



ASEAN Regional Guideline

on Minimum Standards for the Management
of Child Wasting in National Health Systems

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ASEAN Regional Guideline

on Minimum Standards for the Management of Child Wasting in National Health Systems

The ASEAN Secretariat
Jakarta

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Message from the **ASEAN Health Ministers Meeting Chair**

The ASEAN Regional Guidelines on Minimum Standards for the Management of Child Wasting in National Health Systems is a comprehensive reference that was designed to provide ASEAN Member States with evidence-based strategies and practical tools to prevent and manage wasting effectively.

We extend our heartfelt thanks to the leadership of the Ministries of Health of Cambodia, Philippines, and Lao PDR who led this important work. We appreciate the dedication and hard work of contributors from ASEAN Member States and international partners, whose expertise and support have been instrumental to the development of this document.

As we move forward, I encourage all relevant stakeholders to adapt and utilise these guidelines and minimum standards to ensure early detection and timely intervention for child wasting, and the integration of its management into broader nutrition and health programmes. It is my hope that the guidelines will serve as a catalyst for action, inspiring ASEAN Member States to cooperate in concerted efforts at both national and regional levels.

Together, let us continue to work towards a future where every child in the ASEAN region has the opportunity to grow-up healthy and achieve their full potential.

A handwritten signature in black ink, appearing to read 'Bounfeng Phoummalaysith', with a stylized flourish at the end.

Dr. Bounfeng PHOUMMALAYSITH

Minister of Health, Lao PDR

Chair of the ASEAN Health Ministers Meeting (AHMM)

Message from UNICEF



Every child has the right to survive and thrive.

Severe wasting, also known as severe acute malnutrition, is a devastating illness that deprives children of this basic right. It not only turns common childhood illnesses into life-threatening conditions, but also puts children at risk of stunted growth and development.

In the ASEAN region, wasting remains a persistent public health issue. Currently, over 4.5 million children under 5 are affected by wasting in the region, a number current trends suggest is likely to rise. Sadly, too many children—including those suffering from severe forms of wasting—do not get the treatment they need.

These ASEAN Guidelines and Minimum Standards for the Management of Child Wasting in National Health Systems reflect the commitment of all ten ASEAN Member States to establish effective systems for the prevention, early detection, and treatment of childhood wasting. They complement other ASEAN guidelines and standards related to infant and young child feeding, marketing practices, food fortification, school nutrition, and maternal nutrition in supporting the efforts of member states to establish a robust policy environment for combating all forms of malnutrition.

The UNICEF East Asia and Pacific Regional Office has been honoured to support the efforts of Cambodia's Ministry of Health, Lao PDR's Centre of Nutrition, the Philippines' Department of Health, and the ASEAN Secretariat in developing these Guidelines and Minimum Standards. Alongside its country offices, the UNICEF East Asia Pacific Regional Office is committed to work with ASEAN Member States and the ASEAN Secretariat to apply the Guidelines and Minimum Standards at country levels and to end child wasting and all other forms of child and maternal malnutrition across the ASEAN region.

A handwritten signature in black ink, appearing to read 'June Kunugi'.

June Kunugi

Regional Director
UNICEF East Asia and Pacific Regional Office

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List of Abbreviations

AMS	ASEAN Member States
ASEAN	Association of Southeast Asian Nations
CHW	Community Health Worker
HMIS	Health Management Information System
F75	Formula 75
F100	Formula 100
GAP	Global Action Plan
IMCI	Integrated Management of Childhood Illness
MAMI	Management of Small and Nutritionally At-Risk Infants Under Six Months and their Mothers
MUAC	Mid-Upper Arm Circumference
PHC	Primary Health Care
ReSoMal	Rehydration Solution for Malnutrition
RUTF	Ready-To-Use Therapeutic Food
SDG	Sustainable Development Goal
UHC	Universal Health Coverage
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WHZ	Weight-For-Height Z-Score



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About this guidance document

01 This document provides guidance on minimum requirements and standards addressing wasting and integrating the provision of wasting treatment services into routine primary health care services

- The guidance outlines the core principles and minimum standards for the provision of services for the prevention, early detection, and treatment of child wasting through national health systems. It also outlines essential steps for integrating services for the management of child wasting into routine primary health care services.
- The purpose of this guideline is to provide practical guidance to support AMSs in accelerating progress toward the prevention, early detection, and management of child wasting through national health systems, including integrating the treatment of child wasting into routine PHC services.
- This guideline does not cover clinical protocols for the treatment of child wasting. The World Health Organization (WHO) has developed these protocols, and each AMS has developed national guidelines that outline clinical protocols for management of wasting based on the local context.
- The guideline focuses only on health system interventions to prevent and manage wasting with a focus on Severe Acute Malnutrition (SAM); other systems are beyond the scope of this guideline.

02 Intended audience and use

- **Intended audience:** The target audience is policymakers and health and nutrition experts from AMSs.
- **Intended use:** This guideline is intended to serve as a reference for common regional perspectives on providing services for preventing and treating child wasting through national health systems. Each national health system is unique in its characteristics and structure; therefore, each AMS will need to adapt and align these guidelines to reflect its own national context.

03 Terminology of “Wasting” and “Acute malnutrition”

In this document, the terms “wasting” (moderate and severe) and “acute malnutrition” (Moderate/ MAM and severe/SAM) are used interchangeably. The actions and guidelines described here refer to children with wasting and/or nutritional oedema. Likewise, Integrated Management of Acute Malnutrition (IMAM) is used to refer to treatment services for children with wasting and/or nutritional oedema.

ASEAN Leaders’ Declaration on Ending All Forms of Malnutrition

In 2017, ASEAN adopted the ASEAN Leaders Declaration on Ending All Forms of Malnutrition during the 31st ASEAN Summit. To realize these commitments, the ASEAN Health Ministers Meeting adopted the ASEAN Strategic Framework and Action Plan on Nutrition 2018–2030, which identifies activities and outputs. The development of the ASEAN Guidelines and Minimum Standards for the Protection, Promotion, and Support of Complementary Feeding is one of these activities.



CHAPTER 1:

INTRODUCTION

Child wasting refers to a child who is too thin for his or her height and is the result of recent rapid weight loss or the failure to gain weight. Children with wasting have weakened immune systems, leaving them vulnerable to disease, developmental delays, and increased risk of death. The youngest children – those aged 0-5 months – are particularly vulnerable. Child wasting is preventable, but when prevention fails, treatment is critical to save children’s lives and puts them back on the path to healthy growth and development.

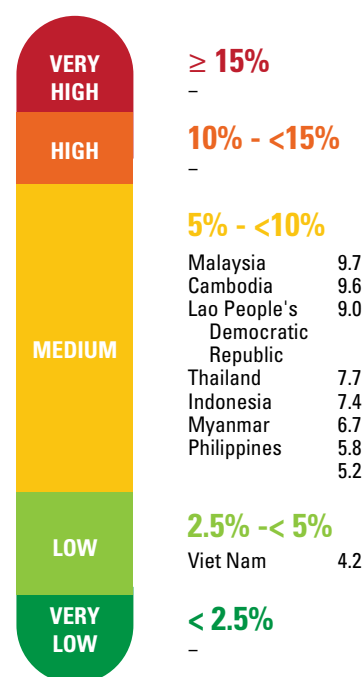
Globally, an estimated 45.4 million children suffer from wasting, and 13.6 million of these children suffer from severe wasting, the most life-threatening form of child malnutrition.¹ These numbers have remained stubbornly high over time.^{2,3} An estimated 8.5 million children with wasting are infants aged 6 months or younger.⁴ The socioeconomic impacts of the COVID-19 pandemic have also exacerbated the number of malnourished children globally.⁵

Child wasting in ASEAN countries

Wasting is a persistent problem in Southeast Asia, affecting an estimated 4.5 million children. This number accounts for **10 per cent of the total number of children with wasting globally**.¹ As shown in Figure 1, the prevalence of wasting is considered “medium” in Cambodia, Malaysia, Lao People’s Democratic Republic, Thailand, Indonesia, Myanmar, and the Philippines and “low” in Viet Nam. Of all Member States in the Association of Southeast Asian Nations (ASEAN), only two (Brunei Darussalam and Singapore) have a low prevalence of wasting (<5 per cent); and do not track national data on stunting and wasting due to its low prevalence.

Wasting in Southeast Asia affects children at a critical age of their development: about 80 per cent of the children with wasting are younger than 2 years of age.⁷ The period before the age of 2 years is a critical window of child development; left untreated, children with wasting face a greater risk of dying, and those who survive could fail to reach their full potential of growth and brain development.

Figure 1: Prevalence of wasting in ASEAN countries
Source: ASEAN et al.⁶



n.a. Brunei Darussalam Singapore

Child wasting

Studies have shown that **wasting and stunting are two interconnected forms of undernutrition**; globally and in the ASEAN region, many children suffer from both conditions simultaneously.⁸ Further, childhood stunting and wasting put children at a higher risk of non-communicable diseases later in life.⁹ Addressing child wasting could, therefore, also play a role in preventing stunting and all forms of malnutrition.

Evidence shows a **link between low birthweight and wasting in Southeast Asia**,^{6,7} underscoring the importance of preventive services, including maternal nutrition, antenatal care services, and early childhood nutrition and health care, particularly in the first year of life.

Global targets and recent developments

Child wasting is one of six global nutrition target indicators endorsed by WHO Member States during the sixty-fifth World Health Assembly in 2012. In 2015, the Sustainable Development Goals (SDGs) were adopted, including Goal 2, to eliminate malnutrition in all its forms by 2030. The SDGs incorporate the World Health Assembly targets, including the target of reducing the proportion of children suffering from wasting to <5 per cent by 2025 and <3 per cent by 2030.¹⁰

The world has made little progress in achieving the SDG target of reducing child wasting. In 2020, the **“Global Action Plan (GAP) on Child Wasting”**² was launched to accelerate this slow progress and respond to calls for a more coordinated and streamlined United Nations approach to addressing the problem of child wasting. Three ASEAN countries are included in the GAP: Cambodia, Indonesia, and The Philippines. The GAP framework identifies four critical outcomes to achieving the SDG target on child wasting: (i) Reducing the incidence of low birthweight; (ii) Improving infant and young child feeding; (iii) Improving child health; (iv) Improving early detection and treatment of child wasting. The fourth outcome of the framework sets the following objective: **“By 2025, increase by 50 per cent the coverage of treatment services for children with wasting.”** The GAP presents a unique opportunity to recognize child wasting as a global development priority and for countries to respond by developing context-specific road maps for action to accelerate progress.

