STANDARD OPERATING PROCEDURES (SOPs)

for

NON-ADMISSION FACILITY

(Peripheral Health Facility)

&

ADMISSION FACILITY

(Hospitals, Nutrition Rehabilitation Centre)

for management of Children with Severe Acute Malnutrition

November 2023

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SOP's for Admission & Non-Admission Facility : November, 2023
Child Health Division
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INTRODUCTION

Severe Acute Malnutrition (SAM) is both a medical and social disorder. Lack of exclusive breast feeding, late introduction of complementary feeds, diluted feeds containing less amount of nutrients, repeated enteric and respiratory tract infection, ignorance and poverty are some of the factors responsible for Severe Acute Malnutritio

Children with Severe Acute Malnutrition (SAM) have higher risk of mortality than well-nourished children. The prevalence of SAM in children remains high despite overall economic growth. According to National Family Health Survey 5 (NFHS-5 2020-21), 4.8% of children below 60 months age are severely wasted whereas 11.2% of children are wasted in Delhi. With timely referral, appropriate case management and follow-up care, the lives of many children can be saved, and case fatality rates can be reduced.

To strengthen the government service delivery and to connect the unreach marginalised families to health facilities, Accredited Social Health Activist (ASHA) is the key. ASHA functions as a healthcare facilitator, a service provider and a health activist. Broadly her functions involve providing preventive and basic curative care in a role complementary to other health functionaries, educating and mobilizing communities especially identification, referral and follow up of all under five malnourished children.

Presently, there are five functional NRCs Delhi at Kalawati Saran Children Hospital, Hindu Rao Hospital, Bhagwan Mahavir Hospital, Chacha Nehru Bal Chikitsalaya and Lok Nayak Hospital. Besides the already functional NRCs others will be established in a phased manner in all medical colleges under the pediatrics department.

SCOPE OF SOPs

Though technical guidelines / SOPs for treatment of malnutrition are already laid out, there are operational issues hampering identification and effective management of SAM children. These operational SOPs are aimed at clearly stating the roles and responsibilities of various stakeholders in the primary healthcare and hospital / NRC settings, reiteration of the required actions , functional referral linkages and convergence with ICDS . They have been formulated by the domain experts from eminent hospitals of the state.

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ABBREVIATIONS

ASHA	-	Accredited Social Health Activist
AWC	-	Aanganwadi centre
AWW	-	Aanganwadi Worker
EDTF	-	Energy dense therapeutic food
MAM	-	Moderate Acute Malnutrition
MO	-	Medical Officer
MUAC	-	Mid Upper Arm Circumference
PHC	-	Peripheral Health Centre
SAM	-	Severe Acute Malnutrition
UHND	-	Urban Health Nutrition Day
THR	-	Take Home Ration
SAMTU	-	SAM Treatment Unit
NRC	-	Nutrition Rehabilitation Centre
WHZ	-	Weight for Height Z score

SOPs FOR PERIPHERAL HEALTH FACILITY (NON-ADMISSION FACILITY) FOR MANAGEMENT OF SAM CHILDREN

Role of Medical Officer of Dispensary (UPHC) / Maternal and Child Welfare Center (MCW Center)

The Medical Officer of the primary health facility should be fully conversant with the identification , assessment and management of malnourished children . Screening for visible wasting and basic anthropometric assessment must be ensured for all children visiting the health facility for vaccination and any other reasons. Their roles include :

Anthropometric assessment:

(Medical Officers must ensure availability of Standardized equipment. Standardization should be regularly checked and confirmed.)

- Ensure screening of visible wasting in children for SAM and MAM visiting the facility by WHZ Score, MUAC (for more than 6 months old only) and looking for bilateral pedal oedema.
- Ensure anthropometric assessment of all children coming for vaccination.
- Anthropometric assessment of the patients brought by the AWW (initial visit and follow-up visits). (Refer Annexure I & III)

Examination of children to assess for any medical complication:

- Carry out medical assessment of the malnourished individual and decide if patient has any medical condition needing admission or needs further evaluation and accordingly refer the patient.
- Examination of all children brought with SAM to the facility by the AWWs for any medical complications
- Refer the patients with medical complications and/ or failed appetite tests (done by AWW) to linked health facility with details of anthropometry and appetite test result after counselling.
- Required follow up assessment of children who are being treated in the community brought to the centre by AWW.

