REPUBLIC OF Sudan

Federal **M**inistry **o**f **H**ealth

General Department of Primary HealthCare

National **N**utrition **P**rogram

Management **and P**revention **of Moderate A**cute **M**alnutrition

Primary **H**ealth **C**are **L**evel (PHC)

Operational Guide for Health Workers
(Providing basic health care)

February 2020

Acronym

ANC	Antenatal Care
FBPM	Food-based Prevention of Moderate Acute Malnutrition
GAM	Global Acute Malnutrition
HH	Household
IYCF	Infant and Young Child Feeding
MAM	Moderate Acute Malnutrition
MCH	Maternal and Child Health
MUAC	Mid-Upper Arm Circumference
NIPP	Nutrition Impact and Positive Practices
NNP	National Nutrition Program
OTP	Out-Patient Therapeutic Program
PD	Positive Deviance
PHC	Primary Health Care
PLW	Pregnant and lactating women
RUTF	Ready -To -Use-Therapeutic Food
RUSF	Ready-To-Use-Supplementray Food
SAM	Severe Acute Malnutrition
SBCC	Social and Behaviour Change Communication
SC	Stabilization Center
SC+	Super cereal plus
TSFP	Targeted Supplementary Food Program
WHZ	Weight for height Z-scores

Contents

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1. Introduction

Acute malnutrition is a major risk factor for child mortality because a child with Moderate Acute Malnutrition (MAM) has 3-4 times more risk of dying compared to a well-nourished child. In addition, the total number of children affected by MAM is much greater and therefore absolute mortality is higher for MAM than Severe Acute Malnutrition (SAM). Prevention and treatment of MAM can therefore reduce the burden of SAM and the associated risks related to mortality, morbidity and overall child development.
Depending on the prevalence of malnutrition in a locality as well as availability of resources, there are several options to manage moderate acute malnutrition. These include:

- Targeted supplementary feeding programme (TSFP)
- Food-based prevention of MAM (FBPM)
- Non-food based prevention of MAM

This field guide provides a step-by step approach to address moderate acute malnutrition through these options. The guide is intended to provide quick reference and guidance to primary health care (PHC) and cooperating partners' staff at field level on how to implement programmes for management of moderate acute malnutrition. The guide is an extract from the National guidelines for management of moderate acute malnutrition. For effective use of this field guide, the users must be trained in the management of moderate acute malnutrition. The user must also be aware that this field guide will be updated regularly based on new findings from research and international standards.

As this guide focuses on implementation of activities for prevention of MAM and management of individual moderately malnourished cases, it is not detailed on program design and therefore the user should refer to National guidelines for management of MAM or other programme guidance for details on what option to set up for management of moderate acute malnutrition, where and when to close.

1.Prepartion:

Primary health care providers should work on planning to mange moderate acute malnutrition and provide necessary equipment and supplies.

Preapartion for management of MAM include below activities:

- Mobilization of community volunteers for screening of under five children and to organize people who come to seek treatment
- Training of volunteers and integrated cardres to detect malnourished children and equip them with MUAC tapes
- Mobilize community people to support the volunteers I.e. health promotors, vaccinators, midewives, mother of SAM children attending the program, mother support group or any available voulnteers working in other sectors. The community leaders or any committee should do selection of volunteers.
- Set one day/days in the week for services provision in the health facility
- Make sure below list is available in the center as minimum level;

Item	MinimumStock of one for 30 children
RUSF	3 cartons/week or 6 cartons /month
Albindazole 100mg	1 tin
Iron & folic acid	90 tabs
Vit A	30 capsules (red)
Measles Vaccination	-
Cups	30
Drinking water	1 Gerican
Saulter scale (25kg) + plastic basin or weighing trouser	1 scale
MUAC tape	2
Thermometer	1
Washing Soap	30
TSFP follow up card for children	30
PLW follow-up card	30
Registration book	1
Stor Card/supply book	1
Sugar	500g
Water container	1

Assessment and Classification of a Child with Acute Malnutrition

Assess	Classify	Action to take

• If age up to six months and
  ○ Visible severe wasting or
  ○ Pitting Oedema of both feet
• If age six to 59 monyhd and
  ○ MUAC <11.5 cm or oedema of both feet and one of the following
  ▪ Danger sign or
  ▪ Fail appetite test or
  ▪ pneumonia/severe pneumonia or
  ▪ severe dehydration
  ▪ blood in the stool or
  ▪ fever/ hypothermia
  ▪ severe anemia
	SAM with complications	Refer urgently to hospital (or health center with Stabilization Center) for an in-patient management

• If age six months or above and
  ○ MUAC <11.5 cm or bilateral pitting oedema of both feet
  ○ None of the complications listed above
  ○ And pass appetite test
	SAM without complications	Manage in OTP as described in this document

• If MUAC 11.5 cm to <12.5 cm and no oedema of both feet	**Moderate Acute Malnutrition**	Refer to supplementary feeding program if available Counsel on child feeding using mother card and refer to growth monitoring and promotion
• If MUAC ≥ 12.5 cm and no oedema of both feet	**No acute malnutrition**	Congratulate the mother and encourage her to continue growth monitoring and promotion

2. Targeted Supplementary Feeding Programme

Targeted Supplementary feeding programme provides treatment for children aged 6-59 months with moderate acute malnutrition (MAM) and acutely malnourished pregnant and lactating women (PLW). TSFP also includes children discharged from OTP. Active case finding of acutely malnourished children and PLW should take place at community level. Community health workers or community mobilizers should carry out active case finding, identify and refer acutely malnourished children to the TSFP or OTP centre as required.

2.1 Screening and Enrolment procedures into TSFP

STEP 1: Anthropometric assessment (MUAC, weight, height, oedema)

- Do the anthropometric measurements and check for bilateral pitting oedema. Give priority to severely ill children and give sugar water for all children in waiting area.
- Reconfirm the age of the child using birth certificate, vaccination card or local calendar of event
- Measure MUAC
- Assess for bilateral pitting oedema. If there is bilateral oedema refer to OTP (see below Oedema assessment)
- Mesure weight and height for children only
- Record the weight for height zscore using the standard schedule
- If the child meets the criteria for OTP (severely acutely malnourished) refer to the nearest OTP.
- Measure MUAC for pregnant women and lactating mothers
- If the child or PLW meets the criteria for TSFP continue with Step 2

Category	Admission
Children 6-59 months	MUAC ≥11.5 cm and < 12.5 cm AND No Oedema Weight/height <-3SD
Children 6-59 months	All children discharged from OTP
Pregnant women	2nd or 3rd trimester of pregnancy and MUAC < 21 cm
Lactating women	Infant < 6 months old and MUAC < 21 cm

- ✓ If the child or PLW meets the criteria for food-based prevention of MAM see admission procedure in next chapter
- ✓ Enroll the child/caregiver or PLW for Social and Behaviour Change Communication (SBCC) activities

STEP 2: Enrolment in TSFP

Decide if the child has moderate acute malnutrition or not?

- Breast fed child less than 6 month …… refer the child to inpatient care

Without any check for medical complications or appetite test

- Children from 6-59 months classified moderately malnourished if his/her MUAC between 11.5 – 12.5 cm with no Oedema, Weight for height between -2 & -3 z-score
- Pregnant and lactating women classified acutely malnourished if their MUAC less than 21.0 cm

Procedure:

- Explain to the caretaker why their child needs to be enrolled in the programme. Explain the purpose of the treatment/programme to the PLW.
- Register the child or PLW in a registration book.
- Complete the admission section of TSFP ration card and assign a number.

STEP 3: Decide whether the treatment will be at the TSFP

- Classfy child situation base on age and anthropometry measurement

- Decide if the child need targeted supplementary feeding
- Explain to the caretaker why their child needs to be enrolled in the programme
- Explain the purpose of the treatment/programme to the PLW.

Management of moderate acute malnutrition in TSFP:

STEP4: Register the child in registration book, fill-in the follow-up card of moderate acute malnutrition

STEP 5: Explain to caretaker treatment in TSFP as below;

- Nutritional treatment in TSFP is given through a take home supplementary ration of RUSF. This is intended to supplement the diet taken at home, providing sufficient energy and nutrient density to allow for rehabilitation.
- The daily ration size is 100 g per person per day (30 sachets of RUSF per month)
- Where TSFP sessions are held every two weeks, a ration sufficient for 2 weeks is distributed at each visit (equivalent to 15 sachets of RUSF).
- Ensure the TSFP card is completed (the mother/caretaker or PLW takes the card home and brings it back on the next visit).

Provide caretaker with following messages;

- Caretaker to use water and soap toclean his hands before feeding
- Ready –to use supplementary food (RUSF) is ready meal for children suffer from moderate acute malnutrition and not to be shared with other ciblings or children
- Children exclusively breast fed, should continue breast feeding before having RUSF
- Give RUSF prior to any other food
- Give adequate clean drinking water while the child eating RUSF

Note: make sure to fill TSFP admission/follow-up card

Routine medication:

- Vitamin A is given to all children on admission (unless they have received vitamin A in the last one month).
- Children referred from OTP, Stablization Centre or other health facility where Vitamin A has already been given should not be given vitamin A.
- Children showing clinical signs of Vitamin A deficiency should be referred to the nearest health facility for treatment according to WHO guidelines.
- Vitamin A is NOT given to pregnant women. Lactating women receive Vitamin A post-partum (6 weeks after delivery) only.
- Mebendazole/Albendazole is given to all children aged 12-59 months on admission.
- Iron is given to children on admission if they show signs of anaemia. If there is severe anaemia, refer to inpatient care.
- Iron/folate is given to all pregnant and lactating women on admission.
- Measles vaccine is given to all unvaccinated children above 9 months of age.
- Record the medications given in the registration book.

