Call for authors – systematic reviews on prevention and treatment of wasting

Deadline of submission: 31 May 2021

Appendix: detailed questions

1. A) In infants <6 months, what are the criteria that best inform the decision to initiate treatment in an outpatient/community setting for growth failure/faltering?

   Population: infants <6 months

   Index prognostic factors: possible criteria or likely combination(s) that best inform the decision to initiate treatment for growth failure/faltering in an outpatient/community setting including:

   Poor anthropometry (alone or in combination with below additional criteria)

   - Oedema (+, ++, or +++)
   - Low WLZ
   - Low WAZ
   - Low MUAC
   - Weight loss or slow weight gain

   Additional criteria

   - Low birthweight or small for gestational age (WHO or INTERGROWTH-21)
   - Age at presentation
   - Breastfeeding/lactation difficulties
   - Not exclusively breastfeeding
   - Maternal health, well-being, and social factors including:
     - Maternal illness
     - Difficulties caring for the infant
     - Adolescent mother
     - Maternal HIV
     - Low maternal BMI or MUAC
     - Mother has died

   Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

   Outcomes (to be scored) may include:

- Mortality
- Weight increase or improvement in anthropometry
- Morbidity

1. B) In infants <6 months, what are the criteria that best inform the decision for referral to treatment in an inpatient setting for growth failure/faltering?

   Population: infants <6 months

   Index prognostic factors: possible criteria or likely combination(s) that best inform the decision for referral to treatment for growth failure/faltering in an inpatient setting including:

   Poor anthropometry (alone or in combination with below additional criteria)

   - Oedema (+, ++, or +++)
   - Low WLZ
   - Low WAZ
   - Low MUAC
   - Weight loss or slow weight gain

   Additional criteria

   - Co-morbidities
   - IMCI danger signs
   - Low birthweight or small for gestational age (WHO or INTERGROWTH-21)
   - Age at presentation
   - Breastfeeding/lactation difficulties
   - Not exclusively breastfeeding
   - Maternal health, well-being, and social factors including:
     - Maternal illness
     - Difficulties caring for the infant
     - Adolescent mother
     - Maternal HIV
     - Low maternal BMI or MUAC
     - Mother has died

   Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

   Outcomes (to be scored) may include:

   - Mortality
   - Clinical deterioration defined by development of any life-threatening danger signs (obstructed breathing, respiratory distress, cyanosis, shock, severe anemia, convulsion, severe dehydration, profuse watery diarrhea, vomiting, and/or impaired consciousness)
   - Weight increase or improvement in anthropometry
   - Morbidity or recovery from co-morbidity

1. C) In infants <6 months admitted for inpatient treatment of growth failure/faltering, what are the criteria that best inform the decision for transfer to outpatient/community treatment?

Population: infants <6 months admitted for inpatient treatment for growth failure/faltering

Index prognostic factors: possible criteria or likely combination(s) that best inform the decision for transfer from inpatient to outpatient/community treatment including:

- Clinical stabilization
- Loss or absence of oedema
- Weight increase or improvement in anthropometry
- No breastfeeding/lactation difficulties
- Recovery from co-morbidity
- Absence of danger signs

Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

Outcomes (to be scored) may include:

- Mortality
- Weight increase or improvement in anthropometry
- Relapse (e.g. low anthropometry within six months after discharge)
- Readmission (e.g. requiring treatment for growth failure/faltering in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)

1. D) In infants <6 months receiving outpatient/community treatment for growth failure/faltering, what are the criteria that best inform the decision for discharge from outpatient/community treatment?

Population: infants <6 months receiving outpatient/community treatment for growth failure/faltering

Index prognostic factors: possible criteria or likely combination(s) that best inform the decision for discharge from outpatient/community treatment including:

- Absence of oedema
- Weight increase or improvement in anthropometry
- No breastfeeding/lactation difficulties
- Recovery from co-morbidity

Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

Outcomes (to be scored) may include:

- Mortality
- Weight increase or improvement in anthropometry
- Relapse (e.g. low anthropometry within six months after discharge)
- Readmission (e.g. requiring treatment for growth failure/faltering in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Default (e.g. absence at consecutive outpatient/community program visits)
- Sustained recovery (e.g. nutritional recovery sustained for at least six months)

2. A) In infants and children >6 months, what are the criteria that best inform the decision to initiate treatment in an outpatient/community setting for wasting and/or oedema?

