

Improving the Quality of Inpatient Management of Severe Acute Malnutrition (SAM) in Malawi

Mentorship & Supervision Checklist

for Inpatient Management of SAM

## **2nd Edition – December 2016**

# (1a) Hospital Assessment Form: SAM CHILD RECORD REVIEW

**Assess the last 3 patients’ records using the following form.** *Enter information in blank boxes. For ‘status’ enter if the child* ***is currently in care, cured, stabilised, defaulted, or death****. Under "monitoring", tick ‘check’ boxes [√] if actions were carried out correctly and cross [X] if done incorrectly. Where ‘check’ boxes are crossed, provide an explanation in ‘notes’ column. If the action is not applicable (e.g. child was not dehydrated) write N/A. If it is unclear if the action was carried out correctly mark ‘?’ and seek clarification.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **District:** | | | **Health Facility:** | | | |
| **Where is Management of SAM located (paediatric ward, Nutrition Rehabilitation Unit (NRU) or other:** | |  | | | | |
| **BASIC INFORMATION:** | **Registration no:** |  | **Registration no:** |  | **Registration no:** |  |
| **STATUS:** |  | **STATUS:** |  | **STATUS:** |  |
| **INDICATORS:** | ***Notes*** |  | ***Notes*** |  | ***Notes*** | |
| **STATUS OF CHILD (WHEN ADMITTED ONTO THE CURRENT WARD)** | | | | | | |
| Age (months) |  |  |  |  |  | |
| Sex |  |  |  |  |  | |
| Admission weight (kg) |  |  |  |  |  | |
| MUAC (cm) |  |  |  |  |  | |
| Weight-for-height/length Z- score |  |  |  |  |  | |
| Oedema grade (0 + ++ +++) |  |  |  |  |  | |
| Dermatosis (skin lesions) |  |  |  |  |  | |
| HIV status (is the child positive, negative, exposed or not tested?) |  |  |  |  |  | |
| Where was the child referred from? |  |  |  |  |  | |
| New admission or readmission in inpatient care |  |  |  |  |  | |
| **KEY DATES** | | | | | | |
| Date admitted to current ward |  |  |  |  |  | |
| Time admitted to current ward |  |  |  |  |  | |
| Date discharge or death |  |  |  |  |  | |
| Time of death *(if applicable)* |  |  |  |  |  | |
| Date of transition from F-75 onto RUTF or F-100 |  |  |  |  |  | |
| Date ReSoMal first prescribed *(if applicable)* |  |  |  |  |  | |
| Date malaria test done (indicate test result) |  |  |  |  |  | |