Name of Product	When	Age	Prescription	Dose
Vitamin A At admission	**Vitamin A** at admission	6 months to 11	100000IU	Single dose on admission
		12 to 59 months	200000IU	Single dose every 4 to 6
Abendazole*	Admission	<12 months	Do not give	
		12 -59 months	400mgs	One tab on admission
Iron /folate at	Admission	6 to 23 months (with low birth weight)	12.5mg iron/50µg Folic Acid	Daily dose for one month
		24 to 59months	20- 30mg	Daily dose for one month

		6 to 11 years	30- 60mg	Daily dose for one month
		Adolescents and adults	60mg	Daily dose for one month
Measles vaccination	At admission	≥9 months Once	-	***Once***
Vitamin A	Within first 8 weeks	Lactating	200000IU	Single dose on admission
Albendazole	At admission	Second trimester	400mg Albendazole	Single dose

Step6: Fix dates for follow-up (every 2 weeks)

3.Fllow-up:

Childen with moderate acute malnutrition need to have better health services/care in TSFP for several visits. Health care provider has to assign day /days in week for TSFP follow-up. Home vists are needed by health care provider to all childen enrolled in the program. In each visit ask caretaker about;

Step 1: Ask about

- Diarrhoea, vomiting, fever or any other new sickness or problem
- Ask if the MAM child finish his RUSF ration appropriately

Step 2: Evaluate the following

- Evalute /assess complications
- Weight, Height, MUAC, Oedema

Step 3: Decide the action base on the evaluation (as mentioned above)

Refer the child to SC if they're any of below;

- Bilateral Pitting Oedema (+++)
- Bilateral Pitting Oedema (++ or +)
- Wasting (MUAC less than 11.5cm , WFH z-score less than -3 standard deviation with other medical complications

Note: If the child is under TSFP follow-up and developed complication must refer to the pediatric general work

OR refer the child to OTP if there is;

- Nutritional Oedema (++ or +)
- Weight loss (MUAC deteroarated to less than 11.5 cm or WFH Z-score to less than -3 standard deviation

If there is no need for above referral provide supplementary feeding and follow-up;

- Give routine medication
- Bi-weekly ration from RUSF
- Fix date /day for follow-up
- Fill-in TSFP follow-up card

If the child absent in any visit;

- ask the community volunteer, midewife, any vommunty person to conduct home visit for the absent child and to provide feed back to health worker

STEP 4: TSFP follow-up visits

- Children and mothers should attend the TSFP every two weeks or every month for monitoring and to receive their supplementary ration.
- Each visit the MUAC and weight is measured, the oedema checked. Height is taken every 4 weeks.
- Children with apparent medical complications should be referred to in-patient care (or the nearest health facility).

- If the child has not gained weight after two consecutive monthly visits or after three 2-weekly visits or if the child is losing weight at any visit refer him/her for a medical check-up at the nearest in-patient care or health facility.
- Children who are admitted to TSFP and then deteriorate and meet entry criteria for OTP should be transferred to OTP.

STEP 5: Behaviour Change intervention

Health and nutrition messages provided should include:

- Clear advice must be given to mothers/caretakers and PLW on how to use the ration and feeding the child.
- Ensure the mother/caregiver understands that the ration is intended for the malnourished individual and is not to be shared.
- Explain how to store the ration safely.
- Make sure the mother / caregiver knows when to return to the TSFP.

- Register the child and caregiver or the PLW to participate in SBCC activities at the centre on the day of visit and assign to a community workers for follow up activities at home.

4. Discharge criteria from TSFP

Discharge child from TSFP if he/she met below criteria;

1. Children admitted based on MUAC they should reach >=12.5 cm, weight for height greater than -2 z-score
2. Refer cured children from TSFP to nutrition positive practice program
3. If child failed to reach discharge criteria after 3 months in treatment or 3 months for children transferred from OTP, the child classified non-respondent and should refer to hospital for further investigation.
   NB: need for referral should be figured out during the weekly follow-up visits and no need to wait until the third month.

Discharge Procedures:

Discharge child or PLW based on the following criteria:

Category	Discharge[1]
Children 6-59 months	MUAC >12.5 cm for two consecutive visits Weight/height > -2 zscore for two consecutive visits After three months in the program if the child is not responding discharge as non-respondent. For OTP Discharge ,after two months in TSFP

[1]Other categories of discharge include: Defaulted - Absent for 2 consecutive visits if TSFP is monthly or 3 consecutive visits if TSFP is every 2 weeks; Non-response - Child or PLW has not reached discharge criteria within 3 months; Died – Died while under treatment in TSFP

Category	Discharge[1]
Pregnant women	Delivered and MUAC >21 cm for two consecutive visits
Lactating women	Child is > 6 months and MUAC >21 cm for two consecutive visits

Cured: Child has recovered from MAM and discharged to the food based prevention program

Death: child has died during the follow-up period in the program and it has to confirm by conducting home visit or checking with recognized person**.**

Non-Respondent: child did not meet the discharge criteria, after 3 months in the program for children who admitted drictely to TSFP and 2 months for children who refered from OTP. Child must referred to hospital for further investigation

Referral: Child who develops medical complication should be send to the pediatric general ward in the hospital.

Children who did not gain weight after 2 or 3 consuective visits must go to the hospital for further investigation. Children who refered to another TSFP because of travel or any reason.

Procedure following discharge:

- For all children 6 – 59 months:
    - Refer to GMP, NIPP or MNP if available
    - Check vaccination status and make sure that child vaccinated for age.
- For children 6 – 23 months:
    - Refer to food-based prevention of MAM (FBPM) if available.

Note: make sure all discharged children are registered in the registration book

3. Food-based Prevention of MAM (FBPM)

FBPM is a community led programme that promotes optimal feeding and hygiene practices for young children and ensures increased coverage and effectiveness of MAM preventive services through early detection and referral of malnourished children and pregnant and lactating women (PLW). FBPM is designed to prevent the child not being MAM or SAM case.

The decision to implement a blanket or targeted FBPM is made based on the prevalence of malnutrition. In localities with global acute malnutrition (GAM) more than 20%, a blanket approach is implemented whereas localities with GAM below 20%, a targeted approach are implemented.

3.1 Enrolment procedures into FBPM

STEP 1: Anthropometric assessment (MUAC, oedema)

- Measure MUAC
- Measure length/height
- Measure weight
- Assess for bilateral pitting oedema. If there is bilateral oedema refer to OTP
- If the child meets the criteria for OTP (severely acutely malnourished) refer to the nearest OTP.
- If the child or PLW meets the criteria for TSFP refer for treatment (see previous section)
- If the child or PLW meets the criteria for FBPM continue with step 3
- Enroll the child/caregiver or PLW for SBCC activities

Locations where GAM>20% => Blanket SFP

Category	Admission
Children 6-23 months	Length 65 cm to 87 cm in case birth date is not known.
Pregnant women	2nd or 3rd trimester of pregnancy verified by health cards or with visible pregnancy
Lactating women	Infant < 6 months old verified by health card or child's birth certificate.

Locations where GAM<20% => target at risk

Category	Admission
Children 6-23 months (Length 65-87cm)	MUAC ≥12.5 cm and < 13.5 cm
Pregnant women (2nd or 3rd trimester)	MUAC ≥21 cm and < 23 cm
Lactating women (infant <6 month)	MUAC ≥21 cm and < 23 cm

STEP 2: Enrolment for Food-based MAM prevention

- Explain to the caretaker why their child needs to be enrolled in the programme. Explain the purpose of the food supplement for PLW.
- Register the child or PLW in a registration book.
- Complete the admission section of beneficiary ration card and assign a number.

STEP 3: Give supplementary ration

- A supplementary ration composed of fortified blended flour enriched with micronutrients (such as SC+ or SC) is given as a take home ration.

This is intended to supplement the diet taken at home, providing sufficient energy and nutrient density to prevent acute malnutrition.

- The type of nutrition supplies and the daily ration size will be identified and calculated based on the needs.
- FBPM sessions are held on monthly basis, accordingly ration for one month is distributed at each visit.
- Ensure the FBPM card is completed (the mother/caretaker or PLW takes the card home and brings it back on the next visit).

STEP 4: Give key messages

- Clear advice must be given to mothers/caretakers and PLW on how to prepare the ration and feed the child.
- Where possible, preparation and cooking demonstrations should be given at the FBPM site or in the community.
- Ensure the mother/caregiver understands that the ration is intended for the malnourished individual and is not to be shared.
- Explain how to store the ration safely.
- Make sure the mother/caregiver knows when to return to the FBPM.
- Schedule the date for the next follow up visit and communicate that clearly to the PLW or caregiver.

STEP 5: FBPM follow-up visits

- Children and mothers should attend the FBPM every month or every two weeks for monitoring and to receive their supplementary ration.
- If the child has not gained weight after two consecutive monthly visits or after three two weekly visits or if the child is losing weight at any visit refer him/her for a medical check-up at the nearest in-patient care or health facility.
- Children or PLW who are admitted to FBPM and then deteriorate and meet entry criteria for TSFP or OTP should be transferred.

STEP 6: Behaviour Change intervention

Health and nutrition messages provided should include:

- Register the child and its caregiver or the PLW to participate in SBCC activities at the centre on the day of visit and assign to a community workers for follow up activities at home.

- Practical preparation and cooking demonstrations should be given at the FBPM site/in the community.
- The programme should have strong linkages to existing and/or planned nutrition programming, e.g. referral mechanism to TSFP, OTP or SC, ANC services, etc.

STEP 7: Community Clubs

- Established in consultation with the SMoH and the community
- Each community club should serve about 1500-2000 caretakers and their children
- The clubs can operate 2 or more hours on designated day of the week, depending on the CMs and the caretakers.
- Activities in the club include;
    - Promotion of optimal infant and young child feeding (IYCF), safe water, hygiene and sanitation measures, appropriate preparation and use of the supplementary ration.
    - Practical preparation and cooking demonstrations should be given at the community clubs.
    - Trials of local recipes
    - Screening of children for referral to TSFP, OTP or SC
    - The clubs should also be equipped with NFIs (anthropometric equipment, cooking utensils, mats, toys, etc.).