Population: infants and children >6 months

Index prognostic factors: possible criteria or likely combination(s) that best inform the decision to initiate treatment for wasting and/or oedema in an outpatient/community setting including:

Poor anthropometry (alone or in combination with below criteria)

- Oedema (+, ++, or +++)
- Low WLZ or WHZ
- Low WAZ
- Low MUAC
- Concurrent wasting (low WLZ or WHZ and/or low MUAC) and stunting (low LAZ or HAZ)

Additional criteria

- Age at presentation
- Passed or failed appetite test
- Maternal health, well-being, and social factors including:
    - Maternal illness
    - Difficulties caring for the infant
    - Adolescent mother
    - Maternal HIV
    - Low maternal BMI or MUAC
    - Mother has died

Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

Outcomes (to be scored) may include:

- Mortality
- Weight increase or improvement in anthropometry
- Morbidity

2. B) In infants and children >6 months with wasting and/or oedema, what are the criteria that best inform the decision for referral to treatment in an inpatient setting for wasting and/or oedema?

Population: infants and children >6 months

Index prognostic factors: possible criteria or likely combination(s) that best inform the decision for referral to treatment for wasting and/or oedema in an inpatient setting including:

Poor anthropometry (alone or in combination with below criteria)

- Oedema (+, ++, or +++)
- Low WLZ or WHZ
- Low WAZ
- Low MUAC
- Concurrent wasting (low WLZ or WHZ and/or low MUAC) and stunting (low LAZ or HAZ)

Additional criteria

- Co-morbidities
- IMCI danger signs
- Age at presentation
- Failed appetite test
- Failure to respond to nutritional interventions
- Maternal health, well-being, and social factors including:
    - Maternal illness
    - Difficulties caring for the infant
    - Adolescent mother
    - Maternal HIV
    - Low maternal BMI or MUAC
    - Mother has died

Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

Outcomes (to be scored) may include:

- Mortality
- Clinical deterioration defined by development of any danger signs (obstructed breathing, respiratory distress, cyanosis, shock, severe anemia, convulsion, severe dehydration, profuse watery diarrhea, vomiting, and/or impaired consciousness)
- Weight increase or improvement in anthropometry
- Morbidity or recovery from co-morbidity

2. C) In infants and children >6 months admitted for inpatient treatment of wasting and/or oedema, what are the criteria that best inform the decision for transfer to outpatient/community treatment?

Population: infants and children >6 months admitted for inpatient treatment of wasting and/or oedema

Index prognostic factors: possible criteria or likely combination(s) that best inform the decision for transfer from inpatient to outpatient/community treatment including:

- Weight increase or improvement in anthropometry
- Clinical stabilization
- Loss or absence of oedema
- Recovery from co-morbidity
- Absence of danger signs
- Appetite

Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

Outcomes (to be scored) may include:

- Mortality
- Weight increase or improvement in anthropometry
- Relapse (e.g. presenting with moderate or severe wasting or oedema within six months after discharge)

- Readmission (e.g. requiring treatment for moderate or severe wasting or oedema in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)

2. D) In infants and children >6 months receiving outpatient/community treatment for wasting and/or oedema, what are the criteria that best inform the decision for discharge from outpatient/community treatment?

   Population: infants and children >6 months with wasting or oedema

   Index prognostic factors: possible criteria or likely combination(s) that best inform the decision for discharge from outpatient/community treatment including:

   - Absence of oedema
   - Weight increase or improvement in anthropometry

   Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

   Outcomes (to be scored) may include:

   - Mortality
   - Weight increase or improvement in anthropometry
   - Relapse (e.g. presenting with moderate or severe wasting or oedema within six months after discharge or other definition)
   - Readmission (e.g. requiring treatment for moderate or severe wasting or oedema in an inpatient or outpatient/community setting within six months after discharge)
   - Non-response (e.g. not achieving recovery within four months of initiating treatment)
   - Default (e.g. absence at consecutive outpatient/community program visits)
   - Sustained recovery (e.g. nutritional recovery sustained for at least six months)

3. In mothers/caregivers of infants <6 months with growth failure/faltering who are experiencing difficulties with breastmilk intake, which interventions to manage difficulties with breastfeeding/lactation can improve breastfeeding practices and increase breastmilk intake?

