for SAM children** *** IYCN-E and Micro-nutrient supplementation**

d. Monitoring

- Refer to Chapter 10
- Accountability to affected populations

e. **Linkages with other sectors –** There is need to link nutrition intervention with the following sectors:

- Food security
- Health
- Agriculture
- WASH
- Protection (Child protection and Gender-based Violence)
- Education
- Logistics
- Camp Coordination and Camp Management (CCCM) – shelter & Non-Food Items (NFI)
- Early recovery and livelihood etc.

f. Exit Strategy

An exit strategy indicates when an emergency intervention should be transitioned to early recovery. This occurs when GAM rate is <10% with no aggravating factors or crude mortality rate <1/10,000 death/day. An exit strategy should be developed right at the beginning of the humanitarian response plan.

8.1.3 IMAM for Exceptionally Difficult Circumstances

Expanded Criteria / Simplified Protocol

The recommendation of the Inter-Agency Nutrition Meeting (IANM) is to use expanded admissions criteria (MUAC <12.5cm) to admit children classified with MAM into the OTP,

or SAM into TSFP, as a temporary measure in emergency situations when no TSFP or OTP are available.

The rationale for expanding the admissions criteria includes:

- RUTF, at a reduced dosage, is nutritionally appropriate for MAM children.
- RUSF, at similar dose of RUTF, has the potential to avert deaths in SAM children when RUTF is not available.
- Treating MAM children in the OTP provides for earlier identification of cases, thereby reducing SAM caseload, medical complications and mortality.
- In context of high morbidity or food insecurity, there is a high risk of relapse if children are sent home in the absence of a TSFP.
- MUAC-only admission and discharge criteria is faster and easier to use than WFH criteria.

Table 8.5: Recommendation in a place where there is OTP but no TSFP

Admission criteria	Children with MUAC < 11.5 cm or grade +/++ oedema without medical complications	Children with MUAC ≥11.5 cm - <12.5 cm without medical complications	Grade +++ oedema or MUAC < 11.5 cm and grade +/++ oedema and/or children with other medical complications Infants under 6 months and infants >6 months <4.0 kg
RUTF Ration	If no supply limitation: Standard dosage (as per national protocol) In case of supply limitation: RUTF: 14 sachets/per	RUTF: 7 sachets/per child/week (1 per day)	Refer to IPC

	child/week (2 per day)		
Systematic treatment	Follow national guidelines for OTP: - Amoxicillin - Deworming - Immunisation - Malaria treatment	Follow national guidelines for TSFP	
Discharge criteria	- MUAC ≥12.5 cm for two consecutive measurements - Clinically well - Minimum stay of 3 weeks - No oedema for 1 week	- MUAC ≥12.5 cm for two consecutive measurements - Clinically well - Minimum stay of 3 weeks	

8.2 NUTRITION IN HIV INFECTION

There should be Nutrition Assessment, Counselling and Support (NACS).

8.2.1 Recommended Care Practices for HIV Mothers

1. Support PLHIV to increase their food intake because their body requires more than the usual amount of food.
2. Support PLHIV to eat small but frequent meals throughout the day.
3. Support PLHIV to modify their diet to include nutrient- rich foods like meat, fish, eggs, cowpea and dairy products.
4. Support the use of fortified foods like iodised salt, vitamin A fortified oil, sugar, and flour.
5. Support PLHIV to promptly seek care from trained counsellors.

8.2.2 Recommended Care Practices for HIV infected Infants

1. Exclusive breastfeeding for the first six months of life with ARVs as recommended by the Federal Ministry of Health.
2. Continued breastfeeding for at least 12 months and may continue breastfeeding for up to 24 months or longer (similar to the general population) with the ARVs as recommended. See current National Policy on Maternal Infant and Young Child Nutrition on breastfeeding for HIV infants.
3. Initiate breastfeeding within one hour of birth.
4. Demonstrate proper positioning and attachment, to prevent nipple cracks, sores and breastfeeding difficulties.

8.3 IMAM IN PUBLIC HEALTH EMERGENCIES

Public health emergencies such as the COVID-19 pandemic has significant potential to affect the quality and scale-up of nutrition, health and other lifesaving interventions. The restrictions on mobility and recommendations on social distancing will affect the modalities for implementation of nutrition programmes, and measures are needed to mitigate the potential negative impact.

This guideline aims to summarise the essential adaptations for Nutrition Sector's services to ensure a safe continuity of care during emergencies including pandemics and humanitarian outbreaks. It outlines adaptations in the IMAM and IYCF programme as well as necessary mitigation measures across all nutrition related activities.

COVID-19 Case Definition

Suspected case:

Any person who meets the clinical AND epidemiological criteria.

Clinical criteria:

Acute onset of ANY TWO OR MORE of the following signs or symptoms: fever, cough, runny nose, sore throat/pharyngitis, headache, difficulty in breathing/dyspnoea, nausea, loss of taste, loss of smell, general weakness/fatigue,

diarrhoea, chest pain, vomiting, chills/sweating, muscle pain/myalgia, wheezing, abdominal pain, altered mental status.

Epidemiological criteria:

Residing or working in a setting with high risk of transmission of the virus: for example, closed residential settings and humanitarian settings, such as camp and camp-like settings for displaced persons, any time within the 14 days before symptom onset.

Probable case

A patient with severe acute respiratory illness (SARI: acute respiratory infection with history of fever or measured fever of ≥ 38°C, and cough, with onset within the last 10 days, and who requires hospitalisation) or with chest imaging showing findings suggestive of COVID- 19 disease.

Confirmed case

Any person with laboratory Polymerase Chain Reaction (PCR) confirmation of SARS-CoV-2 infection with or without signs and symptoms.

Overall Adaptation and Mitigation Measures

- Provide handwashing and temperature checks (using an infra-red gun thermometer) at all entrances.
- Refer all suspected COVID-19 cases based on case-definition as per the NCDC National Interim Guidelines for Clinical Management of COVID-19[4] to the designated COVID-19 testing and treatment centres.
- Avoid crowding and risks of cross contamination through reduced visits/distribution.
- Ensure recommended 2 meters (6 feet) distance between mothers (caregivers) and workers.
- Health workers and CbRPs/CORPs/CHIPS Agents/CVs wear disposable gloves and facemasks, when taking MUAC at all nutrition sites (IPC/OTP/TSFP/BSFP/IYCF).
- Organise distribution areas away from health facility locations.
- Disinfect shared equipment including MUAC tapes, electronic scales, stethoscopes, thermometers with 0.05% bleach (chlorine) after every use.
- Disinfect waiting areas and surfaces (including mats, chairs etc.) with 0.5% bleach (chlorine) solution after distribution.
- Strict staff sickness policy implemented – staff not to attend work if sick.
- Intensify promotion of safe hygiene behaviours especially hand washing with soap at all critical times and practicing safe food preparation/handling to reduce risk of transmission of COVID-19.
- Provide key COVID-19 prevention messages at all nutrition service sites:
    - Mothers should always wash hands with soap and water at critical times, including before and after contact with the infant.
    - Routinely clean the surfaces around the home that the mother has been in contact with, using soap and water.
    - If the mother has respiratory symptoms, use of a face mask when

[4] Refer to the NCDC Standard Operating Procedure (Sop) For COVID-19 Surveillance

feeding or caring for the infant is recommended, if available. Locally available / adaptive face masks can be used as an alternative.

- Mother with her infant should maintain physical distance from other people (at least 2m) and avoid touching eyes, nose and mouth.
- Caregivers to adopt healthy dietary practices and habits to enable families maintain functional immune system together with intake of safe clean drinking water for their young children.

1. Screening, Identification, and Referral of Children with Acute Malnutrition.

• Screen for malnutrition during key contact points with children and caregivers only when staff and beneficiary safety can be assured, and physical/social distancing can be adhered to e.g., during mass MUAC screening or house-to-house screening.

• Promote and adopt active case finding targeting vulnerable households rather than mass MUAC screening or house-to-house screening.

• Demonstrate to caregivers how to take the MUAC of their children and provide them with MUAC tapes to take home when MUAC supplies allow.

• Adopt the Mother/Family MUAC approach for all community screenings based on the Nutrition Sector Mother/Family MUAC guidelines.

• Provide adequate training for CbRPs/CORPs/CHIPS Agents/CVs on COVID-19 prevention.

• Provide CbRPs/CORPs/CHIPS Agents/CVs with personal protection equipment (PPE) including face masks, hand sanitisers etc.

2. In-Patient Care Facilities

- Children and caregivers suspected of COVID-19 SHOULD NOT BE treated in the in-patient facility.
- Ensure strict adherence to COVID-19 infection, prevention and control as in WHO/NCDC guidelines.
- Identify isolation room for COVID-19 suspected cases awaiting referral.
- Caregivers of children should receive a face mask to wear if these are

available.

- Patients should wash their hands and be directed to a waiting area.
- Implementing agencies to provide disposable utensils or ensure proper sterilisation of reusable utensils and equipment as provided for in the IPC protocol.
- Disinfect all equipment, materials, beddings, clothes and waiting areas with 0.05% chlorine solutions.
- Limit contact of patients with multiple healthcare workers, with proper hand washing before and after touching a patient.
- Supervisors should ensure strict adherence to duty roster, with no switch of duty without supervisor's approval. This will prevent missed cases during contact tracing in an event of outbreak.
- Emphasize strong hygiene standards for mothers and all those handling infants under six months, and of feeding equipment, while actively supporting skin to skin contact and breastfeeding (use of N95 /medical masks).
- Increase bed spacing to at least two metres (6 feet).
- Reduce family member visits to primary caregiver only.
- Names and addresses of all visitors to the facility should be captured including primary caregivers for ease of contact tracing and mitigation of community transmission in case of identified cases in a facility.
- Ensure strict hygiene standards for the stabilisation kitchen and designate an area for food service to the caregivers.
- There should be no contact with the service providers in or from any COVID-19 isolation ward.
- IPC length of stay for non-COVID-19 patients should be reduced as much as possible to less than 7 days to reduce exposure.
- In the case of shortages of staff due to illness /quarantine/lockdown:
    - The night team can be reduced as a majority of care can be done during the day.
    - Milk schedules for 6-59 months can be reduced from 12 to 8 or 6 times a day. For patients with severe respiratory symptoms, continue to provide

milk every 3 hours (8 times per day).

- For the transition phase, give RUTF and start to prepare for discharge. F100 can continue to be provided based on medical observations and for children refusing RUTF, for kwashiorkor cases and for children with mouth infection/lesions.

3. Outpatient Therapeutic Programme (OTP)

- Children (and their caregivers) suspected of COVID-19 should NOT be treated at the OTP sites.
- Conduct OTP services on a daily basis.
- Reduce exposure by shifting to MUAC only for anthropometric measurements in children for both admission and discharge criteria.
  - Admission criteria - <11.5cm (RED) or Oedema +
  - Discharge - > 12.5cm for 2 consecutive visits and no oedema with no medical complications.
- As much as possible MUAC should be taken by the caregiver if previously trained (using his own MUAC tape).
- If there are sufficient MUAC tapes, health workers should give the tape used for the child back to the caregiver.
- If there are insufficient MUAC tapes, health workers must disinfect MUAC tapes with 0.05% chlorine solution after every use.
- DO NOT use the salter scale (pants or buckets) for taking weight measurements. Use electronic scales and disinfect with 0.05% after every use.
- Place RUTF for appetite test for caregivers to pick for themselves.
- OTP staff should prepack RUTF for caregivers to pick for themselves.
- Empower mothers and community volunteers to use 'Mother/Family MUAC' approach.
- Continue provision of hygiene kits.
  - If feasible, utilize CbRPs/CORPs/CHIPS Agents/CVs, etc., or other community-based organisation to deliver all treatment of SAM without complications using a limited/no touch simplified treatment approach.

Programmatic modifications should be considered.

- Using simplified admission criteria (e.g. MUAC and oedema only) & give two sachets/day.

4. Targeted Supplementary Feeding Programme (TSFP)

- Reduce the number of TSFP follow-up visits from every 2 weeks to monthly.
- Increase the number of IMAM days/week to reduce the number of mothers/children at one time.
- Only take MUAC measurements - no weight/height - using appropriate protective measures, e.g., disinfection, gloves, mask.
- Ensure recommended 2 meters (6 feet) physical distance between mothers and workers.
- Empower mothers and community volunteers to use the 'Mother/Family MUAC' approach.
- Suspend cooking demonstrations, and IYCF and mother support groups.
- Provide key sector-developed COVID-19 prevention messages

5. Blanket Supplementary Feeding Programme (BSFP)

- Reduce the number of BSFP distributions from bimonthly to monthly.
- Include screening for malnutrition during key contact points with children and caregivers only when staff and beneficiary safety can be assured, and physical/social distancing and wearing of face masks/covering at all times should be adhered.
- Conduct cooking demonstrations, and IYCF and mother support groups only when physical/social distancing and safety of staff can be assured.
- Consider one-on-one sensitisation at the registration/verification point, if possible.
- Provide key sector-developed COVID-19 prevention messages.
- Commodity scooping, if necessary, should be done by the partner staff before all distributions – prevention measures should be observed.

6. Infant and Young Child Feeding (IYCF)

Community Level:

- Limit Care Support Group number of participants per session (<5 per session) ensuring more than 2 metres (6 feet) physical distance.
- Disinfect mats and carpets using 0.5% bleach (Chlorine e.g., Jik) or water with soap after each session.
- Use no-touch method to promote key messages e.g., megaphones, banners, radio jingles, etc.

Health Facility/OTP/IPC

- Continue with face-to-face counselling maintaining more than 2 metres physical distancing and wearing of face mask/covering at all times.
- Mothers should be counselled/advised to continue breastfeeding should the infant or young child or herself become sick with suspected, probable, or confirmed COVID-19 or any other illness.
- Mothers should be discouraged from use of bottles and teats.

Each session should include COVID-19 prevention protocol.

IYCF Key COVID-19 Messages

- Mothers should always wash hands with soap and water at critical times, including before and after contact with the infant.
- Routinely clean the surfaces around the home that the mother has been in contact with, using soap and water.
- If the mother has respiratory symptoms, use of a face mask when feeding or caring for the infant is recommended, if available. Locally available / adaptive face masks can be used as an alternative.
- Mother with her infant should maintain physical distance from other people (at least 2m) and avoid touching eyes, nose and mouth. Mothers should also cover their faces if suspected to have COVID-19 infection.
- Caregivers to adopt healthy dietary practices and habits to enable families maintain functional immune system together with intake of safe clean

drinking water for their young children.