As evidence for tackling the problem of child wasting evolves, the WHO has revised global guidelines for the prevention and management of infants **and child wasting**, including the management of infants under 6 months of age and guidelines for moderate wasting.¹¹ UNICEF also released an alert in May 2022, which highlights child wasting as a devastating child survival emergency that is prevalent in both stable countries and in those experiencing humanitarian crises.¹²

Progress in the ASEAN region: Rationale for a regional guideline on child wasting

Globally and in the ASEAN region, interventions to manage child wasting depend on health systems, including community systems, for their successful delivery. Health providers are often the primary contact with children who require treatment for wasting. Primary healthcare (PHC) is vital in strengthening the prevention, early detection, and treatment of child wasting. Within the ASEAN region, the prevention of wasting has not been consistently scaled up in health systems, and **the management of wasting is a relatively new service in the health care system.**

In 2017, ASEAN leaders declared their commitment to end all forms of malnutrition. In the declaration, ASEAN leaders endorsed the 2025 World Health Assembly nutrition targets and SDG 2 (to end all forms of malnutrition by 2030). They also committed to formulating a multisectoral regional framework and strategic plan to: guide country policies and interventions; set minimum standards for service delivery, implementation, monitoring and evaluation; and promote regional cooperation across ASEAN pillars and ASEAN Member States (AMSs).

The ASEAN Strategic Framework and Action Plan for Nutrition was developed in 2018. The action plan calls for the development of ASEAN guidance on minimum requirements for the integrated management of wasting in health systems (Strategic thrust 1. Activity no. 4). Since then, **there has been substantial progress in ensuring that the treatment of wasting is reflected in national health policies and strategies** in the region.⁶ Indeed, the six ASEAN countries that have focused on wasting interventions now include them within national maternal-child health policies and have adopted updated protocols for treatment in line with the most recent (2013) WHO recommendations. In all AMS with programmes for the treatment of wasting, such treatment is included in the basic essential health services package and is provided free of charge.⁶

However, challenges persist in scaling up access to treatment in the region. The most recent estimates of malnutrition in ASEAN countries indicate that progress is too slow to meet the 2025 global nutrition targets.⁶ According to the most recent Global Nutrition Report,¹³ none of the six ASEAN countries is on track to meet the SDG targets on child wasting. **Moreover, less than 2 per cent of children with wasting in the region accessed treatment in 2021.**¹⁴

Box 1

Summary of progress in addressing wasting in the ASEAN

- All AMS have endorsed the 2025 World Health Assembly global nutrition targets and SDG 2 to end all forms of malnutrition by 2030, including to reduce the proportion of children suffering from wasting to <5 per cent by 2025 and to <3 per cent and stunting by 40 per cent by 2025 and 50 per cent by 2030.
- The burden of child wasting in the ASEAN region remains high, with 4.5 million children affected. Ambitious policies and plans have been developed to scale up interventions to manage child wasting, but the translation of these policies into services has been slow.
- Most AMS have included wasting into their national health policies and strategies. However, availability and use of treatment services remain low; less than 2 per cent of children with wasting in the region accessed treatment in 2020.¹⁴
- AMS with treatment programmes for wasting have started to integrate the treatment of severe wasting into their health systems, but at varying degrees and with inconsistent treatment coverage.
- Availability of Ready-to-use therapeutic food (RUTF), a life-saving product for treating children with wasting through national health systems, is limited. Cambodia and Viet Nam have also launched domestic production of an innovative local RUTF made from fish powder instead of milk.^{15, 16}

Purpose of the guideline

The most recent estimates of undernutrition in AMS indicate that progress in the ASEAN region is too slow to meet the 2025 global nutrition targets.⁶ This guideline aims to provide practical guidance to support AMSs in accelerating progress towards the prevention, early detection, and management of child wasting through national health systems, including integrating the treatment of child wasting into routine PHC services.

The target audience is policymakers and health and nutrition experts from AMSs.

Objectives of the guideline

- Outline the core principles of programmes and services for the management of child wasting
- Define minimum standards for the provision of services for the prevention, early detection, and treatment of child wasting through national health systems
- Outline essential steps for integrating services for the management of child wasting into routine PHC services

Note on Terminology of “Wasting” and “Acute malnutrition”¹

The International Classification of Diseases version 11 (ICD-11)^a includes two terms under the category of “undernutrition”: 1) wasting (5B51) and 2) acute malnutrition (5B52). Although these terms have sometimes been used interchangeably, the precise definition of each is slightly different.

Following the 2023 WHO Guideline, wasting in children under 5 years of age is defined as having a weight-for-height or weight-for-length z-score more than 2 standard deviations (SD) below the median of the WHO child growth standards (WHZ or WLZ < -2 SD).³ A mid-upper-arm circumference (MUAC) < 125 mm can be used as an alternative measure.²

Wasting can be sub-classified as severe or moderate:

- **Severe wasting:** weight-for-height < -3 SD (or MUAC < -115 mm for children 6-59 months)
- **Moderate wasting:** weight-for-height between -3 SD and -2 SD or (or MUAC between 115 mm and 125 mm for children 6-59 months).

The Sustainable Development Goals (SDGs) and WHA Global Nutrition Targets are based on weight-for-height data only, and thus, the terminology of “wasting”².

Acute malnutrition in children under 5 years of age is defined as having a weight-for-height or -length z-score more than 2 standard deviations (SD) below the median of the WHO child growth standards (WHZ or WLZ < -2) or having nutritional oedema, or a MUAC less than 125mm.³ Thus, acute malnutrition can be spelled out as “wasting and/or nutritional oedema.”

Nutritional oedema is bilateral pitting oedema which starts in the feet and can progress up to the legs and the rest of the body, including the face. It is a sign of severe acute malnutrition. Clinical assessments for undernutrition should always include an assessment for nutritional oedema.

Acute malnutrition may be further sub-classified as:

- **Severe acute malnutrition (SAM):** severe wasting (as defined above) and/or nutritional oedema
- **Moderate acute malnutrition (MAM):** moderate wasting (as defined above) without nutritional oedema

The terms MAM and SAM are currently the most familiar and widely used among policymakers, programme managers, and healthcare workers in national health systems. WHO recommends using this grouped terminology for operational guidance and tools used by front-line health workers.

This guidance will use the term **wasting** (moderate and severe) and **acute malnutrition** (MAM and SAM) **interchangeably**. The actions and guidelines described here in refers to children with wasting and/or nutritional oedema. Likewise Integrated Management of Acute Malnutrition is used to refer to treatment programs for children with children with wasting and/or nutritional oedema.

^a Source: World Health Organization, External communication, February 2023



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For children > 6 months with Severe Acute Malnutrition
Pour les enfants > 6 mois atteints de Malnutrition Aiguë Sévère

1 Sachet

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CHAPTER 2:

CORE PRINCIPLES FOR THE MANAGEMENT OF CHILD WASTING

2.1 Prevention first: Increase access to services for the prevention of wasting

National nutrition programmes should aim to prevent children from becoming wasted by offering preventive services before and during pregnancy and throughout the first years of a child's life. There is evidence of a strong link between maternal underweight and low birthweight and subsequent wasting.¹⁷

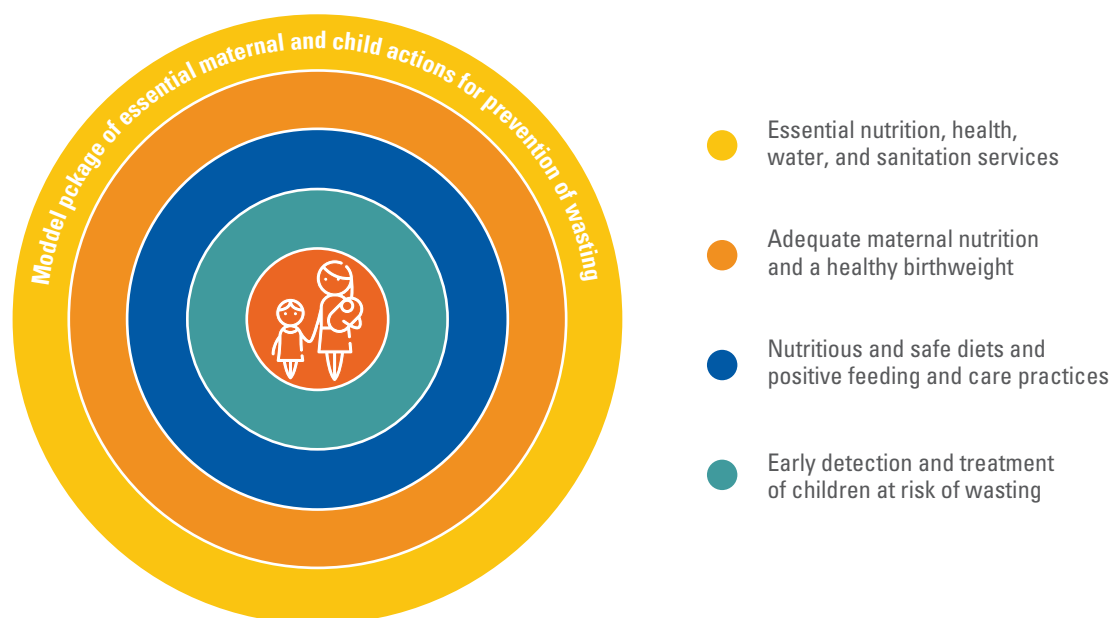
To prevent child wasting, all efforts should be made to sustain a package of services that aims to:

a) improve child health; b) improve maternal nutrition and prevent low birthweight; c) protect, promote, and support adequate infant and young child feeding; and d) identify and intervene early with nutritionally at-risk infants under six months of age.

This package of services ensures that pregnant mothers have access to good nutrition and that children are born at a healthy weight and benefit from adequate feeding and care, with access to essential health, nutrition, water, and sanitation services. It also protects and supports early nutritious diets, including breastfeeding and appropriate complementary foods, to ensure that children thrive during the 1,000-day window of opportunity from conception to the age of 2 years, including promoting essential hygiene actions (EHA). It also provides early intervention in the event of growth faltering to protect against wasting.

Still, even with these preventive actions, some children will become wasted and require treatment. Thus, national health systems should also be equipped to detect and treat children with wasting, especially in younger children and those suffering from concurrent forms of undernutrition.

Figure 2: Model package of essential maternal and child actions for the prevention of wasting



Source: UNICEF, No Time to Waste, 2021.¹⁸

Table 1: Model package of essential nutrition actions for the prevention, early detection and treatment of child wasting

Women's package	1. Counselling on maternal nutrition and monitoring healthy weight gain with balanced protein-energy supplements for malnourished women. 2. Prevention and control of micronutrient deficiencies and anaemia. 3. Eight antenatal care contacts for pregnant women according to national guidelines.
Children's package	1. Adequate breastfeeding: early initiation within one hour of birth; exclusive breastfeeding for infants aged 0–5 months; and continued breastfeeding for children aged 2 years and beyond. 2. Age-appropriate, diverse, complementary foods, with food-based supplements for undernourished children.^b 3. Vitamin A supplements, deworming prophylaxis, and home-based fortification with micronutrient powders where dietary diversity is limited, and micronutrient deficiencies and anaemia are prevalent. 4. Early detection and treatment of child wasting with emphasis on young children aged 0-23 months and community-based approaches.^c

^b The 2003 WHO Guidelines on Prevention and Management of Wasting state that “Infants and children aged 6–59 months of age with moderate wasting should have access to a nutrient-dense diet to fully meet their extra needs for recovery of weight and height and for improved survival, health, and development,

^c This table pre-dates the Multiple Micronutrient Supplementation guidance and the weekly iron folate supplementation. Iron folate supplementation is now included in the Essential Medicines List. RUTF also contributes in addressing existing micronutrient deficiencies.

