



Guidance document for processing PM-JAY packages

Acute severe malnutrition

Packages covered/ package count: 1

Specialty: Pediatric Medical Management

Package name	HBP 1.0 code	HBP 2.0 code	Package price
Acute severe malnutrition	M200029	MP031A	1,800/day (General ward) 2,700/ day (HDU) 3,600/ day (ICU without ventilator) 4,500/ day (ICU with ventilator)

ALOS: 3-5 days

Minimum qualification of the treating doctor:

Essential: PG Diploma/MD/ DNB or equivalent (Paediatrics)

Desirable: DM/DNB(Neonatology) (for NICU patients)

Special empanelment criteria/linkage to empanelment module:

1. Availability of appropriately equipped & staffed Neonatal ICU (NICU) / Paediatric ICU (PICU) for admitting children requiring ICU care.
2. Availability of a qualified Paediatrician (as per the above essential qualifications) in the hospital

Disclaimer:

ICMR has issued clinical guidelines for **Severe Acute Malnutrition with Complications** to be followed in country. For monitoring and administering the claim management process of **Acute severe malnutrition**, NHA shall be following these guidelines. This document has been prepared for guidance of PROCESSING TEAM and TRANSACTION MANAGEMENT SYSTEM of AB PM-JAY for the claims of procedures mentioned above. The ICMR guidelines are also included in the document for better understanding of the SHA teams, Insurance companies and TPAs. The hospitals can also refer to this document so that they have the insight on how the claims will be processed. However, this document doesn't provide any guidance on clinical and therapeutic management of patient. In that respect the hospitals and physicians may refer to the ICMR poster and other relevant material as per the extant professional norms.

PART I: Guidelines for Clinicians and Healthcare Providers

1.1 Objective:

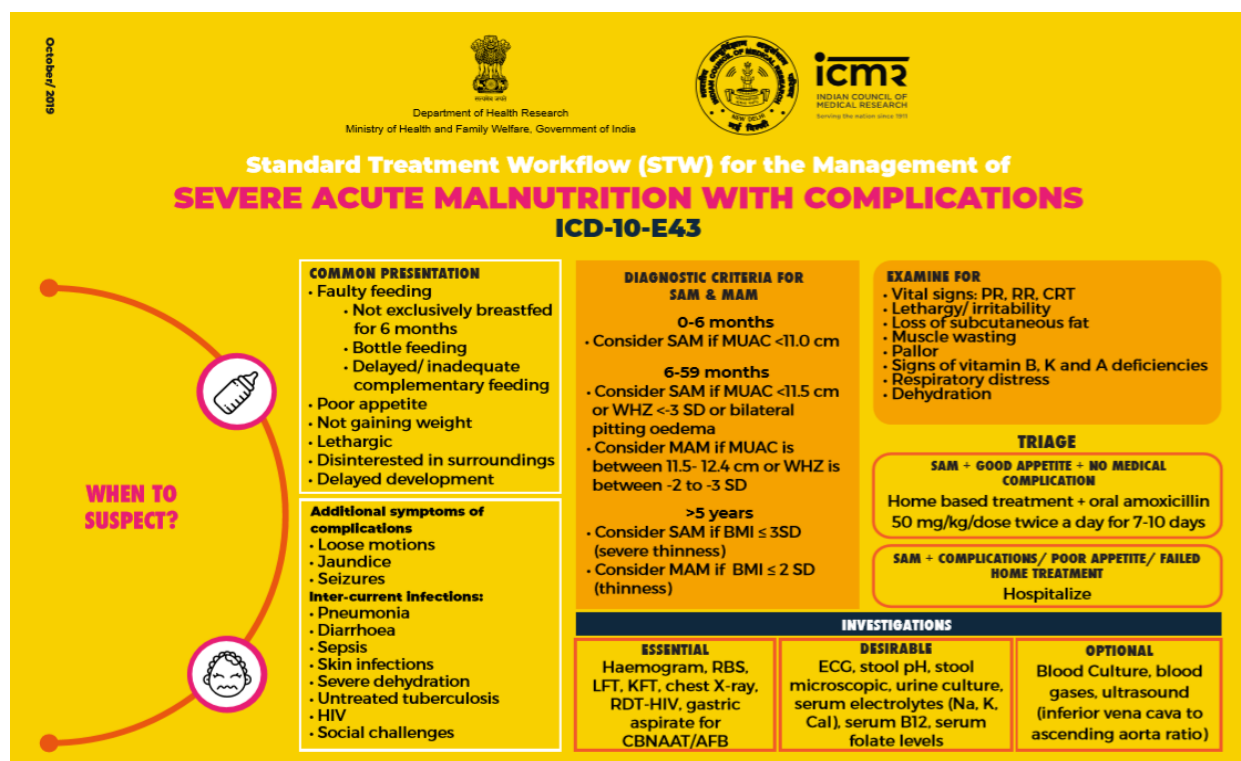
The purpose of this section is to act as a guidance & a clinical decision support tool for the clinicians in deciding the line of treatment, plan clinical management of patient and decide referral of cases to the appropriate level of care (as required) for treatment of patients under PMJAY and selection of corresponding Health Benefit Package.