7. **Assessments and Surveys**

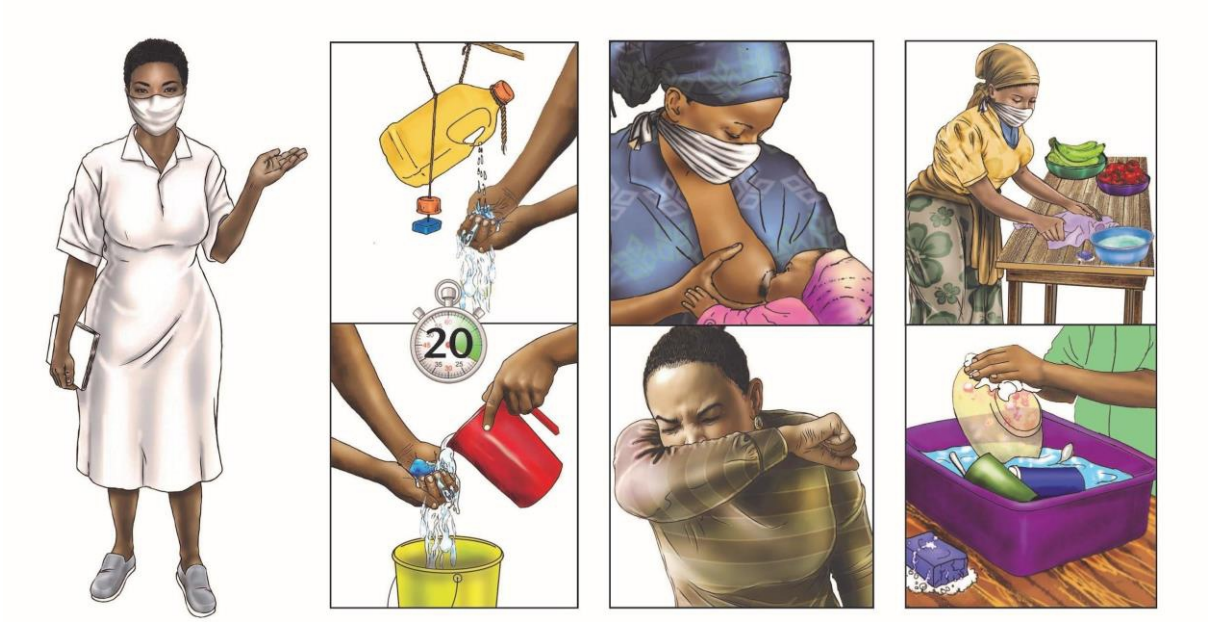
• Conduct assessment and surveys as per the Nigeria Bureau of Statistics guidelines for conducting survey during COVID-19 pandemic period.

8. **Programme Monitoring**

- Prioritise for critical functions observing COVID prevention strategies.
- No touch data collection methods.
- Remote monitoring where feasible e.g., phones, pictures (checklist can be filled via KOBO, or scanned and reported back).
- Conduct regular online meetings with field staff.

9. **Trainings**

- Conduct virtual trainings.
- Continue with on-the-job coaching and mentoring.
- Follow the State's guidelines on face-to-face training, including getting approval from Nutrition Focal Persons and COVID-19 taskforce. Ensure small groups observing 2 metres (6 feet) distancing and wearing facemasks at all times. Adequate sanitizers or handwashing facilities should be accessible in the training venue. Arrange trainings in well ventilated venues, preferably outdoors.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CHAPTER NINE: SUPPLY CHAIN MANAGEMENT FOR IMAM

9.1 INTRODUCTION

Supply chain management (SCM) for IMAM encompasses the planning and management of all activities involved in planning, budgeting, sourcing, procurement, conversion, storage, transport and delivery of IMAM commodities, equipment, supplies/tools and end-user monitoring. An efficient supply chain is one that ensures that time and resources are not wasted, rather best value for money is realised in acquiring supplies. An effective supply chain is one that achieves the nutrition programme's intended outcomes of delivering quality supplies to end-users and beneficiaries at the lowest possible prices. For a supply chain to be both efficient and effective, it must deliver the correct specification and amount of the planned commodities to the right place at the right time and quality must be assured.

This chapter outlines the objectives, types of supplies, sources, and stock management at different levels of the health system that ensures timely access to routine IMAM therapeutic and supplementary food products, medicines and other essential commodities. Any break in the supply chain will not only compromise adherence to management protocols, but also influence outcomes such that less than optimal supplies are available to the end-users of nutrition supplies.

9.2 OBJECTIVES OF SCM FOR IMAM COMMODITIES

i. To prevent stock outs.
ii. To reduce time loss in SCM activities.
iii. To build confidence in service management.
iv. To ensure accountability for the supplies.

Figure 9.1 below outlines briefly the commodity selection, quantification, procurement, inventory strategy, warehousing and distribution, ordering and reporting.

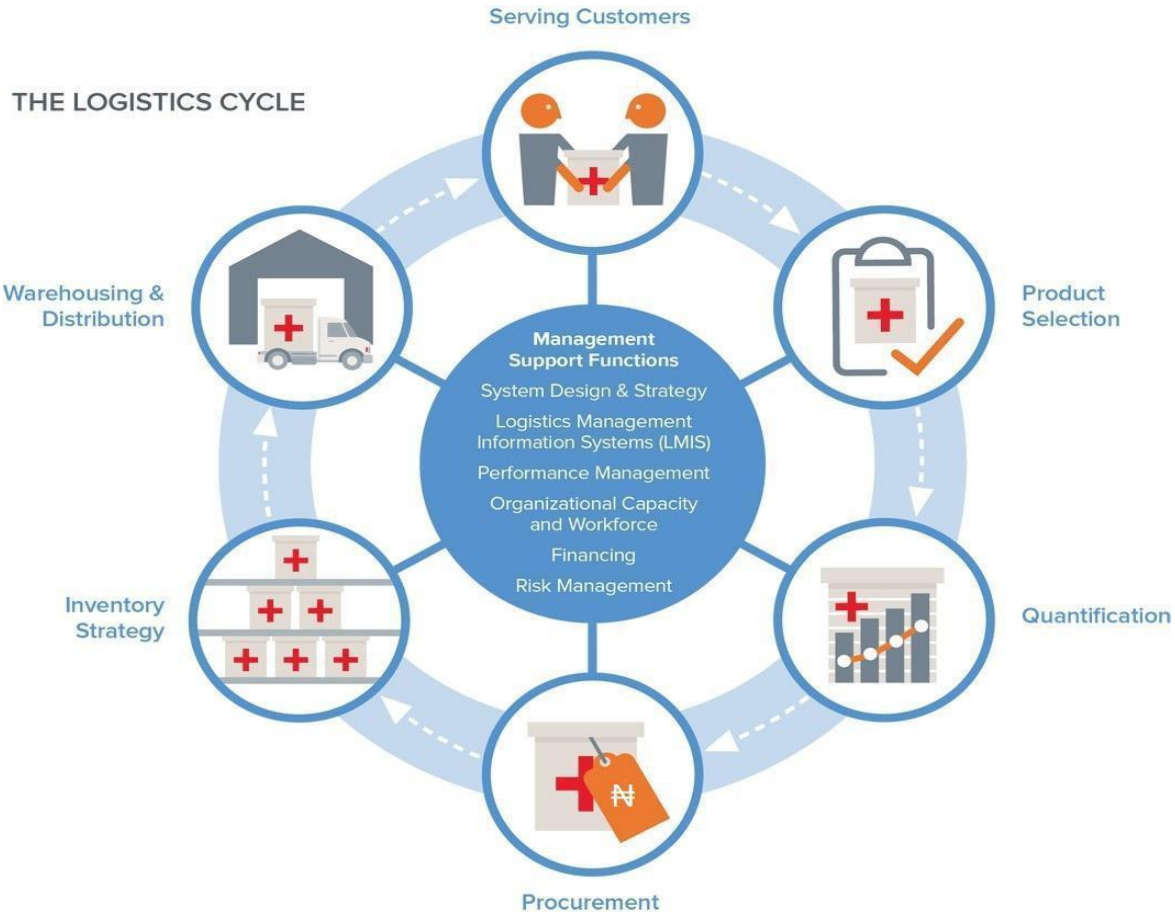


Figure 9.1: The logistics cycle for supply management

9.3 PRODUCT SELECTION

Product selection is done from the most current treatment protocols for the management of malnutrition. The therapeutic food commodities are listed in the National Essential Medicines List.

Table 9.1: Types of IMAM Commodities

Types	Examples
Therapeutic foods	**F-75, F-100, RUTF**
Supplementary foods	**Lipid based nutrient supplement e.g SQ-LNS, fortified blended foods, and RUSF**

Anthropometric Equipment, food Demonstration tools & SBCC Cards & Take-home Brochures,	**MUAC tapes, weighing scales, height boards**
Routine medicines and supplements	**According to IMAM protocols such as antibiotics, antimalarials, deworming tablets, CMV, ReSoMal, MNP, IFA, MMS**
Data collection tools	**HMIS tools- OTP, TSFP, Referral Form, Child Health Card, Nut/GMP, Monthly Summary Form, Computer, Credit card for Data management up to DHIS2 Instance etc.**

9.4 QUANTIFICATION, PROCUREMENT, STORAGE AND DISTRIBUTION OF NUTRITION COMMODITIES

Nutrition commodities are quantified, procured, distributed and stored in accordance with national guidelines. Quantification and forecasting, sourcing, ordering, receiving, storing, dispensing, recalling, monitoring and evaluation of supplies should be integrated with other supplies at all levels in order to reduce the overall logistical costs of managing health supplies up-to the health facility where it is dispensed to the beneficiary or end-user.

9.5 MANAGING STOCKS

This involves quantification of supplies in stock. It includes stocks expected to be received and those that will be issued out for use, and those held as a contingency buffer during the same period.

- The projections for nutrition supplies are done regularly in order to ensure effective programming and minimise stock outs.

- Calculations are based on caseload's target populations and should include buffer stock estimates.

Consumption estimates of the nutrition supplies are derived from total number of new admitted cases multiplied by the recommended quantities of the supplies used for treating a client.

9.6 BUFFER STOCK

Buffer stock is defined as reserve supplies to safeguard against unforeseen shortages or demand and transport delays.

- It is stock held over and above the actual stock required for routine use or needed to run the programme or IMAM services.
- It is obtained by calculating a provision of 10% of the stock needed for the programme.

9.7 SUPPLY AUDIT

- The aim of supply audit is to identify bottlenecks in supply chain management to inform actions and to optimise supply chain procedures and maintain supply chain efficiency.
- The methods, tools, and indicators used depend on the objective of the enquiry (which questions to answer) and use of information in line with the SCM procedures.
- Information to be in audit of the supply chain management and its recommendations are shared in coordination meetings and performance reports to inform decision-making for resource allocation and improvement strategies.

9.8 WAREHOUSE MANAGEMENT IN SUPPLY CHAIN

Warehouse management is the efficient and effective coordination and utilisation of the required resources to achieve optimal warehousing operations. It can also be referred to as the performance of administrative and physical functions associated with storage of goods and materials. These functions include stock receipt, identification, inspection verification, put away, retrieval for issue, dispatch and transportation.

9.8.1 Routine Warehouse/Storeroom Tasks

The routine warehouse tasks should include monitoring of storage conditions, packing and shipping areas, ensuring adequate ventilation and temperature regulation to provide the ambient environment to keep the supplies in good condition. This also includes monitoring product quality (visual inspection of commodities and checking expiry/best before dates).

Other components of warehousing include, design and location, good storage, release of goods, inventory control system, physical inventory, document/records etc. Every facility should have adequate space for storage of supplies especially RUTF, SO-LNS and RUSF to avoid wastages.

9.9 REAL TIME STOCK MANAGEMENT

Where funds are available and where it is practicable, SMS based platforms such as the RapidPro should be utilised in monitoring stock levels at the health facilities and LGAs in real time. Guidance on indicators to be included and frequency of the data collection will be provided by the relevant technical group or team.

9.10 COSTING ESTIMATES OF NUTRITION COMMODITIES

Table 9.2: Unit Cost and Delivery Platform of Nutrition Commodities Equipment and Supplies

Commodities	Intervention	Unit cost (US$ per beneficiary per year)	Delivery Platform
SBCC	1. Education, sensitisation, social mobilisation & IPCC for behavioural change communication and growth promotion	$5.00	✓ PHC, ✓ Secondary ✓ Tertiary ✓ Community nutrition programmes
Vitamin A	2. Vitamin A supplementation	$0.44	✓ MNCH weeks ✓ Routine delivery
Zinc + ORS	3. Therapeutic zinc supplements with ORS	$0.86	✓ MNCH weeks ✓ Routine delivery
Micronutrient Powder (MNP)	4. Home fortification using multiple micronutrients powder	$3.00	✓ Primary health care and Community Nutrition programmes
Albendazole	5. Deworming	$0.44	MNCH weeks

Food vehicles	6. Complementary food for prevention or treatment of moderate malnutrition	$51.10	Community nutrition programmes
Ready-to-Use Therapeutic Food	7. Treatment of severe acute malnutrition (SAM) using Integrated Management of Acute Malnutrition (IMAM) approach	$50.00	✓ Primary health care
Therapeutic milk formula 75 (F75) 800g/CAR-6	Management of Severe/Moderate Acute Malnutrition with complication	$30.00	✓ Secondary ✓ Tertiary Facility
Therapeutic milk formula 100(F100) 800g CAR-6	Management of Severe/Moderate Acute Malnutrition with complication	$35.00	✓ Secondary ✓ Tertiary Facility
ReSoMal- 42g sat/1 litre/ CAR-100	Management of Severe/Moderate Acute Malnutrition with complication	$18.45	✓ Secondary ✓ Tertiary Facility
Small Quantity Lipid-based Nutrient Supplement (SQ-LNS)	Prevention of Malnutrition	$35.00	✓ Primary, ✓ Secondary ✓ Tertiary facility

CHAPTER 10: MONITORING, SUPPORTIVE SUPERVISION AND EVALUATION

10.1 OVERVIEW

Monitoring, Supportive Supervision and Evaluation involve the tracking of inputs, processes, activities, outputs and outcomes against indicators and the modification of these processes and activities as and when necessary.

10.2 MONITORING

The aim of monitoring is to support effective management through reports on actual performance against what was planned or expected. It shows whether programme activities are going on as planned and help programme managers to identify and solve problems quickly. It tracks project inputs and outputs including activities, finance, supplies and equipment, documentation and reportage. Monitoring is an ongoing activity which is incorporated into daily activities.