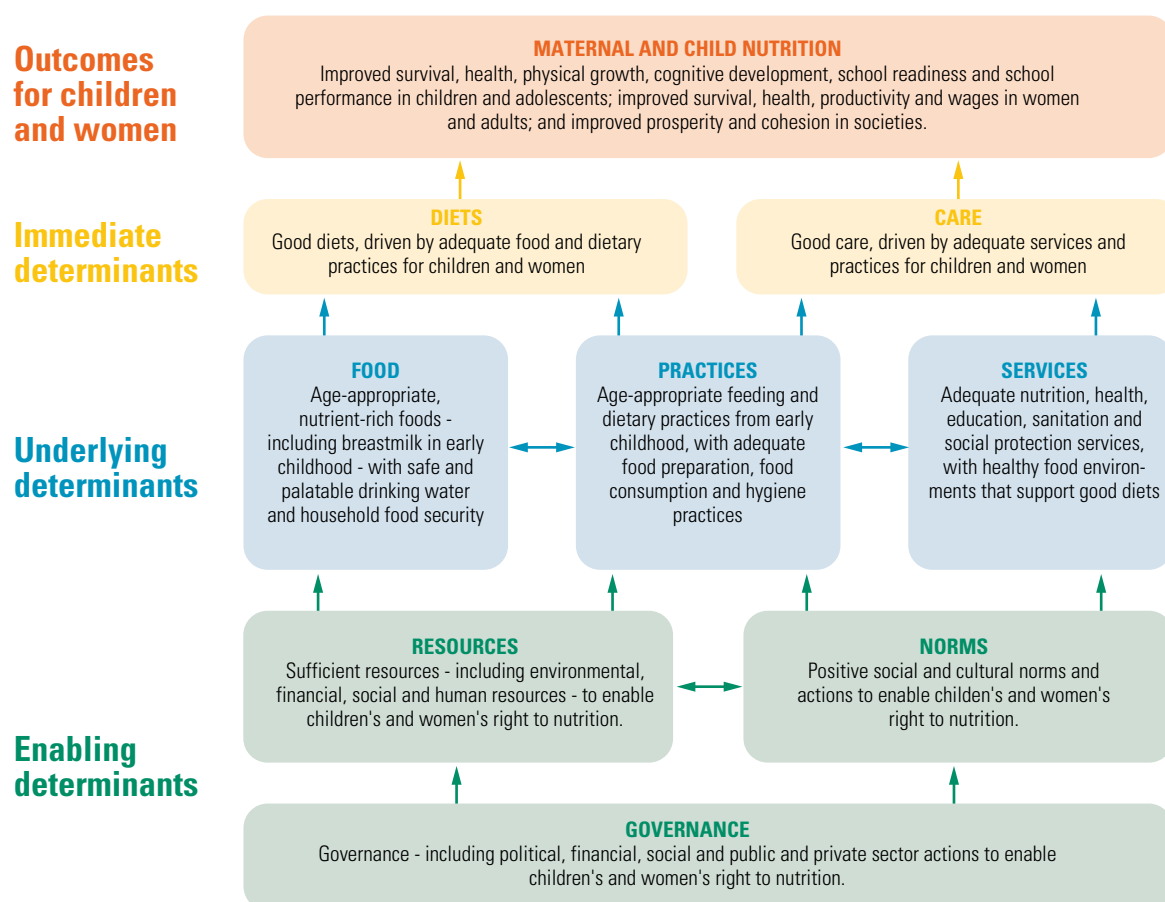
2.2 Understand the local drivers of child wasting and address them

National programmes to prevent wasting should be based on a context-specific understanding of the determinants and drivers of undernutrition, which can vary nationally and locally in each country.

Interventions to tackle wasting should systematically identify and map out the determinants and drivers of wasting, which are complex and can vary depending on the season, context, and environments in which a child lives.⁹ They include inadequate availability, affordability, demand and access to age-appropriate, nutrient-dense foods and feeding practices; poor hygiene services and practices; and lack of access to essential services for children and women in households, communities and environments (see Figure 3: UNICEF conceptual framework on maternal and child nutrition). Emergencies, outbreaks of infectious diseases and natural disasters may trigger or aggravate the incidence of child wasting.

Addressing the determinants and drivers of wasting effectively and sustainably requires actions through indirect interventions: this includes sustainable and resilient food systems to ensure access to healthy diets; health systems that provide quality universal health coverage (UHC) with essential nutrition actions throughout the life course; and social protection systems that address poverty and other inequalities to make nutritious foods and basic services available to the most vulnerable.

Figure 3: UNICEF conceptual framework on maternal and child nutrition



2.3 Prioritize the most vulnerable children in the delivery of preventive and treatment services for wasting

The youngest children are the most vulnerable to wasting and stunting and should be prioritized for preventive and treatment interventions, particularly in the context of limited resources. Children under 2 years are at heightened risk of developing and dying from wasting.^{21,22} Moreover, episodes of wasting during this period are a proxy for future episodes of wasting.³ Infant risk may be due to in-utero factors, poor feeding practices, clinical conditions and/or poor maternal nutrition and health. Child nutrition and health services targeted at this group (e.g., growth monitoring and promotion, vaccinations, etc.) offer an existing platform for identifying children with wasting or those at-risk of wasting, referring them for treatment and establishing continuity of care.

Special attention should be provided to infants under 6 months of age who are at greatest risk of becoming wasted: conduct comprehensive assessments of the mother/caregiver-infant pair and follow best practices for management of breastfeeding/ lactation problems

Wasting among infants aged 0-6 months has been identified as a critical gap in wasting responses. The well-being of an infant under 6 months of age is intimately linked to the health and nutrition of his/her mother, and yet the mother-infant dyad is rarely considered as part of an integrated package of services to manage growth faltering, including wasting, among infants under 6 months of age. Moreover, nutrition-centered treatment services for older children are not adequate to provide the more holistic cross-sector package of care that is needed for infants under 6 months of age. Because of the specific vulnerabilities of infants less than six months of age at risk of poor growth and development, WHO revised guidelines (2023) recommend comprehensive assessments of the mother/caregiver-infant pair and support the mother to breastfeed adequately. The

management of small and nutritionally at-risk infants under 6 months and their mothers (MAMI) Care Pathway package provides practitioners with tools to screen, assess, and manage at-risk infants under 6 months and their mothers. The MAMI is modelled on the integrated management of childhood illness (IMCI) approach.

[Additional resources for the management of at-risk under 6 months and their mothers \(MAMI Care Pathway\)](#)

Box 2

WHO (2023) updated guideline: Infants under 6 months

Mothers/caregivers and their infants less than 6 months of age at risk of poor growth and development should receive regular care and monitoring by health professionals. The immediate goal is the early detection of any acute medical or psychological problems and preventing infants from becoming severely underweight or severely wasted. The longer-term goal of this regular care and monitoring is to enable these infants to grow and develop in a healthy way that can lead to them achieving their full potential, whilst simultaneously supporting their mothers/caregivers with their own health and wellbeing. This approach recognizes the importance of acknowledging and caring for the mother/caregiver and infant as an inter-dependent pair for both to survive and thrive.

Management of breastfeeding/lactation difficulties in mothers/caregivers of infants at risk of poor growth and development

For infants under 6 months of age at risk of poor growth and development, healthcare providers should conduct comprehensive assessments of the mother/caregiver-infant pair and follow best practices for managing breastfeeding/lactation challenges and underlying factors contributing to these challenges.

Supplementary milk for infants at risk of poor growth and development

Decisions about whether an infant less than 6 months of age at risk of poor growth and development needs supplementary milk in addition to breastfeeding must be based on a comprehensive assessment of the infant's medical and nutritional/feeding needs and the mother/caregiver's physical and mental health. This applies to infants who are enrolled in outpatient care or admitted into inpatient care.

Management of infants less than 6 months in inpatient care

Infants who are less than 6 months of age with severe wasting and/or oedema who are admitted for inpatient care:

- a) Should be breastfed where possible and the mothers or female caregivers should be supported to breastfeed the infants. If an infant is not breastfed, support should be given to the mother or female caregiver to re-lactate. If this is not possible, wet nursing should be encouraged.
- b) Should also be provided a supplementary feed:
 - supplementary suckling approaches should, where feasible, be prioritized;
 - for infants with severe wasting but no oedema, expressed breast milk should be given, and where this is not possible, commercial (generic) infant formula or F-75 or diluted F-100 may be given, either alone or as the supplementary feed together with breast milk;
 - for infants with oedema, infant formula or F-75 should be given as a supplement to breast milk;
- c) Should not be given full-strength F-100 if they are clinically unstable and/or have diarrhoea or dehydration and/or nutritional oedema (due to the renal solute load of this therapeutic milk and risk of hyponatraemic dehydration);
- d) If there is no realistic prospect of being breastfed, infants should be given appropriate and adequate replacement feeds such as commercial (generic) infant formula, with relevant support to enable safe preparation and use, including at home when transferred from inpatient care;

In addition:

- e) Assessment of the physical^d and mental health status of mothers or caregivers should be promoted and relevant treatment or support provided.

2.4 Adopt evidence-based national guidelines

Services for managing wasting must be provided according to **nationally and internationally recognized guidelines**, including services for early diagnosis and referral, inpatient care, outpatient care, referral, and community mobilization components.

^d This includes assessment of micronutrient deficiencies. Refer to the ASEAN minimum guidance on maternal nutrition for more details

National guidelines should aim, at a minimum, to:

- Facilitate the implementation of evidence-based maternal and child interventions to protect children from wasting and other forms of malnutrition during the first 1,000 days from pregnancy to a child's second birthday.
- Detect wasting early in its onset and provide timely, safe, and effective treatment for children with wasting.
- Integrate the early detection and management of wasting as part of routine services provided through national health programmes.
- Break the divide between stunting and wasting, making wasting management an integral component of national nutrition and stunting reduction programmes.
- Consider adopting simplified approaches to existing national protocols (see below) to improve care provision for children with wasting and sustainably address barriers to access and uptake of quality treatment services.

Accompanying tools and job aids, including agreed monitoring, and reporting formats, and supervision checklists and specific training materials, are equally critical tools for national capacity development in the management of wasting

The management of wasting should consist of four essential components: (i) early detection of child wasting and referral for treatment; (ii) inpatient care for children with severe wasting who have medical complications; (iii) outpatient therapeutic care for children with severe wasting who do not have complications; (iv) services for the management of children with moderate wasting.

Services for the management of child wasting

Early diagnosis and referral: Consider opportunities to leverage existing platforms and programmes to identify children with wasting (and those with growth faltering who are at risk of wasting) and ensure timely referral for treatment. Some opportunities for early detection of wasting include:

- Adding MUAC screenings to growth monitoring sessions, immunization campaigns and in early childhood development centres, followed by referral for treatment if needed.
- Using services for integrated IMCI, including community-IMCI services, as the main entry point for the management of wasting; or using paid community health workers from existing health and social services or the Ministry of Health to identify children with wasting.
- Linking growth monitoring platforms and screening for wasting to community-based interventions such as age-specific health and nutrition counselling, which is recognized by caregivers as a point of interaction for information on breastfeeding, complementary feeding, immunizations, and illness management.
- Leveraging family MUAC, where caregivers or family members use a MUAC tape to screen their own child for wasting and oedema, such as maternal groups (for example, Mother-to-Mother Support Groups). Family MUAC empowers families and caregivers to use low-literacy, low-numeracy diagnostic tools to monitor their child's growth. It also increases demand for treatment services and allows caregivers to make informed decisions about when to seek appropriate care.