   Population: mothers/caregivers of infants <6 months with growth failure/faltering who are experiencing difficulties with breastmilk intake (author-defined)

   Intervention: management of difficulties with breastfeeding/lactation, supplementary suckling, or other interventions to increase breastmilk intake

   Comparison: none of the above interventions and/or interventions compared to each other

   Outcomes (to be scored) may include:

   - Breastfeeding indicators and intake
   - Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
   - Mortality
   - Morbidity or recovery from co-morbidity

4. A) In infants <6 months with growth failure/faltering, which criteria best determine if and when an infant should be given a supplemental milk formula (in addition to breastmilk if the infant is breastfed)?

   Population: infants <6 months with growth failure/faltering (author-defined)

   Index prognostic factor: possible criteria or approaches for giving commercial infant formula, F-75, or diluted F-100 or likely combination(s) including:

   - Early versus late introduction of supplemental milk formula
   - Giving supplemental milk formula versus no supplemental milk formula given
   - Introduction of supplemental milk formula based on specific criteria (including when mothers experience difficulties with breastfeeding/lactation)

   Reference prognostic factor: alternative approaches to introduction of supplemental milk formula and/or above approaches compared to each other

   Outcomes (to be scored) may include:

   - Mortality
   - Clinical deterioration defined by development of any danger signs (obstructed breathing, respiratory distress, cyanosis, shock, severe anemia, convulsion, severe dehydration, profuse watery diarrhea, vomiting everything, and/or impaired consciousness)
   - Duration of hospital stay or time to discharge
   - Weight increase or improvement in anthropometry
   - Relapse (e.g. low anthropometry within six months after discharge)
   - Readmission (e.g. requiring treatment for growth failure/faltering in an inpatient or outpatient/community setting within six months after discharge)
   - Non-response (e.g. not achieving recovery within four months of initiating treatment)
   - Morbidity or recovery from co-morbidity

4. B) In infants <6 months with growth failure/faltering meeting the above criteria, what is the most effective supplemental milk formula (commercial infant formula, F-75, or diluted F-100) and for how long should these feeds be given?

   Population: infants <6 months with growth failure/faltering (author-defined)

   Intervention: commercial infant formula, F-75, or diluted F-100; different durations of commercial infant formula, F-75, diluted F-100

   Comparison: commercial infant formula, F-75, or diluted F-100 compared to each other

   Outcomes (to be scored) may include:

   - Mortality
   - Clinical deterioration defined by development of any danger signs (obstructed breathing, respiratory distress, cyanosis, shock, severe anemia, convulsion, severe dehydration, profuse watery diarrhea, vomiting, and/or impaired consciousness)
   - Duration of hospital stay or time to discharge
   - Relapse (e.g. low anthropometry within six months after discharge)

- Readmission (e.g. requiring treatment for growth failure/faltering in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity or recovery from co-morbidity

5. In infants <6 months with growth failure/faltering, should an antibiotic be routinely given (as per the 2013 guidelines for severe wasting and oedema)?