10.3 EVALUATION

Evaluation is a systematic assessment of the strengths, weaknesses, opportunities and threats of the programme design and implementation by utilising the reports of the results of completed or ongoing interventions. It is usually done in a periodic manner e.g., quarterly, annually or as required, etc. and can be performed by external agencies or by government officials and stakeholders or by a combination of the group and external agencies. External involvement lends technical expertise and objectivity to evaluations. However, the use of government officials in an evaluation builds their capacity and provides a sense of ownership of results.

10.4 SUPPORTIVE SUPERVISION

This is a facilitative approach to programme supervision that promotes mentorship, coaching, on-the-job training, joint problem solving and communication between supervisor and supervisees. Supportive supervision is used mostly to improve routine programme monitoring and evaluation. Please refer to chapter 8, section 8.3 on how to adapt supportive supervision in the context of emergency public health concerns, to the supportive supervision steps/procedures for user-friendliness to the guidelines.

Monitoring, supportive supervision and evaluation provide:

- information on what an intervention is doing, how well it is performing and whether it is achieving its goal, aims and objectives.
- guidance on future intervention activities.
- an important part of accountability to funding agencies and stakeholders.
- data about nutrition/health situation to be used for planning and decision making.

Monitoring, supportive supervision and evaluation are essential for:

- Providing information about implementation of activities.
- Noting outcomes, analysing and identifying appropriate corrective actions.
- Assessing the situation and identifying needs for improvement.

10.5 MONITORING TEAMS

The nutrition focal persons at the federal, state and LGA levels shall constitute a team of trained competent officers to monitor the IMAM programme. During monitoring, standard indicators (quantitative data) should be analysed and combined with qualitative information collected through consultation with the community and stakeholders. Through supervisory visits, strengths and weaknesses are identified, feedback provided and timely adjustments carried out.

The main performance indicators should be plotted against time (months) to provide a picture of how the performance of the activities and the situation has evolved.

Table 10.1: Frequency of monitoring visits

From	To	Frequency	What to do
Federal	State, LGA & HF	Quarterly	- Review data with the state team - Visit pre-selected LGAs - Visit selected IMAM sites in the LGA - Give supportive supervision - Provide feedback - Follow up on recommendations made
State	LGA, HF	Monthly	- Review data with the LGA team - Visit all implementing LGAs -Visit some implementing sites/ communities - Give supportive supervision - Provide feedback - Follow up on recommendations made
LGA	Health Facilities/ Communities	Weekly	- Check records - Mentoring and coaching - Provide feedback

10.6 MONITORING AND EVALUATION AT THE HEALTH FACILITIES

Monitoring of IMAM at service delivery points includes two levels:

- Individual monitoring to ensure appropriate treatment and continuum of care.
- Record keeping and programme monitoring to assess outcomes and performance.

10.6.1 Individual monitoring

A good registration system allows both close monitoring and successful management of individuals, provides information for the compilation of appropriate indicators and statistics to monitor the functioning of the feeding programme, as well as ordering and monitoring stock levels. To facilitate a continuum of care between services, a numbering system and various tools have been developed.

10.6.2 Registration number

The procedure for enrolment into the IMAM programme should follow this format for appropriate data capture.

a. OTP

The standard codes to identify the LGA and health facility should be used and include an identifying code for OTP.

Numbers should follow this formula adapted from FGN/FMOH (2011), a directory of health facilities in Nigeria. The state and LGA codes are those used by HMIS and are harmonised with codes developed and used by the National Population Commission and National Bureau of Statistics and all the facilities in Nigeria have unique health facility numbers.

Client Number: Regular NHMIS number

OTP Number: The number that will be assigned to the child at the OTP centre should follow the numbering format below:

___ ___ ___ ___ / ___ ___ ___ ___ / _ _ /_ _ / ___ ___ ___

STATE & LGA CODE / HEALTH FACILITY NUMBER / YY / MM / 3 - DIGIT SERIAL NUMBER OF PATIENT.

State Code: The code used to identify the State in HMIS.
LGA Code: The code used to identify the LGA in HMIS.
Health facility number: The number used to identify the health facility in HMIS.
YY: The last two digits of the year e.g., 2021 will be 21.
MM: The number representing the months using two digits i.e., 01-12, e.g., September is 09.

3-Digit serial number of patient: the first new admission in every month is assigned a serial number 001 for that month in that year.

Examples:

The tenth child with SAM newly registered in an OTP centre located in Isolo PHC, Ire Akari/ Ishaga Ward of Oshodi/ Isolo LGA of Lagos State in September 2021 will have an OTP card registration number of

2 4 1 8 / 0 0 0 2/21/09/ 0 1 0

STATE & LGA CODE/HEALTH FACILITY NUMBER/ YY/MM/3- DIGIT SERIAL NUMBER OF PATIENT

Lagos State Code is 24, Oshodi/Isolo LGA Code is 18, Health Facility number is 0002, Year is 21 (2021), Month is 09 (September) and the serial number of the tenth patient is 010.

A card with number 2106/0001/21/10/123 will be for the one hundred and twenty third child that was registered in October 2021 at Ambursa PHC of Ambursa Ward, Birnin kebbi LGA of Kebbi State.

A card with number 0421/0026/21/04/001 will be for the first child that was newly registered in the month of April 2021 at Cottage hospital, Ogbunike, Ward 2, Oyi LGA of Anambra State.

b. TSFP

The pattern for registration for TSFP will follow that done for OTP, however, "TSFP" will be added in prefix.

TSFP/___ ___ ___ ___ / ___ ___ ___ ___ / __ __/__ __/___ ___ ___

TSFP/STATE & LGA CODE / HEALTH FACILITY NUMBER /YY/MM / 3 -DIGIT SERIAL NUMBER OF PATIENT.

- If the child already has a SAM number, write it in the second column of the registration book.

- When children are transferred from OTP to IPC or another OTP, they should retain their original admission number.

10.6.3 Specific Tools

In order to ensure quality and continuity of care during the management of SAM and MAM cases, the following tools should be used:

i. OTP and TSFP cards (*see Annexes 2 and 4*): contain all information regarding the child's condition at admission and discharge and his/her evolution during treatment.
ii. Referral slip (*see Annex 3*): allows tracking information about the child's condition and evolution during movements between IMAM services.
iii. Registration book (*see Annexes 8 and 9*): can facilitate data collection and quick evaluation of workload and outcomes.
iv. Ration Cards for OTP / TSFP: (*see Annex 5*):
    - Register admission.
    - Indicate date of attendances and ration of RUTF/RUSF/SQ-LNS/Fortified Blended Food given.
    - Discharge date and outcome.

Include registration number on these tools both to link with other medical treatment provided in the health facility and also to minimise risk of double registration.

Double registration: To prevent double registration at more than one OTP/TSFP site, a fingernail should be marked using indelible ink (permanent marker) to indicate registration in OTP. This should be repeated on every visit. A specific finger should be identified for use by each health facility in an LGA or given area.

10.6.4 Record keeping and programme monitoring

c. Monthly Reporting

Quantitative data are collected on the outcome of all activities to enable the calculation of standard indicators. Standard indicators should be compared to IMAM National Guidelines Standards. The basic routine data collected are:

- Admissions: new cases and old cases (by gender).
- Exits: numbers and by categories.
- Number of children (beneficiaries) in the programme, this is normally calculated using the formula below[5]:

$$No.\ of\ beneficiaries\ in\ the\ programme = Total\ end\ of\ the\ previous\ reporting\ period + Admissions\ - Exits$$

These three basic elements allow monitoring of trends along time and help in the appropriate allocation of resources.

Other additional pieces of information that may be relevant are:

- Percentage of relapses (among total new admissions).
- Admission per typology (wasting, oedema).
- Average length of stay (and weight gain), mainly for inpatient services.
- Causes of death.
- Reasons for defaulting.
- Data on admissions disaggregated by gender.

This should be accompanied by some narrative description or explanation of the main events that might have influenced attendance and performance (e.g., opening or closing of facilities, outbreaks of infectious diseases, insecurity, seasonal trends in agriculture and weather, etc.).

There are two levels of reporting:

- Reporting of individual services (outpatient or in-patient: health centres with OTP, hospital with IPC).
- Compilations prepared with the outcomes from the different individual facilities providing IMAM services (outpatient and in-patient) and representing an accountable unit or area (LGA, state, zonal, federal).

d. Site Reporting

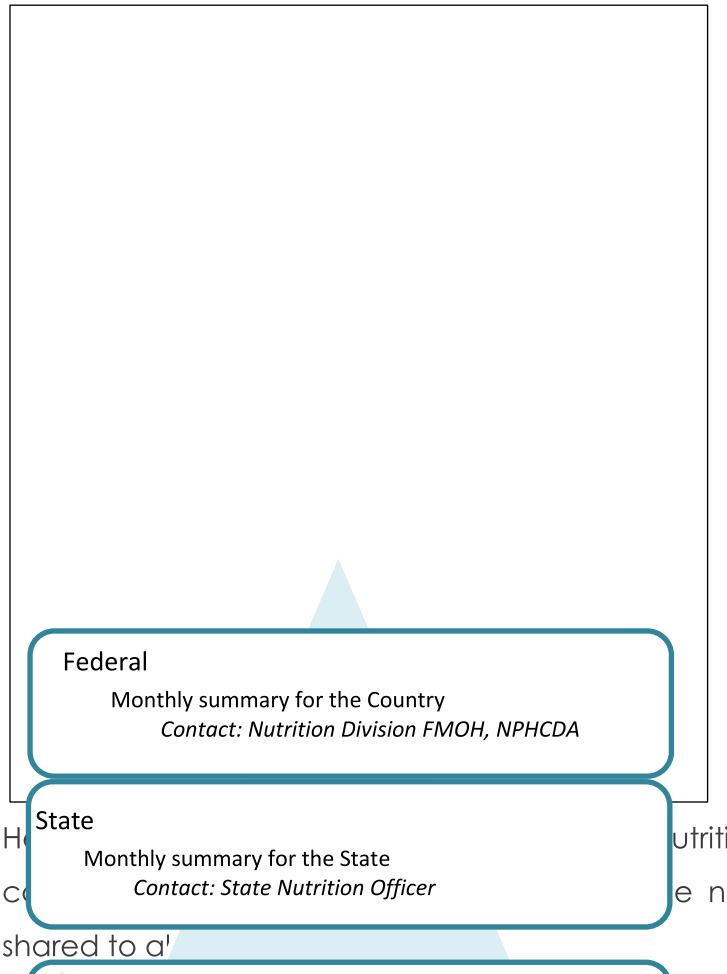
[5] Reporting period could be weekly, monthly, quarterly or yearly

The monthly site report (tally sheet) is completed by the responsible health care provider (i.e., Officer–in-Charge) for each facility offering IMAM services with inputs from the *registration book* and sent to the LGA.

e. Consolidated Reporting (compilation by area or programme)

The reports from the individual facilities operating within an LGA are examined and collated to produce a compilation report for the LGA by the Nutrition Focal Person. This report will be forwarded to the state nutrition officer at state level. The report provides a summary of quantitative information to assess performance, monitor trends and identify areas that require investigation at the health facility level:

- Total number in treatment at the beginning of the month.
- Admissions as new cases (by age group and gender if required).
- Admissions as old cases (incoming referrals and returned defaulters).
- Total admissions of the month.
- Total exits (denominator for discharge rates).
- The number and proportion of children that are discharged cured, died, defaulted or non-recovered.
- Total number in treatment at the end of the month.



At the state level, data from all LGAs will be compiled and analysed by the state nutrition officer, then forwarded to the Nutrition Division, Federal Ministry of H utrition Division IMAM focal person will c e national compilation of data will be shared to a'

Where the nutrition data is captured in NHMIS tools, the LGA nutrition focal persons will support the LGA M&E officers to ensure that nutrition data is captured in the NHMIS routinely. The state and federal will pull down pivot table for nutrition data from the DHIS2. Responsible officers at each level will be expected to take appropriate action based on the analysed data. Examples for tally sheets and weekly/ monthly reports can be found in Annexes 10, 11, 12 and 13.

10.7 IMAM SERVICE PERFORMANCE INDICATORS

Performance indicators are based on discharge outcomes from OTP, TSFP and IPC. For the purposes of analysis, the outcomes of OTP and IPC are combined. The time needed to achieve the discharge outcome indicators for an IMAM programme is 1-3 months. Discharges from an IMAM programme are those no longer registered. The discharged individuals are made up of those who are cured, non-recovered, defaulted or died.

The following performance indicators help in monitoring the effectiveness of IMAM services:

Cure rate: a discharged individual must be free from medical complications and have achieved and maintained appropriate weight gain without nutritional oedema (e.g., for two consecutive weighing). Protocols outlining discharge criteria should be adhered to in order to avoid the risks associated with premature exit. International standards aim for >75% of discharges to be cured.

***Death rates*:** causes of death should be noted and acted upon to improve services for other children. All defaults could be potential deaths so need to be followed up. International standards aim for <10% of discharges to be deaths.

Figure 10.1: Reporting at different levels in the Ministry of Health

Defaulter rates: a defaulter from a therapeutic feeding programme is an individual who has not been in attendance for a defined period of time (e.g., for more than 48 hours for in-patients, or

three consecutive return visits for outpatients). Defaulter rates can be high when the programme is not accessible to the population e.g., the distance of the treatment point from the community, conflict/lack of security, the level of support offered to the caregiver of the individual treated, the number of caregivers who are left at home to look after other dependants (this may be especially relevant in situations of high HIV/AIDS prevalence), and the quality of the care provided. *International standards aim for <15% of discharges to be defaulters.*

Non-recovered rates: There are no set international standards but it should be almost zero if protocols are properly followed. In instances of non-recovery, a child who did not reach discharge criteria within 12 weeks needs careful investigation into both the services provided and the environment (disease outbreaks, food insecurity etc.). The child should be referred to a higher level of care for further investigations and care.

Coverage refers to those needing treatment that are actually getting the treatment. Coverage estimates vary according to method used. The methodology must be stated when reporting. Coverage assessment should be seen as a management audit tool and should be conducted on a regular basis.