Treatment of severe wasting: Infants and children aged 6–59 months severe wasting (defined as a mid-upper arm circumference less than 115 mm or more and less than 125 mm or weight-for-height between less than -3 z-scores below the WHO child growth standards median, with or without oedema) should receive treatment based on the severity of nutrition and clinical needs.

- **Inpatient management** is intended for children with severe wasting who have medical complications. It involves initial stabilization, during which life-threatening complications are treated and nutritional

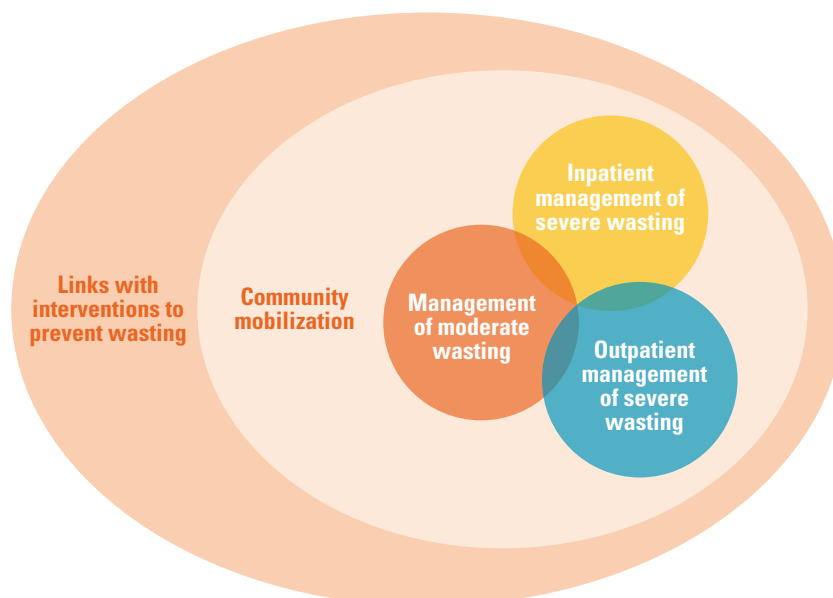
rehabilitation is started. When children are stable and have regained appetite, they are transferred to outpatient services (if existing) for continued management until they have fully recovered from wasting. Infants and children 6-59 months old with severe wasting and/or nutritional oedema who have any of the following characteristics should be referred and admitted for inpatient care: (i) one or more Integrated Management of Childhood Illness (IMCI) danger signs, (ii) acute medical problems, (iii) severe nutritional oedema (+++), (iv) poor appetite (failed the appetite test). Malnourished children presenting with medical complications should initially be hospitalized, even if they suffer from moderate rather than severe wasting.

- **Outpatient management:** Children with severe wasting who have no medical complications or who have been transferred after inpatient management should receive decentralized outpatient care, allowing them to be treated and recover in their own homes and communities. Outpatient therapeutic services should be close to the targeted population to reduce the risks and costs associated with travelling long distances to seek care, which usually requires weekly health and nutrition checkups at the closest health facility. Infants and children 6-59 months old with severe wasting and/or nutritional oedema who have all of the following characteristics should be enrolled and managed as outpatients: (i) good appetite (passed the appetite test); and no danger signs or any of the acute medical problems from inpatient part ii; and (iii) no criteria needing in-depth assessment or the in-depth assessment having no signs of severity.

Management of moderate wasting: All infants and children 6-59 months with moderate wasting (defined as a weight-for-height between 2 and 3 z-scores below the WHO child growth standards median and/or a mid-upper arm circumference 115 mm or more and less than 125 mm, without oedema) should be assessed comprehensively and treated wherever possible for medical and psychosocial conditions leading to or exacerbating this episode of wasting. They should have access to a nutrient-dense diet to fully meet their extra needs for recovery of weight and height and for improved survival, health, and development from locally available foods or supplementary foods.

Note: Details about services for managing child wasting are specified in national guidelines for managing acute malnutrition in most ASEAN Member States. They should be revised according to the 2023 updated WHO guideline for preventing and managing child wasting.

Figure 4: Interventions for the management of child wasting



Box 3

WHO (2023) updated guideline: Management of moderate wasting

Prioritizing specially formulated food (SFF) interventions with counselling, compared to counselling alone, should be considered for infants and children 6-59 months of age with moderate wasting with any of the following factors.

Individual child factors:

- mid-upper arm circumference (MUAC) 115-119 mm
- weight-for-age z-score (WAZ) <-3 SD
- age <24 months
- failing to recover from moderate wasting after receiving other interventions (e.g. counselling alone)
- having relapsed to moderate wasting
- history of severe wasting
- co-morbidity (medical problems needing mid or long-term follow-up care and with a significant association with nutritional status such as HIV and tuberculosis or a physical or mental disability)

Social factors:

- severe personal circumstances, such as the mother's death or poor maternal health and well-being.

In high-risk contexts (where there is a recent or ongoing humanitarian crisis), all infants and children 6-59 months of age with moderate wasting should be considered for specially formulated foods (SFFs) along with counselling and the provision of home foods for them and their families.

Lipid-based nutrient supplements (LNS) are the preferred type for infants and children 6-59 months of age with moderate wasting who need supplementation with specially formulated foods (SFFs). When these are unavailable, Fortified Blended Foods with added sugar, oil, and/or milk (improved FBFs) are preferred compared to Fortified Blended Foods with no added sugar, oil, and/or milk.

Infants and children 6-59 months of age with moderate wasting who require specially formulated foods (SFFs) should be given SFFs to provide 40-60% of the total daily energy requirements needed to achieve anthropometric recovery. Total daily energy requirements needed to achieve anthropometric recovery are estimated to be around 100-130 kcal/kg/day.

2.5 Simplify protocols for the management of wasting to facilitate scale-up and integration of wasting services into national health programmes

Simplification of protocols involves adaptations to existing national and global protocols for treating child wasting to improve effectiveness and treatment coverage and reduce the costs of caring for children with uncomplicated wasting while maintaining quality. The local context is important in deciding which simplifications to adopt in a country/setting. The decision on which simplification to adopt should be based on existing barriers to availability (supply barriers) and utilization of services (demand barriers). Simplified approaches can also be considered if there is a sudden increase in cases of wasting or a decrease in access to treatment.

The most implemented adaptations include:

- **Family MUAC:** Engaging family members to screen their children for wasting and refer them for treatment
- **Community health worker-led treatment:** Management of wasting (without medical complications) by community health workers at the community level. NB: WHO 2023 updated guideline states that “assessment, classification, and treatment or referral of infants and children 6-59 months with wasting and/or nutritional oedema can be carried out by community health workers as long as they receive adequate training, and regular supervision of their work is built into service delivery.”
- **Reduced frequency of follow-up visits:** Reducing the number of visits for children with wasting admitted for treatment from weekly to bi-weekly or monthly follow-up.
- **A single treatment product:** Use of one therapeutic food product for the treatment of all children with wasting (those with severe or moderate wasting). Lipid-based nutrient supplements (meeting the technical specification of ready-to-use supplementary food (RUSF) or RUTF) are preferred. When these are not available, Fortified Blended Foods with added sugar, oil, and/or milk (improved FBFs) are preferred compared to Fortified Blended Foods with no added sugar, oil, and/or milk. This hierarchy may be adapted for different contexts considering feasibility, acceptability and equity considerations, resource considerations, and production capacity. As only RUTF can be used to treat SAM, it should be prioritized for children with this condition and only when all the needs of children with SAM have been met should RUTF be used for children with MAM. Whichever SFF is used, this is only meant to provide 40-60% of the child’s daily energy and nutrient needs.
- **Reducing the dosage of therapeutic food products throughout treatment and recovery.** The WHO 2023 updated guideline states that “The decision as to whether to reduce the quantity of RUTF given to children when they are no longer severely wasted or oedematous, must be made by programme managers taking into consideration the capacity of the health care workers who deliver the nutritional treatment to safely and efficiently follow a reducing-quantity protocol, food security context in which the child and their family live in, along with close monitoring of the patient’s clinical condition.”
- **MUAC- and oedema-only admission:** Use MUAC and oedema as the only criteria for admission and discharge. According to the WHO 2023 updated guidelines, MUAC can be used as a sole anthropometric criterion, in addition to an assessment of medical problems and appetite, to admit a child to inpatient care or enroll into outpatient care but not to monitor the child’s progression.
- **Expanded admissions criteria:** Increasing the MUAC cut-off to admit children with wasting for treatment that have a MUAC above 115 mm

[Additional resources on Simplified Approaches here \(www.simplifiedapproaches.org\)](http://www.simplifiedapproaches.org)

[A supplementary briefing note of the 2023 WHO Guidelines on prevention and management of wasting and nutritional oedema explains how it relates to the “Simplified Approaches”.](#)

Note: The adaptations should be tested in each AMS country context to assess opportunities for improving cost-effectiveness and coverage of wasting treatment services based on the local conditions and the organization of the health system.

2.6 Decentralize services for the management of wasting, bringing them as close to the population as possible to maximize access

Services for prevention, early detection and management of wasting should be available at the lowest level of the health care system and integrated within community-based health and nutrition services whenever possible. This ensures that services are available and accessible to the greatest number of children and close to the communities where children with wasting live, including hard-to-reach populations and ethnic minorities.

Management of wasting should not be a stand-alone programme. The integration of wasting services within health care services (made available routinely at the facility and community levels) is a critical strategy for increasing the availability and accessibility of services for the prevention, early detection, and treatment of child wasting. A concerted effort is needed to foster integration within WHO's six building blocks of the health system: (1) service delivery; (2) workforce; (3) information systems; (4) access to essential medicines; (5) financing; and (6) leadership/governance.²³ A review of the evidence on integration within health systems suggests that there is no single successful integration model; it varies according to the context and demands of the particular setting in which integration occurs.²⁴ Integration plans should thus be guided by the structure and characteristics of each national health system.

2.7 Engage communities

Evidence suggests that the most significant barrier to accessing treatment for child wasting is a lack of information.²⁵ This includes information about how wasting can be diagnosed at home and where treatment is available.

To address these information gaps, families and community members can be trained and engaged in identifying children with wasting and linking them to health services for treatment and care.^{26,27} In the family MUAC approach, for example, mothers, fathers and other caregivers are trained to identify wasting in their children using a MUAC tape. This approach was developed to increase the frequency and coverage of screening for wasting and ultimately detect more children with wasting for early referral. In contrast, poor community engagement results in low programme coverage and higher treatment costs. More complicated cases of malnutrition often present because identification and treatment are delayed, thus eventually requiring inpatient care. Robust referral systems are critical – from the community to the health facilities providing wasting treatment services – to ensure that children receive the care they need promptly.