| **INDICATORS** | ***Check*** | ***Notes*** | ***Check*** | ***Notes*** | ***Check*** | ***Notes*** |
| --- | --- | --- | --- | --- | --- | --- |
| **Step 1: Treat/prevent hypoglycaemia** | | | | | | |
| Fed F75 within 30 minutes of arrival on current ward and/or given 10% glucose (IV) or sugar solution (orally) |  |  |  |  |  |  |
| **Step 2: Treat / prevent hypothermia** | | | | | | |
| Temperature monitored twice daily? |  |  |  |  |  |  |
| **Step 3: Treat / prevent dehydration** | | | | | | |
| Watery stools documented |  |  |  |  |  |  |
| ReSoMal prescribed and documented as given after each watery stool |  |  |  |  |  |  |
| IV fluids only prescribed if child in shock |  |  |  |  |  |  |
| If given IV, duration does not exceed 2 hours |  |  |  |  |  |  |
| If given IV, respirations and pulse monitored every 10 minutes |  |  |  |  |  |  |
| Child diagnosed as dehydrated only if has watery stools/ vomiting |  |  |  |  |  |  |
| If dehydrated, correct volume of ReSoMal prescribed (5ml/kg every 30 mins for 2 hrs and 5-10ml/kg for next 4-10 hrs) |  |  |  |  |  |  |
| If dehydrated, ReSoMal documented as given according to prescription |  |  |  |  |  |  |
| If dehydrated, ReSoMal alternated with F75 after first 2 hours |  |  |  |  |  |  |
| If dehydrated, duration of ReSoMal does not exceed 12 hours |  |  |  |  |  |  |
| If dehydrated, Child’s respirations and pulse monitored at least hourly whilst on ReSoMal |  |  |  |  |  |  |
| **Step 4: Correct Electrolyte Imbalance** | | | | | | |
| Were feeds given according to standard protocol? |  |  |  |  |  |  |
| Diuretic not prescribed for oedema |  |  |  |  |  |  |
| Resomal used (e.g. ReSoMal) for dehydration |  |  |  |  |  |  |
| **Step 5: Treat / prevent infection** | | | | | | |
| Antibiotics given on day 1 |  |  |  |  |  |  |
| Appropriate course of broad-spectrum antibiotics given (5 -7 days) |  |  |  |  |  |  |
| Cotrimoxazole given if HIV +/exposed |  |  |  |  |  |  |
| Antibiotics documented as given according to prescription |  |  |  |  |  |  |
| If positive, was the child started on ART after stabilization? |  |  |  |  |  |  |
| **Step 6: Micronutrient deficiencies** | | | | | | |
| Were the standard feeds, F-75, F-100, RUTF given? |  |  |  |  |  |  |
| Does the child have eye signs of vitamin A deficiency? |  |  |  |  |  |  |
| If child has eye signs or measles, was Vitamin A given on day 1, Day 2 & Day 14? |  |  |  |  |  |  |
| Vitamin A recorded as given according to prescription |  |  |  |  |  |  |
| if the child is transitioning using F-100, was iron (3mg/kg/day) prescribed only after transition onto F100 |  |  |  |  |  |  |
| Iron recorded as given according to prescription |  |  |  |  |  |  |
| **Step 7: Start cautious feeding** | | | | | | |
| F75 given as starter feed |  |  |  |  |  |  |
| Correct volume of F75 prescribed 2 or 3 hourly during stabilization |  |  |  |  |  |  |
| Frequency of F75 lowered and volume increased correctly (if no vomiting, <5 watery stools, finishing most feeds) |  |  |  |  |  |  |
| F75 recorded as given according to prescription |  |  |  |  |  |  |
| NG tube correctly prescribed (if intake <80% feed over 24 hours or <80% for 3 consecutive feeds) |  |  |  |  |  |  |
| **Step 8: Achieve catch up growth** | | | | | | |
| Transition onto RUTF / F100 prescribed at right time (if appetite and reduced/ minimal oedema) |  |  |  |  |  |  |
| Correct volume of F75 and RUTF / F100 prescribed and given during transition |  |  |  |  |  |  |
| Volume of F75 and RUTF / F100 recorded as given according to prescription |  |  |  |  |  |  |
| If child is getting F100, Volume of F100 increased by 10ml per feed on day 3 of transition |  |  |  |  |  |  |
| Volume of RUTF or F100 increased after day 3 of transition |  |  |  |  |  |  |
| Total 24 hour daily feed volume calculated correctly |  |  |  |  |  |  |
| ***If transitioned using F100,*** volume of F100 given in correct amount every 4 hours |  |  |  |  |  |  |
| **Step 9: Follow up** | | | | | | |
| If transitioned using RUTF caregiver being informed of the nearest health centre outpatient to her home and being given a transfer slip and a weekly ration of RUTF. |  |  |  |  |  |  |
| **Monitoring** | | | | | | |
| Weight accurately plotted on chart |  |  |  |  |  |  |
| Z scores recorded daily using WHO charts |  |  |  |  |  |  |
| Target weight correctly recorded on admission |  |  |  |  |  |  |
| Record weight daily |  |  |  |  |  |  |
| **Key Points** | | | | | | |