Table 10.2: Performance indicators for monitoring effectiveness of IMAM services

A: OTP, TSFP		
Indicator		**Definition**
1	**Cure rate**	**Number of patients cured as a percentage of total discharges during reporting month.** ***Note: Total discharges include cured, defaulters, deaths and non-respondents*** $\frac{Total\ cured}{Total\ discharged} \times 100$
2	**Default rate**	**Number of patients who defaulted as a percentage of all discharges during the reporting month** $\frac{Total\ Defaulted}{Total\ discharged} \times 100$
3	**Non-recovery rate**	**Number of patients who did not respond to treatment as a percentage of all discharges during the reporting month** $\frac{Total\ non-recovered}{Total\ discharged} \times 100$
4	**Death rate**	**The number of patients who died as a percentage of total**

		discharges during the reporting month $\frac{Total\ death}{Total\ discharged} \times 100$
5	Coverage	Number of eligible cases who are enrolled in IMAM programme divided by total number of eligible x 100 (It should be done annually) $\frac{Total\ eligible\ enrolled}{Total\ eligible} \times 100$
B: IPC		
1	Case fatality[a]	Number of patients who died as a percentage of total discharge for the reporting month (s) $\frac{Total\ Died}{Total\ Discharge} \times 100$ *New admissions don't include readmissions and defaulters*
2	Default rate	Number of patients who defaulted as a percentage of total discharged for the reporting month (s) $\frac{Total\ Defaulted}{Total\ Discharged} \times 100$
4	Cure rate	Number of patients cured as a percentage of total discharged for the reporting month (s) $\frac{Total\ cured}{Total\ Discharged} \times 100$
5	Failure to respond[b]	Number of patients who failed to respond as a percentage of all new admissions for the reporting month (s) $\frac{Total\ failure\ to\ respond}{Total\ new\ admission} \times 100$
6	Transfer rates to OTP	Number of patients transferred to OTP as a percentage of new admissions for the reporting month (s) $\frac{Total\ Transfered}{Total\ new\ admission} \times 100$

[a] Case-fatality rate of >20% is unacceptable; 11-20% poor; 5-10%, moderate and <5% is acceptable.
[b] Refer to 7.7.1 Failure to respond to treatment.

Table 10.3: Summary of International Standards (SPHERE 2018)

Indicator	SAM Standard	MAM/SFP Standard
Cured	> 75%	>75%
Defaulted	< 15%	<15%
Died	< 10%	<3%
Non-recovered	No standard	
Coverage	Rural > 50% Urban > 70% Camp > 90%	Rural > 50% Urban > 70% Camp > 90%

The overall effectiveness of a programme is the product of the cure rate multiplied by coverage (see Figure 10.2 below). This illustrates the importance of the community mobilisation component of IMAM. Without good coverage, even the best clinical care outcomes will only partially meet the needs of the community as a whole.

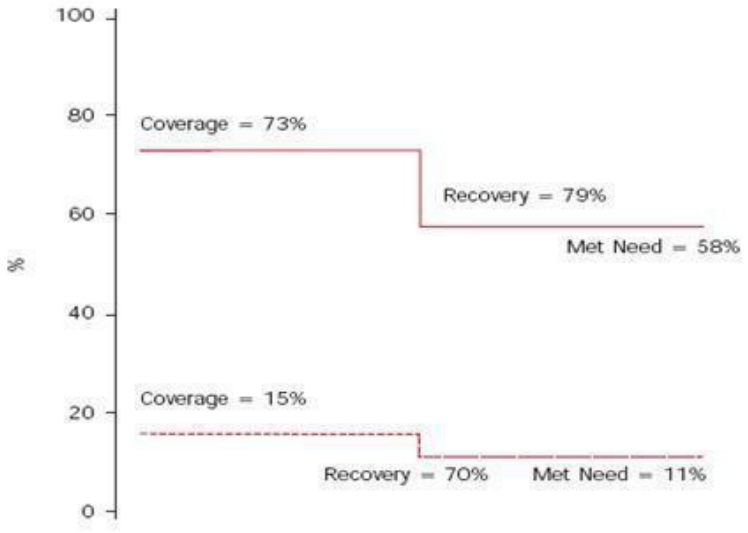


Figure 10.2: Effectiveness of IMAM programmes

10.8 MONITORING AND EVALUATION OF COMMUNITY MOBILISATION ACTIVITIES

The effectiveness of community mobilisation must be monitored on a regular basis and contact maintained with key community figures and those involved in case finding. This will enable problems to be promptly identified and corrective action to be taken. The collection and analysis of routine data will provide an indication of the success of the service and community mobilisation or highlight issues which need investigation.

Quantitative Indicators

- The number of admissions of referred cases over time.
- The number of referrals from different sources (CbRPs/CORPs/CHIPS Agents/CVs, other caregivers, self, etc.).
- The percentage of referrals who do not attend and their reasons.
- The number of children correctly referred by CbRPs/CORPs/CHIPS Agents/CVs (indicator of CbRPs activities and accuracy).

- The number of self-referrals rejected as ineligible who have misunderstood the service.
- The number of absentees tracked and brought back by CbRPs/CORPs/CHIPS Agents/CVs.
- The percentage of defaulters of the total exits and the reasons for defaulting.

Qualitative Data

In addition to monitoring statistics, it is important to also measure quality. The perceptions of service users, those involved in mobilisation activities and the wider community should be gathered.

- Community awareness, understanding and opinions of the IMAM service.
- CbRPs/CORPs/CHIPS Agents/CVs, etc., motivation and challenges to performing activities.
- Caregivers' experience of the service and areas identified for improvement.

Ongoing Mobilisation Activities for CbRPs/CORPs/CHIPS Agents/CVs, etc.

Ongoing mobilisation activities are also important to maintain community engagement, motivation, ownership, and foster a genuine sense of partnership.

- CORPS/CHIPS Agents/CVs, etc., attending refresher training for case finders on SAM and case identification (MUAC & bilateral oedema).
- Number of meetings between health facility staff and CbRPs/CORPS/CHIPS Agents/CVs to share experiences and air any problems which need to be resolved.
- Number of feedback sessions on results done with the community.

10.9 DATA QUALITY ASSESSMENT

Data Quality Assessment (DQA) should be conducted at least once a year to verify the quality of data/data collection systems, in a bid to identify challenges and bottlenecks as well as proffer solutions for better outcomes. The protocol for each DQA would be developed based on needs.

10.10 PROGRAMME COVERAGE

One of the most important elements behind the success of the IMAM approach is its proven capacity for achieving and sustaining high levels of coverage over wide areas. A direct coverage method called SQUEAC (Semi-Quantitative Evaluation of Access and Coverage) uses a three-stage process to assess access and coverage. The SQUEAC method combines quantitative data collected through routine monitoring of the IMAM activities (admissions, exits, defaulting rates, etc.), quantitative surveys and qualitative (anecdotal) data collected using informal group discussions and interviews with a variety of informants.

Stage 1: The examination of the pattern of admissions and defaulters over time can identify patterns and potential problems with the programme. Mapping of the locations of beneficiaries and defaulters (obtained from individual follow-up cards) and outreach activities can help identify potential barriers to accessing IMAM services. Information about other barriers or boosters to access IMAM services can be acquired through informal group discussions and interviews with a variety of informants or made available from sources such as nutritional anthropometry surveys and food-security assessments. At the end of stage 1, areas of low and high coverage are identified as well as various hypotheses for coverage failure.

Stage 2: In this stage, hypotheses of high and low coverage and the reasons for coverage failure are confirmed using small studies, small surveys and small-area surveys.

Stage 3: If appropriate, and if required, an additional stage may be performed to provide an estimate of overall programme coverage using Bayesian techniques. Although an estimate of coverage for the IMAM services can be provided, the true value of the methodology lies in the information obtained regarding the barriers and boosters to service access which can then be addressed to improve coverage and service quality.

10.11 SUPERVISION

Supervisory visits to IMAM sites are designed to improve the quality of care offered in:

- Identifying strengths and weaknesses in the performance of IMAM activities, taking immediate action and applying shared corrective solutions.
- Strengthening the technical capacity of health providers through encouragement of good practices.
- Providing feedback to health workers at the health facilities.

Supervisors must ensure that the performed activities and the functioning of the services meet standards of quality. Supervision for IMAM activities should be combined with those for other services and by the same personnel.

Supervisory visits are done by the direct observation of the performance at the health centres while filling a "supervision checklist" which should cover the key practical aspects of the guidelines in use (example of supervision checklist in Annex 14). During supervision other documents that should be reviewed include:

- OTP cards.
- Registration book (OTP/TSFP).
- Data collection sheets (tally sheets and monthly reports).
- Stock cards and stock levels (*see Annexes 6 and 7*).

Supervision checklists should facilitate the evaluation of logistics management and technical aspects related to the provision of services (outpatient or in-patient) in a structured manner:

- Organisation of the activities.
- Structural condition and hygiene of the facilities.
- Storage of products and equipment.
- Reference documents and job aids available.
- Filling of forms and filing follow-up cards, monthly reports etc.
- Adherence to criteria, protocols and procedures.
- Performance of tasks: anthropometric measurements, clinical examination and appetite test, prescription/ administration of medicines and RUTF/RUSF/SQ-LNS.

- Education and prevention activities.

Prior to each visit, supervisors should examine all the available documentation for each facility, the records of previous supervision and routine monitoring outcomes. This will allow for identifying the priority areas to observe and make the supervision more efficient.

During the visit, gaps and discrepancies should be identified in consultation with the health staff, and as much as possible, with representatives of the community. Immediate feedback should be given to the health care provider and to the community, jointly searching for solutions to the problems identified. Supervision is also essential for improving staff capacities through the organisation of formal or informal refresher training (on-the-job training) during the visits, mainly in less accessible areas where staff replacement is difficult.

Refer to Chapter 8, section 8.3 for appropriate actions regarding emerging public health concerns such as COVID-19.

10.12 CALCULATING ESTIMATED THERAPEUTIC FOOD SUPPLY NEEDS

a. Calculating estimated RUTF needs in OTP

Estimated RUTF needs for OTP per month are based on a RUTF diet of 200 kilocalories (Kcal) per kg per day on average.

Each child in OTP consumes about 20 sachets of RUTF a week. Total consumption in OTP per time period is calculated as follows:

Table 10.4: Calculation of RUTF requirements

A	**Number of OTP beneficiaries**	**(According to the OTP)**
B	**Monthly consumption per child (@20 sachets/child/week)**	**80**
C	**Monthly sachets consumption for OTP**	**A x B**
D	**Monthly carton consumption for OTP**	**C/150**

E	Monthly net weight (MT) (@13.8 kg/carton)	D x 13.8/1000
F	Monthly gross weight (MT) (@14.7 kg/carton)	D x 14.7/1000

Example

RUTF	
Number of OTP beneficiaries	1,000 children
Monthly consumption per child (@20 sachets/child/week)	80 sachets
Monthly sachets consumption for OTP	1,000 x 80 = 80,000 sachets
Monthly carton consumption for OTP	80,000/150 = 533.33
Monthly net weight (MT) (@13.8 kg/carton)	533.33 x 13.8/1000 = 7.35 MT
Monthly gross weight (MT) (@14.7 kg/carton)	533.33 x 14.7/1000 = 7.84 MT

Table 10.5: Calculation of SQ-LNS requirements at TSFP

A	Number of SAM children 6-59 months discharged cured from OTP now at TSFP	200 children
B	Monthly consumption per child (@ 1 sachet/child/day x 30 days)	30 sachets
C	Monthly sachets consumption for TSFP	A x B= 6000 sachets
D	Monthly carton consumption for TSFP (a carton contains approximately 600 SQ-LNS)	C/600 = 10 cartons

NOTE: Discharged cured SAM children at OTP takes 7 sachets of RUTF for transit to TSFP. On enrolment at TSFP, they are to collect 30 sachets of SQ-LNS per month (1 sachet per

day) for three (3) months. Ration day at TSFP should correspond to the growth monitoring and promotion session.

b. Calculating estimated RUSF needs in TSFP

Estimated RUSF supply needs are calculated from the total estimated number of beneficiaries, RUSF ration size and programme duration. The formula used to estimate the required metric tonnage is: Required tonnage in MT = (Estimated total beneficiaries × Ration size per person per day in grams × Duration of support in days) ÷ 1,000,000

c. Calculating estimated F75 and F100 needs in IPC

The estimate of F75 and F100 should be calculated if available

ANNEXES

LIST OF CONTRIBUTORS IN THE DEVELOPMENT OF THE NATIONAL GUIDELINES FOR INTEGRATED COMMUNITY MANAGEMENT OF ACUTE MALNUTRITION

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Annex 1: Weight-for-length (WFL) & Weight-for-Height (WFH) gender specific reference table (WHO 2006)

How to Calculate Weight-for-Height Z-Score (WHZ) in Children 0–59 Months of Age[6]

A weight-for-length/height z-score (WHZ) compares a child's weight to the weight of a child of the same length/height and sex to classify nutritional status.

To use the charts to classify children's nutritional status:

1. Find the correct table for the child´s age (0–23 months or 24–59 months) and sex (boy or girl). Measure children 0–23 months of age or less than 87 cm long lying down (length). Measure children 24–59 months of age or taller than 87 cm standing up (height).
2. Find the figure closest to the child's length/height in the left column.
3. Move your finger to the right to find the range that contains the child's weight.
4. The label at the top of the column with the range containing the child's weight tells you the child's nutritional status.