Community mobilization improves people's understanding of the causes of wasting and the availability of treatment services, ultimately increasing demand and use. Clear and comprehensive information about these services should be shared in local languages using multiple information-sharing channels, including audio, visual and written forms.

2.8 Increase the supply of essential commodities and equipment

Continuous availability of supplies without stock-out is a pre-requisite for the successful treatment of child wasting, since recovery and patient confidence are undermined by interruptions to treatment. MUAC tapes, weighing scales, and height/length measurement boards are needed to assess and monitor nutrition status. In addition, RUTF, therapeutic milks (F75 and F100), rehydration solutions for severely wasted children (e.g., ReSoMal) and antibiotics are the essential commodities required to treat children with wasting.

Adequate financing and forecasting are common barriers to ensuring the continuous availability of supplies to manage wasting.

Accuracy in forecasting will ensure efficient budget use and adequate stocks. Accuracy and timeliness of reporting are essential for estimating supply needs based on consumption (e.g., previous years' admission). Forecasting should also take account of realistic expansion plans and any predicted surges in prevalence.

Evidence also suggests that forecasting based on consumption figures or the previous year's admission might be more accurate than estimations based on wasting prevalence and estimated coverage.

The forecasting of supplies for managing wasting (and other nutrition supplies) should be done alongside national drug supplies. A forecasting tool should define requirements based on the best information available (programme data or nutrition survey) and reflect scale-up/expansion plans. The UNICEF East-Asia and Pacific Office included [a nutrition calculation of caseload and targets](#) tool in its Nutrition in Emergencies toolkit, which can be used for that purpose.

RUTF is the costliest supply item, and the scale and reach of treatment services today are directly proportional to the resources available for RUTF and its transport. Expanding access to treatment can only be achieved if national governments mobilize resources to procure RUTF and other essential supplies. It is crucial to advocate for sustainable financing for RUTF and ensure a sufficient budget for its procurement during the budgeting process. Inclusion of RUTF in national essential supply/ commodity lists could help mobilizing adequate financing, its procurement and distribution as part of the national supply chain. Nutrition supplies, including RUTF, should also be integrated within national logistics monitoring information systems.

When evaluating the possibility of local production of RUTF, cost-effectiveness should be evaluated, as well as the strength of the supply chain of the local ingredients needed. It is also vital to investigate the most acceptable local formulation. For example, a qualitative study of the challenges and opportunities of integrating community-based management of acute malnutrition into the government health system in Bangladesh concluded that the Government should promote in-country production of RUTF.²⁸

Information from wasting programme indicators can be useful in calculating annual supply needs, providing insight into consumption patterns and determining the accessibility and acceptability of the services

Examples include:

Number of all children with wasting admitted for treatment in the previous year

Percentage of all children with wasting admitted for treatment in the previous year

2.9 Monitor service reach and quality

Effective monitoring of services for the management of wasting entails:

- Monitoring the individual child where they receive treatment, including recording his or her clinical status at admission, treatment progress and discharge outcomes
- Monitoring and reporting on the effectiveness of the service as a whole
- Integrating the management of wasting within regular supervision and mentorship of healthcare workers to provide support and motivate improved performance.

Responsibility for supervising wasting services should be established during the planning stages. In addition, wasting should be included as part of health service monitoring and supervision checklists.

National authorities should also establish minimum indicators for wasting and integrate them within national health management information systems (HMIS), including emergency surveillance data systems.

Table 2: Sample routine wasting indicators for integration into the national HMIS

Early detection of wasting	Number of children screened for wasting in health facilities and through community platforms
Service delivery	Number of all children with wasting admitted for treatment Percentage of all children with wasting admitted for treatment
Quality of care	Number and percentage of children • Cured (minimum standard: >75 per cent of total discharges) • Defaulted (minimum standard: <10 per cent of total discharges) • Died (minimum standard: < 10 per cent of total discharges) • Do not respond to treatment, excluding medical transfers

Monitoring and supportive supervision should also aim to support and motivate healthcare workers to investigate and act on causes of defaulting non-response or increased deaths. This entails understanding the barriers to seeking and accessing treatment services for wasting and identifying solutions to these bottlenecks as a part of local annual planning processes.

Box 4

Key reporting and data considerations for ASEAN member states

- Adopting harmonized minimum indicators can facilitate the inclusion of information on the management of child wasting in the ASEAN nutrition scorecard.
- Collecting relevant data to answer the questions needed for planning and service delivery: it is important not to collect data that will not be put to use as this affects data quality and unnecessarily increases workload for health workers.
- Deciding what data to collect, based on what questions need to be answered and what indicators are adopted, makes the data more likely to be used.

2.10 Link to other support services

Breastfeeding support: Mothers of infants with wasting or who are nutritionally at-risk need skilled breastfeeding support for nutritional rehabilitation and recovery. This is particularly important for children younger than 6 months of age and mothers with disabilities. Health systems should provide sufficient resources, such as a designated private breastfeeding area, skilled support for feeding, and facilitate peer support.

Psychosocial support: Emotional and physical stimulation through play is essential during rehabilitation for children with severe wasting; it also promotes attachment and positive maternal mood. Caregivers of children with wasting often require social and psychosocial support to bring their children for treatment. Some mothers may also need help to access mental health care services for perinatal depression. Programmes should emphasize the importance of stimulation and interaction. Caregivers can be empowered to provide nutritious food and care for their children; they also benefit from advice, demonstrations and relevant health and nutrition information.

Linkage with other actors: Coordinate with child protection and gender-based violence partners to establish referral pathways and information-sharing protocols. Train nutrition staff on how to provide supportive and confidential referrals for i) children with signs of potential abuse and or disabilities and (ii) caregivers of children exposed to physical, sexual, or emotional violence, exploitation, or abuse.

Social protection: Social protection programmes and welfare funds should include families that are highly vulnerable to wasting as beneficiaries. For example, cash transfer interventions can be linked to programmes for the management of wasting.

WHO 2023 updated guideline states that “In infants and children with severe wasting and/or nutritional oedema, cash transfers in addition to routine care may be provided to decrease relapse and improve overall child health during outpatient care and after exit from treatment, depending on contextual factors such as cost.”

*Developing a nutrition
emergency preparedness and
response plan before an
emergency ensures an effective
response.*

2.11 Build capacity to rapidly expand services during emergencies

The health and nutritional status of the population can be adversely affected during emergencies, such as conflict and natural disasters. In addition to broad-scale crises that threaten the nutritional status of many people, localized areas can experience fluctuations in the number of children affected by wasting that exceed the coping capacity of the health system. This can occur even when wasting services are integrated. Monitoring of admission trends at the health facility level can help identify seasons or other moments when cases of children with wasting begin to increase and stress existing resources. Early action can be taken to ensure prompt resource allocation to improve coping capacity.

During emergencies, response and coordination gaps arise when existing national capacities for the provision of services become overwhelmed due to the expanded scale of needs, the number of actors involved, and the need for a more complex multisectoral approach.

Having a Nutrition Emergency Preparedness and Response Plan (ERP) in place before an emergency is critical for an effective response. The ERP needs to be linked to all the government sectors and their partners dealing with it. To be effective, the nutrition emergency response needs to be well-coordinated, with clearly stipulated roles and responsibilities to ensure that nutrition services reach and impact the children and families who need them most. It also requires adequate human and financial resources.

Core preparedness action includes strengthening the capacities of government institutions at the national and subnational level and those of existing service delivery platforms to rapidly scale up the provision of nutrition services when emergencies occur.

Table 3: Minimum preparedness actions for scaling up of services for the prevention and treatment of wasting during emergencies^e

Governance and leadership	Build the capacity of the national government to adequately address nutrition in emergencies by developing up-to-date and agreed-upon technical standards for nutrition response during emergencies – including a nutrition emergency response and preparedness plan. Identify the national and regional level bodies responsible for coordinating and supervising emergency response; integrate the agreed nutrition in emergency actions within their related national and regional plans; and build awareness among these national and regional bodies on nutrition response in emergencies. Within the nutrition sector, develop a common framework to guide actions, pre-define roles and responsibilities and outline information management responsibilities in the event of an emergency. Support and strengthen national and subnational authorities' capacities to coordinate a timely nutrition response. Anticipate and prepare for intra- and inter-sector coordination mechanisms at national and subnational levels, e.g., building relationships with other sectors, so that multi-sector assessment and response are facilitated in the event of an emergency, establishing a clear protocol for coordination if military assets are used in emergencies. Prepare by ensuring robust local food systems can deliver fresh, nutritious foods to vulnerable populations and emergency-prone areas.
Health workforce (Operational capacity to scale up nutrition services during emergencies)	Outline the skills required for emergency nutrition preparedness, response, and recovery. Identify learning needs and design and implement capacity-building plans to address gaps. Train and maintain a pool of personnel with appropriate skills for nutrition response during emergencies. Keep an up-to-date database of details of personnel trained in emergency response available for quick deployment.
Service delivery	Breastfeeding and age-appropriate complementary feeding • Define important breastfeeding and complementary feeding interventions in emergencies. • Develop/strengthen policies to ensure that young children are appropriately breastfed and receive appropriate and safe complementary foods in emergencies. • Advocate for and develop guidance on meeting the nutritional needs of non-breastfed infants less than 6 months of age. • Use and implement the code monitoring kit²⁹ to report violations of the International Code of Marketing of Breast-milk Substitutes during emergencies. • Advocate for and develop guidance on meeting the nutritional needs of non-breastfed infants less than 6 months of age.

^e [The UNICEF EAPRO Nutrition in Emergencies Toolkit](#) has a list of tools that can be used for Nutrition Emergency Preparedness.

	Management of child wasting • Establish clearly defined and agreed criteria to set up or increase support for existing services. • Ensure national guidelines for managing child wasting are established and updated with the latest evidence and international standards, including for infants under 6 months of age. • Develop a contingency supply and distribution plan to support service scale-up based on risk analysis scenarios and forecasted caseloads. • Strengthen the existing capacities of health systems and communities to scale up to meet the additional needs for wasting services in an emergency. Include breastfeeding and complementary feeding interventions and management of child wasting in ongoing training of health workers and lay counsellors.
Medical products, vaccines, nutrition commodities and technologies	Develop a standard list of emergency medical and nutritional inputs and equipment for preventing and treating child wasting during emergencies. In forecasting supplies, ensure there is a minimum stock of essential commodities and medication.^f Develop mechanisms for rapidly mobilizing additional resources (workers, equipment and materials) and speedy delivery of products locally. Establish procedures for exceptional access to medical products that are not included on the list of standard equipment.
Financing	Develop annual costed nutrition action plans of the Ministry of Health, which include prevention and treatment of child wasting. Make a budget provision to support increased needs in times of emergencies (beyond regular coping capacity).
Information Management Systems	Develop nutrition standard emergency response indicators for both assessments and tracking of response. Develop and harmonize assessment methodologies, reporting requirements, tools and templates, including sex and age-disaggregated data and gender-responsive information across the various information systems platforms used for emergencies Agree on the responsibilities for information management with Government and partners, including information dissemination and communication modalities

^f The [Caseload targets supplies calculation tool](#) of [The UNICEF EAPRO Nutrition in Emergencies Toolkit](#) can be used to build a list of minimum essential supply



CHAPTER 3:

PROVIDING SERVICES FOR THE MANAGEMENT OF CHILD WASTING THROUGH NATIONAL HEALTH SYSTEMS

Services for managing child wasting should be an integral part of the package of essential nutrition services delivered within the health system and through community-based health services.