Treatment:

- All less than 6 months infants with SAM will be referred to NRC/Hospital having admission facility/ Hospital.
- Children with SAM with medical complications or failed appetite test will be referred to the linked higher health facility for admission and management of SAM.
- Children with SAM who are not medically complicated and passed appetite test will be given treatment by medical officer (MO). A course of antibiotic (Amoxicillin), Folic Acid Multivitamin, Iron, Albendazole etc. (details given below in table 1).
- M.O. will prescribe the double ration for all SAM children.
- Ensure follow up of the patients by the AWW of the facility for expected weight gain and any medical complications.

- If there is no improvement / or a complication develops, the patient will be referred to the higher facility for further management.
- Ensure prescribed facility based (NRC / Hospital) follow-up of the children discharged from NRC / Hospital by the concerned AWW / ASHA.

Guidelines for Medical Treatment

To be prescribed by MO at PHC without any complications:

- A course of antibiotics, Amoxycillin to all uncomplicated cases.
- Micro nutrient and Electrolyte supplementation
- Since the Take Home Ration (THR) will be home based, there is a need to supplement these children with additional micro nutrients like vitamins, zinc, iron, folic acid. The electrolyte requirements shall be fulfilled from family food.

Table 1. Medical treatment for SAM Children

DRUGS	WHEN	WEIGHT IN Kg or Age	DOSE
Amoxicillin DT125 mg	First dose on enrolment and then for home (twice a day for 5 days)	4-6.9 Kg 7-9.9 Kg 10-12.9 Kg 13-15.9 Kg 16-18.9 Kg	1 tab BD for 5 days 1.5tab BD for 5 days 2 tab BD for 5 days 2.5tab BD for 5 days 2.5tab BD for 5 days
Syp. Albendazole (200mg/5ml)	On Second Visit	<12 months 12-23 months >24 months	Do not give 5 ml 10ml
Tab. Folic Acid 5mg	First dose on enrolment	6-59 months	5 mg on Day 1 only
Syp.Multivitamin	Daily for 90 days	6-59 months	5ml
Vitamin A	One dose on admission if not given in last 1month.	<6 Months 6-12 months or <8Kg >12 months & > 8Kg	50000 IU/0.5ml 100000 IU/1 ml 200000 IU/2 ml
Syp. Iron Folic Acid (20mg Iron and 100mcg Folic Acid/ ml) Syrup * (if no signs of infection)	1 ml IFA Syrup biweekly having 20 mg elemental iron and 100mcg folic acid and link with existing intensified Iron plus initiative	6-59 months	1 ml will be given biweekly for 4 months After 4 months, the child should be linked with the existing Iron plus initiative.
Tab Zinc (DT)		<2 months 2 to 6 months >than 6 months	Do not give 10mg(x 14 days) 20mg(x 14 days)

Reference of Table 1: Participant manual for community based management of severe acute malnutrition among children (6-59 months) by NCoE KSCH & UNICEF prepared for SCoE- Odisha.

All less than six months SAM Children to be referred for evaluation at higher centre (Paediatrician)

- If the clinical examination demands additional treatment, accordingly doctor can prescribe or send the patient for evaluation and investigation not available in the facility.
- If the child has fever and no other complaints try to bring down fever by tepid sponging. Perform RDT test, (if available) if RDT is positive, give anti-malarial as per the guidelines. If fever persists for more than 2 days or it is high grade (≥38.5ºC/101.3ºF), then refer the child to the hospital for management.
- Vitamin A should not be given if the child has already received it during past one month.
- Do not give systemic antibiotics to children transferred to the community from inpatient facility or have been transferred from another AWC after having already received a course of antibiotics. However, they will continue receiving other supplementation as mentioned in Table 1.
- Child must be advised to stop iron and folic acid if he/she develops diarrhoea or fever and following to be advised:

Syrup Paracetamol	When temperature> 38 °C		10- 15 mg/kg 6-8 hourly
ORS	Give ORS after every stool	<24 months 24-59 months	50 ml 100 ml

Indications for Referral to Higher Centre:

Medical officer will refer the children with severe acute Malnutrition in following conditions with details of Anthropometry and reason for reference:

- Children with SAM with Medical Complications.
- Any child where, due to the presenting symptoms, the MO feels the need for evaluation (assessment and investigations) by a Paediatrician.
- All patients with Oedema
- Children with failed appetite test
- All Infants with SAM less than 6 months for evaluation at higher centre by paediatrician.