3.2 Discharge criteria from FBPM

Discharge child or PLW based on the following criteria:

Locations where GAM>20% => Blanket SFP

Category	Discharge
Children 6-23 months	Child reaches 24 months or with a height > 87 cm in case birth date is not known Child develops MAM or SAM. The child should be immediately referred to OTP/SC or TSFP as appropriate if services are available
Pregnant women	Delivered (She will continue as lactating mother until 6 months post-partum)
Lactating women	Child is > 6 months

Locations where GAM<20% => target at risk

Category	Discharge
Children 6-23 months (Height 65-87 cm)	MUAC >13.5 cm for two consecutive visits Child develops MAM or SAM (refer for treatment) After six months in the program if the child is not responding
Pregnant women (2^{nd} or 3^{rd} trimester)	MUAC > 23 cm for two consecutive visits Delivered Develops MAM (refer for treatment)
Lactating women (infant <6 month)	MUAC > 23 cm for two consecutive visits Child is > 6 months or Develops MAM (refer for treatment)

4. Non-food based Prevention of MAM

There is growing support for non-food based approaches to prevention of moderate acute malnutrition in Sudan with links to existing treatment programmes. One such approach is the Nutrition Impact and Positive Practice (NIPP). NIPP can be implemented in settings where there is no FBPM. It is expected that all localities will have growth monitoring and promotion program (GMP). By default, the non-food based prevention approach should be part of GMP. Below are two options of non-food based prevention are described. The first one is where there is GMP only and the second one is where there is NIPP in addition to GMP.

4.1 Non-food based prevention of MAM where there is GMP only

Note that lack of food is not the only cause of malnutrition. Therefore GMP sessions can be used to closely examine all factors related to nutritional status of children so that families are empowered to address them. Following monthly GMP session, it is important to have individual as well as group counseling sessions to determine why some children are not growing well while others are. For example, some children may not be the mother lacks knowledge on appropriate caring and feeding support while the food is available at home. It may also be that the child is having frequent diarrhea episodes due to poor hygiene practices.

Step 1: set the date for monthly GMP session in consultation with mothers of young children:

The date of the GMP should be convenient both for the facilitator as well as the mothers. In some areas mothers may prefer market days, and in others they may prefer other days. Explain clearly the importance of GMP as it is the first opportunity to identify the child's growth and take corrective action before s/he shows sign of malnutrition.

Step 2: take accurate anthropometric measurements:

Make sure your equipment are appropriately calibrated and functioning well. Ask the mother to assist you while taking the measurements. Note that sometimes the child may lean on the mother and that may affect the measurement. Be very friendly with the mother. Note that if the child is stressed, or if the mother feels that she is not treated well, the mother may not come for the next GMP session.

Step 3: read the growth monitoring chart, and help the mother to read the chart:

Teach the mother how to read the growth monitoring chart. This may require patience and make sure that you appreciate the mother and encourage her.

Step 4: discuss with the mother on the growth status of the child:

Provide advice on appropriate actions based on the child's status. Following your support to read the GMP chart, discuss with the mother on the growth trends over the past months in comparison with the standard curves. Encourage the mother to understand and make comparisons with the chart. Use the opportunity to teach the mother on signs of malnutrition, and the need to seek medical advice when they appear. Key IYCF messages must be provided based on the age of the child.

4.2 Non-food based prevention of MAM where there is NIPP in addition to GMP

What are NIPP circles?
Circles target family of moderately malnourished children aim to help families address problems of MN by enabling men and women to share their knowledge and skills on how to improve nutrition for family members, using locally available resources.

NIPP Objectives:

1. Improve the nutritional status of targeted children with confirmed MN.
2. Improve families understanding of why MN occurs in high risk individuals and what can be done to prevent future episodes (by changing community norms in care practices, feeding and health-seeking behaviours for

infants, children, pregnant or lactating women (PLW) &/or the chronically ill (CI).

3. To improve household (HH) diet diversity (and thus nutritional repleteness) of targeted HHs.
4. To achieve sustainable improvements in HH care and feeding practices through promotion of positive behaviour change (with a focus on maternal & infant, young child nutrition).These will include sanitation, hygiene, health seeking, IYCF, maternal nutrition and CI feeding practices.

The circles provide participants with knowledge and skills through 3 main components:
1) Behaviour Change Communication and Counselling - for improved awareness & practice
2) Micro-gardening - for improved food/nutrition security and
3) Cooking Demonstrations - for improved care practices.

Where the NIPP circles Are's implemented:

- High level of Global Acute Malnutrition rate among children <5years and pregnant and lactated women and community participation in problem analysis and solution.
- Availability of affordable local foods
- Social acceptance of voluntary work free of charge by enabling men and women to share their knowledge and skills on how to improve the nutrition of family members
- Accept community leaders NIPP circles.
- The existing of the relevant agencies (health centres - environment Health program – food security program, social associations,..).

Target and admission criteria (more detail in NIPP guideline

Target for admission Criteria to Female Circles	Discharge Criteria for Female Circles
All children recently discharged cured from OTP	MUAC ≥12.5 cm at the end of the NIPP Circle cycle andCarers pass the post-test assessment (includes theory ≥70% and post test result and practical

	elements)
Families with children with moderate MN:Children 6-59mths with MUAC 11.5cm <12.5cm	MUAC ≥12.5; Carers pass post-test assessment (includes theory ≥ 70%and practical elements)
Malnourished pregnant or lactating mothers (MUAC <23cm)	MUAC >23cm for PLW admitted on MUAC and They pass post-test assessment (includes ≥70% post-test result and practical elements)
Families with twins or multiple births, families where the primary carers show a keenness to participate to improve their public health nutrition education (PHNE) knowledge	Carers pass the pass post-test assessment (includes theory ≥70% post-test result and practical elements)

Female and Male NIPP Circles

The 3 component (mentioned above) are covered in one sessions 40 minute for each .the total no longer than 3hrs/day and duration from 2-12weeks,(depending on the context) ,Register a circle made up of 15 female mother of malnourished children and anther one for fathers, brothers and/or other family member ,all the participants should be register registration book for follow up .

Male Circles should cover the same major topics the women will focus on, but using tailored information communication tools, the duration less than Female circles due to the cooking demonstrations will need only to be covered in theory.

How NIPP circles are working:

1. **Behaviour Change Communication & Counselling.**

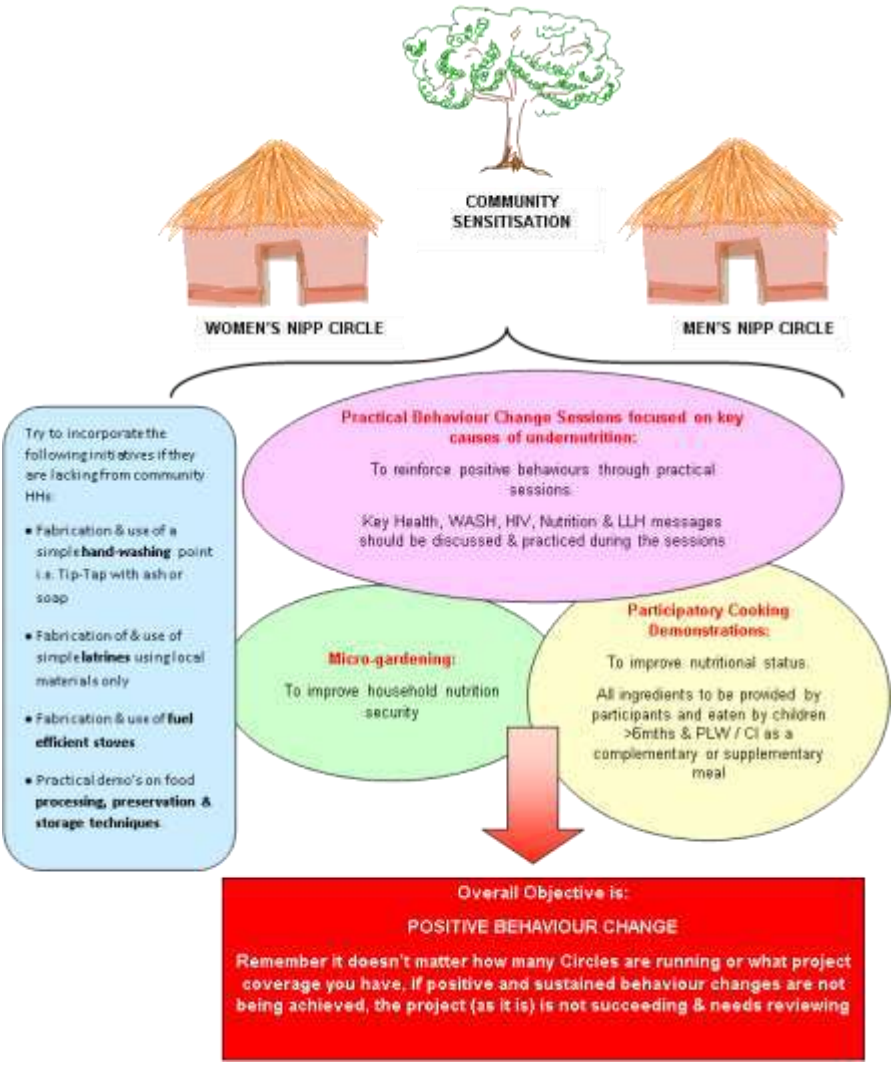
Session should focus on a 'core' topic agreed by participants for 40 mins until the topic is well understood by all participants' .In addition to the 'core' topics all NIPP Circles must include hand-washing points, latrines and fuel efficient stove, storage practices.

2. Micro-gardening and food security:
Practical learning around construction and maintenance of a micro-garden using farming methods, explain how can use production at household level and training participants on how can produce seeds.