It will also serve as a tool for hospitals to determine and submit the mandatory documents required for claiming reimbursement of health benefit package under PMJAY.

1.2 Clinical key pointers:

- Proceed for admission **only if** Severe Acute Malnutrition (SAM) is present along with Complications/ poor appetite/ failed home treatment
- If the patient is not having any complications/ is able to feed well and mother is co-operative, admission may not be required.
- Transfer to Nutrition Rehabilitation Centre (NRC) when child meets the discharge criteria & accepts home available foods
- Discharge criteria from hospital to outpatient care:
 - Child is clinically well and alert
 - No or resolving medical complications
 - No or resolving edema (if present)
 - Satisfactory oral intake, has a good appetite with appropriate weight gain

1.3 STANDARD TREATMENT WORKFLOW (DHR-ICMR STW)ⁱ- For clinicians/ treating doctor



TREATMENT		
A. STABILISATION PHASE: Monitor vitals, urine frequency, stool/ vomitus volumes INTAKE: IVF (DNS) 4 ml/kg/hr for 2-3 days with early/ concomitant initiation of oral feeds (130 ml/kg/day)		
CONDITION	PLACE OF TREATMENT	TREATMENT
INFECTIONS (empirically)	Facilities for supportive monitoring, investigations and IVF	• Inj. Ampicillin – 50 mg/kg/iv or im X 6hrly Plus inj. Gentamicin- 7.5 mg/kg iv or im, OD for 7-10 days • If no response within 48 hrs or critically ill give inj. Ceftriaxone 50 mg/kg, OD for 7-10 days • When accepting orally, switch to oral amoxicillin 40-45 mg/kg/dose twice a day for 7 days • If prolonged diarrhoea (>7 days): Metronidazole 10-12 mg/kg, 8 hrly for 7-10 days (inj.ectable or oral)
HYPOGLYCAEMIA (RBS <54mg/dL)	Facilities for supportive monitoring, investigations and IVF	Conscious: 50 ml of 10% Dextrose or 1 tsf sugar in 3 tsf water orally
	Transfer to intensive care facility to manage shock	Unconscious: 5 ml/kg of 10% Dextrose IV NO IMPROVEMENT treat as shock
HYPOTHERMIA (<35.5 °C or 96 °F)	Facilities for supportive monitoring, investigations and IVF. Plus warmer	Skin to skin care with mother (infants) Warming under warmer, incandescent lamp or warmer
	Intensive care facility to manage shock	NO IMPROVEMENT treat as shock
SEVERE DEHYDRATION	Facilities for supportive monitoring, investigations and IVF	Conscious: 50 ml of 10% Dextrose or 1 tsf sugar in 3 tsf water orally
	Transfer to intensive care facility to manage shock	Unconscious: 5 ml/kg of 10% Dextrose IV NO IMPROVEMENT treat as shock
ELECTROLYTE IMBALANCE (empirically)	Facilities for supportive monitoring, investigations and IVF	Potassium: 3-4 mmol/kg/D, orally for 2 weeks Magnesium: 0.4-0.6 mmol/kg/D1 IM followed by oral for 2 weeks
ANAEMIA	Facilities for supportive monitoring, investigations and IVF	Whole blood/ PRBC transfusion (10 ml/kg over 3 hrs) : if Hb <4 g/dL or Hb 4-6.5 g/dL with respiratory distress with close monitoring and hy. Furosemide (1 mg/kg) at start of transfusion