6 https://www.fantaproject.org/sites/default/files/download/Calculate-WHZ-2.6-NACS-Users-Guide-Apr2016.pdf

BOYS 0–23 months, weight-for-length

Length (cm) ↓	SAM < –3	MAM ≥ –3 to < –2	Normal ≥ –2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
45	0–1.8	1.9	2.0–3.0	3.1–3.3	> 3.3
46	0–1.9	2.0–2.1	2.2–3.1	3.2–3.5	> 3.5
47	0–2.0	2.1–2.2	2.3–3.3	3.4–3.7	> 3.7
48	0–2.2	2.3–2.4	2.5–3.6	3.7–3.9	> 3.9
49	0–2.3	2.4–2.5	2.6–3.8	3.9–4.2	> 4.2
50	0–2.5	2.6–2.7	2.8–4.0	4.1–4.4	> 4.4
51	0–2.6	2.7–2.9	3.0–4.2	4.3–4.7	> 4.7
52	0–2.8	2.9–3.1	3.2–4.5	4.6–5.0	> 5.0
53	0–3.0	3.1–3.3	3.4–4.8	4.9–5.3	> 5.3
54	0–3.2	3.3–3.5	3.6–5.1	5.2–5.6	> 5.6
55	0–3.5	3.6–3.7	3.8–5.4	5.5–6.0	> 6.0
56	0–3.7	3.8–4.0	4.1–5.8	5.9–6.3	> 6.3
57	0–3.9	4.0–4.2	4.3–6.1	6.2–6.7	> 6.7
58	0–4.2	4.3–4.5	4.6–6.4	6.5–7.1	> 7.1
59	0–4.4	4.5–4.7	4.8–6.8	6.9–7.4	> 7.4
60	0–4.6	4.7–5.0	5.1–7.1	7.2–7.8	> 7.8
61	0–4.8	4.9–5.2	5.3–7.4	7.5–8.1	> 8.1
62	0–5.0	5.1–5.5	5.6–7.7	7.8–8.5	> 8.5
63	0–5.2	5.3–5.7	5.8–8.0	8.1–8.8	> 8.8
64	0–5.4	5.5–5.9	6.0–8.3	8.4–9.1	> 9.1
65	0–5.6	5.7–6.1	6.2–8.6	8.7–9.4	> 9.4
66	0–5.8	5.9–6.3	6.4–8.9	9.0–9.7	> 9.7
67	0–6.0	6.1–6.5	6.6–9.2	9.3–10.0	> 10.0
68	0–6.2	6.3–6.7	6.8–9.4	9.5–10.3	> 10.3
69	0–6.4	6.5–6.9	7.0–9.7	9.8–10.6	> 10.6

GIRLS 0–23 months, weight-for-length

Length (cm) ↓	SAM < –3	MAM ≥ –3 to < –2	Normal ≥ –2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
45	0–1.8	1.9–2.0	2.1–3.0	3.1–3.3	> 3.3
46	0–1.9	2.0–2.1	2.2–3.2	3.3–3.5	> 3.5
47	0–2.1	2.2–2.3	2.4–3.4	3.5–3.7	> 3.7
48	0–2.2	2.3–2.4	2.5–3.6	3.7–4.0	> 4.0
49	0–2.3	2.4–2.5	2.6–3.8	3.9–4.2	> 4.2
50	0–2.5	2.6–2.7	2.8–4.0	4.1–4.5	> 4.5
51	0–2.7	2.8–2.9	3.0–4.3	4.4–4.8	> 4.8
52	0–2.8	2.9–3.1	3.2–4.6	4.7–5.1	> 5.1
53	0–3.0	3.1–3.3	3.4–4.9	5.0–5.4	> 5.4
54	0–3.2	3.3–3.5	3.6–5.2	5.3–5.7	> 5.7
55	0–3.4	3.5–3.7	3.8–5.5	5.6–6.1	> 6.1
56	0–3.6	3.7–3.9	4.0–5.8	5.9–6.4	> 6.4
57	0–3.8	3.9–4.2	4.3–6.1	6.2–6.8	> 6.8
58	0–4.0	4.1–4.4	4.5–6.5	6.6–7.1	> 7.1
59	0–4.2	4.3–4.6	4.7–6.8	6.9–7.5	> 7.5
60	0–4.4	4.5–4.8	4.9–7.1	7.2–7.8	> 7.8
61	0–4.6	4.7–5.0	5.1–7.4	7.5–8.2	> 8.2
62	0–4.8	4.9–5.2	5.3–7.7	7.8–8.5	> 8.5
63	0–5.0	5.1–5.4	5.5–8.0	8.1–8.8	> 8.8
64	0–5.2	5.3–5.6	5.7–8.3	8.4–9.1	> 9.1
65	0–5.4	5.5–5.8	5.9–8.6	8.7–9.5	> 9.5
66	0–5.5	5.6–6.0	6.1–8.8	8.9–9.8	> 9.8
67	0–5.7	5.8–6.2	6.3–9.1	9.2–10.0	> 10.0
68	0–5.9	6.0–6.4	6.5–9.4	9.5–10.3	> 10.3
69	0–6.0	6.1–6.6	6.7–9.6	9.7–10.6	> 10.6

70	0–6.5	6.6–7.1	7.2–10.0	10.1–10.9	> 10.9
71	0–6.7	6.8–7.3	7.4–10.2	10.3–11.2	> 11.2
72	0–6.9	7.0–7.5	7.6–10.5	10.6–11.5	> 11.5
73	0–7.1	7.2–7.6	7.7–10.8	10.9–11.8	> 11.8
74	0–7.2	7.3–7.8	7.9–11.0	11.1–12.1	> 12.1
75	0–7.4	7.5–8.0	8.1–11.3	11.4–12.3	> 12.3
76	0–7.5	7.6–8.2	8.3–11.5	11.6–12.6	> 12.6
77	0–7.7	7.8–8.3	8.4–11.7	11.8–12.8	> 12.8
78	0–7.8	7.9–8.5	8.6–12.0	12.1–13.1	> 13.1
79	0–8.0	8.1–8.6	8.7–12.2	12.3–13.3	> 13.3
80	0–8.1	8.2–8.8	8.9–12.4	12.5–13.6	> 13.6
81	0–8.3	8.4–9.0	9.1–12.6	12.7–13.8	> 13.8
82	0–8.4	8.5–9.1	9.2–12.8	12.9–14.0	> 14.0
83	0–8.6	8.7–9.3	9.4–13.1	13.2–14.3	> 14.3
84	0–8.8	8.9–9.5	9.6–13.3	13.4–14.6	> 14.6
85	0–9.0	9.1–9.7	9.8–13.6	13.7–14.9	> 14.9
86	0–9.2	9.3–9.9	10.0–13.9	14.0–15.2	> 15.2

70	0–6.2	6.3–6.8	6.9–9.9	10.0–10.9	> 10.9
71	0–6.4	6.5–6.9	7.0–10.1	10.2–11.1	> 11.1
72	0–6.5	6.6–7.1	7.2–10.3	10.4–11.4	> 11.4
73	0–6.7	6.8–7.3	7.4–10.6	10.7–11.7	> 11.7
74	0–6.8	6.9–7.4	7.5–10.8	10.9–11.9	> 11.9
75	0–7.0	7.1–7.6	7.7–11.0	11.1–12.2	> 12.2
76	0–7.1	7.2–7.7	7.8–11.2	11.3–12.4	> 12.4
77	0–7.3	7.4–7.9	8.0–11.5	11.6–12.6	> 12.6
78	0–7.4	7.5–8.1	8.2–11.7	11.8–12.9	> 12.9
79	0–7.6	7.7–8.2	8.3–11.9	12.0–13.1	> 13.1
80	0–7.7	7.8–8.4	8.5–12.1	12.2–13.4	> 13.4
81	0–7.9	8.0–8.6	8.7–12.4	12.5–13.7	> 13.7
82	0–8.0	8.1–8.7	8.8–12.6	12.7–13.9	> 13.9
83	0–8.2	8.3–8.9	9.0–12.9	13.0–14.2	> 14.2
84	0–8.4	8.5–9.1	9.2–13.2	13.3–14.5	> 14.5
85	0–8.6	8.7–9.3	9.4–13.5	13.6–14.9	> 14.9
86	0–8.8	8.9–9.6	9.7–13.8	13.9–15.2	> 15.2

BOYS 0–23 months, weight-for-length

Length (cm) ↓	SAM < –3	MAM ≥ –3 to < –2	Normal ≥ –2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
87	0–9.4	9.5–10.1	10.2–14.2	14.3–15.5	> 15.5
88	0–9.6	9.7–10.4	10.5–14.5	14.6–15.8	> 15.8
89	0–9.8	9.9–10.6	10.7–14.7	14.8–16.1	> 16.1
90	0–10.0	10.1–10.8	10.9–15.0	15.1–16.4	> 16.4
91	0–10.2	10.3–11.0	11.1–15.3	15.4–16.7	> 16.7
92	0–10.4	10.5–11.2	11.3–15.6	15.7–17.0	> 17.0
93	0–10.6	10.7–11.4	11.5–15.8	15.9–17.3	> 17.3
94	0–10.7	10.8–11.6	11.7–16.1	16.2–17.6	> 17.6
95	0–10.9	11.0–11.8	11.9–16.4	16.5–17.9	> 17.9
96	0–11.1	11.2–12.0	12.1–16.7	16.8–18.2	> 18.2
97	0–11.3	11.4–12.2	12.3–17.0	17.1–18.5	> 18.5
98	0–11.5	11.6–12.4	12.5–17.3	17.4–18.9	> 18.9
99	0–11.7	11.8–12.6	12.7–17.6	17.7–19.2	> 19.2
100	0–11.9	12.0–12.8	12.9–18.0	18.1–19.6	> 19.6

GIRLS 0–23 months, weight-for-length

Length (cm) ↓	SAM < –3	MAM ≥ –3 to < –2	Normal ≥ –2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
87	0–9.0	9.1–9.8	9.9–14.1	14.2–15.5	> 15.5
88	0–9.2	9.3–10.0	10.1–14.4	14.5–15.9	> 15.9
89	0–9.4	9.5–10.2	10.3–14.7	14.8–16.2	> 16.2
90	0–9.6	9.7–10.4	10.5–15.0	15.1–16.5	> 16.5
91	0–9.8	9.9–10.6	10.7–15.3	15.4–16.9	> 16.9
92	0–10.0	10.1–10.8	10.9–15.6	15.7–17.2	> 17.2
93	0–10.1	10.2–11.0	11.1–15.9	16.0–17.5	> 17.5
94	0–10.3	10.4–11.2	11.3–16.2	16.3–17.9	> 17.9
95	0–10.5	10.6–11.4	11.5–16.5	16.6–18.2	> 18.2
96	0–10.7	10.8–11.6	11.7–16.8	16.9–18.6	> 18.6
97	0–10.9	11.0–11.9	12.0–17.1	17.2–18.9	> 18.9
98	0–11.1	11.2–12.1	12.2–17.5	17.6–19.3	> 19.3
99	0–11.3	11.4–12.3	12.4–17.8	17.9–19.6	> 19.6
100	0–11.5	11.6–12.5	12.6–18.1	18.2–20.0	> 20.0

BOYS 24–59 months, weight-for-height

Height (cm)	SAM < -3	MAM ≥ -3 to < -2	Normal ≥ -2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
65	0–5.8	5.9–6.2	6.3–8.8	8.9–9.6	> 9.6
66	0–6.0	6.1–6.4	6.5–9.1	9.2–9.9	> 9.9
67	0–6.1	6.2–6.6	6.7–9.4	9.5–10.2	> 10.2
68	0–6.3	6.4–6.8	6.9–9.6	9.7–10.5	> 10.5
69	0–6.5	6.6–7.0	7.1–9.9	10.0–10.8	> 10.8
70	0–6.7	6.8–7.2	7.3–10.2	10.3–11.1	> 11.1
71	0–6.8	6.9–7.4	7.5–10.4	10.5–11.4	> 11.4
72	0–7.0	7.1–7.6	7.7–10.7	10.8–11.7	> 11.7
73	0–7.2	7.3–7.8	7.9–11.0	11.1–12.0	> 12.0
74	0–7.3	7.4–7.9	8.0–11.2	11.3–12.2	> 12.2
75	0–7.5	7.6–8.1	8.2–11.4	11.5–12.5	> 12.5
76	0–7.6	7.7–8.3	8.4–11.7	11.8–12.8	> 12.8
77	0–7.8	7.9–8.4	8.5–11.9	12.0–13.0	> 13.0
78	0–7.9	8.0–8.6	8.7–12.1	12.2–13.3	> 13.3
79	0–8.1	8.2–8.7	8.8–12.3	12.4–13.5	> 13.5
80	0–8.2	8.3–8.9	9.0–12.6	12.7–13.7	> 13.7
81	0–8.4	8.5–9.1	9.2–12.8	12.9–14.0	> 14.0
82	0–8.6	8.7–9.2	9.3–13.0	13.1–14.2	> 14.2
83	0–8.7	8.8–9.4	9.5–13.3	13.4–14.5	> 14.5
84	0–8.9	9.0–9.6	9.7–13.5	13.6–14.8	> 14.8
85	0–9.1	9.2–9.9	10.0–13.8	13.9–15.1	> 15.1
86	0–9.3	9.4–10.1	10.2–14.1	14.2–15.4	> 15.4
87	0–9.5	9.6–10.3	10.4–14.4	14.5–15.7	> 15.7
88	0–9.7	9.8–10.5	10.6–14.7	14.8–16.0	> 16.0

GIRLS 24–59 months, weight-for-height

Height (cm)	SAM < -3	MAM ≥ -3 to < -2	Normal ≥ -2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
65	0–5.5	5.6–6.0	6.1–8.7	8.8–9.7	> 9.7
66	0–5.7	5.8–6.2	6.3–9.0	9.1–10.0	> 10.0
67	0–5.8	5.9–6.3	6.4–9.3	9.4–10.2	> 10.2
68	0–6.0	6.1–6.5	6.6–9.5	9.6–10.5	> 10.5
69	0–6.2	6.3–6.7	6.8–9.8	9.9–10.8	> 10.8
70	0–6.3	6.4–6.9	7.0–10.0	10.1–11.1	> 11.1
71	0–6.5	6.6–7.0	7.1–10.3	10.4–11.3	> 11.3
72	0–6.6	6.7–7.2	7.3–10.5	10.6–11.6	> 11.6
73	0–6.8	6.9–7.4	7.5–10.7	10.8–11.8	> 11.8
74	0–6.9	7.0–7.5	7.6–11.0	11.1–12.1	> 12.1
75	0–7.1	7.2–7.7	7.8–11.2	11.3–12.3	> 12.3
76	0–7.2	7.3–7.9	8.0–11.4	11.5–12.6	> 12.6
77	0–7.4	7.5–8.0	8.1–11.6	11.7–12.8	> 12.8
78	0–7.5	7.6–8.2	8.3–11.8	11.9–13.1	> 13.1
79	0–7.7	7.8–8.3	8.4–12.1	12.2–13.3	> 13.3
80	0–7.8	7.9–8.5	8.6–12.3	12.4–13.6	> 13.6
81	0–8.0	8.1–8.7	8.8–12.6	12.7–13.9	> 13.9
82	0–8.2	8.3–8.9	9.0–12.8	12.9–14.1	> 14.1
83	0–8.4	8.5–9.1	9.2–13.1	13.2–14.5	> 14.5
84	0–8.5	8.6–9.3	9.4–13.4	13.5–14.8	> 14.8
85	0–8.7	8.8–9.5	9.6–13.7	13.8–15.1	> 15.1
86	0–8.9	9.0–9.7	9.8–14.0	14.1–15.4	> 15.4
87	0–9.1	9.2–9.9	10.0–14.3	14.4–15.8	> 15.8
88	0–9.3	9.4–10.1	10.2–14.6	14.7–16.1	> 16.1