Medical Complications which require referral and admission:

- Presence of any of emergency signs(Coma, convulsion, shock)
- Presence of any general danger signs
- Refusal to feeds
- Persistent vomiting/ Vomits everything
- Bilateral pitting oedema
- Drowsy, very weak, apathetic
- High Fever - 38.5 °C
- Fast breathing/ chest in-drawing/ cyanosis
- Extensive skin lesions, eye lesions, post-measles state

- Diarrhoea with dehydration based on history and clinical signs or dysentery
- Severe anaemia (HB<7gm)
- Hypothermia
- Hypoglycaemia
- Purpura or bleeding tendency
- All children with history of chronic illness, recurrent pneumonia (>2 episodes in last 6 months), Hemoglobinopathy (Thalassemia, sickle cell anaemia), suspected birth defects (cleft palate, congenital heart disease), abnormal tone, recurrent seizure, jaundice or abnormally distended abdomen.
- Any other general sign which the Medical Officer /ANM think warrants transfer to in-patient facility for assessment or care. These children will be assessed by the MO of SAMTU for decision on need for hospitalization and further management.
- In addition, if the caregiver is unable to take care of the child at home, the child should be referred to NRC/ Hospital with admission facility.

Follow up of discharged patients:

ASHA worker/AWW worker shall ensure that care givers take the discharged child for the required follow up for first 4 months in the NRC / Hospital from where the child was discharged:

- 1st FU – Day 15 after Discharge
- 2nd FU- 1 month of Discharge date
- 3rd FU- 2 month of Discharge date
- 4th FU- 3 month of Discharge date
- 5th FU- 4 month of Discharge date

SOPs FOR ADMISSION FACILITIES (NRCs / HOSPITALS) FOR SAM CHILDREN

- The Head of the Department will ensure there is provision of 1-4 beds dedicated for children with SAM i.e. SAM Corner in each hospital admitting children.
- All admitted children (1-59 months old) will be screened for SAM by WHZ, MUAC (for more than 6 months old only) and for bilateral pedal oedema preferably by a dedicated Health worker who will maintain the records also.
- Ensure that these children with SAM, referred from periphery get admitted promptly and get the due attention and treatment as a priority.
- Availability of medicines / injections / consumables/ diet is maintained throughout the stay of SAM patient. It must be ensured that no out of pocket expenditure is incurred on diet / medicine/ investigations .
- Ensure patients with SAM get treatment as per guidelines of Facility based management of children (GOI FSAM guidelines are readily available on NET) and that Feeds are prepared and given to the patients as per GOI guidelines of FSAM.
- If patient is found to be non-complicated and not requiring admission, patient will be referred to peripheral health facility with reasons for non-admission and advice on management in community under supervision of peripheral health facility through AWW.
- SAM patients will be discharged as per FSAM guidelines and duly followed up as per the protocols. Records of all SAM children shall be maintained at the NRC / Hospital . Summary report must be shared every month with the district in the prescribed format.

Role of HOD Paediatrics /Nodal Officer

- Dedicated bed allocation in a corner / cubicle of ward for admitted SAM patients.
- Ensure Screening of all admitted patients in emergency or Wards. Efforts must be made to ensure screening for visible wasting and basic anthropometric assessment of all children visiting the hospital in pediatric OPD.
- To ensure that system is in place for patients referred from periphery.
- Ensure patients with SAM get treatment as per guidelines of Facility based management of children with SAM.
- Ensure availability of medicines / injections / consumables/ diet throughout the stay of SAM patient.
- Make arrangements for making feeds in a designated corner.
- Ensure follow up of patients is done smoothly and all records are maintained.
- Conduct frequent seminars on facility-based treatment for building the required skills and competence of the team. New residents/ staff nurses to be sensitized after joining through induction trainings.
- Maintaining necessary records with support of Nutritionist and staff nurses. Where nutritionist is not posted it will be duty of the staff nurse to get the feeds prepared.