3. Cooking demonstrations
Encourage mothers to prepare a high energy, micronutrient rich complimentary food, should be repeated twice a weekly, can use the means of education, such as pictures of vegetables (flash card) drawing must be given a meal after preparation for children and pregnant women should be encouraged mothers replicated at the level household to provide the meal components. And training participants in food processing and improved stove

Figure 1: Food flash cards used NIPP circles for BCC and Counselling

Step2: Key Components of NIPP Circle Session

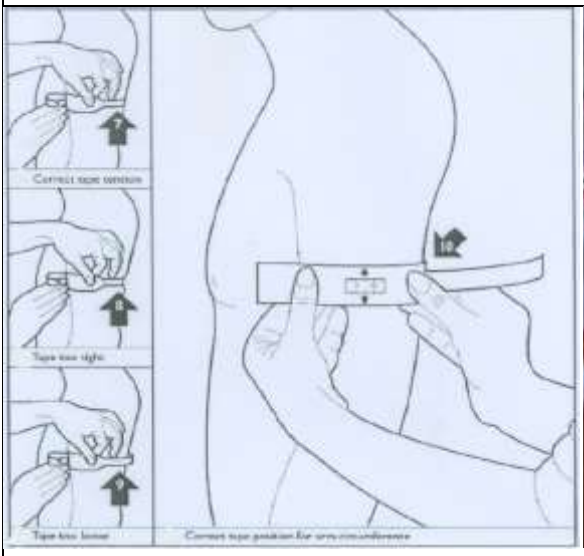


5. Annexes

5.1: Techniques of Anthropometric Measurement

Annex 5.1.1: Steps to Measure MUAC

1. Ask the mother to remove clothing that may cover the child's left arm. If possible, the child should stand erect and sideways to the measurer.
2. Estimate the midpoint of the left upper arm (Refer the pictures below)
3. 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 (arrow 7).
4. Inspect the tension of the tape on the child's arm. Make sure the tape has the proper tension (arrow 7) and is not too tight or too loose (arrows 8 and 9). Repeat any step as necessary. When the tape is in the correct position on the arm with correct tension, read and call out the measurement to the nearest 0.1cm (arrow 10).
5. Immediately record the measurement.



Annex 5.1.2: Steps to measure weight

1. Explain the procedure to the child's mother or caregiver before starting.
2. Install a 25kg hanging spring scale (graduated by 100g). If mobile weighing is needed, the scale can be hooked on a tree or a stick held by two people.
3. Attach the washing basin / pants and recalibrate to zero.
4. Remove the child's clothes and place him or her into the basin.
5. Ensure nothing is touching the child and the basin/pant.
6. Read the scale at eye level (if the child is moving about and the needle does not stabilize, estimate weight by using the value situated at the midpoint of the range of oscillations).
7. When the child is steady record the measurement to the nearest 100gm. and record.
8. Calibrate the scale with a material with known weight every week

Annex 5.1.3: Measuering HEIGHT

To increase accuracy and precision, two people are always needed to measure length and height.

Children 2 years or older are measured standing up, while those under 2 are measured lying down. If the age is difficult to assess, children with a height of 87 cm tall or above are measured standing and those below 87 cm are measured lying down. If children age 2 or older or with a height of 87 cm or above are measured lying down, 0.7 cm is subtracted from the measurement (WHO standards).

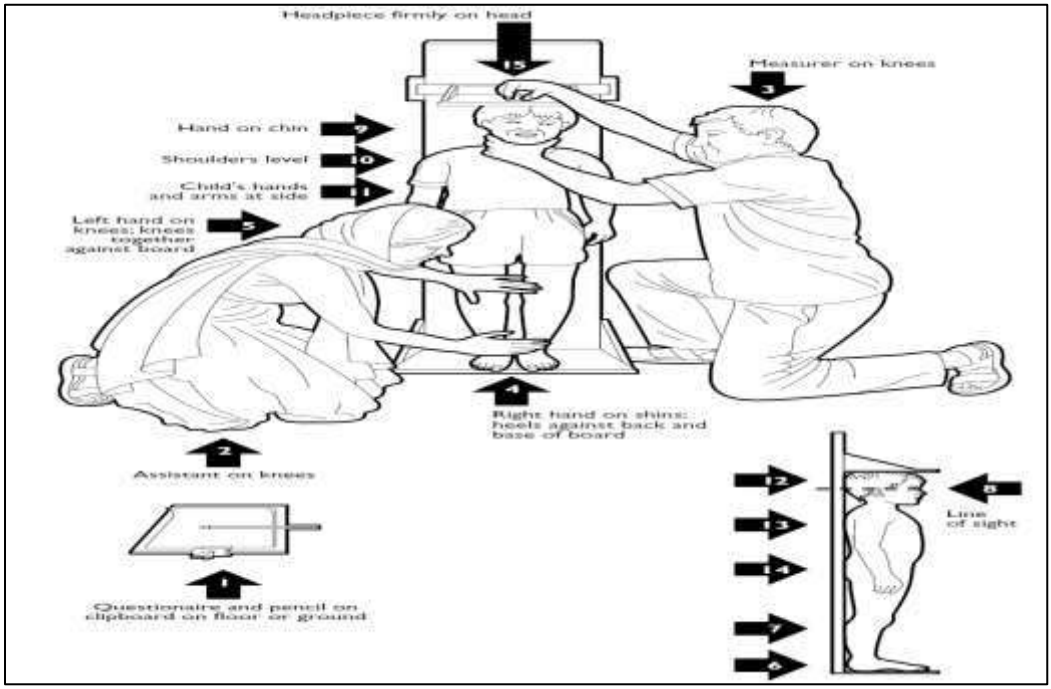
For Children 2 Years or Older or with a Height of 87 cm or above

Steps for and considerations in measuring HEIGHT (standing up):

- The child's shoes are removed.
- The child is placed on the height board, standing upright in the middle of the board with arms at his or her sides.

- The assistant firmly presses the child's ankles and knees against the board while the measurer holds the child's head straight.
- The child's heels, back legs, buttocks, shoulders and head should be touching the back of the board, and his or her feet should be close together.
- his or her back of the board.
- The child's head should be straight and looking ahead. A line between his or her ears and eyes should be parallel to the floor.
- The measurement is always made with two people: one assistant is holding the child's legs and feet, and the measurerthe child's head. The person holding the head reads the measurement out loud to the nearest 0.1 cm. The assistant repeats it for verification and records it on the anthropometric form or treatment card.

Steps to measure height for children 24 to 59 months

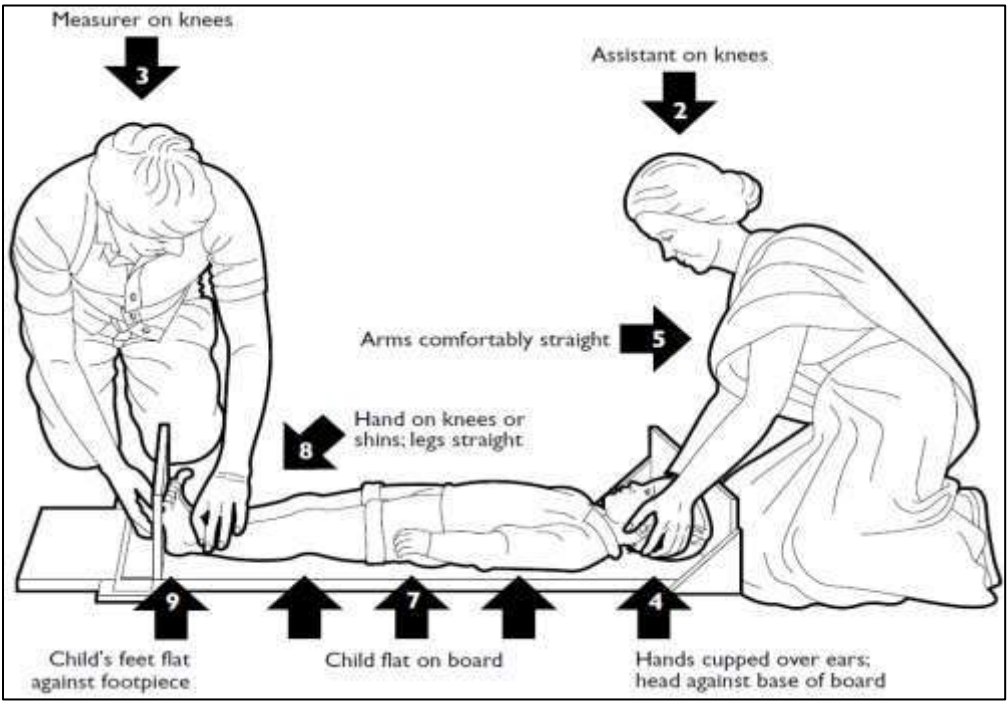


Steps to measure length for children 6 to 23 months

For Children under 2 or with a Height below 87 cm

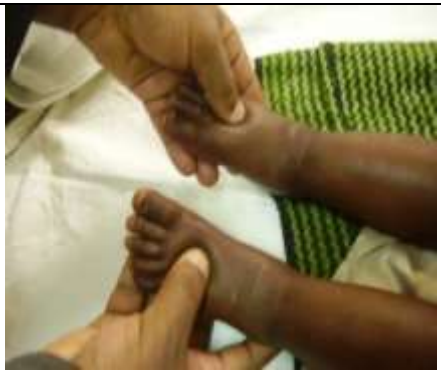
Steps for and considerations in measuring LENGTH (Lying Down):

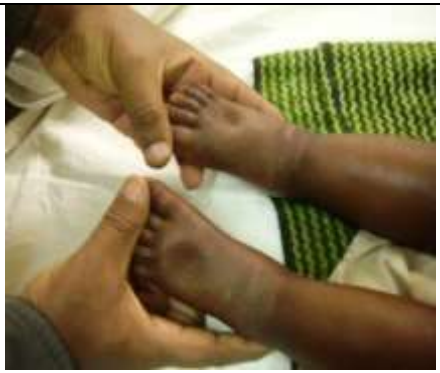
- The height board is placed on the ground.
- The child's shoes are removed.
- The child is gently placed on he or she back on the middle of the board, facing straight up with arms at his or her sides and feet at right angles.
- The assistant holds the sides of the child's head and positions it on the board.
- While holding down the child's ankles or knees, the measurer moves the sliding board up against the bottom of the child's feet and takes the measurement to the nearest 0.1 cm.
  The measurer announces the measurement, and the assistant repeats it for verification and records it on the anthropometric form or treatment card.