This section outlines minimum standards and benchmarks for progress in the management of wasting within national health systems based on the WHO health systems building blocks. These benchmarks are also helpful in determining when and if treatment services have been effectively integrated into national health systems.

For each health system function, a list of minimum benchmarks are proposed. This is not an exhaustive list and could be amended based on national objectives and the health system's structure in each AMS. Management of wasting through existing health systems and structures must consider the design of national health systems and country-specific needs related to the treatment of wasting.

3.1 Governance and leadership

Nutrition governance is critical for successfully implementing national nutrition policies and programmes.

The governance and leadership function involves ensuring that strategic policy frameworks exist and are combined with effective oversight, coalition-building, regulation, attention to the health system design, and accountability at both national and subnational levels of the health care systems.

Governance should ensure that the prevention and treatment of child wasting are prioritized and integrated at the highest health policy levels and within the UHC plan as part of an essential package of nutrition interventions at national and decentralized levels. Infants under 6 months of age should be included in this package of care.

Integration of child wasting into health and nutrition policies is a mark of progress, yet integration at the policy level does not guarantee implementation in practice. Effective implementation requires coordination and operational capacity. It also requires deliberate health system efforts during the assessment, design, and planning stages and the analysis of health system barriers and bottlenecks.

The governance building block is often considered only from the policy perspective. However, it is important to acknowledge that it also encompasses management and operational leadership of the health system at community, district, provincial level or the equivalent

Table 4: Governance and leadership benchmarks

Policy-setting	National health and nutrition policies explicitly include wasting as part of essential basic health services at national and sub-national levels.
National guidelines	National guidelines for the management of wasting are available and are integrated into various clinical algorithms/ protocols.
Technical leadership	A technical advisory group/focal point for comprehensive child health care oversees the scale-up of wasting services within the health system.
Regulation and coordination	Management of wasting is planned for, together with other health services at national and decentralized levels of the health system (including during emergency response).

3.2 Financing

As described by WHO, a sound health financing system raises adequate health funds to ensure that people can use the services they need, including treatment for wasting, and are protected from financial catastrophe or impoverishment associated with having to pay for them.

While the health financing mechanism will differ in each AMS, there should be a budget provision for the management of wasting within the health budget proposal to meet the scale of wasting in the country. Treatment of wasting should be subsidized, included in health insurance schemes, or provided free of charge.

As previously stated, AMSs have made many efforts to promote wasting management free of charge. Cambodia and the Philippines are good examples of this building block. In Cambodia, treatment services for wasting are provided free of charge. Families are reimbursed for transport costs when their child is enrolled for treatment, and the government procures a proportion of RUTF supplies. In the Philippines, the Department of Health (DOH) procures all the RUTF supplies and reimbursement of health service providers for the treatment of wasting are in the process of being included in the National Health Insurance Programme through the Philippines Health Insurance Corporation (PhilHealth), following the expansion of the primary care benefits of PhilHealth to cover wasting services as a commitment to achieving UHC.

Table 5: Financing benchmarks

Regular budget-pooled funding	Regular budget from pooled funds with a sector-wide approach covers wasting treatment and prevention financing.
Annual costed action plans	Annual costed nutrition action plans of the Ministry of Health include prevention and treatment of child wasting. Budget provision is made to support increased needs in times of emergencies (beyond regular coping capacity).
Financial risk protection	Financial protection mechanisms are available to reduce out-of-pocket expenditures for wasting treatment services (and other nutrition essential nutrition services).

3.3 Service delivery

Health service delivery aims to provide practical, safe, quality health interventions to those who need them, when and where required, with a minimum waste of resources. Wasting services should thus be offered routinely as part of a package of essential nutrition services through existing health facilities and community health services.

Management of wasting is included in the basic essential health service package in six AMSs; however, there is a disparity in how concretely this translates into the delivery of services at the health facility level.

At a minimum, every child in contact with the health system should be assessed for wasting as part of a clinical assessment and referred for treatment if wasting is identified. Children suffering from wasting should receive comprehensive and coordinated treatment at different health system levels. Communities should be aware of child wasting and the treatment services available.

Table 6: Service delivery benchmarks

Accessibility and availability of services	Assessment and treatment services for wasting are available in PHC facilities and community-based health care services Assessment and treatment services for wasting are incorporated into IMCI services or similar services Referral facilities and referral mechanisms are available for children with wasting who have medical complications that require hospital care
Early detection of wasting	Screening for wasting is included in outreach and community health services and systematic case-finding by health workers for all children presenting at all health facilities
Emergency surge capacity	Prevention, early detection, and treatment of child wasting are included in health emergency preparedness and response plans with consideration of additional capacity in times of crisis
Community involvement	Communities are informed about prevention and treatment services for child wasting using health and non-health actors Families and caregivers are empowered to screen their children for wasting (e.g., through family MUAC) and seek services if the child is wasted

3.4 Health workforce

Health workers responsible for providing paediatric services at all health system levels should have the skills and abilities to assess children for wasting as part of clinical assessment and provide prevention and treatment services.

To facilitate this, the management of child wasting should be integrated into pre-service and in-service training curricula for health workers as part of the essential nutrition services provided through the health system. This will help ensure that every health professional is trained on wasting identification and management as part of initial training and continuing professional development.

There should be enough health workers and community health workers to support the management of wasting, particularly in pockets of high prevalence and during emergencies/natural disasters.

Community health workers should receive adequate training, equipment, supplies, medicines, supportive supervision and remuneration for early detection of wasting and (national protocols permitting) provide treatment for uncomplicated wasting at the community level.

Among the AMS, there is some progress in integrating management of wasting into the pre-service curriculum for health professionals. Lao People's Democratic Republic and Malaysia have included the management of wasting in pre-service training for doctors and nurses. The Lao People's Democratic Republic and Viet Nam have also included it in initial training programmes for community health workers. In Cambodia, the management of wasting has been integrated into the revised pre-service curriculum education for health professions, the Associated Degree for Midwives and the Associated Degree for Nurses. In Myanmar, the management of wasting has been integrated in pre-service curriculum of medical doctors and nurses.

Table 7: Health Workforce

Competences	Job descriptions and work standards for health workers include the treatment of wasting
Education/skills development	Modules of pre-service education curricula for all health sector staff include prevention and treatment of wasting In-service training is provided for all untrained health workers providing wasting treatment services
Professional development	Wasting is included as part of continuing professional development for health workers
Performance management and motivation system	Performance appraisal and supportive supervision include wasting treatment services
Health workers payroll	Staff in national health facilities providing wasting services are on the government payroll
Adequate coverage and geographic distribution	An adequate number of health workers trained in wasting management are posted in areas with the highest prevalence of wasting An adequate number of trained health workers are available to provide surge capacity for the management of child wasting during emergencies

3.5 Health information system

The HMIS is a tool to support decision-making and has four essential functions: (i) data generation, (ii) compilation, (iii) analysis and synthesis, and (iv) communication and use.

A well-functioning HMIS should enable the production, analysis, dissemination, and use of reliable and timely information on health determinants, health system performance, and health services, including the treatment of wasting. Thus, appropriate indicators for wasting should be integrated into the national HMIS, including in emergency surveillance data systems, and wasting data should be routinely reported as part of the HMIS.

The following levels could be used to assess or describe the extent to which wasting has been integrated within national health systems:

- 1. Not integrated***
- 2. Partially integrated***
- 3. Fully integrated***

According to the ASEAN Food and Nutrition Security Report 2021, only three of the six AMS countries implementing wasting treatment have integrated data on wasting in the HMIS for reporting.

To monitor progress and promote the sustainability of wasting services within national health services, the status of integration should be included in the ASEAN nutrition scorecard for annual dissemination within AMS.

Table 8: Health information system benchmarks

Indicator in HMIS	National HMIS includes wasting treatment indicators (that are being reported against consistently)
Health services monitoring	Routine health service assessments and supervision checklists include wasting services Monitoring the specialized nutritious food commodities flow – both RUTF / RUSF and the F100 and F75 at least
Data management	There is completeness, timeliness, and accuracy in the wasting reports from health facilities providing treatment services
Data use	Data from caseload assessments and wasting treatment reports are translated into information to inform decision-making/planning for wasting services Data on wasting is shared with other relevant sectors

3.6 Medical products, vaccines and technologies

According to the WHO framework for health systems, a well-functioning health system ensures equitable access to essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use.²³

Supplies for the management of wasting (including RUTF) should be reflected in national medical supplies procurement and distribution policies, standards, guidelines, and regulations. These supplies should be included in the national essential supply/commodity list, within procurement and distribution mechanisms, and tracked in the logistics monitoring information system.

Ensuring the continuous availability of supplies is one of the biggest challenges in the management of wasting through national health systems. The specificity of treatment supplies (e.g. RUTF), their cost, bulkiness, and sourcing make it extremely difficult and time-consuming to integrate into the procurement system. Most AMS still rely on external non-government procurement. Two of the six AMS implementing wasting treatment (Cambodia and the Philippines) have a government procurement and distribution through the national drugs supply chain. Cambodia and Viet Nam have also launched domestic production of an innovative local RUTF made from fish powder instead of milk.^{15,16} Recently, Cambodia launched an innovative local RUTF made with fish powder instead of milk, and Viet Nam also attempted local production.

Table 9: Medical products, vaccines, and technologies benchmarks

Essential medical supplies list	National essential drugs and medical supplies list includes supplies for the management of wasting (particularly RUTF, therapeutic milks, and MUAC tapes)
Procurement and distribution system	Supplies for the management of wasting treatment are forecasted, procured, and delivered through the national supply chain system
Stock monitoring	Supplies for the management of wasting are included in the national logistics monitoring information system



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CHAPTER 4:

PLANNING FOR THE INTEGRATION OF WASTING TREATMENT SERVICES INTO NATIONAL HEALTH SYSTEMS

The concept of integrated health services is not new; the principle of PHC developed in the 1980s is based on this concept. However, currently, there is no standard accepted definition of “integration.”

WHO defines integrated health services³⁰ as: “health services that are managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management, rehabilitation, and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout the life course.”