B. REHABILITATION PHASE (Transfer to NRC when child meets criteria for discharge* & accepts home available foods)

FEEDING	ELECTROLYTES	VITAMINS
Place of treatment: Facilities for supportive monitoring Treatment: a. 6 months and above: F75 at least 5 times/day gradually increasing to give 150-200 kCal/kg/day (usually 2-3 days) then switch to F100 for next 5-7 days with introduction of home available food b. Below 6 months: same as above with return to exclusive breastfeeding where ever possible	Place of treatment: Facilities for supportive monitoring Treatment: a. Zinc: 2 mg/kg/day X 2 weeks orally b. Copper: 0.3 mg/kg/day X 2 weeks orally c. Iron: 3 mg/kg/day once weight gain has started orally for 6 weeks	Place of treatment: Nutritional rehabilitation centre (NRC) Treatment: a. Vitamin A: >12 months- 2 lac iu, 6-12 months: 1 lac iu, <6 months: 0.5 lac iu if food not fortified b. Vitamin D, A, B Complex: RDA

***CRITERIA FOR DISCHARGE FROM HOSPITAL TO OUTPATIENT CARE:** Clinically well and alert; no or resolving medical complications; no or resolving oedema (if present); satisfactory oral intake has a good appetite (taking at least 75% of target calorie intake of 150- 200 kcal/kg/day & 0-6 months old have weight gain of 3-5 g/kg/day for three days).

PRIMARY FAILURE OF TREATMENT: (a.) Failure to regain appetite by day 4 (b.) Failure to lose oedema by day 4 (c.) Oedema still present Day 10 (d.) Failure to gain at least 5 g/kg/day for 3 consecutive days on catchup diet. Look for unrecognised congenital abnormality, inborn errors of metabolism, immune deficiency, other major organ dysfunction, and malignancy.

APPETITE TEST: Passed if, a child not fed for last 2 hours, when fed by mother in a quiet place consumes in 1 hour:
 • 7-12 months: of ≥ 25 ml/kg of F100
 • > 12 months: of locally prepared ready to eat food **
AMOUNT TO BE GIVEN: 15 g or more if < 4 kg, 25 g or more if 4 – 7 kg, 35 g or more if 7-10 kg
 **[Mixture of Roasted groundnut 1000 g, Milk powder 1200 g, Sugar 1120 g, Coconut oil 600 g. To be kept refrigerated for not more than 1 week.]

HOW TO PREPARE F75 AND F100	F75	F100
FRESH WHOLE CREAM MILK	300 ml	900 ml
SUGAR	100 g	75 g
VEGETABLE OIL	20 ml	20 ml
ADD WATER TO GET TOTAL VOLUME OF	1 Litre	1 Litre

ABBREVIATIONS

WHZ: Weight for Height Z-score
SAM: Severe Acute Malnutrition

MUAC: Mid-upper Arm Circumference
SD: Standard Deviation (from median)

MAM: Moderate Acute Malnutrition
BMI: Body Mass Index

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

REFERENCES

- The WHO growth standards. Available at <http://www.who.int/childgrowth/standards/en/>
- Management of severe acute malnutrition in children 6-59 months of age with oedema. Available at http://www.who.int/elena/titles/oedema_sam/en/
- Operational guidelines on Facility Based Management of Children with Severe Acute Malnutrition. Available at <http://nhm.gov.in/nhm-components/rmnc-a/child-health-immunization/child-health/guidelines.html>
- Kumar R, Kumar P, Aneja S, Kumar V, Rehan HS. Safety and Efficacy of Low-osmolarity ORS vs. Modified Rehydration Solution for Malnourished Children for Treatment of Children with Severe Acute Malnutrition and Diarrhea: A Randomized Controlled Trial. J Trop Pediatr. 2015 Dec;61(6):435-41.

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit our web portal (stw.lcmr.org.in) for more information.