   Population: infants <6 months with growth failure/faltering (author-defined)

   Intervention: no routine antibiotics or different approaches (e.g. types of antibiotics, doses, etc.) than treatment protocols in the 2013 guidelines

   Comparison: routine antibiotics following treatment protocols in the 2013 guidelines

   Outcomes (to be scored) may include:

   - Mortality
   - Clinical deterioration defined by development of any danger signs (obstructed breathing, respiratory distress, cyanosis, shock, severe anemia, convulsion, severe dehydration, profuse watery diarrhea, vomiting, and/or impaired consciousness)
   - Antimicrobial resistance
   - Hospital acquired infections
   - Duration of hospital stay or time to discharge
   - Relapse (e.g. low anthropometry within six months after discharge)
   - Readmission (e.g. requiring treatment for growth failure/faltering in an inpatient or outpatient/community setting within six months after discharge)
   - Non-response (e.g. not achieving recovery within four months of initiating treatment)
   - Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
   - Morbidity or recovery from co-morbidity
   - Markers of intestinal and systemic inflammation

6. In mothers/caregivers of infants <6 months with growth failure/faltering, do maternal nutritional supplementation and/or counselling and/or maternal-directed mental health interventions improve infant outcomes?

   Population: mothers/caregivers of infants <6 months with growth failure/faltering (author-defined)

   Intervention: maternal nutritional supplementation and/or counselling and/or maternal-directed mental health interventions including:

   - Maternal nutritional supplementation (micronutrients, LNS, balanced energy and protein, etc.)
   - Breastfeeding, complementary feeding, and other nutrition and health counselling/education
   - Relaxation therapy while breastfeeding
   - Women's empowerment interventions
   - Mental health, psychosocial, peer, or social support
   - Cash transfers
   - Kangaroo mother care

Comparison: none of the above maternal-directed interventions and/or compare interventions (or combinations) to each other

Outcomes (to be scored) may include:

- Mortality
- Nutritional recovery
- Relapse (e.g. low anthropometry within six months after discharge)
- Readmission (e.g. requiring treatment for growth failure/faltering in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Child development

7. In infants and children >6 months with moderate wasting across settings and contexts, which children require specially formulated foods; also what is the effectiveness of specially formulated foods (including RUSF, RUTF, CSB++, MDCF) vs non-specially formulated food interventions vs other approaches?

   Population: infants and children >6 months with moderate wasting (outpatient/community), disaggregated by subgroups to determine effectiveness for different children

   Intervention: specially formulated foods (including RUSF, RUTF, CSB++, MDCF) vs non-specially formulated food interventions vs other approaches (e.g. improved quality / augmented family foods, counselling, cash distribution)

   Outcomes (to be scored) may include:

   - Mortality
   - Nutritional recovery
   - Time to recovery
   - Sustained recovery (e.g. nutritional recovery sustained for at least six months)
   - Relapse (e.g. presenting with moderate wasting within six months after discharge)
   - Readmission (e.g. requiring treatment for moderate wasting in an inpatient or outpatient/community setting within six months after discharge)
   - Non-response (e.g. not achieving recovery within four months of initiating treatment)
   - Deterioration to severe wasting
   - Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
   - Morbidity or recovery from co-morbidity
   - Micronutrient status
   - Child development
   - Risk of noncommunicable disease
   - Body composition

8. In infants and children >6 months with moderate wasting, what is the appropriate dietary treatment in terms of optimal type, quantity, and duration?

   Population:

   - infants and children >6 months with moderate wasting (receiving community/outpatient treatment)

- infants and children >6 months with moderate wasting (receiving inpatient treatment)

Intervention: dietary treatment in addition to standard clinical care

Comparison: no specific dietary treatment in addition to standard clinical care and/or compare different dietary treatment approaches to each other

Outcomes (to be scored) may include:

- Mortality
- Nutritional recovery
- Time to recovery
- Sustained recovery (e.g. nutritional recovery sustained for at least six months)
- Relapse (e.g. presenting with moderate wasting within six months after discharge)
- Readmission (e.g. requiring treatment for moderate wasting in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Deterioration to severe wasting
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity or recovery from co-morbidity
- Micronutrient status
- Child development
- Risk of noncommunicable disease
- Body composition

9. In infants and children >6 months with severe wasting or oedema, what is the optimal quantity and duration of RUTF?

Population: infants and children >6 months with severe wasting and/or oedema

Intervention: varying quantity or duration of RUTF

Comparison: current RUTF quantity and duration of treatment from the 2013 guidelines

Outcomes (to be scored) may include:

- Mortality
- Nutritional recovery
- Time to recovery
- Sustained recovery (e.g. nutritional recovery sustained for at least six months)
- Relapse (e.g. presenting with severe wasting or oedema within six months after discharge)
- Readmission (e.g. requiring treatment for severe wasting or oedema in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity or recovery from co-morbidity
- Micronutrient status
- Child development
- Risk of noncommunicable disease
- Body composition

10. In infants and children with growth failure/faltering or severe wasting or oedema who are not tolerating F-75 or F-100, what is the effectiveness of hydrolyzed formulas during inpatient care?