In this guidance, integration is defined from a health system perspective as **“the extent, pattern, and rate of adoption and assimilation of treatment and service provision for wasting into the key functions of the national health system for early diagnosis and treatment of child wasting at all levels and sites of health care.”**

4.1 Key considerations for integrating wasting treatment services into health systems

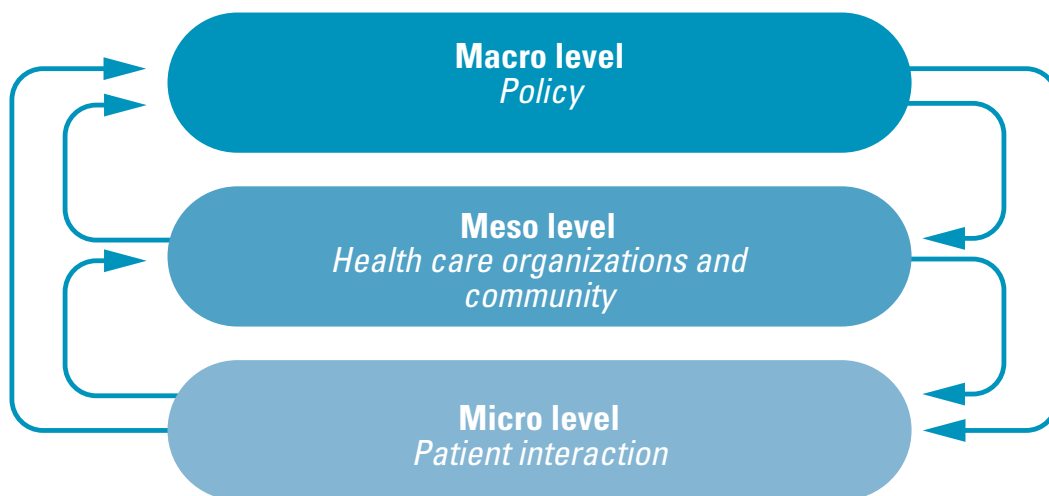
Designing an integration plan is highly context-specific and dependent on the structure and characteristics of the health system, and the nature of the health service that needs to be integrated. The health system structure is complex, multidimensional, and dynamic; as such, the approach to integration differs in each country’s health system. The architecture should dictate the modalities of integration and the capacity-related and context-specific needs of each AMS (e.g., prioritization of locations with the highest prevalence of wasting).

The integration strategy should not only be developed from a wasting services/intervention perspective. Rather, a systematic approach must be used to consider all six building blocks of the health system and the complex factors that can hinder or boost the process.³² This is especially important since the services for managing wasting in most AMS states started as vertical stand-alone programmes that were externally funded in response to natural disasters.

For integration to be successful, it must ensure:

- That a coordinated effort is mobilized to accelerate the integration of essential maternal and child nutrition services for the prevention, early detection, and treatment of child wasting, with an emphasis on children under 2 years of age, into PHC services.
- Consideration of the different roles of macro, meso and micro levels of the health system in the integration process. Roles at the macro level are related to legal and regulatory functions. The meso level concerns local health services and community factors, while the micro level relates to the day-to-day delivery of health services (see Figure 5). Each of these levels interacts with and dynamically influences the other two levels.³³ However, the role of the meso level of the health system, especially in coordination and monitoring, is often not considered in integration plans, and parallel mechanisms are often developed.
- That wasting is detected early, as late presentation leads to more protracted and costly care, including more significant amounts of expensive commodities such as RUTF.
- Simplifying and adapting treatment protocols to the local context will make it easier for health providers to seamlessly add the treatment of wasting to their portfolio of services.
- Efforts to integrate wasting services within national health systems draw on successful experiences of financing and scaling up other health services, such as malaria treatment.

Figure 5: Roles of micro, meso, and macro levels of the health system



Source: World Health Organization, 2023

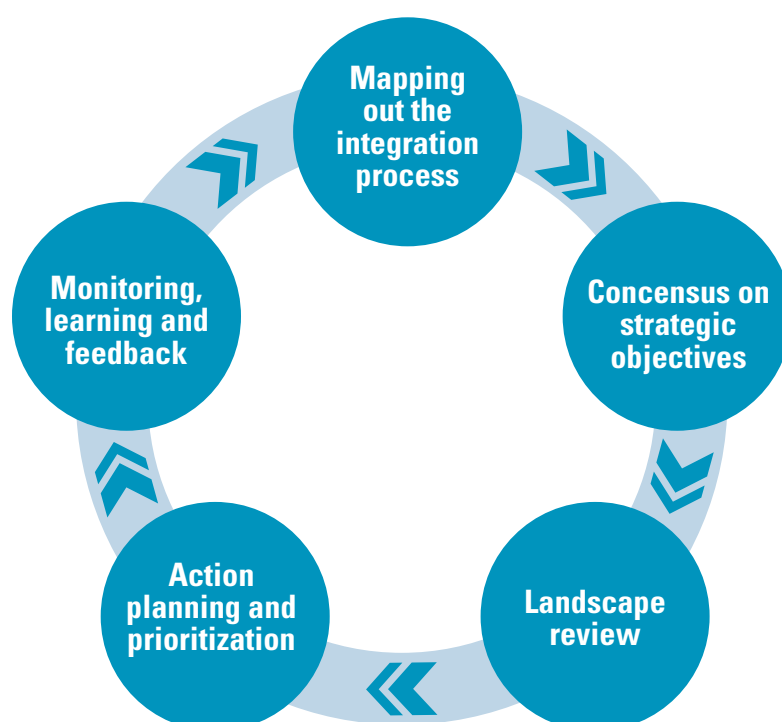
4.2 Guiding principles in planning for integration of wasting treatment services into health systems

- a) Government leadership is critical, along with a consensus among health sector actors that integration of wasting treatment is a priority.
- b) Integration is context-dependent, and there is no one approach; instead, it is dependent on the structure and maturity of the health system and other similar health services where the treatment of wasting can be embedded (e.g., IMCI).
- c) Integration must be considered systemically and across all health system dimensions (at micro, meso, and macro levels and across the six health system building blocks).
- d) Potential trade-offs and health system implications for the integration of treatment services must be considered and planned for (e.g., budgetary implications, such as the high cost of treatment; workforce implications, such as overburdening health workers, which may diminish treatment quality; supply chain implications, such as lack of capacity).
- e) All health system actors, including the private sector, must be engaged in developing and implementing the wasting integration plan.

4.3 Planning for integrating the treatment of wasting into national health systems

Developing an integration plan for wasting can follow a five-step process (see Figure 6 below) and the above-mentioned guiding principles, routed in government ownership and contextualization. The adaptations of minimum standards in this document should be tested in each AMS country context to assess opportunities for improving cost-effectiveness and coverage of wasting treatment services based on the local conditions and the organization of the health system.

Figure 6: A five-stage process for the integration of wasting into the health system



Step 1: Mapping out the integration process and identifying key stakeholders

To achieve this step:

Key stakeholders in each country should be identified and included in the process from the beginning. This process must be consultative and include all health sector actors, including the private sector.

- a) **Identify a steering committee** to guide the overall process, including developing, implementing, and monitoring the wasting management integration plan.
- b) **Identify key stakeholders** to be included in integrating wasting into the health system. Ensure that representatives from all levels are included (i.e., patient care, health administration, and policy levels, the private sector, and the community) when gathering stakeholders from across the health system building blocks in the integration process.
- c) **Clarify the roles and responsibilities** of the steering committee and other key Ministry of Health and non-Ministry of Health stakeholders; these must be clearly defined and agreed upon.
- d) **Develop an operational plan** for the integration process. An operational plan will detail methods, participants, and responsibilities for each of the five steps in the integration process. The operational plan should be considered a “living document” as it will need to evolve and be revisited and updated frequently to reflect learning at each step.

How long is this going to take?

Ensuring a common understanding of timelines is critical at Step 1 in the integration process

The state of the health system, the integration goals, and political will and support for the integration process will determine how long it will take

Those involved in the process should understand that it is likely to be a staged multi-year commitment and not necessarily a series of steps that can be completed in six months

Step 2: Consensus on strategic objectives

To achieve this step:

- A process is developed to achieve consensus on the strategic objectives for integration of wasting into each health system building block among all stakeholders, including private health care providers in each country.

In Step 2, the steering committee ensures that all **relevant stakeholders agree on strategic objectives to integrate wasting**. Private health care providers include both formal and informal providers; while informal health care providers may not be formally registered with health regulatory authorities, they are often the first point of call for children with wasting and can play a critical role in the early detection of wasting, including by directing children to appropriate services for the management of wasting.

Table 10 below provides a set of proposed strategic objectives across the health system building blocks, which should be contextualized to each country.

Table 10: Proposed strategic objectives for the integration of services for the treatment of wasting into the health system

Health system building block	The objective for integration of treatment services for wasting
Government and leadership	Treatment of wasting is included in health policies, planning, coordination and regulation frameworks alongside other health services, including in frameworks addressing public health emergencies and UHC. Milestones: • An appropriate coordination mechanism is available to steer the integration of wasting into routine health services • Planning for the provision of treatment services for wasting is conducted together with other health services at national and sub-national level
Health workforce	Health professionals providing maternal and child health services are trained to identify and manage wasting as part of the pre-service training and in-service training. Milestones: • At each level of the health care system, an adequate number of qualified health professionals can identify and treat wasting
Service delivery	Every child in contact with the health system is screened for wasting as part of clinical assessment. An effective referral mechanism ensures that patients receive care according to the severity of wasting. Milestones: • Systems are in place to inform communities of wasting and the treatment options available • Assessment and treatment services for wasting are available in PHC facilities and community-based health care services
Medical products, vaccines and technologies	RUTF and other commodities required for the treatment of wasting are included in the national procurement and distribution system, including in national logistics management information systems. Milestones: • RUTF supply is delivered to the last mile of wasting treatment services
Financing	Services for the management of wasting are financed through national health budgets, and treatment services are included in health insurance schemes or are free/ subsidized. Milestones: • Budget allocation for prevention and treatment services for wasting is secured within the health budget • Budget for surge capacity and expansion of wasting services during emergencies is included in health disaster budgets
Health information systems	Accurate data on screening and treatment of wasting are routinely collected, reported, and used as part of the national HMIS system. Milestones: • Other sectors have access to data on screening and treatment of wasting • Data on screening and treatment of wasting inform the need for surge capacity

Step 3: Landscape review

To achieve this step:

- A landscape review is completed to ensure a common understanding of the state of the system and how wasting fits into the health system building blocks in this context

To **assess the readiness of the system** to adopt a new service, mapping and visualization of each building block and its influence on the integration of wasting management into health systems are essential.

A landscape review will inform a common understanding of how wasting fits into different aspects of the health system building blocks and across the various health system levels (i.e., patient interaction, health system organization, and the policy and standards setting levels). The existing state of the health system, including the capacity of its institutions, people, and systems, as well as the current gaps and opportunities for the integration of wasting, need to be considered in the landscape review. To effectively integrate wasting as part of routine health services, corrective actions and an action plan to implement these actions should be developed, based on the findings of available options and potential bottlenecks.

“Health systems reviews” performed regularly for each country by WHO can help assess the state of the health system. Further, the guidance document “Monitoring the building blocks of the health system: A handbook of indicators and their measurement strategy”²³ can help identify the main obstacles to the availability, quality, and efficiency of essential health services before focusing on wasting treatment services. These resources will help countries identify pre-existing constraints, barriers, and challenges specific to the functioning of the health system. Existing policy, strategy, programme and project documents related to maternal, newborn, child health and nutrition can also be valuable resources for assessing the gaps and opportunities of integrating wasting services in each context.