Measurer on knees
3
Assistant on knees
2
Arms comfortably straight
5
Hand on knees or
shins; legs straight
8
9
7
4
Child's feet flat
against footpiece
Child flat on board
Hands cupped over ears;
head against base of board

Annex 5.1.4: Checking for Oedema

1. Using your thumb gently apply pressure to BOTH feet for at least three seconds
2. If a shallow print persists on both feet, then the child has oedema





Oedema results from accumulation fluid in the body. The oedema caused by malnutrition is bilateral and pitting. After admission to the OTP, if the child is not responding, please refer for inpatient care as oedema can also be caused by other conditions like kidney or heart conditions. Oedema is graded to three grades: One + if only on feet, ++ if it involves feet and pre-tibia, +++ if it is generalized.

Annex 5.1.5 Weight for Height Table

Weight-for-Length Look-Up Table, Children 6–23 Months, WHO 2006 Child Growth Standards

Boys' Weight (kg)				Length[a] (cm)	Girls' Weight (kg)			
−3 z-score	−2 z-score	−1 z-score	Median		Median	−1 z-score	−2 z-score	−3 z-score
1.9	2.0	2.2	2.4	45	2.5	2.3	2.1	1.9
2.0	2.2	2.4	2.6	46	2.6	2.4	2.2	2.0
2.1	2.3	2.5	2.8	47	2.8	2.6	2.4	2.2
2.3	2.5	2.7	2.9	48	3.0	2.7	2.5	2.3
2.4	2.6	2.9	3.1	49	3.2	2.9	2.6	2.4
2.6	2.8	3.0	3.3	50	3.4	3.1	2.8	2.6
2.7	3.0	3.2	3.5	51	3.6	3.3	3.0	2.8
2.9	3.2	3.5	3.8	52	3.8	3.5	3.2	2.9
3.1	3.4	3.7	4.0	53	4.0	3.7	3.4	3.1
3.3	3.6	3.9	4.3	54	4.3	3.9	3.6	3.3
3.6	3.8	4.2	4.5	55	4.5	4.2	3.8	3.5
3.8	4.1	4.4	4.8	56	4.8	4.4	4.0	3.7
4.0	4.3	4.7	5.1	57	5.1	4.6	4.3	3.9
4.3	4.6	5.0	5.4	58	5.4	4.9	4.5	4.1
4.5	4.8	5.3	5.7	59	5.6	5.1	4.7	4.3
4.7	5.1	5.5	6.0	60	5.9	5.4	4.9	4.5
4.9	5.3	5.8	6.3	61	6.1	5.6	5.1	4.7
5.1	5.6	6.0	6.5	62	6.4	5.8	5.3	4.9
5.3	5.8	6.2	6.8	63	6.6	6.0	5.5	5.1
5.5	6.0	6.5	7.0	64	6.9	6.3	5.7	5.3
5.7	6.2	6.7	7.3	65	7.1	6.5	5.9	5.5
5.9	6.4	6.9	7.5	66	7.3	6.7	6.1	5.6
6.1	6.6	7.1	7.7	67	7.5	6.9	6.3	5.8
6.3	6.8	7.3	8.0	68	7.7	7.1	6.5	6.0
6.5	7.0	7.6	8.2	69	8.0	7.3	6.7	6.1
6.6	7.2	7.8	8.4	70	8.2	7.5	6.9	6.3
6.8	7.4	8.0	8.6	71	8.4	7.7	7.0	6.5
7.0	7.6	8.2	8.9	72	8.6	7.8	7.2	6.6
7.2	7.7	8.4	9.1	73	8.8	8.0	7.4	6.8
7.3	7.9	8.6	9.3	74	9.0	8.2	7.5	6.9
7.5	8.1	8.8	9.5	75	9.1	8.4	7.7	7.1
7.6	8.3	8.9	9.7	76	9.3	8.5	7.8	7.2
7.8	8.4	9.1	9.9	77	9.5	8.7	8.0	7.4
7.9	8.6	9.3	10.1	78	9.7	8.9	8.2	7.5
8.1	8.7	9.5	10.3	79	9.9	9.1	8.3	7.7
8.2	8.9	9.6	10.4	80	10.1	9.2	8.5	7.8
8.4	9.1	9.8	10.6	81	10.3	9.4	8.7	8.0
8.5	9.2	10.0	10.8	82	10.5	9.6	8.8	8.1
8.7	9.4	10.2	11.0	83	10.7	9.8	9.0	8.3
8.9	9.6	10.4	11.3	84	11.0	10.1	9.2	8.5
9.1	9.8	10.6	11.5	85	11.2	10.3	9.4	8.7
9.3	10.0	10.8	11.7	86	11.5	10.5	9.7	8.9
9.5	10.2	11.1	12.0	87	11.7	10.7	9.9	9.1
9.7	10.5	11.3	12.2	88	12.0	11.0	10.1	9.3
9.9	10.7	11.5	12.5	89	12.2	11.2	10.3	9.5
10.1	10.9	11.8	12.7	90	12.5	11.4	10.5	9.7
10.3	11.1	12.0	13.0	91	12.7	11.7	10.7	9.9
10.5	11.3	12.2	13.2	92	13.0	11.9	10.9	10.1
10.7	11.5	12.4	13.4	93	13.2	12.1	11.1	10.2
10.8	11.7	12.6	13.7	94	13.5	12.3	11.3	10.4
11.0	11.9	12.8	13.9	95	13.7	12.6	11.5	10.6
11.2	12.1	13.1	14.1	96	14.0	12.8	11.7	10.8
11.4	12.3	13.3	14.4	97	14.2	13.0	12.0	11.0
11.6	12.5	13.5	14.6	98	14.5	13.3	12.2	11.2
11.8	12.7	13.7	14.9	99	14.8	13.5	12.4	11.4
12.0	12.9	14.0	15.2	100	15.0	13.7	12.6	11.6

Weight-for-Height Look-Up Table, Children 24–59 Months, WHO 2006 Child Growth Standards

Boys' Weight (kg)				Height[a] (cm)	Girls' Weight (kg)			
−3 z-score	−2 z-score	−1 z-score	Median		Median	−1 z-score	−2 z-score	−3 z-score
5.9	6.3	6.9	7.4	65	7.2	6.6	6.1	5.6
6.1	6.5	7.1	7.7	66	7.5	6.8	6.3	5.8
6.2	6.7	7.3	7.9	67	7.7	7.0	6.4	5.9
6.4	6.9	7.5	8.1	68	7.9	7.2	6.6	6.1
6.6	7.1	7.7	8.4	69	8.1	7.4	6.8	6.3
6.8	7.3	7.9	8.6	70	8.3	7.6	7.0	6.4
6.9	7.5	8.1	8.8	71	8.5	7.8	7.1	6.6
7.1	7.7	8.3	9.0	72	8.7	8.0	7.3	6.7
7.3	7.9	8.5	9.2	73	8.9	8.1	7.5	6.9
7.4	8.0	8.7	9.4	74	9.1	8.3	7.6	7.0
7.6	8.2	8.9	9.6	75	9.3	8.5	7.8	7.2
7.7	8.4	9.1	9.8	76	9.5	8.7	8.0	7.3
7.9	8.5	9.2	10.0	77	9.6	8.8	8.1	7.5
8.0	8.7	9.4	10.2	78	9.8	9.0	8.3	7.6
8.2	8.8	9.6	10.4	79	10.0	9.2	8.4	7.8
8.3	9.0	9.7	10.6	80	10.2	9.4	8.6	7.9
8.5	9.2	9.9	10.8	81	10.4	9.6	8.8	8.1
8.7	9.3	10.1	11.0	82	10.7	9.8	9.0	8.3
8.8	9.5	10.3	11.2	83	10.9	10.0	9.2	8.5
9.0	9.7	10.5	11.4	84	11.1	10.2	9.4	8.6
9.2	10.0	10.8	11.7	85	11.4	10.4	9.6	8.8
9.4	10.2	11.0	11.9	86	11.6	10.7	9.8	9.0
9.6	10.4	11.2	12.2	87	11.9	10.9	10.0	9.2
9.8	10.6	11.5	12.4	88	12.1	11.1	10.2	9.4
10.0	10.8	11.7	12.6	89	12.4	11.4	10.4	9.6
10.2	11.0	11.9	12.9	90	12.6	11.6	10.6	9.8
10.4	11.2	12.1	13.1	91	12.9	11.8	10.9	10.0
10.6	11.4	12.3	13.4	92	13.1	12.0	11.1	10.2
10.8	11.6	12.6	13.6	93	13.4	12.3	11.3	10.4
11.0	11.8	12.8	13.8	94	13.6	12.5	11.5	10.6
11.1	12.0	13.0	14.1	95	13.9	12.7	11.7	10.8
11.3	12.2	13.2	14.3	96	14.1	12.9	11.9	10.9
11.5	12.4	13.4	14.6	97	14.4	13.2	12.1	11.1
11.7	12.6	13.7	14.8	98	14.7	13.4	12.3	11.3
11.9	12.9	13.9	15.1	99	14.9	13.7	12.5	11.5
12.1	13.1	14.2	15.4	100	15.2	13.9	12.8	11.7
12.3	13.3	14.4	15.6	101	15.5	14.2	13.0	12.0
12.5	13.6	14.7	15.9	102	15.8	14.5	13.3	12.2
12.8	13.8	14.9	16.2	103	16.1	14.7	13.5	12.4
13.0	14.0	15.2	16.5	104	16.4	15.0	13.8	12.6
13.2	14.3	15.5	16.8	105	16.8	15.3	14.0	12.9
13.4	14.5	15.8	17.2	106	17.1	15.6	14.3	13.1
13.7	14.8	16.1	17.5	107	17.5	15.9	14.6	13.4
13.9	15.1	16.4	17.8	108	17.8	16.3	14.9	13.7
14.1	15.3	16.7	18.2	109	18.2	16.6	15.2	13.9
14.4	15.6	17.0	18.5	110	18.6	17.0	15.5	14.2
14.6	15.9	17.3	18.9	111	19.0	17.3	15.8	14.5
14.9	16.2	17.6	19.2	112	19.4	17.7	16.2	14.8
15.2	16.5	18.0	19.6	113	19.8	18.0	16.5	15.1
15.4	16.8	18.3	20.0	114	20.2	18.4	16.8	15.4
15.7	17.1	18.6	20.4	115	20.7	18.8	17.2	15.7
16.0	17.4	19.0	20.8	116	21.1	19.2	17.5	16.0
16.2	17.7	19.3	21.2	117	21.5	19.6	17.8	16.3
16.5	18.0	19.7	21.6	118	22.0	19.9	18.2	16.6
16.8	18.3	20.0	22.0	119	22.4	20.3	18.5	16.9
17.1	18.6	20.4	22.4	120	22.8	20.7	18.9	17.3