(1b) Hospital Assessment Form: OBSERVATIONS on WARD

**Observe activities on the ward during feeds (one session) and after feeds (during ward rounds, 2 sessions per day).** *Complete the blank spaces. Tick check boxes if actions were carried out correctly and cross if done incorrectly. Where check boxes are crossed provide an explanation in notes column. If it is unclear if the action was carried out correctly mark ‘?’ and seek clarification.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **District** |  |  |  |  |
| **Health Facility** |  |  |  |  |
| **Where is Management of SAM located (paediatric ward, Nutrition Rehabilitation Unit (NRU) or other:** |  |  |  |  |
| **OBSERVATION PERIOD:** | ***Date*** |  | ***Start***  ***time*** | ***End***  ***time*** |

X

| **INDICATORS:** | ***Check*** | ***Notes*** |  |  |
| --- | --- | --- | --- | --- |
| **Step 1: Treat / prevent hypoglycaemia** | | | | |
| *Checking question: are children admitted onto the ward within 2 hours of arrival?* |  |  |  |  |
| *Checking question to mothers: what time did you arrive at the hospital?* |  |  |  |  |
| **Step 2: Treat / prevent hypothermia** | | | | |
| Children remain covered |  |  |  |  |
| Each child has a blanket |  |  |  |  |
| Ward is not draughty (prevention of cold air getting into the ward, that causes discomfort) |  |  |  |  |
| Hot water bottle discouraged |  |  |  |  |
| Kangaroo method encouraged |  |  |  |  |
| *Checking question for HCP: if a child is hypothermic, what would you do? (Active rewarming?)* |  |  |  |  |
| ***Other emergency treatments*** | | | | |
| Checking question: If child shows signs of shock are they stabilized at OPD? |  |  |  |  |
| Checking question: If child is in septic shock is 10ml/kg whole blood ordered and administered? |  |  |  |  |
| Checking question: If child has severe anaemia, is 10ml/kg whole blood (or 5-7ml/kg packed cells) ordered and administered? |  |  |  |  |
| Appropriate wall charts for giving IV fluids are present |  |  |  |  |
| Checking question: Are IV fluids not given to treat dehydration unless the child is in shock? |  |  |  |  |
| Checking question: Are pulse and respirations monitored every 10 minutes during IV fluids? |  |  |  |  |
| **Step 3: Treat / prevent dehydration** | | | | |
| ReSoMal given instead of ORS to prevent and treat dehydration |  |  |  |  |
| ReSoMal given on time, as prescribed |  |  |  |  |
| Staff accurately measure out ReSoMal volumes according to prescription |  |  |  |  |
| Children on ReSoMal monitored for return of rehydration signs (check pulse rate, respiratory rate every 10 to 30 mn) |  |  |  |  |
| *Checking question: Is ReSoMal given routinely after every watery stool?* |  |  |  |  |
| Resomal not being given to children who are not severely malnourished (answer yes if given, no if not given) |  |  |  |  |
| **Step 4: Correct electrolyte imbalance** | | | | |
| Salt not added to additional foods (ask knowledge of the caregiver and health workers) |  |  |  |  |
| **Step 5: Treat/ prevent infections** | | | | |
| Antibiotics given on time (within 30 minutes of prescription time) [Treat] |  |  |  |  |
| Antibiotic type and dose given according to prescription [Treat] |  |  |  |  |
| Staff wash hands between contact with each child [Hand washing] |  |  |  |  |
| Staff wash hands before preparing feeds [Hand washing] |  |  |  |  |
| Mothers wash hands before giving feeds [Hand washing] |  |  |  |  |
| Running water available for staff  [Hand washing] |  |  |  |  |
| Soap available for staff [Hand washing] |  |  |  |  |
| Running water available for mothers  [Hand washing] |  |  |  |  |
| Soap available for mothers [Hand washing] |  |  |  |  |
| New syringes used for each injection  [Ward hygiene] |  |  |  |  |
| New or sterilized syringes used for each feed given through NG tube [Ward hygiene] |  |  |  |  |