BOYS 24–59 months, weight-for-height

Height (cm)	SAM < -3	MAM ≥ -3 to < -2	Normal ≥ -2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
89	0–9.9	10.0–10.7	10.8–14.9	15.0–16.3	> 16.3
90	0–10.1	10.2–10.9	11.0–15.2	15.3–16.6	> 16.6
91	0–10.3	10.4–11.1	11.2–15.5	15.6–16.9	> 16.9
92	0–10.5	10.6–11.3	11.4–15.8	15.9–17.2	> 17.2
93	0–10.7	10.8–11.5	11.6–16.0	16.1–17.5	> 17.5
94	0–10.9	11.0–11.7	11.8–16.3	16.4–17.8	> 17.8
95	0–11.0	11.1–11.9	12.0–16.6	16.7–18.1	> 18.1
96	0–11.2	11.3–12.1	12.2–16.9	17.0–18.4	> 18.4
97	0–11.4	11.5–12.3	12.4–17.2	17.3–18.8	> 18.8
98	0–11.6	11.7–12.5	12.6–17.5	17.6–19.1	> 19.1
99	0–11.8	11.9–12.8	12.9–17.9	18.0–19.5	> 19.5
100	0–12.0	12.1–13.0	13.1–18.2	18.3–19.9	> 19.9
101	0–12.2	12.3–13.2	13.3–18.5	18.6–20.3	> 20.3
102	0–12.4	12.5–13.5	13.6–18.9	19.0–20.7	> 20.7
103	0–12.7	12.8–13.7	13.8–19.3	19.4–21.1	> 21.1
104	0–12.9	13.0–13.9	14.0–19.7	19.8–21.6	> 21.6
105	0–13.1	13.2–14.2	14.3–20.1	20.2–22.0	> 22.0
106	0–13.3	13.4–14.4	14.5–20.5	20.6–22.5	> 22.5
107	0–13.6	13.7–14.7	14.8–20.9	21.0–22.9	> 22.9
108	0–13.8	13.9–15.0	15.1–21.3	21.4–23.4	> 23.4
109	0–14.0	14.1–15.2	15.3–21.8	21.9–23.9	> 23.9
110	0–14.3	14.4–15.5	15.6–22.2	22.3–24.4	> 24.4
111	0–14.5	14.6–15.8	15.9–22.7	22.8–25.0	> 25.0
112	0–14.8	14.9–16.1	16.2–23.1	23.2–25.5	> 25.5
113	0–15.1	15.2–16.4	16.5–23.6	23.7–26.0	> 26.0
114	0–15.3	15.4–16.7	16.8–24.1	24.2–26.6	> 26.6
115	0–15.6	15.7–17.0	17.1–24.6	24.7–27.2	> 27.2
116	0–15.9	16.0–17.3	17.4–25.1	25.2–27.8	> 27.8
117	0–16.1	16.2–17.6	17.7–25.6	25.7–28.3	> 28.3
118	0–16.4	16.5–17.9	18.0–26.1	26.2–28.9	> 28.9
119	0–16.7	16.8–18.2	18.3–26.6	26.7–29.5	> 29.5
120	0–17.0	17.1–18.5	18.6–27.2	27.3–30.1	> 30.1

GIRLS 24–59 months, weight-for-height

Height (cm)	SAM < -3	MAM ≥ -3 to < -2	Normal ≥ -2 to ≤ +2	Overweight > +2 to ≤ +3	Obesity > +3
	Weight (kg) →				
89	0–9.5	9.6–10.3	10.4–14.9	15.0–16.4	> 16.4
90	0–9.7	9.8–10.5	10.6–15.2	15.3–16.8	> 16.8
91	0–9.9	10.0–10.8	10.9–15.5	15.6–17.1	> 17.1
92	0–10.1	10.2–11.0	11.1–15.8	15.9–17.4	> 17.4
93	0–10.3	10.4–11.2	11.3–16.1	16.2–17.8	> 17.8
94	0–10.5	10.6–11.4	11.5–16.4	16.5–18.1	> 18.1
95	0–10.7	10.8–11.6	11.7–16.7	16.8–18.5	> 18.5
96	0–10.8	10.9–11.8	11.9–17.0	17.1–18.8	> 18.8
97	0–11.0	11.1–12.0	12.1–17.4	17.5–19.2	> 19.2
98	0–11.2	11.3–12.2	12.3–17.7	17.8–19.5	> 19.5
99	0–11.4	11.5–12.4	12.5–18.0	18.1–19.9	> 19.9
100	0–11.6	11.7–12.7	12.8–18.4	18.5–20.3	> 20.3
101	0–11.9	12.0–12.9	13.0–18.7	18.8–20.7	> 20.7
102	0–12.1	12.2–13.2	13.3–19.1	19.2–21.1	> 21.1
103	0–12.3	12.4–13.4	13.5–19.5	19.6–21.6	> 21.6
104	0–12.5	12.6–13.7	13.8–19.9	20.0–22.0	> 22.0
105	0–12.8	12.9–13.9	14.0–20.3	20.4–22.5	> 22.5
106	0–13.0	13.1–14.2	14.3–20.8	20.9–23.0	> 23.0
107	0–13.3	13.4–14.5	14.6–21.2	21.3–23.5	> 23.5
108	0–13.6	13.7–14.8	14.9–21.7	21.8–24.0	> 24.0
109	0–13.8	13.9–15.1	15.2–22.1	22.2–24.5	> 24.5
110	0–14.1	14.2–15.4	15.5–22.6	22.7–25.1	> 25.1
111	0–14.4	14.5–15.7	15.8–23.1	23.2–25.7	> 25.7
112	0–14.7	14.8–16.1	16.2–23.6	23.7–26.2	> 26.2
113	0–15.0	15.1–16.4	16.5–24.2	24.3–26.8	> 26.8
114	0–15.3	15.4–16.7	16.8–24.7	24.8–27.4	> 27.4
115	0–15.6	15.7–17.1	17.2–25.2	25.3–28.1	> 28.1
116	0–15.9	16.0–17.4	17.5–25.8	25.9–28.7	> 28.7
117	0–16.2	16.3–17.7	17.8–26.3	26.4–29.3	> 29.3
118	0–16.5	16.6–18.1	18.2–26.9	27.0–29.9	> 29.9
119	0–16.8	16.9–18.4	18.5–27.4	27.5–30.6	> 30.6
120	0–17.2	17.3–18.8	18.9–28.0	28.1–31.2	> 31.2

	Malaria Treatment	<5 years	≥5yrs (excluding PW)	Preg Women (PW)	Total
211	Number of persons with Confirmed Uncomplicated Malaria treated with ACT				
212	Number of persons Clinically diagnosed with Malaria treated with ACT				
213	Number of persons with Confirmed Uncomplicated Malaria treated with other antimalarials				
214	Number of persons with Severe Malaria given recommended pre-referral treatment				
215	Number of persons with Severe Malaria treated with Artesunate injection				
216	Number of persons with Severe Malaria treated with other injectable antimalarials				

	Hepatitis B Screening and Treatment Sevices	Male		Female		Total
		10 - 19yrs	≥20 yrs	10 - 19yrs	≥20 yrs	
217	Number of individuals Counselled and Tested for Hepatitis B					
218	Number of individuals tested HepB positive (HepB +ve result)					
219	Number of individual with HepB Treated					
220	Number of individual with HepB Referred					

	Hepatitis C Screening and Treatment Sevices	Male		Female		Total
		10 - 19yrs	≥20 yrs	10 - 19yrs	≥20 yrs	
221	Number of individuals Counselled and Tested for Hepatitis C					
222	Number of individuals tested HepB positive (HepC +ve result)					
223	Number of individual with HepB Treated					
224	Number of individual with HepB Referred					

	Gender Based Violence (GBV) Care Services	Male		Female		Total
		10 - 19yrs	≥20 yrs	10 - 19yrs	≥20 yrs	
225	Number of GBV cases seen					
226	Number of GBV cases who received post GBV care (Post GBV Care Received)					
227	Number of GBV cases referred for treatment (GBV Referred for Treatment)					

Obstetric Fistula

		VVF		RVF		VVF & RVF		Total
		10-19 yrs	20year +	10-19 yrs	20year +	10-19 yrs	20year +	
228	Women presenting with leaking urine or feaces - new cases							
229	Women receiving surgery for fistula repair							
230	Women receiving a first repair							
231	Women receiving a second repair							
232	Women discharged after fistula surgery							
233	Women who had a closed and dry fistula at discharge							
234	Women discharged after fistula surgery							
235	Women who had a closed and dry fistula at discharge							

ANNEX 3: NUTRITION REFERRAL FORM

Detached

Client#:_____Date: _____

Client Information

Name of Child: _____

Name of Care giver: _____

Referred From:		Referred to:	
IPC	☐	IPC	☐
OTP	☐	OTP	☐
TSFP	☐	TSFP	☐
IYCF	☐	IYCF	☐
		BSFP	☐

Name of Health Facility: _____

Clients No: (If applicable) _____ Date: _____

Client Information

Name of Child:_____Name of Care-giver: _____

Sex: M☐ F☐ Community/Camp: _____

Ward: _____ _____

LGA: _____

Anthropometry

Age (months):_____Weight (Kg):_____Height (cm):_____MUAC **G** **Y** **R** **Oedema** ☐

Referral Details

Referral/Transfer from: IPC☐ OTP☐ TSFP☐ IYCF☐ BSFP☐ Community/camp☐

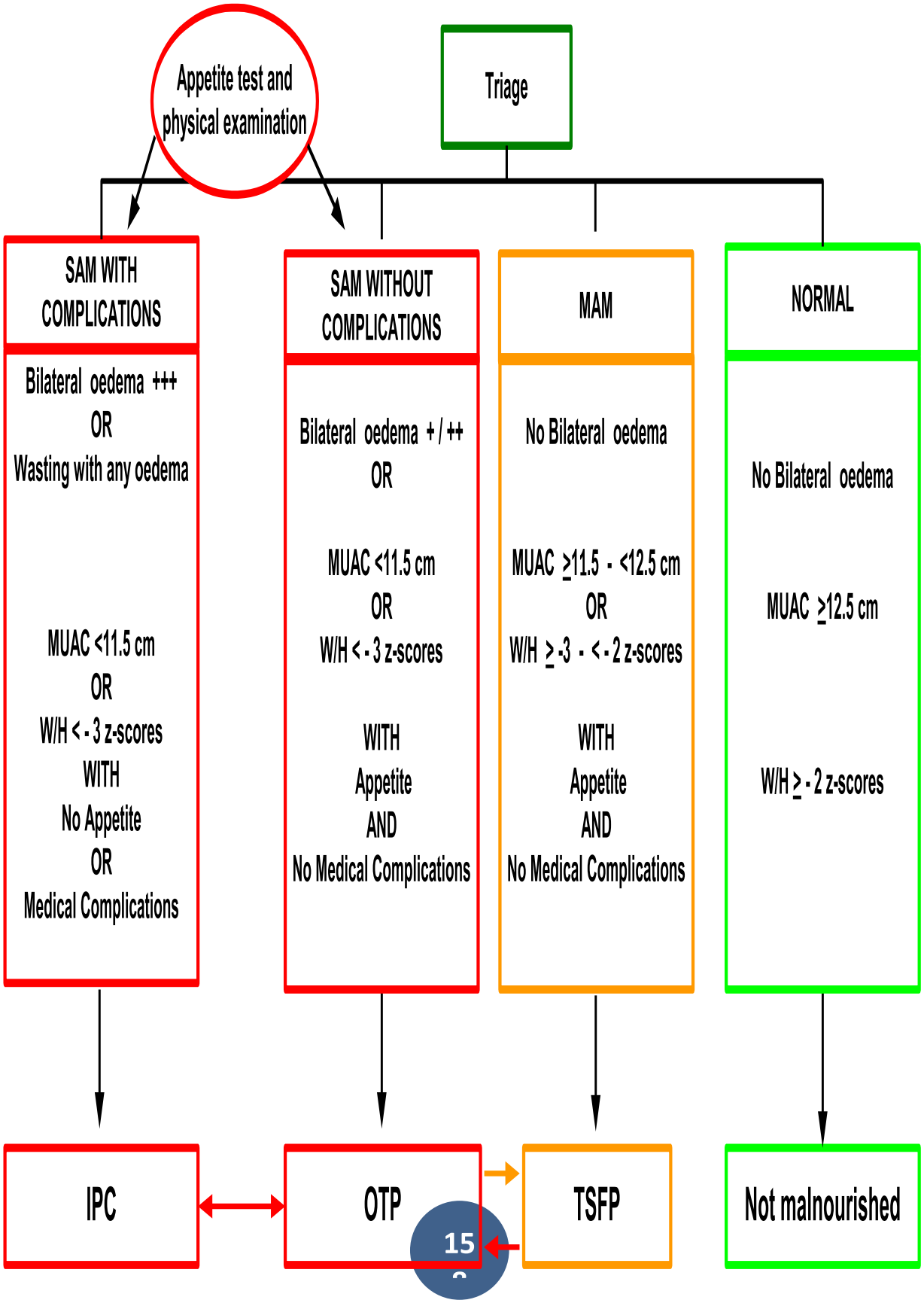
Referral/Transfer to: IPC☐ OTP TSFP IYCF BSFP☐

Name/Location of new site: _____

Vaccination/Treatment given before referral: _____

Referred by: Health Worker CORP Name:_____Contact #: _____

Additional Information for Reasons for Referral:


Appetite test and physical examination
Triage
SAM WITH COMPLICATIONS
Bilateral oedema +++
OR
Wasting with any oedema
MUAC <11.5 cm
OR
W/H < - 3 z-scores
WITH
No Appetite
OR
Medical Complications
SAM WITHOUT COMPLICATIONS
Bilateral oedema + / ++
OR
MUAC <11.5 cm
OR
W/H < - 3 z-scores
WITH
Appetite
AND
No Medical Complications
MAM
No Bilateral oedema
MUAC ≥11.5 - <12.5 cm
OR
W/H ≥ -3 - < - 2 z-scores
WITH
Appetite
AND
No Medical Complications
NORMAL
No Bilateral oedema
MUAC ≥12.5 cm
W/H ≥ - 2 z-scores
IPC
OTP
TSFP
Not malnourished

Annex 5:- RATION CARD (OTP/TSFP) (circle)

Mother's Name							**Registration Number**					
Client's Name							**Sex (M/F)**					
Date of Admission							**Age (Months)**					
Distribution site							**Address**					
Distribution/week	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Date												
Weight (kg)												
Oedema												
MUAC (cm)												
Ration (Type & Quantity)												

** This is a Take Home Card for subsequent visits of mother/caregiver to access RUFT/RUSF*
*** Without this, she can't access rations. It also helps to check pilfer age and/or Double reception of RUFT/RUSF*