Annex 5.2: Key IYCF messages

Teaching aid 5.2 Key IYCF messages

Key education messages for caretakers of children admitted in OTP:
For pregnant women, or women with under-six months infant with older sibling in OTP,

Pregnancy

- During pregnancy, mothers should get at least one additional meal a day
- During breastfeeding, eat two extra meals or snacks per day
- You need to eat the best foods available, including milk, fresh fruits and vegetables, meat, fish, eggs, grains, peas and beans
- Take plenty of water whenever you are thirsty
- During pregnancy and breastfeeding special nutrients will help your body grow well and be healthy
- Take iron and folic acid tablets to prevent anemia during pregnancy and at least 3 months after birth
- Use iodized salt to help your baby's brain and body develop well
- Attend ANC at least four times during pregnancy

Young infant

- Hold your new born skin to skin immediately after birth
- Begin breastfeeding within the first hour of birth
- Colostrum and thick yellow milk is good for your baby
- Colostrum helps protect your baby from illness and helps remove the first dark stool
- Breastfeed frequently to help your breast milk 'come in' and ensure plenty of breast milk
- Do not give water or other liquids/fluids to your baby during the first six months
- Breast milk provides all the food and water that your baby needs during the first six months of life
- Mixed feeding increases the chance that your baby will suffer from illnesses such

as diarrhoea, pneumonia and malnutrition.

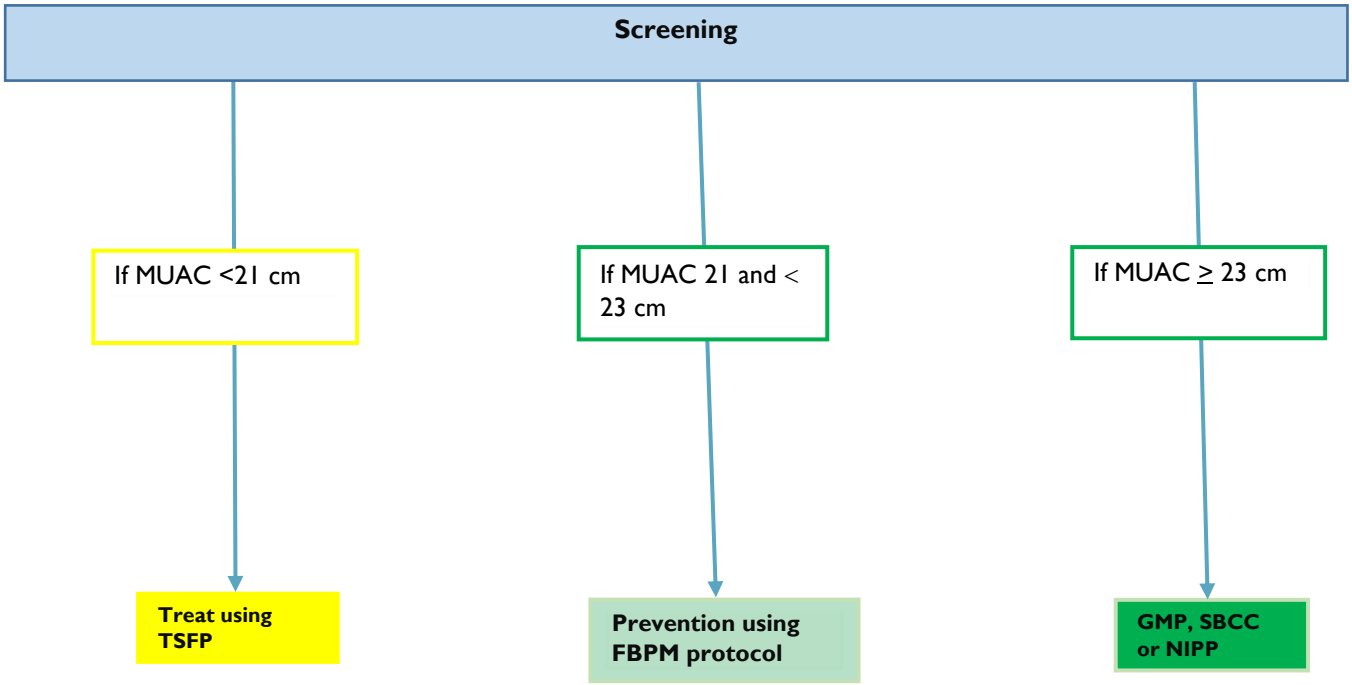
- Breastfeed on demand, both day and night 8 to 12 times a day to build up your breast milk supply
- Remember that good hygiene practices prevent disease
- Do not give RUTF to infant under-six months. The aim of treatment for severely malnourished children who are under six months is re-establishment of breast feeding

For young children 6 to 23 month olds that are on OTP follow up,

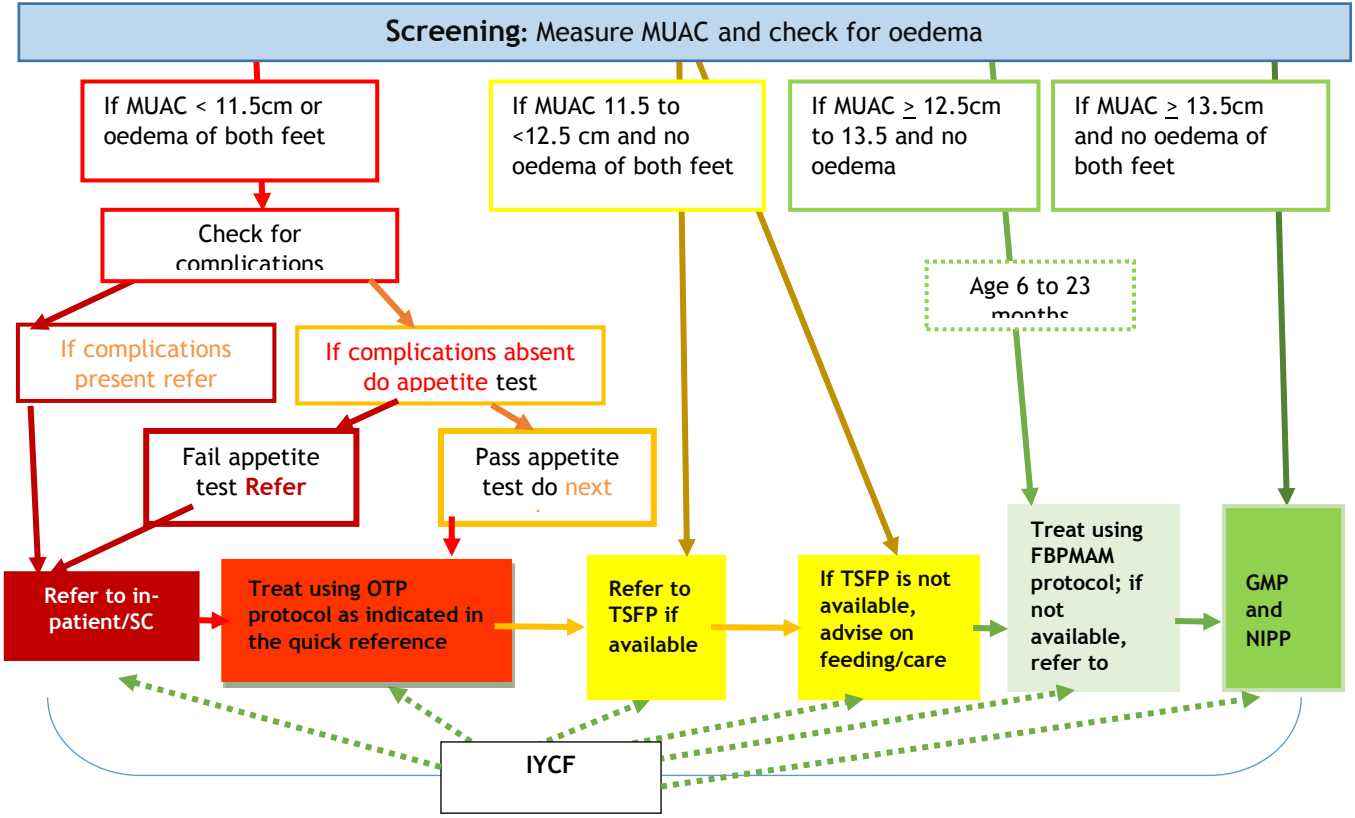
- For breast-fed children in OTP, always give breast milk before the RUTF and on demand
- RUTF should be given before other foods. Give small regular meals of RUTF and encourage the child to eat often, every 3-4 hours
- Always offer plenty of clean water to drink while eating RUTF
- Breast milk continues to be the most important part of your baby's diet until two years of age
- When giving complementary feeds think: Frequency, amount, thickness, variety, active/responsive feeding, and hygiene.