    Population:

    - infants <6 months with growth failure/faltering who are not tolerating F-75 or F-100 (inpatient only)
    - infants and children >6 months with severe wasting and/or oedema who are not tolerating F-75 during the stabilization phase or F-100 during the rehabilitation phase (inpatient only)

    Intervention: hydrolyzed formulas (partially or fully hydrolyzed proteins and/or carbohydrates)

    Comparison: standard therapeutic feeds including F-75 and F-100

    Outcomes (to be scored) may include:

    - Mortality
    - Clinical deterioration defined by development of any danger signs (obstructed breathing, respiratory distress, cyanosis, shock, severe anemia, convulsion, severe dehydration, profuse watery diarrhea, vomiting, and/or impaired consciousness)
    - Tolerance of feeds (vomiting, need for NGT, osmotic diarrhea, persistent abdominal distension, paralytic ileus)
    - Duration and intensity of osmotic diarrhea
    - Duration of NPO and IV maintenance fluids used
    - Markers of intestinal and systemic inflammation
    - Duration of hospital stay or time to discharge
    - Weight change
    - Morbidity or recovery from co-morbidity

11. A) In infants and children >6 months with moderate or severe wasting or oedema, how can dehydration be identified?

    Population:

    - infants and children >6 months with moderate wasting (inpatient only)
    - infants and children >6 months with severe wasting and/or oedema (inpatient only)

    Index test:

    - History of diarrhea or vomiting
    - Loose watery stools
    - Lethargy
    - Fever
    - Reduced consciousness
    - Prolonged capillary refill time
    - Abnormal respiratory patterns
    - Inability to drink
    - Low urine output
    - Low blood pressure
    - Rapid pulse
    - Hyponatremia

Reference standard: electrolyte imbalance, metabolic acidosis

Outcome: identification of dehydration (accuracy or diagnostic yield or detection rates)

11. B) In infants and children >6 months with moderate or severe wasting or oedema and dehydration but who are not shocked, what is the effectiveness of standard WHO low-osmolarity ORS compared with ReSoMal during inpatient care?

    Population:

    - infants and children >6 months with moderate wasting and dehydration but who are not shocked (inpatient only, excluding children with cholera/profuse watery diarrhea)
    - infants and children >6 months severe wasting and/or oedema and dehydration but who are not shocked (inpatient only, excluding children with cholera/profuse watery diarrhea)

    Intervention: standard WHO low-osmolarity ORS

    Comparison: current guidelines for fluid strategies with ReSoMal (from 2013 guidelines and ETAT guideline)

    Outcomes (to be scored) may include:

    - Mortality
    - Clinical deterioration defined by development of any danger signs (obstructed breathing, respiratory distress, cyanosis, shock, severe anemia, convulsion, severe dehydration, profuse watery diarrhea, vomiting, and/or impaired consciousness)
    - Adverse outcomes such as electrolyte imbalance, oedema
    - Duration of diarrhea
    - Time to full rehydration
    - Duration of hospital stay or time to discharge
    - Weight change
    - Morbidity or recovery from co-morbidity

12. A) Which infants and children with growth failure/faltering, moderate or severe wasting, or oedema require post-discharge interventions?