ANNEX 6: RUTF/ RUSF/ SQ-LNS (circle) STOCK CARD

	STATE/LGA										OTP/TSFP Site:			
Date	STARTING BALANCE		RECEIVED		ISSUED		TOTAL		MISSING OR EXTRA		COMMENTS	PHYSICAL BALANCE		Sign
	Cartons	Sachets	Carton	Sachets	Carton	Sachets	Carton	Sachets	Carton	Sachets		Carton	Sachets	

Anthropometric Measurement tools:

- Weight scales - both children and adults
- Height/length board
- MUAC tapes - both children and adults
- Weight for height z-scores table

Registration

- OTP/TSFP registration book
- OTP/TSFP admission cards
- OTP/TSFP ration card

Distribution of specialised nutritious foods

- RUTF
- RUSF or FBF
- SQ-LNS

Routine medicine

- Amoxicillin
- Albendazole/mebendazole tablets
- Supplementary medicines (see chapters 5)

Health and nutrition education

- Cooking demonstration kit
- Posters on nutrition and health
- Material for health education nutrition

		Admission & Discharge details								
Entry #	REG. N°.	Admission Date	Name	Age (months)	Sex (M/F)	Admission Criteria	Home Visit Date	Reason for Home Visit	Discharge Date	Discharge Outcome
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										

ANNEX 9: TSFP REGISTER

		Admission & Discharge details								
Entry #	REG. N°	Admission Date	Name	Age (months)	Sex (M/F)	Home Visit Date	Reason for Home Visit	Discharge Date	Discharge Outcome	Total RUSF Taken
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										

ANNEX 10: WEEKLY/MONTHLY OTP (SAM CASE LOAD AND RUTF) DATA SHEET

STATE		LGA		WARD		HF	

MONTH			NAME OF OFFICER COMPLETING FORM	SIGNATURE
YEAR				

	TOTAL start of WEEK (A)	ADMISSIONS			EXITS						TOTAL END OF WEEK H=A+D-G	GENDER (New Cases Only)		RUTF STOCK REPORT			
		NEW CASES (B)	OLD CASES (C)	TOTAL ADM (D= B + C)	DISCHARGE (E)				TRANSFER (F)	TOTAL EXITS G=E+F		M	F	UTILISED		BALANCE	
		6-59 SAM	From IPC or OTP or returned defaulter		Cured	Death	Default	Non-Recov'd	Transfer to IPC or OTP					Carton	Sachet	Carton	Sachet
MONTHLY TOTAL																	

ANNEX 11: WEEKLY/MONTHLY TSFP (MAM CASE LOAD AND RUSF) DATA SHEET

STATE		**LGA**		**WARD**		**HF**	

MONTH			NAME OF OFFICER COMPLETING FORM	SIGNATURE
YEAR				

Date	TOTAL start of WEEK (A)	ADMISSIONS			EXITS						TOTAL END OF WEEK H=A+D-G	GENDER (New Cases only)		RUSF STOCK REPORT			
		NEW CASES (B)	OLD CASES (C)	TOTAL ADM (D= B + C)	DISCHARGE (E)				TRANSFER (F)	TOTAL EXITS G=E+F		M	F	UTILISED		BALANCE	
		6-59 SAM	From TSFP or OTP or returned defaulter		Cured	Death	Default	Non Recov'd	Transfer to TSFP or OTP					Carton	Sachet	Carton	Sachet
MONTHLY TOTAL																	

ANNEX 4: TARGETED SUPPLEMENTARY FEEDING PROGRAMM
TSFP ADMISSION DETAILS

Child's Name					**TSFP REG. Nº**	__ / ____ / ___ / TSFP/STATE &LGA CODE/ HF NUMBI	
Address / Mobile Nº.					**Date of Admission**		
Age (months)		**Sex**	M	F	**Caregiver's Name**		
Admission	Referral from Community	Self-Referral	From other centre	From inpatient	**Walking distance to home (hrs)**		HOUSEH Total
Admission Anthropometry							
Weight (kg)		**Height (cm)**		**MUAC (cm)**		**Other**	
Admission Criteria	MUAC ≥11.5 and <125cm	WFH ≥ -3 and < -2			**Readmission** Relapse		Yes
					Returned Defaulter		Yes
					Transfer in from other TSFP		Yes
					Cured SAM from OTP		Yes
History							
Diarrhoea	Yes	No			**Stools / Day**	1-3	4-5
Vomiting	Yes	No			Passing Urine		Yes
Fever	Yes	No			**Breastfeeding**		Yes
Cough	Yes	No			**Appetite**	Good	Poor
Reported Problems							
Physical Examination at Admission							
Respiration Rate (# min)	6-12m	< 50 / >50	12-59m	< 40 / > 40	**Chest In-drawing**		Yes
Temperature (ºC)					**Conjunctivae/ Palmar Coloration**		Normal
Eyes	Normal	Sunken	Discharge		**Passing Urine**		Yes
Thirsty	Yes	No			**Dehydration**	None	Moderate
State of Consciousness	Normal	Agitated	Irritable	Apathetic / Passive	**Extremities**		Normal
Ears	Normal	Discharge			**Mouth**	Normal	Sores
Lymph Nodes	None	Neck	Axilla	Groin	**Disability**		Yes
Skin Changes	None	Scabies	Peeling	Ulcers / Abscesses	**RDT**		+ ve
Routine Admission Medication & Immunisation							
Admission: Drug	***Date***	***Dosage (& type)***			***2nd visit:***	***Date***	
Albendazole/ mebendazole							
					Immunization	**Measles**	Yes
						Fully Immunised	Yes
Other Treatment							
	Date	+ve / -ve			***Other Drugs***	***Date***	
HIV Test/ART					**Vitamin A**		
TB therapy	Yes	No					
Cotrimoxazole prophylaxis	Yes	No					

	Maternal Health (Labour and Delivery)
33	Deliveries – total
34	Deliveries - SVD (Spontaneous Vaginal Delivery)
35	Deliveries - assisted
36	Deliveries - caesarean section
37	Preterm birth (a birth that occurs before the 37th week of pregnancy)
38	Deliveries with complications - mother only
39	Deliveries among HIV positive women – Booked
40	Deliveries among HIV positive women – Unbooked
41	Deliveries by adolescent mother (aged 10-19 years)
42	Deliveries monitored using a partograph
43	Deliveries taken by a skilled birth attendant
44	Number of women giving birth who received Oxytocin in the third stage of labour
45	Number of women that received Misoprostol in the third stage of labour
46	Number of women admitted with Eclampsia who received MgSo4
47	Abortions - induced
48	Abortions - total
49	Number of women who received post abortion care
50	Number of Women admitted for complications of unsafe abortion
51	Number of women admitted with Vesico-Vaginal Fistula (VVF)

	Tetanus Diphtheria (Women of child bearing age)					
		TD1	TD2	TD3	TD4	TD5
52	Pregnant women given Tetanus Diphtheria vaccine					
53	Non-Pregnant given Tetanus Diphtheria vaccine					

	Newborn Health				
		Male		Female	
	Outcome of pregnancy	<2.5kg	≥2.5kg	<2.5kg	≥2.5kg
54	Live Births				
55	Live Births by HIV positive women only				
56	Still Births				
57	Macerated Still Births (MSB)				
58	Fresh Still Births (FSB)				

	Immediate Newborn Care	Male	Female
59	Number of babies for whom 4% Chlorhexidine (CHX) gel is applied to cord at birth		
60	Babies put to breast within 1 hour with skin-to-skin to keep warm		

	Complications - Newborn	Male	Female
61	Number of babies not breathing/crying at birth		
62	Number of babies not breathing/crying at birth that were successfully resuscitated		
63	Number of newborns with danger signs		
64	Number of new borns with danger signs given first dose of antibiotics and referred		
65	Neonatal tetanus		
66	Neonatal jaundice		
67	Number of Newborns with low birth weight admitted on KMC		
68	Number of Newborns with low birth weight discharged after KMC		

	Immunization					
		< 1 Year		> 1 Year		Total
	Antigen	Fixed	Outreach	Fixed	Outreach	
69	OPV 0 birth					
70	Hep. B 0 birth					
71	BCG					
72	OPV 1					
73	Penta. 1					
74	PCV 1					
75	Rota 1					
76	OPV 2					
77	Penta. 2					
78	PCV 2					
79	Rota 2					
80	OPV 3					
81	Penta. 3					
82	PCV 3					
83	Rota3					
84	IPV					
85	Vitamin A					
86	Measles 1					
87	Fully Immunized < 1 year					
88	Yellow Fever					
89	Measles 2					
90	MEN A					

	Routine Immunization Strategy and Operational Fund			
91	Do you have updated REW Microplan? (if YES, enter 1; NO, enter 0)			
		Planned	Conducted	
92	Number of RI fixed session during the index month			
93	Number of RI outreach session during the index month			
94	Did you receive supervision (if YES, enter 1; NO, enter 0)			
		National	State	LGA
95	Level of Supervision received during the index month (enter 1 where applicable or as appropriate)			
96	How much RI funds did you receive during the index month (enter amount in Naira)			
97	Did you hold VDC meeting the index month (if YES, enter 1; NO, enter 0)			

	Birth Registration	Male	Female	Total
98	Number of children under 1 year registered (registration of children <1yr)			
99	Number of birth certificate issued			
100	Number of birth certificate collected			
101	Number of birth certificate not collected			

	Nutrition and Growth Monitoring & Promotion (NUTGMP) for under fives				
		Age group	New	Revisit	Total
102	Number of Children 0-59 months that received Nutrition and GMP services	0-5months			
		6-23months			
		24-59months			
103	Number of Children 0-59 months that are growing well				
104	Number of Children 0-6 months receiving exclusive breast feeding				
105	Number of clients counselled on Maternal, Infant and Young Child Nutrition (MIYCN)				
			Male	Female	Total
		6-11 months			
106	Number of Children 6-59 months given Vitamin A	12-59 months			
107	Number of Children 6-23 months who received Micronutrient Powder (MNP)				
108	Number of Children 12-59 months who received deworming medication				
		New			
109	Number of Children <5 years admitted for treatment of severe acute malnutrition	Transferred in			
	Outcome of Severe Acute Malnutrition (SAM) Treatment		Male	Female	Total
110	Number of children treated for SAM who recovered during the index month (# recovered)				
111	Number of children treated for SAM who did not recover during the index month (# non- recovered)				
112	Number of children treated for SAM who defaulted during the index month (# defaulted)				
113	Number of children treated for SAM who died during the index month (# dead)				
113	Number of children treated for SAM who were transferred out during the index month (# transferred out)				
	Child Health and Integrated Management of Childhood Illnesses (CH & IMCI)				
115			Male	Female	Total
116	Diarrhoea new cases < 5 years				
117	Diarrhoea new cases < 5 years - given oral rehydration preparations (low osmolar ORS) and zinc				
118	Pneumonia new cases < 5 years				
119	Pneumonia new cases < 5 years - given antibiotics (amoxyl DT)				
120	Measles new cases < 5 years				

	Family Planning			
		Male	Female	Total
121	Number of FP clients counselled			
122	Number of New family planning acceptors			
123	Number of females aged 10 - 14 yrs using modern contraception			
124	Number of females aged 15 - 19 yrs using modern contraception			
125	Number of females aged 20 - 24 yrs using modern contraception			
126	Number of females aged 25 - 49 yrs using modern contraception			
127	Persons given oral pills			
128	Oral pills cycle (sachets) dispensed			
129	Emergengy contraceptive pills dispensed			
130	Injectables given (Noristerat)			
131	Injectables given (DMPA-IM)			
132	Injectables Sayana Press / Plus SI indicator given (DMPA-SC)			
133	Number of women who self inject DMPA-SC			
134	IUD 10 years CuT 380A (Copper) inserted			
135	IUD LNG IUS (5 year hormonal) inserted			
136	Implants - Implanon NXT inserted			
137	Implants - Jadelle inserted			
138	Number of IUD removed			
139	Number of Implant removed			
140	Sterilization (Male)			
141	Sterilization (Female)			
142	Male Condoms distributed			
143	Female Condoms distributed			
144	Number of Individual referred for FP services from PMTCT (HIV+ Pregnant Women), HCT, PAC, Immunization, Labour & Delivery			
145	Number of Individual referred for FP services from PPMVs/ Community Pharmacies			
146	Number of women councelled on Postpartum Family Planning			
147	Post-partum Implanon NXT inserted			
148	Post-partum Jadelle inserted			
149	Post-partum IUD inserted			
150	Number of postpatum women who were referred for IUD, Implant or surgical methods			

	Referrals (include Community to Health Facility and Inter-Facility referrals)	
		Total
151	Number of all in-coming referred cases (Referral in)	
152	Number of all out-going referred cases (Referral out)	
153	Malaria cases referred for further treatment	
154	Malaria cases referred for adverse drug reaction	
155	Women referred in for Pregnancy related complications	
156	Women referred out for Pregnancy related complications	
157	Women seen and referred for Obstetric Fistula (VVF & RVF)	

Pharmaceutical Services

		Total
185	Number of Prescriptions issued	
186	Number of Items dispensed	
187	Number of Prescriptions issued which contain Antibiotics	
188	Number of Prescriptions issued which contain Injectables	

	Antimalarials	With Mobile Authentification Service (Scratch Card)	Without Mobile Authentification Service (Scratch Card)	
189	Packs of Antimalarials in the health facility avaialable at the end of the index month (stock balance of non-expired packs only)			

	Adverse Drug Reaction	
190	Adverse drug reactions (ADRs) reported following immunization	
191	Adverse drug reactions (ADRs) reported following use of antiretrovirals	
192	Adverse drug reactions (ADRs) reported following use of antimalarials	

Mortality

		Male						Female						Total
		0-28 days	29d - 11 mths	12 - 59 mths	5 - 9 yrs	11 - 19 yrs	≥20 yrs	0 - 28 days	29d - 11 mths	12 - 59 mths	5 - 9 Yrs	10 - 19 yrs	≥20 yrs	
193	Number of Deaths among individuals (dissagregated by age)													

	Maternal Mortality	
194	Number of Deaths of women related to pregnancy	

Deaths Audit

	Causes of Maternal deaths:	Post-partum haemorrhage	Sepsis	Obstructed labour	Abortion	Malaria	Anaemia	HIV	Other
195	Number of confirmed maternal deaths due to:								

	Causes of Neonatal deaths	Prematurity	Neonatal Tetanus	Congenital Malformation	Other
196	Number of confirmed neonatal deaths due to:				

	Causes of Under 5 Deaths	Malaria	Pneumonia	Malnutrition	Other
197	Number of confirmed under 5 deaths due to:				

Malaria Services

	Malaria Prevention (LLIN)	Total
198	Children under 5 years who received LLIN this month	

	Malaria Testing	<5 years	≥5yrs (excluding PW)	Preg Women (PW)	Total
199	Persons presenting with fever				
200	Persons presenting with fever and tested by RDT				
201	Persons tested positive for malaria by RDT				
202	Persons presenting with fever and tested by Microscopy (for malaria parasites)				
203	Persons tested positive for malaria by Microscopy				

	Malaria Cases	<5 years	≥5yrs (excluding PW)	Preg Women (PW)	Total
204	Persons with clinically diagnosed Malaria				
205	Persons with confirmed uncomplicated Malaria				
206	Number of severe Malaria cases seen				
207	Positive cases of Malaria without fever				

	Malaria in Pregnancy	Total
208	Pregnant women with clinically diagnosed Malaria	
209	Pregnant women with confirmed uncomplicated Malaria	
210	Pregnant women with severe Malaria	

	Commodity Availability (enter 1=Yes, 0=No, leave blank=NA)	
236	Manual Vacuum Aspiration (MVA) kit for management of unsafe abortions is available	
237	Stock out of Implanon NXT at any time in the past one month?	
238	Stock out of Jadelle at any time in the past one month?	
239	Stock out of Noristerat at any time in the past one month?	
240	Stock out of DMPA IM at any time in the past one month?	
241	Stock out of DMPA SC at any time in the past one month?	
242	Stock out of oral contraceptive pills at any time in the past one month?	
243	Stock out of Oxytocin in the past one month?	
244	Stock out of Misoprostol in the past one month?	
245	Stock out of Chlorhexidine gel in the past one month?	
246	Stock out of low osmolar ORS preparations in the past one month?	
247	Stock out of Zinc tablet in the past one month?	
248	100, ReSoMal, RUTF, RUSF, MNP,IYCF Counseling Cards, MUAC Tape etc.)	