Table 11 guides key considerations in **mapping existing capacities** for each health system building block (and identifying appropriate actions to support the integration of treatment services for wasting). The landscape review should identify gaps and opportunities to include wasting management for each building block.

Step 4: Action planning and prioritization

To achieve this step:

- An action plan for integration is agreed upon and developed
- A prioritization exercise for actions is completed

In this step, an **action plan for integration is developed**, which considers both the strategic objectives for the integration of wasting and required actions identified from the landscape analysis (Step 3). For the plan to be implemented successfully, the proposed activities should be realistic and in sync with the health system structure. It also needs to embrace all the health system building blocks and identify clear roles and responsibilities for each proposed action.

It is unlikely that all integration actions can be carried out concurrently. Therefore, once an action plan has been outlined, the steering committee should consider a prioritization exercise to determine where to start. The prioritization exercise can focus on some “quick wins” and begin initiating some actions that can take longer to accomplish.

As the implementation actions differ in complexity and timelines, the plan should aim for a phased approach, proposing gradual steps toward integration where necessary.

Table 11 lists potential integration actions for each health system building block. It is important to note that these lists are not exhaustive or definitive. All integration actions need to be context-specific and defined by the country’s strategic objectives for integration and the landscape review.

Step 5: Monitoring, learning, and feedback

To achieve this step:

- A monitoring plan for wasting integration is developed and implemented
- A learning feedback loop for wasting integration is created and implemented with a continuous review of the process

Some concepts frequently used to measure health services remain highly relevant for monitoring the integration of wasting services. For example, access, availability, utilization, and coverage have often been used interchangeably to reveal whether people are receiving the needed services. Access is a broad term with varied dimensions: the comprehensive measurement of access requires a systematic assessment of the physical, economic, and socio-psychological aspects of people's ability to make use of health services. Availability is an aspect of comprehensiveness and refers to the physical presence or delivery of services that meet a minimum standard. Utilization is often defined as the quantity of health care services used. Coverage of interventions is defined as the proportion of people who receive a specific intervention or service among those who need it.

Integrating wasting services into health care services is dynamic and not always linear. Adaptive learning is thus essential in monitoring the various steps in developing the implementation plan and the actual implementation of the planned action.

Table 11: Mapping factors influencing integration across the health building blocks

This section provides guidance on key considerations for mapping existing capacities for each health system building block. This includes identifying gaps and opportunities for the inclusion of wasting management as part of each building block. The guidance contained in this table is intended to help structure the landscape review. However, the process and specific landscape review questions should be contextualized to each AMS context.

Building block	Integration objective	Review actions	Key considerations/questions	Potential integration actions
Government and leadership	Treatment of wasting is included in health system coordination and regulation frameworks alongside other health services, including in frameworks addressing public health emergencies	Policy gap analysis about wasting treatment services	- Review all existing or planned laws, policies, strategies, frameworks, and programmes related to PHC and the basic or essential package of health services and child health, and map those that integrate wasting - List the policies that are not yet integrating wasting, including national and subnational emergency response plans and community health strategies - Identify gaps and opportunities for the inclusion of wasting within multiple sectoral policies - Coordination mechanisms in relation to wasting services - Review the existence and operability of coordination mechanisms related to wasting at national and decentralized levels of the health care system. Determine whether they are stand-alone/vertical, partially integrated/ fully integrated, and whether different mechanisms are used during emergencies - Review the significant limitations of coordination mechanisms in effectively integrating wasting management and follow-up. (This links with budget allocation, HMIS, human resource support including training and supportive supervision)	- Designate an accountable department and national lead/ champion to steer integration efforts for wasting at the national and sub-national level - Identify key health system actors and partners crucial for the integration of service provision for wasting and enlist their support - Update any policy and strategy documents as well as frameworks where services for the management of wasting are missing, including those guiding emergency management - Include wasting in the national UHC strategy - Include wasting in the national stunting reduction plan - Include wasting in health services planning at all levels of the health system, including emergencies - Include wasting in the coordination functions of health and nutrition managers at all levels, including standard operations procedures for emergencies

Building block	Integration objective	Review actions	Key considerations/questions	Potential integration actions
Health workforce	Health professionals providing maternal and child health services are trained to identify and manage wasting as part of the initial training and in-service training.	Review human resource policies, management systems, and motivation with the perspective of wasting interventions	- Can you identify any human resource policies and plans, initial and on-the-job training, or any significant human resources challenges that could be overburdening frontline workers? - Is wasting included in health professional training curricula (e.g., pre-service training; in-service training), and for which health cadres? - What is the proportion of existing health workers with skills to identify and treat wasting? - What is the distribution of health workers with skills to manage wasting in areas with the highest prevalence/burden of wasting or in rural versus urban areas?	Health workforce policy - Include wasting in pre-service training curricula and in-service or continuing professional development of relevant health cadres - Include the prevention and management of wasting in competency requirements and job descriptions for relevant health worker cadres - Ensure that qualified health professionals support the management of wasting at each system level, including response to health emergencies and natural disasters - Ensure appropriate geographical distribution of health workers with wasting management competencies Health workforce training - Include wasting in pre-service and in-service training curricula for health professionals (i.e., doctors, nurses, community health workers, managers, etc.) - Strengthen collaboration with professional associations to maintain training provision throughout a health worker's career - Include wasting management and prevention in routine supportive supervision schemes and feedback mechanisms for relevant health cadres

Building block	Integration objective	Review actions	Key considerations/questions	Potential integration actions
Service delivery	Every child in contact with the health system is screened for wasting as part of clinical assessment. An effective referral mechanism ensures patients receive care according to the severity of wasting	Review of policy and healthcare service delivery model in relation to wasting	- How are other health services delivered, and what are the existing service packages that could facilitate the integration of wasting? - Clinical integration: is wasting integrated in the everyday practice of health professions at the point of health service delivery and emergency outreach services; and do health care procurement systems cover wasting services? (This links with the Health workforce building block) - Is detection and treatment of wasting by community health services included in community health systems? - What are the private sector's roles and contribution to service delivery	Policy and coordination - Include wasting in a basic essential health care package of services (this links with the governance building block) - Identify common barriers to service delivery of routine health services and develop actions to support and improve it - Specify the roles and responsibilities of health actors at each level of the health care system (community, primary, secondary, and tertiary), and the role of the private sector in the delivery of wasting services - Ensure that wasting services are available at the lowest level of health care and referral mechanisms are available for complicated cases that require inpatient management - Identify service delivery options that can be mobilized in case of increased service demand and plan for them (such as outreach, more significant community mobilization, etc.). Clinical integration - Include MUAC assessment as part of triage and clinical assessment at the point of delivery - Train and mandate health workers to provide wasting identification and management - List wasting as one of the diseases in the clinical referral forms Community health services - Include services for the management of wasting in the community health worker and volunteers' package of services and include MUAC tapes as part of their supplies kit - Identify which health-adjacent community services can be optimized to include screening and referral for wasting and/or sensitization on wasting and stunting - Include messages on wasting and training on Family MUAC in community sensitization packages and health campaigns

Building block	Integration objective	Review actions	Key considerations/questions	Potential integration actions
Financing	Services for the management of wasting are financed through national health budgets, and treatment services are included in health insurance schemes or are free/subsidized	Review of health expenditures, financial arrangements, and incentives in relation to wasting	- Does UHC cover wasting treatment services, or is there a fee waiver? - Is wasting included in government procurement services for health care? - Is there a costed plan for implementing services to manage wasting? - Is there an adequate national regular budget for wasting treatment services in relation to national targets (planned coverage)? - Do the national/ provincial/ district/ municipal health budgets include a budget line for nutrition and wasting services? - If the health budgets are decentralized, what is the proportion of provinces, districts, and municipalities that have already included wasting in their health budget/ and what are the barriers to not doing so?	- Prepare budget and cost for implementing wasting management at scale (multi-year plan with coverage) - Include wasting in UHC or free health care policy and ensure wasting services are free at the point of delivery - Advocate for budget allocation for wasting services within health budgets, including for expansion of wasting services during emergencies in health disaster budgets - Ensure that the budget for implementing wasting management at scale includes procurement - Build subnational level capacity to advocate, budget and track nutrition expenditures. (This links with governance and HR Building block)
Medical products, vaccines and technologies	RUTF and other commodities required for the treatment of wasting are included in the national procurement and distribution system, including in national logistics management information systems^g	Review the adequacy of the national supply chain in procurement and distribution of wasting treatment commodities and equipment for detection of wasting	- Are wasting treatment commodities (therapeutic milks, RUTF) and equipment included in the national drug and supply/ commodity list? - Is there a budget allocated for the procurement of wasting supplies? This links with the financing building block - Are wasting treatment commodities included in the national procurement, supply and storage, and distribution systems? - Are wasting treatment commodities included in the national logistics management and reporting system? - Are wasting treatment commodities included in the emergency response supply list?	Policy - Include wasting commodities in the national list of essential drugs or commodities - Develop a guidance note to define what constitutes essential supplies to manage wasting. Often, only RUTF is considered while MUAC tapes and other anthropometric equipment are not included - Identify gaps, challenges, and opportunities for the inclusion of wasting supplies in the national supply-chain system (forecasting, procurement and delivery) at the national, local and community levels, and develop a strategy to address them. Procurement and distribution - Ensure adequate budget is allocated for the procurement of wasting supplies (link with financing building block) - Budget for last-mile distribution in subnational plans, including transportation costs and buffer stock positioning Include wasting supplies, particularly RUTF, in national logistics monitoring and information management systems

^g Some rare side effects of RUTF like Gastrointestinal discomforts, Nausea or vomiting or allergic reactions can be noticed and requires to consult a medical specialist.

Building block	Integration objective	Review actions	Key considerations/questions	Potential integration actions
Health information system	Accurate data on screening and treatment of wasting is routinely collected, reported and used as part of the national HMIS system	Identify opportunities and gaps for collection, reporting, and analysis of wasting data through national health information systems	- Are wasting indicators included in the list of core indicators for HMIS, or is there a parallel mechanism in place? - Are the definitions of indicators for wasting consistent with the standard global indicator definitions required to report against the SDGs? - What gaps exist in data collection formats in frontline services? Are wasting treatment services included in the registration and reporting books at health facilities and hospitals providing wasting services? - Does the reporting framework for wasting data allow for timely transmission, analysis and response? Are data regularly sent to the district/ provincial/national level? Is there a feedback mechanism in place? - Have the relevant staff at each health service level received training in the accurate collection, reporting and utilization of data on wasting?	Wasting indicators in HMIS - Harmonize definitions of wasting indicators across HMIS platforms in public and private health networks - Harmonize reporting and indicator generation between inpatient and outpatient service delivery units to ensure coherent reporting across the care continuum (e.g., numbers admitted, discharged, cured, or referred to inpatient/outpatient care) - Ensure data collection is appropriately disaggregated to monitor and evaluate equitable service delivery according to gender, disability and other equity measures. Utilization of wasting data and feedback - Ensure caseload fluctuations outside of the norm or beyond the coping capacity of existing services are identified and discussed for action Health workforce capacity to report and use wasting data - Train all relevant health workers involved in the management of wasting in data collection and reporting

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