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1.4 Mandatory documents- For healthcare providers

Following documents should be uploaded by the concerned hospital staff at the time of pre-authorisation and claims submission:

Mandatory documents	
I. At the time of Pre-authorisation	
a.	Still image of the child at the time of admission with patient ID and date
b.	Clinical notes with indications such as: <ul style="list-style-type: none"> i. Faulty feeding habits (Not exclusively Breast fed for 6 months/ bottle feeding/ delayed or inadequate complementary feeding) ii. Poor appetite iii. Lethargy/ Irritability iv. Any delayed developmental milestones including Weight v. Vitals- Pulse rate (PR), respiratory rate (RR), Capillary refill time (CRT) vi. Loss of Subcutaneous fat, muscle wasting, pallor, mid-upper arm circumference (MUAC) less than normal vii. Signs of Vitamin B, K and A deficiencies (if any of these symptoms are present) viii. Dehydration ix. Respiratory distress
c.	Essential Investigations such as: <ul style="list-style-type: none"> I. Haemogram II. Random Blood sugar (RBS) III. LFT IV. KFT V. Chest X-ray VI. RDT-HIV (only where available/ possible) VII. Gastric aspirate for CBNAAT/ AFB (only where available/ possible) VIII. Peripheral smear examination
d.	Planned line of management
II. At the time of claim submission	
a.	Still image of the child at the time of discharge with patient ID and date
b.	Detailed indoor case papers with treatment details indicating <ul style="list-style-type: none"> i. Monitoring of vitals with Input-output charting as well as urine frequency, stool/ vomitus volumes ii. Intake: IV fluids (IVF) (DNS) 4ml/ Kg/hr for 2-3 days with early/ concomitant initiation of oral feeds (130 ml/kg/day) iii. Condition/ complication specific treatment such as Antibiotics for Infection, Dextrose for Hypoglycemia/ severe dehydration, Potassium/ Magnesium for electrolyte imbalance, Whole blood/ PRBC transfusion for Anemia.
c.	Detailed essential investigation reports <ul style="list-style-type: none"> i. Haemogram ii. Random Blood sugar (RBS) iii. LFT

<ul style="list-style-type: none"> iv. KFT v. Chest X-ray vi. RDT-HIV (only where available/ possible) vii. Gastric aspirate for CBNAAT/ AFB (only where available/ possible) viii. Peripheral smear examination
<ul style="list-style-type: none"> d. Detailed Discharge summary with follow-up advise including: <ul style="list-style-type: none"> i. Transfer to Nutritional Rehabilitation Centre (NRC) ii. Feeding, electrolytes (Zinc, Copper & Iron), vitamins (A & D, A, B complex) & supplementation advice

PART II: GUIDELINES FOR PROCESSING TEAM

2.1 Objective: To provide guidance to the pre-authorisation and claims processing team in ascertaining the medical necessity of procedure carried out vis a vis the patient's medical condition as evidenced by supporting documents/investigation reports etc, in deciding the admissibility and quantum of claim and compliance with mandatory documents by the hospital.

2.2 Following mandatory documents to be diligently reviewed by the pre-auth / claims processing personnel:

2.2.1 At the time of pre-authorization processing- For pre-authorisation processing doctor (PPD):

Mandatory documents
I. At the time of Pre-authorisation
<ul style="list-style-type: none"> a. Still image of the child at the time of admission with patient ID and date b. Clinical notes indicating: <ul style="list-style-type: none"> i. Faulty feeding habits (Not exclusively Breast fed for 6 months/ bottle feeding/ delayed or inadequate complementary feeding) ii. Poor appetite iii. Lethargy/ Irritability iv. Any delayed developmental milestones including Weight v. Vitals- Pulse rate (PR), respiratory rate (RR), Capillary refill time (CRT) vi. Loss of Subcutaneous fat, muscle wasting, pallor, mid-upper arm circumference (MUAC) less than normal vii. Signs of Vitamin A, B and K deficiencies (If any of these symptoms are present) viii. Dehydration ix. Respiratory distress c. Essential Investigations: <ul style="list-style-type: none"> I. Haemogram II. Random Blood sugar (RBS) III. LFT IV. KFT V. Chest X-ray VI. RDT-HIV (only where available/ possible) VII. Gastric aspirate for CBNAAT/ AFB (only where available/ possible)