| Cups used for feeding children (not bottles) [Ward hygiene] |  |  |  |  |
| Cups washed with soap between each feed [Ward hygiene] |  |  |  |  |
| Feeding equipment washed with soap between each feed preparation  [Ward hygiene] |  |  |  |  |
| Separate sink used for washing equipment from washing hands [Ward hygiene] |  |  |  |  |
| Children do not share beds with each other [Ward hygiene] |  |  |  |  |
| Ward appears clean [Ward hygiene] |  |  |  |  |
| No evidence of pests on ward (e.g. rat droppings, cockroaches) [Ward hygiene] |  |  |  |  |
| Clean toilet available for staff  [Ward hygiene] |  |  |  |  |
| Clean toilet available for mothers  [Ward hygiene] |  |  |  |  |
| Area and detergent available for washing clothes and nappies [Ward hygiene] |  |  |  |  |
| Bed sheets clean and dry [Ward hygiene] |  |  |  |  |
| **Steps 7: Start cautious feeding & Step 8: Achieve catch-up growth** | | | | |
| Feeds not shared? [Feed preparation] |  |  |  |  |
| F75 recipe used is correct [Feed preparation] |  |  |  |  |
| RUTF / F100 used as feed once child has stabilized [Feed preparation] |  |  |  |  |
| F100 recipe used is correct  [Feed preparation] |  |  |  |  |
| Recipe/s on display close to where feeds are prepared [Feed preparation] |  |  |  |  |
| Jugs measuring in 10ml used to measure volumes [Feed preparation] |  |  |  |  |
| Scoops, if used, provide an accurate measure for each ingredient  [Feed preparation] |  |  |  |  |
| Staff use good technique to measure ingredients [Feed preparation] |  |  |  |  |
| Boiled water used to make feeds  [Feed preparation] |  |  |  |  |
| Feeds made up to correct volume (whether add x litres or make up to x litres)  [Feed preparation] |  |  |  |  |
| Ingredients mixed thoroughly (if starting from scratch, oil not separated out)  [Feed preparation] |  |  |  |  |
| Feeds either refrigerated or fresh feeds made every 4 hours  [Food storage and administration] |  |  |  |  |
| Utensils and feeds always covered  [Food storage and administration] |  |  |  |  |
| WHO F75 feed volume chart easily accessible [Food storage and administration] |  |  |  |  |
| Feeds given on time (within 15 minutes of prescription)  [Food storage and administration] |  |  |  |  |
| Staff accurately measure out feed volumes for each child  [Food storage and administration] |  |  |  |  |
| Correct feed type given to each child according to prescription (F75 or RUTF / F100) [Food storage and administration] |  |  |  |  |
| Correct volume of feed given to each child according to prescription  [Food storage and administration] |  |  |  |  |
| Staff measure any leftovers for each child [Food storage and administration] |  |  |  |  |
| Feeds recorded according to actual volume taken (i.e. leftovers charted)  [Food storage and administration] |  |  |  |  |
| Feeds recorded according to actual time given [Food storage and administration] |  |  |  |  |
| If child vomits, feed re-offered  [Food storage and administration] |  |  |  |  |
| Reluctant feeders encouraged to eat with patience (no force feeding)  [Food storage and administration] |  |  |  |  |
| Children on RUTF / F100 fed until quantity offered finished  [Food storage and administration] |  |  |  |  |
| *Checking question: Are additional foods withheld from children in stabilisation phase? Ask mother: is the child given anything in addition?* [Food storage and administration] |  |  |  |  |
| Oral route tried first before NG route used at each feed [NGT] |  |  |  |  |
| NG tube checked to ensure in place before each feed [NGT] |  |  |  |  |
| Large syringes used for NG feeding (e.g. 20ml) so that fluid can flow freely [NGT] |  |  |  |  |
| NG tube flushed with water (about 20 ml) straight after feeds [NGT] |  |  |  |  |
| Feed allowed to flow through tube by gravity, not forced [NGT] |  |  |  |  |
| **Step 9: Sensory stimulation** | | | | |