NB – Ask the mother to repeat the messages to check her understanding.

5.3 Flow Chart for Assessment and Action for pregnant women and lactating mothers



5.4 Flow Chart for Assessment and Action for children between 6 to 59 months



Annex 5.5: Needs and Requirement for OTP and TSFP children 6-59 month

NB: These requirement and needs recommended by CMAM technical working group and CMAM focal persons at state level as minimum requirement. This doesn't means restriction to this, in case of availability of resources might increase needs.

1. Places/spaces required

1. Separate space for waiting and distribution of sugar water and nutrition/health education
2. Separate space for medical check by doctor or medical assistant
3. Separate space for nursing and drugs prescription
4. Separate place for anthropometry measurement
5. Separate place with drinking water, hand washing facility for appetite test
6. Latrine/s
7. Store for therapeutic food

2. Staffing and care workers

Staffs provide health and nutritional care and must be trained on management of acute malnutrition in OTP and TSFPs;

1. All staff working in the centre (doctors , MAs, Nurses, Nutrition officers, nutrition educators and volunteers must be trained
2. Provide them with operational guideline , quick reference for SAM & MAM and community mobilization
3. Provision of refresher training from time to time

Responsibilities of staff:

Medical Doctor & medical Assist:

1. Do medical check and decision for admission
2. Fill-in admission card with medical check and history
3. Decide on weekly follow-up
4. Referral instruction

Nurse:

1. Give routine medication and fill-in the follow-up card
2. Observation of clinical signs and filling the card in the absence of doctor

Nutrition Officer, Nut. Educator & volunteer:

1. Take anthropometry measurement for children (Oedema, MUAC, Weight, Height and WFH Z-score calculation
2. Conduct appetite test
3. Interaction with mothers and children (involving mothers in treatment and follow-up)
4. Recording danger sign
5. Procedure of admission
6. Provision of health and nutrition education messages and ensure mothers has understand
7. Record any improvement or deterioration on child situation i.e. no weight gain , oedema decrease before classifying him/her as non-respondent
8. Make sure that mothers/caretakers has gave their children therapeutic food during the weekly visit
9. Fill the child card for follow-up
10. Register the child in the registration book
11. Preparation of the monthly report
12. Fill the referral card after consultation with medical person/s

Other workers:

1. Cleaners are very important to keep the surrounding environment clean and organized for children and mothers
2. Store keeper/s according to the need
3. Volunteer/s for every village , sector , block according to the population in the area

Supervisors**:**

- Each health facility/nutrition center need at least one supervisor to raise the monthly performance about the center

Staffing needed per site:

Sr.no	Type of staff	Number
1	Medical doctor , Medical assistant , community health worker	1
2	Nurse	1
3	Nutrition officer	1

4	Nutrition assistant	4
5	Supervisor	1
6	Store Keeper	1
7	Cleaner	1
8	Community volunteers	One or more for each village according to the population

3. Equipment and other requirement:

1. Thermometers
2. Salter scale (25 kg) (plus pants or plastic basin) or mother & child Electronic scale
3. Height/Length board
4. MUAC tapes (child)
5. MUAC tapes (mother)
6. Plastic matts (# 3) or Benches (# 6) in mothers waiting area
7. Plastic matts in appetite test place
8. Water container (# 3)
9. Cups (# 15)
10. Sugar
11. Hand washing facility and water
12. Soap and detergents
13. Water system

4. Routine drugs

1. Amoxicillin
2. Folic acid
3. Vit A
4. Measles vaccine
5. Mebendazole

5. Lap requirement

1. Malaria diagnoses kit
2. Urine analysis tool

3. Stool analysis tool

6. Cleansing requirement (staff & mothers)

1. Water
2. Latrine
3. Soap
4. Detergents
5. Brooms
6. Garbage /trash basket
7. Incinerator

8. Work Aids:

1. Laminated sheet weight for height
2. RUTF ration sheet
3. Stationaries

9. Registration books

1. Child follow-up card (admission)
2. Child registration book for out patient
3. Health Education book
4. Monitoring & supervision book (field monitoring visit)
5. Referral card (child)
6. Discharge card (child)
7. Monthly report form
8. Supply form
9. Ration card (RUTF)
10. Home visit sheets

10. Posters

1. Map of catchment area
2. Chart with target and admission per month
3. Poster of Assessment and Classification of Children 6 to 59 months with Acute Malnutrition
4. Flow up chart for Assessment and Action for children between 6 to 59 months
5. Basic messages for management of acute malnutrition

Other Posters:

1. List of SCs, OTPs and TSFPs
2. Names and telephones of volunteers, team leaders
3. Term of reference for staff

References:

1. SAM with complication operational guideline
2. SAM without complication operational guideline
3. MAM operational guideline
4. Community involvement operational guideline
5. CMAM guideline

Supply:

1. Ready to use therapeutic food (RUTF)
2. Ready to use supplementary food (RUSF)

Annex 5.6: Child registration book

Federal Ministry of Health - National Nutrition program
Registration book for TSFP children under 5 years

Sr. NO.	Regist. number	child name	Address/phone number	shiekh name	Gender (male /female)	age in months	child status	Source of admission:	Type of admission				admission data					Discharge data					Result	Comments / Remarks
							Resident, IDP, Refugee, Returnee	Popular committee, tradional healer, midwife, self referral, volunteer, other... specify	new admission	re-adm. Defaulter	readm. Relapse	referral from other TSFP	date	MUAC	Weight in kg	Height in cm	WFH Z-score	date	MUAC in cm	Weight in kg	Height in cm	WFH Z-score	Cured, Death, Defaulter, Non-respondent, Referral to SC, referral to other TSFP	

Annex 5.7: PLWs registration book

Federal Ministry of Health -National Nutrition program
Registration book for TSFP PLWS

SN	Regist. Number	Full name	Address, telephone number	Shiekh name	Source of admission: Popular committee, tradional healer, midwife, self referral, volunteer, other.... specify	Type: 1. Pregnant 2. Lactating	mother status	Age in years	Adm. Data		Discharge data		Result	Comments
							Resident, IDP, Refugee, Returnee		Date	MUAC in cm	Date	MUAC in cm	Cured, Death, Defaulter, Non-respondent	

Annex 5.8 Child TSFP follow-up Card

Front of the TSFP child card

		Federal Ministry of Health - National Nutrition Program					
		TSFP follow-up card children U5 years					
Name						Regist. Number	
State						Locality	
						Village /Sector	
Care taker name						H F name	
Age in months						Shiekh name	
Gender		male	Female				
Child status	Resident	IDP	Refugee	Returnee			
Admission source	Caretaker	Volunteer	Popular committee	Health Worker	ditional hea	Other (specify)	
admission type	New admission	Re-adm default.	Re adm.relapse	Referral from other TSFP			
Routine drugs							
Medication	date	dosage	Other drugs	date	dosage		
Vit A							
De-worming							
Iron/Folic acid							
Measles							
Transfer in and out during treatment of MAM (always use first MAM admission unique number)							
Referral in					Referral out		
Location	Date	Registration No. from other side			Reasons	Location	Date
Home Visit							
date	Reason of visit		date of visit		Date of visit		

Back of the TSFP child card:

SFP Follow-up							
Name							
Follow-up weeks	Admission	2	3	4	5	6	
Date							
Anthropometry							
MUAC in cm							
Weight in kgs							
Height in cm							
WFH z-score							
RUSF Sachets							
Result	Cured	Death	Defaulter	Relapse	Referral		

Note: Height measured monthly

TSFP follow-up : Folow-up weeks (1,2,3,....) means visits

Annex 5.9 PLWS Follow-up Card

Federal Ministry of Health - National Nutrition Prograr
TSFP follow-up card children PLWS

Name					Regist number		
State					Locality		
Age in years					Village/ sector		
Pregnant	Pregnancy months				HF name		
Status of mother	Resident	IDP	Refugee	Return			
Lactating	child age in months				Shiekh name		
Source of admission	Self ref	Volunteer	Pop comt	H worker	trad healer	other	
Admission	New	Readm	Referral				
Routine Drugs							
Drugs	Date	Dosage	Others drugs	Date	Dosage		
Vit A							
Iron/Folic Acid							
Albendazole							
	TSFP Follow-up						
Name							
Follow-up weeks	Admission	2	3	4	5	6	
Date							
Anthropometry measurement							
MUAC in cm							
RUSF (# sachets)							
Result	Cured	Death	Defaulter	Non-respond	Referral		

Note: MUAC target more than 21 cm

TSFP follow-up : Folow-up weeks (1,2,3,....) means visits

Annex 5.10: Monthly statistics format – TSFP

MONTHLY STASTICS REPORT - MANAGEMENT OF MODERATE ACUTE MALNUTRITION - SUPPLEMENTARY FEEDING PROGRAMMES

Programme	TSFP		
Type of Program			
State		Report prepared by:	
Locality		MONTH / YEAR of reporting :	
Agancy		Site	

Data Consolidation | **Criteria Selection**

Age Group	Total beginning of month	New Admissions (B)			TOTAL NEW Admissions (B1+B2+B3)	Old Admissions (C)			TOTAL Entries (B+C)	Discharges (E)				TOTAL Discharges (E1+E2+E3+E4)	Referral (F)			TOTAL EXITS (E+F)	TOTAL end of the month (A+D)-(G)
		MUAC[1]	W/H > -3 to < -2 z-score	Other		Re-admission after defaulting	Re-admission after collapse	Transfer in from other SFP		CURED	DEATH	DEFAULTER	NON-RESPONDER		Transfer out to SC	Transfer out to OTP	Transfer out to TSFP		
	(A)	(B1)	(B2)	(B3)	(B)	(C1)	(C2)	(C3)	(D)	(E1)	(E2)	(E3)	(E4)	(E)	(F1)	(F2)	(F3)	(G)	(H)
6-59 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/L	0	0		0	0	0	0	0	0	0	0	0	0	0			0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Exit indicators:					
Total	TOTAL	0%	0%	0%	0%
< 5 yrs	< 5 yrs	0%	0%	0%	0%
P/L	P/L	0%	0%	0%	0%
SPHERE minimum standar		>75%	<3%	<15%	

Category	Screening Data				
	TOTAL Screened	Normal	Refered for SC	Refered for OTP	Refered for SFP
< 5 yrs	0	0	0	0	0
P/L	0	0			0

Source of referrals						
Popular committee	Refered from OTP	THs/TBAs	Self/mothers	CBVs/VMWS	Others	TOTAL Refferrals
0	0	0	0	0	0	0

Status	New Admissions		
	Total Male	Total Female	P/L
Resident	0	0	0
IDP	0	0	0
Refugee	0	0	0
Returnee	0	0	0
Total	0	0	0

Type of Product	Balance start of the month	Received	Expired/ Damaged	Balance end of the month	Used during the month
RUSF	0	0	0	0	0
VIT A	0	0	0	0	0
Albendazole/ Mebendazole	0	0	0	0	0

Quantities reported in cartons

Annex 5.11: TSFP Ration card for children 6 -59 months

SUPPLEMENTARY FEEDING CARD: Under-5's

Card No.