    Population: infants and children with growth failure/faltering, moderate or severe wasting, and/or oedema

    Index prognostic factors: possible criteria or likely combination(s) including:

    - Low WHZ
    - Low MUAC
    - Low WAZ
    - Low HAZ
    - Age at presentation
    - Breastfeeding/lactation or feeding difficulties
    - Maternal health, well-being, and social factors including:
        - Maternal illness
        - Difficulties caring for the infant
        - Adolescent mother

- Maternal HIV
- Low maternal BMI or MUAC
- Mother has died

Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

Outcomes (to be scored) may include:

- Mortality
- Relapse (e.g. low anthropometry or presenting with moderate or severe wasting or oedema within six months after discharge)
- Readmission (e.g. requiring treatment for growth failure/faltering or moderate or severe wasting or oedema in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Deterioration to severe wasting
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity or recovery from co-morbidity

12. B) In infants and children with growth failure/faltering, moderate or severe wasting, or oedema meeting the above criteria, which post-discharge interventions are effective?

Population: infants and children with growth failure/faltering, moderate or severe wasting, and/or oedema

Intervention: post-discharge interventions (e.g. counselling, nutritional supplementation, conditional cash transfers, etc.) in addition to standard of care

Comparison: no additional post-discharge interventions in addition to standard of care

Outcomes (to be scored) may include:

- Mortality
- Nutritional recovery
- Time to recovery
- Sustained recovery (e.g. nutritional recovery sustained for at least six months)
- Relapse (e.g. low anthropometry or presenting with moderate or severe wasting or oedema within six months after discharge)
- Readmission (e.g. requiring treatment for growth failure/faltering or moderate or severe wasting or oedema in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Deterioration to severe wasting
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity or recovery from co-morbidity
- Child development
- Body composition

13. In infants and children with wasting without co-morbidities, what is the effectiveness of the identification and treatment of wasting by community health workers (in community settings)?

Population: children with wasting without co-morbidities

Intervention: identification and treatment of wasting by community health workers (in community settings) following the same criteria for identification of wasting and program admission and discharge, following the same treatment protocols

Comparison: identification and treatment of wasting by health care staff (at health facilities) following the same criteria for identification of wasting and program admission and discharge, following the same treatment protocols

Outcomes (to be scored) may include:

- Mortality
- Nutritional recovery
- Sustained recovery (e.g. nutritional recovery sustained for at least six months)
- Relapse (e.g. wasting within six months after discharge)
- Readmission (e.g. requiring treatment for wasting in an inpatient or outpatient/community setting within six months after discharge)
- Non-response (e.g. not achieving recovery within four months of initiating treatment)
- Default (e.g. absence at consecutive treatment program visits)
- Deterioration to severe wasting
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity

14. In communities with infants and children up to five years old at risk of wasting, what community characteristics increase or mitigate risk of wasting for individual children?

Population: infants and children up to five years old at risk of wasting

Index prognostic factors: community settings characteristics including:

- Seasonal dimensions
- Food insecurity
- Humanitarian or stable settings
- Geographical location
- Health system quality and coverage
- WASH indicators

Reference prognostic factors: absence of the criteria or combination of criteria (categorical factors) or the increase or decrease in a criteria or combination of criteria (continuous factors)

Outcomes (to be scored) may include:

- Wasting incidence and prevalence
- Mortality

15. In communities with infants and children up to five years at risk of wasting, what is the effectiveness of community prevention interventions for prevention of wasting?

Population: infants and children up to five years at risk of wasting

Intervention: community prevention interventions including:

- Nutritional supplementation
- Nutritional counselling
- Breastfeeding interventions
- Social protection programs
- Cash transfers

Comparison: prevention interventions compared to each other and/or no prevention interventions

Outcomes (to be scored) may include:

- Mortality
- Wasting incidence and prevalence
- Deterioration to severe wasting
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity

16. In communities with infants and children up to five years at risk of wasting, what is the effectiveness of population-based interventions compared to targeted interventions for primary and secondary prevention of wasting?

Population: infants and children up to five years at risk of wasting

Intervention: population-based interventions including:

- Blanket supplementary feeding programs
- Nutritional supplementation programs
- Cash transfers

Comparison: population-based interventions compared to each other

Outcomes (to be scored) may include:

- Mortality
- Wasting incidence and prevalence
- Deterioration to severe wasting
- Anthropometric outcomes (WLZ, WAZ, MUAC, change in anthropometry, weight gain)
- Morbidity