Indications for admission of Children with SAM:

- Presence of any of emergency signs(Coma, convulsion, shock)
- Presence of any general danger signs
- Refusal to feed
- Persistent vomiting/ Vomits everything
- Bilateral pitting edema
- Not alert, very weak, apathetic

- High Fever - 38.5 °C
- Fast breathing/ chest in-drawing/ cyanosis
- Extensive skin lesions, eye lesions, post-measles state
- Diarrhoea with dehydration based on history and clinical signs or dysentery
- Severe anemia (HB<7gm)
- Hypothermia<35 °C
- Hypoglycaemia
- Purpura or bleeding tendency
- All children with history of chronic illness, recurrent pneumonia (>2 episodes in last 6 months), Hemoglobinopathy (thalassemia, sickle cell anaemia), suspected birth defects (cleft palate, congenital heart disease), abnormal tone, recurrent seizure, jaundice or abnormally distended abdomen.
- In addition, if the caregiver is unable to take care of the child at home, the child should be referred to SAMTU. Children referred by MO/ANM from the periphery will be assessed in the NRC / Hospital MO and if the child does not require admission, he will be referred back to peripheral health facility with reasons for non-admission and advice on management in community through AWW.

Discharge Criteria for SAM patients admitted in Hospital :

Every child discharged from Admission facility should be prescribed double ration/ energy dense food/ special food to be collected from their registered / nearest anganwadi .

For Child

- Satisfactory weight gain for 3 consecutive days(>5 gm/kg/day)
- Oedema has resolved
- Child eating an adequate amount of nutritious food that mother can prepare at home
- All infections and other medical complications have been treated
- Child is provided with micronutrients
- Immunization is updated

For Mother / Caregiver

- Knows how to prepare appropriate foods and to feed the child
- Knows how to make appropriate toys and play with the child
- Knows how to give home treatment for diarrhoea, fever and acute respiratory infections, and how to recognize the signs that warrant seeking medical assistance
- Follow-up plan is completed

Follow up of the patients after discharge will be done for first 4 months in the facility:

- 1st FU – Day 15 after Discharge
- 2nd FU- 1 month of Discharge date
- 3rd FU- 2 month of Discharge date
- 4th FU- 3 month of Discharge date
- 5th FU- 4 month of Discharge date

*Follow ups can be more frequent if medical condition demands

If patient load is high, a Nodal Officer will be designated by HOD in consultation With Medical Superintendent of hospital to ensure the smooth functioning.

Annexure-I: WHO Growth Reference Charts

Weight-for-Length Reference Card (below 87cm)