| Home-craft workers / Nurses touch and hold the children |  |  |  |  |
| Home-craft worker / Nurse contacts with children are gentle, caring and loving |  |  |  |  |
| Mothers interact with their children |  |  |  |  |
| Colourful pictures/ displays up on walls |  |  |  |  |
| Toys are available in/ around beds |  |  |  |  |
| Checking question: Are structured play sessions held for children? |  |  |  |  |
| **Step 10: Follow up** | | | | |
| Mothers are treated kindly and supportively by staff |  |  |  |  |
| Checking question: Are educational sessions on children stimulation held for mothers? |  |  |  |  |
| Checking question: Are mothers given a transfer card and referred to the nearest outpatient site to their home? |  |  |  |  |
| Checking question: Are mothers given a weekly ration of RUTF in discharge from NRU |  |  |  |  |
| Checking question: Is the list of health centre providing outpatient Management of SAM available and information given to the mothers? |  |  |  |  |
| Raw skin covered (zinc and castor oil ointment, or petroleum jelly or paraffin gauze) [Nursing] |  |  |  |  |
| 1% potassium permanganate solution diluted to pale violet to treat dermatosis [Nursing] |  |  |  |  |
| Pulse rate recorded [Nursing] |  |  |  |  |
| Respiratory rate recorded [Nursing] |  |  |  |  |
| Temperature recorded twice daily [Nursing] |  |  |  |  |
| Set of weighing scales present [Monitoring] |  |  |  |  |
| Good technique used to weigh children [Monitoring] |  |  |  |  |
| Length board present OR MUAC tapes available [Monitoring] |  |  |  |  |
| Good technique used to measure height/length OR to measure MUAC [Monitoring] |  |  |  |  |
| WHO weight for length charts OR MUAC charts easily accessible to staff [Monitoring] |  |  |  |  |
| Critical Care Pathway (CCP), weight gain tally sheet, 24 hour feeding card filled for each child [Monitoring] |  |  |  |  |
| Separate ward or ‘corner’ available to treat severe malnutrition [Ward] |  |  |  |  |
| Separate kitchen available [Ward] |  |  |  |  |
| Guidelines for treatment of severe malnutrition easily accessible to staff [Ward] |  |  |  |  |
| Charts for each child kept at end of their bed (e.g. intake, weight, drugs, vital signs) [Ward] |  |  |  |  |
| Admissions register complete (n admitted, readmission, defaulters, death, cured) [Ward] |  |  |  |  |
| Referral slip for outpatient care complete [Ward] |  |  |  |  |
| Ward in good state of repair [Ward] |  |  |  |  |
| Equipment on ward in good working order [Ward] |  |  |  |  |
| Oxygen available [Ward] |  |  |  |  |
| Minimum of one nurse to five children available during day [Staff] |  |  |  |  |
| At least one qualified nurse, plus one other person available at night [Staff] |  |  |  |  |
| Duty shift organised every 12 hours [Staff] |  |  |  |  |
| Ward round carried out every day, including weekends [Staff] |  |  |  |  |
| Doctor/s visit ward at least once per day outside of ward rounds/ emergencies [Staff] |  |  |  |  |
| **KEY NOTES** |  |  |  |  |

**(1c) NRU Routine data**

|  |  |
| --- | --- |
|  | **Number** |
| **Total at the start of the month** |  |
| WFH/L < -3 z-score |  |
| MUAC < 11.5cm |  |
| Bilateral Oedema |  |
| Other |  |
| TOTAL NEW ADMISSIONS |  |
| Returned defaulter |  |
| Transfer from Hospital |  |
| Transfer from OTP |  |
| Transfer from other NRU |  |
| TOTAL ADMISSIONS |  |
| Stabilised |  |
| Cured |  |
| Died |  |
| Default |  |
| Medical Transfer |  |
| Transfer to other NRU |  |
| TOTAL EXITS |  |
| **Total at the end of the month** |  |
| Cure Rate (%) |  |
| Death Rate (%) |  |
| Default Rate (%) |  |
| Medical Transfer |  |
| Children referred for HTS |  |
| Children tested for HIV |  |
| Children HIV status already known |  |
| Child HIV sero-status R: (1) |  |
| Child HIV sero-status NR: (0) |  |
| HIV Exposed children |  |
| On ART |  |