Administrative Unit

Name

Mother/Caretaker

Tel No.....

Address

Sheikh Name

Age (Mths)

Sex

Mebendazole Y N

Vit A Y N

Measles Vaccination Y N

Distribution	Ration	Date	Weight (kg)	Height (cm)	WHZ	Target Wt	MUAC (cm)	Iron/ Folic
Admission								
2								
3								
4								
5								
Discharge								

Cured

Transferred

No Response

Defaulted

Dead

Annex 5.12:TSFP followup Ration card for PLW

	SUPPLEMENTARY FEEDING CARD: PW&LW					Card No.	
Name							
Centre							
Address				Sheikh Name			
Age (Yrs)						Pregnant	
						Lactating	
Pregenancy Months				Lactating (infant age in mths)			
Distribution	Date	Ration		MUAC (cm)		Target MUAC	
Admission						> 21 cm	
2							
3							
4							
5							
6							
7							
Discharge							
Cured			Transferred				
Defaulted			Dead				
No Response							

Annex 5.13: Equipment and supportive materials

For an estimated caseload of 200 children per month, there is a need for:

- Mid-Upper Arm Circumference (MUAC) tape
- Height/Length board
- 2 Salter scale (25kg)& Weighing pants
- 1 Uniscales – Electronic scales
- 2 Weight-for-Height Chart
- Registration and recording
- 100 Ration cards for under-5's
- 200 Ration cards for pregnant and lactating women
- 1 Registration book for under-5's
- 1 Registration book for pregnant and lactating women
- 200 Screening form
- 200 Referral forms
- 1 Calculator
- 1 Stationery Kit - (5 Pens, 5 pencils, 2 erasers,2 ruler)
- 2 Bucket/Basin
- 6 Measuring cup/Scoop
- 60 Soap
- Feeding and cooking equipment for wet supplementary feeding
- Route in medicine table
- Summary admission – discharge criteria
- NCHS/WHO Reference table.

Annex 5.14: Monthly statistics Report – FBPM

MONTHLY STASTICS REPORT

Food based Prevention of Moderate Acute Malnutrition / Community Outreach

State:	
Locality:	
Agency:	
Report prepared by:	
Month / Year :	
Site:	

Food Based Prevension of Moderate Acute Malnutrition (FBPMAM) **Not Applicable** ☐

Category	Total beginning of month	Admissions (B)		Returned Defaulter	Reached Exit from FBMAM (D)			
		New Admission	Referrals from SC/OTP/SFP		Graduated	Defaulter	Death	Transfer Out to SC/OTP/SFP
	(A)	(B1)	(B2)	(C)	(D1)	(D2)	(D3)	(D4)
< 2 yrs								
PLW								

Home Fortification for the Prevention of Micronutrient Deficiencies in Children (HF) **Not Applicable** ☐

Age Group	Total beginning of month	New Admissions (B)		Discharges (C)	
		New Admission (At Center Level)	New Admission (At Community level)	Exit	Referred to FBPMAM or TFSP
	(A)	(B1)	(B2)	(C1)	(C3)
< 5 yrs					

Annex 5.15: Registration Book for children 6 -23 months – FBPM

FBPMAM registration book for children < 2

SNo	Name	Age (months)	Male (1) Female (2)	Date of admission	Residence	From community	From TSFP/TFC/OTP	Measurment on Admission Date	2nd visit	3rd visit	4th visit	5th visit	6th visit	Measurment on exit Date	Reason for exit
								MUAC	MUAC	MUAC	MUAC	MUAC	MUAC		

Reason for exit 1/ Graduated=MUAC>13.5 2/Default 3/Referral

4/Non-Respondent=duration in the programme>6months 5/ Death 6/other, specify

Annex 5.16: Registration Book for PLW – FBPM

FBPMAM registration book for children PLW

SNo	Name	Age (years)	Date of admission	Residence	From community	From TSFP/TFC/OTP	Measurment on Admission Date	2nd visit	3rd visit	4th visit	5th visit	6th visit	Measurment on exit Date	Reason for exit
							MUAC	MUAC	MUAC	MUAC	MUAC	MUAC		

Reason for exit 1/ Graduated=MUAC>23.5 2/Default 3/Referral

4/Non-Respondent=duration in the programme>6months 5/ Death 6/other, specify

Annex 5.17: Ration Card – FBPM

World Food Programme

Food Based Prevention of Moderate Acute Malnutrition

Ration Card

☐ Child <2

☐ Pregnant/Lactating Woman

Name of the patient _____

Date of Birth _____

(Estimate if not Known)

Mother's Name _____

(for children only)

Date of Admission _____

Distribution Site _____

Registration Number _____

Visit n.	Date
1st visit	
2nd visit	
3rd visit	
4th visit	
5th visit	
6th visit	

Back of the card: messages on breastfeeding

Annex 5.18: Calculation of burden and Coverage

Burden of Malnutrition

The burden of MAM is defined as an estimation of the total number of MAM cases in a population over a specific period (i.e., prevalent cases + incident cases in the year). The burden is estimated through calculation of MAM prevalence within the 6 - 59 month population (either nationally or within a defined geographic area) with incidence correction factor as follows:

Burden = Population 6-59 m X Prevalence X2.6

To clarify further, the above is the total of the below:

- **Prevalent cases = prevalence MAM x population 6-59m**

Example: 10% (prevalence MAM) and 7000 (population 6-59m)

Prevalent cases= 10%*7000= 700 (700*2.6=1,820)

- **Incident cases = prevalence SaM x population 6-59m x 2.6 (where 2.6 is a correction factor which gives incidence as factor of prevalence)**

Coverage of MAM program

There are two ways of coverage calculation, geographical and period coverage;

Geographical coverage: means number of feeding center /health facilities providing CMAM services in the locality or state divided by the total number of health facilities exist in the area.

Example:

Locality (A) has 12 CMAM sites

Number of health facilities in (A) = 30, there fore the geographic coverage (12/30*100%) equal to 40%

Period Coverage: means number of children (6-59) admitted and treated in MAM program divided by the total burden of MAM in the locality/area multiplied by hundred

Example:

Number of children admitted in MAM program = 3000

Malnutrition burden = 17,500

Coverage = 3000/17500*100= 17.1%

Annex 5.19:Definition of Stock-out:

Stock-out or out of stock (OOS) is event where the product /RUTF is exhausted at all levels. It generally refers to the stock-out experienced in the stores of the health facilities supply/ RUTF. It means that the upstream supply chain is generally not the reason for stock-outs but the replenishment efficiency of locality OTPs.

Causes of stock-out:

- Faulty demand estimation of the need
- An inefficient supply chain
- Delay in Supply delivery from state to locality and or from locality to OTP level

Note: When you have zero balnce/sachet at **All levels** (from state to heath facility) this is **stockout** BUT when you experience shortage of supply in some OTPs and/or localities this is **shoratge** and you can do internal re-distribution, by taking supply from low consumption sites to high consumption to prevent such situation.

Annex 5.20:Calculation of Length of Stay in CMAM sites/center:

Length of stay (LOS) is the period in number of days that a child spends in treatment for MAM from admission to discharge. LOS in outpatient care is normally long and can take up to 60 days.

Average LOS reflects effectiveness of the CMAM services

- A long average LOS might be the result of, not respond to treatment, frequent absence, default, sharing of RUTF.

A short average LOS might indicate that children are discharged too soon. If there is a high relapse rate, this might be a possible cause

Average LOS is calculated on a sample of cured discharges, as the sum of LOS divided by number of cards in the sample.Calculation: Average LOS = sum of LOS divided by number of cards in sample

Directions: Collect this information from OTP monitoring visits conducted during the month, from the OTP register book and discharge information. Fill in the number of days stayed on the program for 30 children who were discharged cured. The average length of stay will be calculated in the yellow box at the bottom.			
Child number	Number of days on program to reach 11.5cm (SAM)	Number of days on program to reach 12.5cm (MAM)	Total number of days until discharge
1		28	28
2		35	35
3		40	40
4		20	20
5		35	35
6		45	45

7		56	56
8		42	42
9		49	49
10		35	35
11		40	40
12		49	49
13		28	28
14		35	35
15		21	21
16		35	35
17		42	42
18		56	56
19		63	63
20		70	70
21		42	42
22		35	35
23		56	56
24		28	28
25		35	35
26		84	84
27		63	63
28		40	40
29		21	21

30		70	70
TOTAL number of days مجموع عدد الايام		1298	1298
Average LOS per child متوسط الاقامة لكل طفل		43.26666667	43.26666667