Boys` weight (kg)					Length	Girls` weight (kg)				
-4 SD	-3 SD	-2 SD	-1 SD	Médian	(cm)	Médian	-1 SD	-2 SD	-3 SD	-4 SD
1.7	1.9	2.0	2.2	2.4	45	2.5	2.3	2.1	1.9	1.7
1.8	2.0	2.2	2.4	2.6	46	2.6	2.4	2.2	2.0	1.9
2.0	2.1	2.3	2.5	2.8	47	2.8	2.6	2.4	2.2	2.0
2.1	2.3	2.5	2.7	2.9	48	3.0	2.7	2.5	2.3	2.1
2.2	2.4	2.6	2.9	3.1	49	3.2	2.9	2.6	2.4	2.2
2.4	2.6	2.8	3.0	3.3	50	3.4	3.1	2.8	2.6	2.4
2.5	2.7	3.0	3.2	3.5	51	3.6	3.3	3.0	2.8	2.5
2.7	2.9	3.2	3.5	3.8	52	3.8	3.5	3.2	2.9	2.7
2.9	3.1	3.4	3.7	4.0	53	4.0	3.7	3.4	3.1	2.8
3.1	3.3	3.6	3.9	4.3	54	4.3	3.9	3.6	3.3	3.0
3.3	3.6	3.8	4.2	4.5	55	4.5	4.2	3.8	3.5	3.2
3.5	3.8	4.1	4.4	4.8	56	4.8	4.4	4.0	3.7	3.4
3.7	4.0	4.3	4.7	5.1	57	5.1	4.6	4.3	3.9	3.6
3.9	4.3	4.6	5.0	5.4	58	5.4	4.9	4.5	4.1	3.8
4.1	4.5	4.8	5.3	5.7	59	5.6	5.1	4.7	4.3	3.9
4.3	4.7	5.1	5.5	6.0	60	5.9	5.4	4.9	4.5	4.1
4.5	4.9	5.3	5.8	6.3	61	6.1	5.6	5.1	4.7	4.3
4.7	5.1	5.6	6.0	6.5	62	6.4	5.8	5.3	4.9	4.5
4.9	5.3	5.8	6.2	6.8	63	6.6	6.0	5.5	5.1	4.7
5.1	5.5	6.0	6.5	7.0	64	6.9	6.3	5.7	5.3	4.8
5.3	5.7	6.2	6.7	7.3	65	7.1	6.5	5.9	5.5	5.0
5.5	5.9	6.4	6.9	7.5	66	7.3	6.7	6.1	5.6	5.1
5.6	6.1	6.6	7.1	7.7	67	7.5	6.9	6.3	5.8	5.3
5.8	6.3	6.8	7.3	8.0	68	7.7	7.1	6.5	6.0	5.5
6.0	6.5	7.0	7.6	8.2	69	8.0	7.3	6.7	6.1	5.6
6.1	6.6	7.2	7.8	8.4	70	8.2	7.5	6.9	6.3	5.8
6.3	6.8	7.4	8.0	8.6	71	8.4	7.7	7.0	6.5	5.9
6.4	7.0	7.6	8.2	8.9	72	8.6	7.8	7.2	6.6	6.0
6.6	7.2	7.7	8.4	9.1	73	8.8	8.0	7.4	6.8	6.2
6.7	7.3	7.9	8.6	9.3	74	9.0	8.2	7.5	6.9	6.3
6.9	7.5	8.1	8.8	9.5	75	9.1	8.4	7.7	7.1	6.5
7.0	7.6	8.3	8.9	9.7	76	9.3	8.5	7.8	7.2	6.6
7.2	7.8	8.4	9.1	9.9	77	9.5	8.7	8.0	7.4	6.7
7.3	7.9	8.6	9.3	10.1	78	9.7	8.9	8.2	7.5	6.9
7.4	8.1	8.7	9.5	10.3	79	9.9	9.1	8.3	7.7	7.0
7.6	8.2	8.9	9.6	10.4	80	10.1	9.2	8.5	7.8	7.1
7.7	8.4	9.1	9.8	10.6	81	10.3	9.4	8.7	8.0	7.3
7.9	8.5	9.2	10.0	10.8	82	10.5	9.6	8.8	8.1	7.5
8.0	8.7	9.4	10.2	11.0	83	10.7	9.8	9.0	8.3	7.6
8.2	8.9	9.6	10.4	11.3	84	11.0	10.1	9.2	8.5	7.8
8.4	9.1	9.8	10.6	11.5	85	11.2	10.3	9.4	8.7	8.0
8.6	9.3	10.0	10.8	11.7	86	11.5	10.5	9.7	8.9	8.1

Weight-for-Height Reference Card (87 cm and above)