Authentication

Completed by: Designation:..... Name: ..... Signature: ..... Date:	Verified by: Designation:..... Name: ..... Signature: ..... Date: .....

Preparation

Recipe: (You can use any measure, say bowl or your chosen marketing the ratio is key)

- 3 measures of millet, sorghum and/or maize
- 2 measures of soya beans
- 1 measure of groundnuts

DAY ONE – Soak the soya beans in clean water for 24 hours(overnight). This soaking makes it easier to remove the husk from soya beans and reduces the high bean levels.

"All soaking water, you will have to wash overnight too. Wash off the second day. Remove husk before or after roasting on the third day. Whether can a sundry do hooked with a rolling machine."

DAY TWO – "Wash all the beans with clean water".

By morning, Remove and wash off the husks from soya beans.

Soak millet or sorghum for 1-2 hours and wash clean.

Spread washed soya beans, millet and/or sorghum in the shade for drying.

"Do not put wet and soaking utensils, the grains should remain in the shade for drying until they are completely dry. They should not be placed in the sun to increase the speed of drying as this cause loss in some of the nutrients.

DAY THREE – Roast the dry soya beans and groundnut nuts until gold brown. The origin of Dan Brown's name is believed that the frequent description during preparation is as "burn brown".

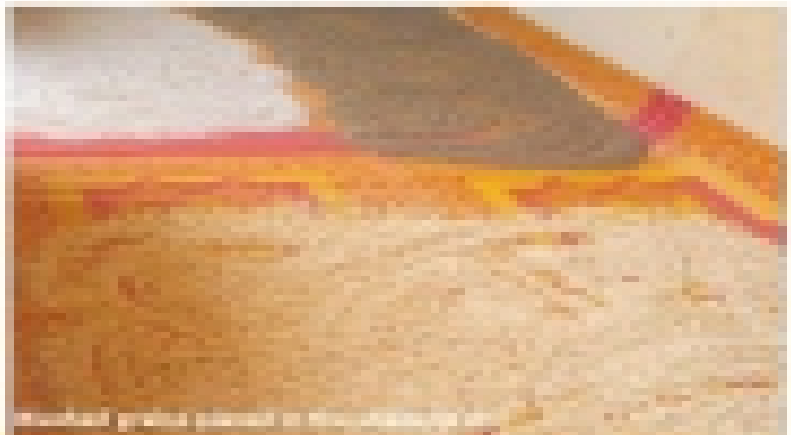
Lightly roast the sorghum and millet

Wash all the beans with clean water

Mix all the ingredients together for milling.

Ground ingredients together into a powder

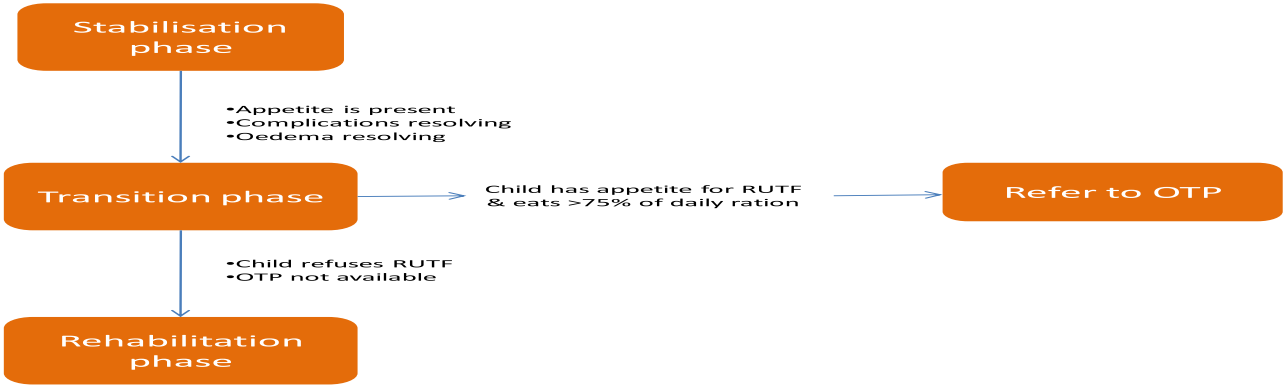
Position and package the mixed powder into airtight containers



CRS faith. action. results.

CATHOLIC RELIEF SERVICES

FEDERAL
MINISTRY
OF HEALTH


Stabilisation phase
•Appetite is present
•Complications resolving
•Oedema resolving
Transition phase
Child has appetite for RUTF & eats >75% of daily ration
Refer to OTP
•Child refuses RUTF
•OTP not available
Rehabilitation phase

IMAM SUPERVISORY CHECKLIST **Date: _____**

LGA_____ OTP SITE _____

A	Community Outreach Variables	QUALITY [Rate on a scale of 1 (very poor) to 5 (very good)]	COMMENTS (Why you select your option) PIs discuss all issues seen with staff (HWs)
I	Active case finding conducted by community providers		
Ii	Children referred accurately from the community		
Iii	Community leaders understand purpose of the programme		
Iv	Children absent/defaulted are followed up		
v	Transfer slips filled out correctly, if used		
vi	No of Active CORPS	**Total No____** **Active No___**	
vii	Briefly discuss on the distribution of the CORPS in the major communities within the catchment areas		
viii	Briefly discuss the challenges to community outreach, including CORPS works		
QUALITY RATING:	**1 = Very Poor,**	**2= Poor,**	**3= Fair,** **4= Good,** **5= Very Good**

B	Anthropometry Variables	QUALITY [Rate on a scale of 1 (very poor) to 5 (very good)]	COMMENTS (Why you select your option) Pls discuss all issues seen with staff (HWs)
I	Oedema assessed accurately		
Ii	MUAC measured accurately		
Iii	Weight measured accurately		
iv	General Comment on the screening procedure, waiting area and triage		
QUALITY RATING: 1 = Very Poor, 2= Poor, 3= Fair, 4= Good, 5= Very Good			

C	**Process Variables** **Check or observe at least ten different processes to determine quality**	**QUALITY** **[Rate on a scale of 1 (very poor) to 5 (very good)]**	**COMMENTS** **(Why you select your option)** **PIs discuss all issues seen with staff (HWs)**
i	Admission procedures and criteria correct		
ii	Number system used correctly		
iii	Cards filed correctly		
iv	Admission history recorded accurately on OTP card		
v	Medical examination performed correctly and recorded		
vi	Appetite test conducted correctly (Including hand washing procedure)		
vii	Routine medicines given correctly		
viii	Action protocol used correctly		
ix	Children correctly referred to inpatient care		
x	RUTF available and given correctly		
xi	Key messages given correctly		
xii	Follow up history and examination performed correctly		
xiii	Home visit ever done & reasons identified correctly		
xiv	Links between health facility and community established		
xv	Exit procedures and criteria correct		
QUALITY RATING:	**1 = Very Poor,**	**2= Poor,**	**3= Fair,**	**4= Good,**	**5= Very Good**

REMARKS

D	Availability of Functional Equipment / Supplies and Organisation	Availability Yes or No	Number Available or Functional	COMMENTS
I	Weighing Scale for Children			
Ii	MUAC Tape			
Iii	RUTF			Comment on break in supply since inception
iv	Drugs	Amoxicillin|_| ACT |__| Deworming |_|	Amoxicillin|___| ACT |___| Deworming |___|	Comment on break in supply since inception
v	Thermometer and stopwatch	Therm |__| S/wath |__|	Therm |___| S/wath |___|	
vi	OTP FORMS Card, Ration card, referral form, stock card, weekly tally sheet	OTP Card |___| Ration card |___| Referral form |___| Stock card |___| Weekly tally sheet |___|		Comment on quantity available
vii	OTP Register	Available and up to date |___| Available but not up to date |___| Not available |___|		
viii	General Comment on the storage of RUTF and Drugs			
ix	Comment on the organization of OTP (availability of waiting area and benches, source of water, toilet etc)			
x	Staff Capacity Health workers (e.g. CHEW, JCHEW, etc.)	Total No: _____ No Trained: _____ No Available: _____		**Comment(s)**

REMARKS

E: Target Supplementary Feeding Programme (TSFP)

Please freely discuss the TSFP programme available under the following variables		
	VARIABLES	**COMMENTS**
i	Availability of Register: Yes or No |____|	
ii	Register up to Date: Yes or No |____|	
iii	If Yes, No of Children (6-59 month to date): |____|	
iv	No of staff dedicated to TSFP: |____|	
v	A space within the facility or another room use for TSFP? Yes or No |____|	
vi	Counselling topic(s) giving to the caregiver, **List**	
vii	Counselling given orally or from IYCF Pictorial guide Yes or No |____|	
viii	Quality of counselling: Rate on a scale of 1 to 5 QUALITY RATING: **1 = Very Poor, 2= Poor, 3= Fair, 4= Good, 5= Very Good** |____|	
ix	**GENERAL COMMENT**	

REMARK(S)

OTHERS:

i. Confirm if the OTP has been reporting their data using Rapid SMS, ask for challenges

ii. Record the number of CORPs at OTP

iii. Confirm sharp practices regarding caregivers on RUTF/RUSF e.g., if it is being sold within the community or if it is commonly shared among all under5 and or adult

iv. Any other challenge(s) from HFs/CORPs/Caregivers

ANNEX 15: Tom Brown Recipe Card

Tom Brown, is a blended complementary food produced from locally available ingredients of cereal, soya beans, and groundnuts/crayfish in a ratio of 6:3:1 – 6 measures of any cereal (16.0 kg comprising 6measures of maize/sorghum/millet, 3 measures of soya beans (8.0 kg), and 1 measure of Crayfish/fish (2.7 kg).

- Each child gets a weekly ration of 1.5 kg of blended Tom Brown powder @ about 214 g per day.
- Caregiver feeds the child with Tom Brown porridge 2-3 times per day {214g daily} in addition to other daily diet.
- In a 214-gram ration of Tom Brown, there are 43 grams of protein and 28 grams of fat.

NATIONAL HEALTH MANAGEMENT INFORMATION SYSTEM

GMP/NUTRITION INFORMATION REGISTER

NHMIS/HF/NUTRITION

1. State:__________ 2. LGA:__________ 3. Ward: __________ 4. Health facility: __________ 5. Month/Year__________

6. S/N	7. Date	8. Name of client	9. Sex (F/M)	10. Client number	11. Date of birth	12. Age in months	13. Type of visit: (Tick as appropriate)		14. Infant and Young Child feeding (0- 23 months)						15. Anthropometry					16. Nutritional Status (Tick as appropriate)		17. Vitamin A supplementation		18. Micronutrient supplementation (Tick if child aged 6-23 months received Micronutrient Powder (MNP))	19. Child received deworming tablet (12 - 59) months (Yes = given, No= Not given)	20***Child referred for CMAM programme from other HFs or from the community (write HF/Comm as appropriate)	21. **Treatment of Severe Acute Malnutrition(SAM)									22. Client Counselled on				23. Referral
									Infant feeding (0 - 5 months)				Complementary feeding (6 -23months)	Stopped B/F (Y/N -indicate age if yes)	Height (cm)	Weight (kg)	MUAC (enter in cm)			(Above the Line)	(Below the Line)	6-11 mths.	12-59 mths.				Eligible for SAM treatment (tick as appropriate)				Outcome of Treatment (tick as appropriate)					Maternal Nutrition	Exclusive Breastfeeding	Complementary Feeding	Water, Sanitation and Hygiene	Support Group
							N	R	Exclusive BF	BF + Water	B/F with other foods	Not B/F	Child eating family foods?(Y/N)				1	2	3								Admitted in HF (OTP)	Transfer in from another OTP/IPC	Referred out (RO) to IPC	Not Eligible	Transfer to another OTP	Recovered	Defaulted	Died	Non recovered					
TOTAL																																								

Type of visit: N = New R = Revisit

KEY: BF = Breast Feeding R = Regular IR = Irregular

EBF=Exclusive Breastfeeding, MN=Maternal Nutrition, CF=Complementary Feeding, WASH=Water Sanitation and Hygiene, SG=Support Groups

IYCF = Infant and Young Child Feeding; Red (1)= SAM, Severe acute Malnutrition; Yellow (2)=MAM, Moderately acute Malnutrition; Green (3)=Normal

OTP = Outpatient Therape IPC = In-Patient Care SC = Stabilization centre

*Vitamin A: Write B=Blue if blue capsule given for child 6-11months OR R=Red if red capsule given for child 12-59months

Source: CRS: Tom Brown Implementation Guide 2020

*Deworming: Write L=Lower dose for children 12-23months OR H=Higher dose for children 24-59months

*RUTF=Ready to Use Therapeutic Food, F75=Formular 75, F100=Formular 100

28. Name of reporting officer __________ 29. Designation __________ 30. Signature __________ 31. Date __________


mano


unicef


ACTION
AGAINST
HUNGER