VIII. Peripheral smear examination
d. Planned line of management

2.2.2 At the time of claim processing- For claims processing doctor (CPD)

- a. Is the still image of the child at the time of discharge with patient ID and date available?
- b. Does the patient have documentary evidence of (clinical indications & physical examination) for admission for Severe Acute Malnutrition (SAM) such as:
 - i. Faulty feeding habits (Not exclusively Breast fed for 6 months/ bottle feeding/ delayed or inadequate complementary feeding)
 - ii. Poor appetite
 - iii. Lethargy/ Irritability
 - iv. Any delayed developmental milestones including Weight
 - v. Vitals- Pulse rate (PR), respiratory rate (RR), Capillary refill time (CRT)
 - vi. Loss of Subcutaneous fat, muscle wasting, pallor, mid-upper arm circumference (MUAC) less than normal:
 - a. **In Child 0-6 months of age:** Consider SAM if MUAC < 11.0 cm
 - b. **In Child 6-59 months of age:** Consider SAM if MUAC < 11.5 cm or WHZ < -3 SD or bilateral pitting edema Consider Moderate Acute Malnutrition (MAM) if MUAC is between 11.5 to 12.4 cm or Weight for Height Z-score (WHZ) is between -2 to -3 Standard Deviation (SD)
 - c. **In Child > 5 years of age:** Consider SAM if BMI ≤ 3SD (severe thinness), Consider MAM if BMI ≤ 2SD (thinness)
 - vii. Signs of Vitamin A, B, and K deficiencies (If any of these symptoms are present)
 - viii. Dehydration
 - ix. Respiratory distress
- c. Do the indoor case papers give the treatment details such as:
 - i. Monitoring of vitals with Input-output charting as well as urine frequency, stool/ vomitus volumes
 - ii. Intake: IVF(DNS) 4ml/ Kg/hr for 2-3 days with early/ concomitant initiation of oral feeds (130 ml/kg/day)
 - iii. Condition/ complication specific treatment such as Antibiotics for Infection, Dextrose for Hypoglycemia/ severe dehydration, Potassium/ Magnesium for electrolyte imbalance, Whole blood/ PRBC transfusion for Anemia.
- d. Is there a documentary evidence to confirm the discharge criteria i.e.:
 - i. Child is clinically well and alert
 - ii. No or resolving medical complications
 - iii. No or resolving edema (if present)
 - iv. Satisfactory oral intake, has a good appetite with appropriate weight gain (taking at least 75% of target calorie intake of 150- 200 kcal/kg/day & 0-6 months old have weight gain of 3-5 g/kg/day for three days).
- e. Is the discharge summary available and includes follow-up advise for rehabilitation phase such as:



- i. Transfer to Nutritional Rehabilitation Centre (NRC)
- ii. Feeding, electrolytes (Zinc, Copper & Iron), vitamins (A & D, A, B complex), Supplementation advise

PART III: GUIDELINES FOR IT

3.1 Objective: To enable setting up of cross check mechanisms/rule engines within the IT platform (TMS) to ensure compliance with STGs and to prevent fraud / abuse of the Health Benefit Package.

3.2 Below mentioned are the scenarios where a provision would be built in TMS for pop-ups:

- a. SAM with Complications/ Poor appetite/ failed home treatment- Yes
- b. Is the Child 0-6 months of age- Yes, then is MUAC< 11.0 cm- Yes
- c. Is the Child 6-59 months of age- Yes, then is MUAC<11.5 cm or WHZ <-3 SD or bilateral pitting edema - Yes
- d. Is the Child > 5years of age- Yes, then is BMI <= 3SD (severe thinness)- Yes

Acknowledgment:

ⁱ Standard Treatment Workflows of India. 2019 Edition, vol. 1, New Delhi, Indian council of Medical Research, Department of Health Research, Ministry of Health and Family Welfare, Government of India. These STWs have been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the web portal (stw.icmr.org.in) for more information. © Indian Council of Medical Research and Department of Health Research, Ministry of Health & Family Welfare, Government of India.