Boys` weight (kg)					Length	Girls` weight (kg)				
-4 SD	-3 SD	-2 SD	-1 SD	Médian	(cm)	Médian	-1 SD	-2 SD	-3 SD	-4 SD
8.9	9.6	10.4	11.2	12.2	87	11.9	10.9	10.0	9.2	8.4
9.1	9.8	10.6	11.5	12.4	88	12.1	11.1	10.2	9.4	8.6
9.3	10.0	10.8	11.7	12.6	89	12.4	11.4	10.4	9.6	8.8
9.4	10.2	11.0	11.9	12.9	90	12.6	11.6	10.6	9.8	9.0
9.6	10.4	11.2	12.1	13.1	91	12.9	11.8	10.9	10.0	9.1
9.8	10.6	11.4	12.3	13.4	92	13.1	12.0	11.1	10.2	9.3
9.9	10.8	11.6	12.6	13.6	93	13.4	12.3	11.3	10.4	9.5
10.1	11.0	11.8	12.8	13.8	94	13.6	12.5	11.5	10.6	9.7
10.3	11.1	12.0	13.0	14.1	95	13.9	12.7	11.7	10.8	9.8
10.4	11.3	12.2	13.2	14.3	96	14.1	12.9	11.9	10.9	10.0
10.6	11.5	12.4	13.4	14.6	97	14.4	13.2	12.1	11.1	10.2
10.8	11.7	12.6	13.7	14.8	98	14.7	13.4	12.3	11.3	10.4
11.0	11.9	12.9	13.9	15.1	99	14.9	13.7	12.5	11.5	10.5
11.2	12.1	13.1	14.2	15.4	100	15.2	13.9	12.8	11.7	10.7
11.3	12.3	13.3	14.4	15.6	101	15.5	14.2	13.0	12.0	10.9
11.5	12.5	13.6	14.7	15.9	102	15.8	14.5	13.3	12.2	11.1
11.7	12.8	13.8	14.9	16.2	103	16.1	14.7	13.5	12.4	11.3
11.9	13.0	14.0	15.2	16.5	104	16.4	15.0	13.8	12.6	11.5
12.1	13.2	14.3	15.5	16.8	105	16.8	15.3	14.0	12.9	11.8
12.3	13.4	14.5	15.8	17.2	106	17.1	15.6	14.3	13.1	12.0
12.5	13.7	14.8	16.1	17.5	107	17.5	15.9	14.6	13.4	12.2
12.7	13.9	15.1	16.4	17.8	108	17.8	16.3	14.9	13.7	12.4
12.9	14.1	15.3	16.7	18.2	109	18.2	16.6	15.2	13.9	12.7
13.2	14.4	15.6	17.0	18.5	110	18.6	17.0	15.5	14.2	12.9
13.4	14.6	15.9	17.3	18.9	111	19.0	17.3	15.8	14.5	13.2
13.6	14.9	16.2	17.6	19.2	112	19.4	17.7	16.2	14.8	13.5
13.8	15.2	16.5	18.0	19.6	113	19.8	18.0	16.5	15.1	13.7
14.1	15.4	16.8	18.3	20.0	114	20.2	18.4	16.8	15.4	14.0
14.3	15.7	17.1	18.6	20.4	115	20.7	18.8	17.2	15.7	14.3
14.6	16.0	17.4	19.0	20.8	116	21.1	19.2	17.5	16.0	14.5
14.8	16.2	17.7	19.3	21.2	117	21.5	19.6	17.8	16.3	14.8
15.0	16.5	18.0	19.7	21.6	118	22.0	19.9	18.2	16.6	15.1
15.3	16.8	18.3	20.0	22.0	119	22.4	20.3	18.5	16.9	15.4
15.5	17.1	18.6	20.4	22.4	120	22.8	20.7	18.9	17.3	15.6

Reference : **Participant Manual, Facility Base Care of Severe Acute Malnutrition, Ministry of Health and Family Welfare, Government of India, 2013**

Annexure-II

Appetite Test (To be done at Anganwadi Centre)

Appetite Assessment

- The test needs to be performed before referring / taking the child to the dispensary.
- The test needs to be conducted only on children (more than 6 months of age) who are identified as SAM and are without any medical complications. If the child has bilateral pitting edema or any other medical complications like high fever, vomiting, diarrhea, breathing difficulty, severe cough, drowsiness/ lethargy etc., AWWs should immediately refer the child to health facility / dispensary without performing appetite test.

How to Perform Appetite Test

- The child will be provided food prepared with THR or locally available food items like khichdi /any hot cooked meal or milk etc. for the appetite test depending on the age of the child.
- Ask the mother/care giver to wash her/his hands.
- The mother/care giver should sit comfortably with the child on her/his lap
- The child should not have taken any food for approx. 2 hours.
- The child should have free access to safe drinking water while he/she is taking the test.
- If the mother of the child is not available, the AWW needs to conduct the appetite test.

Observation of the appetite

- If the child is taking food eagerly, it means that the child has passed the test
- If the child is not taking food with eagerness, the child has failed the appetite test.

The Recommended amount of food to be offered for the appetite test

- 7 to 18 months : Atleast 15 gm of THR / Home based diet (1tbsp)
- 19 to 36 months: Atleast 30gm THR / Home based diet (2 tbsp.)
- 37 to 59 months: Atleast 50gm of THR / Home based diet (3tbsp. approx)

Reference : https://motherchildnutrition.org/malnutrition-management/info/appetite-test.html#:~:text=The%20mother%2Fcaregiver%20should%20sit,the%20child%20all%20the%20time.

Annexure-III

Chart 9.2: WHO classification of nutritional status & identification of acute malnutrition (wasting)

WHO classification of nutritional status

SD score	Growth Indicator		
	Height/Length-for-age	**Weight-for-age**	**Weight-for-height/length**
0 (median) to -2 SD	Normal	Normal	Normal
< -2 SD to -3 SD	Stunted	Underweight	Wasted or Moderate acute malnutrition
< -3 SD	Severely Stunted	Severely Underweight	Severely wasted or Severe acute malnutrition

Identification of acute malnutrition (wasting)

Moderate Acute Malnutrition

- Weight-for-height between -2SD and-3SD **AND /OR**
- Mid upper arm circumference (MUAC) 11.5 to 12.4cm **AND**
- No Oedema

Severe Acute Malnutrition

For infants aged <6 months

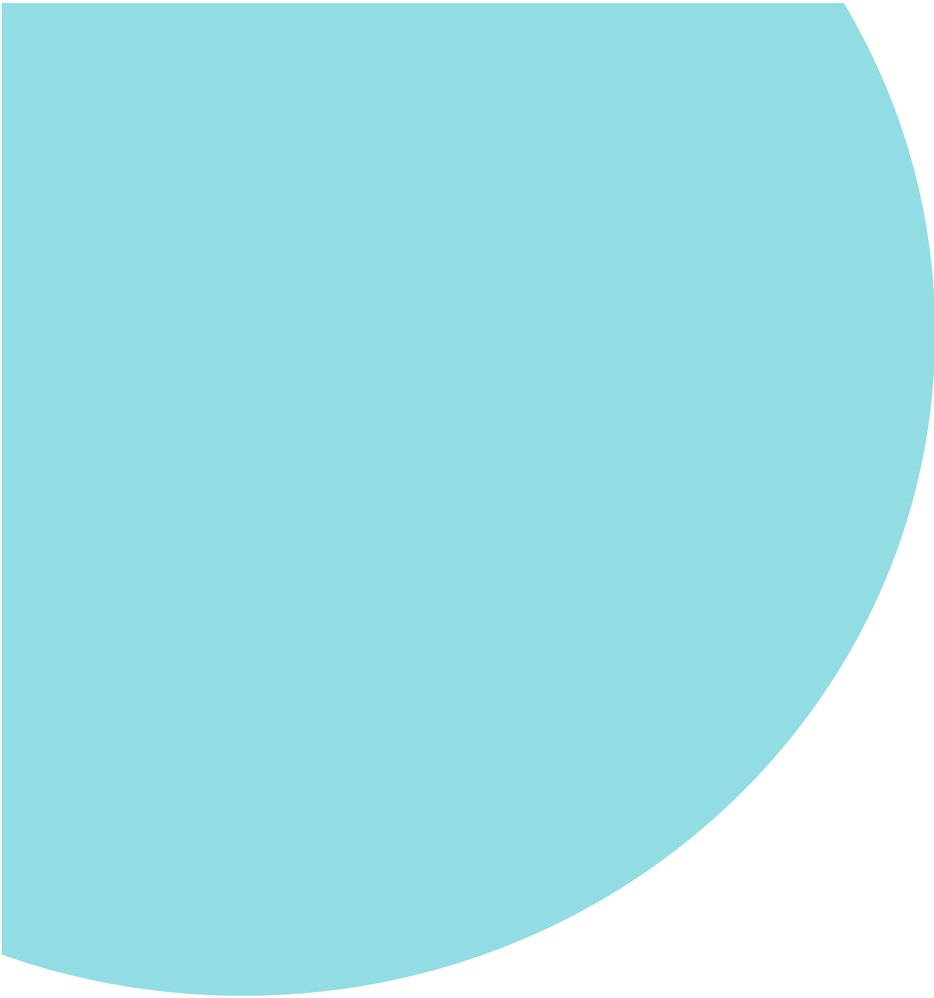
- Weight for length is <-3 SD score of median of WHO child growth standards***AND/OR**
- Bilateral pitting pedal oedema **

For children aged 6-59 months

- Weight for length/height is <-3 SD score of median of WHO child growth standards **AND/OR**
- MUAC<11.5 cm **AND/OR**
- Bilateral pitting pedal oedema **

**Use visible severe wasting in emergency settings, if measurements not possible and for children who has length <45 cms*

*** No other cause of oedema e.g. nephrotic syndrome, CHF etc.*



Directorate of Family Welfare

Government of National Capital Territory of Delhi