Including Nutrition Commodities on Global and National Medicines Lists Case Examples and Country Experiences

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Co-hosted by the Nutrition and Commodities subgroups



Image credit: Mubeen Siddiqui/MCSP, Odisha, India



## Speakers



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Including Nutrition Commodities on Global and National Medicines Lists:

Case Examples and Country Experiences

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The supply chain strengthening viewpoint on the impact of the nutrition commodities on National Medicines Lists

Child Health Task Force Webinar 9 November 2022



#### Top six, Nutrition Commodities List In MoH EML and DHIS2

The six nutritional commodities for malnourished children	Health centres	Primary health care clinics	Health posts	CHW
Therapeutic milk formula 75(f75) Sachet: 410 g	X	Depending		
Therapeutic milk formula 100(f100) Sachet 456 g	Х	Depending		
Micronutrient powder (MNP). Sachet: 1 g.	X	X	X	Х
Vitamin A Capsule: 100,000 units (blue) for children 6-11 months; 200,000 units (red) for children 12-59 months	Х	Х	Х	Х
Ready-to-use therapeutic food (RUTF) Sachet: 500 Kcal.	X	X	Х	Х
Rehydration solution for severe malnutrition (RESOMAL) Sachet: 45 mmol/L (sodium); 40 mmol/L (potassium	Х	Depending		

# Overview of countries with nutrition supplies integrated onto the EML in WCAR

Countries	Is RUTF on the EML list?	Are MUAC & WHZ Accepted as independent criteria for Admission & the 115criteria referenced ?	Does the country have protocols to management SAN ?	Is SAM part of National training curriculum?	Is domestic funding made available for SAM MGMT?	Is a community-based approach to SAM MGMT promoted?
						Yes
Benin	Yes		Yes	No	Ν	
Burkina Faso	Yes		Yes	Yes	Yes	
Cameroon	No	Yes	Yes	No	No	Yes
Cape Verde						
Central African Republic	Yes		Yes	No	Yes	
Chad	Yes	Yes	Yes	No	No	
Congo	No		Yes	No	No	
Côte d'Ivoire	Yes		Yes	No	Yes	
Democratic Republic of the Congo	Yes	Yes	Yes	No	No	Yes
Equatorial Guinea						
Gabon			Yes		No	
Gambia	No	Yes	Yes	No		Yes
Ghana	No		Yes	Yes	No	
Guinea	Yes	Yes	Yes	Yes	No	Yes
Guinea-Bissau	No		Yes	Yes	No	
Liberia	Yes	Yes	Yes	No	No	Yes
Mali	Yes	Yes	Yes	No	Yes	Yes
Mauritania	Yes	Yes	Yes	Yes	Yes	Yes
Niger	Yes	Yes	Yes	Yes	Yes	Yes
Nigeria	Yes	Yes	Yes	No	Yes	Yes
Sao Tome and Principe						
Senegal	Yes	Yes	Yes	Yes	Yes	Yes
Sierra Leone	Yes	Yes	Yes	No	Yes	
Тодо	Yes	Yes	Yes	Yes	No	Yes
Total	15/24	13/24	22/24		8	9 11





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#### Perceived consequences of listing RUTF on EML





#### Perceived impact of listing RUTF on EML











Can be coordinated by the Government And further funded

Advocate for integration of nutrition onto national training curriculum

Centralized Needs-based product quantification, can be used for revised pipeline





digitalized health facilities admissions reviews can be used to adjust "caseload"

Availability of updated stock information (Physical and Virtual) for revised needs-based deliveries

Widespread the availability of trained HR capacity, at last mile to enhance the quality & scale of SAM management

### **Opportunities offered** by the integration (products and service)



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# Challenges: The multiplicity of distribution chains hinders the operational efficiency as whole

#### Upstream logistics challenges:

- Deficient promotion of MNP to the point of use, leading to a poor scaleup of the products at outpatient treatment Center(OTC).
- Lack of clarity of responsibility at central level (redundancy of orders, risk of expiry, Swapping)
- Poor inspection of nutrition products throughout the health systems (no quality control of parallel chains)

#### Downstream logistics challenges:

- Lack of virtual integration of partner products onto the LMIS to allow a visibility and monitoring (stocks at last mile)
- Loss of information, and challenge of traceability of nutrition commodities, (delivered vs. Consumed)

#### Use case: - RUTF End User Monitoring (EUM)

**Use case:** The nutrition products EUM is being conducted to ensure that the availability, quality, distribution and utilization by the end user is secured. The outcomes shows that, "in theory, information should be made timely available at districts level for quarterly planning, then submitted to the central level": in practice, the deadlines are rarely met and/or health facilities' information is incomplete – In context were, integrated supplies and buffer stocks almost unavailable.

#### Process for engaging government and stakeholders in supply chain strengthening

Consultations for development of EUM guidance document,	Government and health staff from the national, regional and facility levels were engaged by UNICEF Supply Division and the Mauritania Country Office to contribute to the development of the EUM guidance document. This document is now being used in the region by countries as a blueprint when designing their EUM approach.
Stakeholder engagement,	As an entry point for health system and supply chain strengthening, UNICEF Mauritania engaged the Ministry of Health in discussions to pilot EUM, as an initial step towards integrating nutrition commodities into the national supply chain.
Assessment of supply chain capacity,	An initial assessment of Mauritania's national supply chain was conducted using the Supply Chain Maturity Model Scorecard <sup>5</sup> to assess the country's readiness and capacity to assume management of the nutrition supply chain, which is currently managed by UNICEF. Mauritania received low scores across many of the key supply chain operations and enabling elements. These findings provide support for prioritizing system strengthening efforts.

t to collection	n forms	- sivity
EUM data-collection Form name Stock Status Facility Survey Storage Household Survey	Location Health facility Health facility Health facility Household	Type of survey activity           Count RUTF stock and review stock records           Interview facility staff and review patient records and registers           Observe storage area and conditions           Interview caregivers and observe RUTF use
Housenore		





## Key operational considerations and way forward

A HOLISTIC nutrition supplies and service integration as a package (including community health platforms)

Promote a governance model for integrated products and services management at all levels of the health system Have available & functional digital systems to capture and provide the visibility of stocks and monitoring at last mile

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Encourage countries to implement a traceability system for nutrition commodities (delivered vs. Consumed)

Influence national regulatory frameworks for better fit of product categorization Generalize the utilization of MNP with or without integration to EML (enhance access)

#### The supply chain strengthening viewpoint f

#### utrition commodities

# Thank you

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#### Nutrition Supply Chain Integration : Malawi Country Case

#### November 2022

Sylvester Kathumba Chief Nutrition Programmes Officer Ministry of Health



# **Presentation Outline**

## • Background

- ➢Bottleneck analysis
- ≻CMAM operational plan
- SAM deep dive commitments
- ≻Learning visit to Nairobi
- ≻High level advocacy meeting
- Progress on nutrition supply chain integration
- Best practices and lessons learned





# **Bottleneck Analysis**



National SAM Dashboard Summary							
Supply RUTF	HR (HSA)	HR (Nurses & Clinicians)	Geographic access - OTP	Outreach	Initial Utilization	Continuous utilization	Quality
	$\rightarrow$						
36%		29%	90%	24%			36%
(Poor)	69% (Acceptable)	(Poor)	(Good)	(Poor)	44% (Acceptable)	42% (Acceptable)	(Poor)
National MAM Dashbo	oard Summary						
Supply CSB	HR (HSA)	HR (Nurses & Clinicians)	Geographic access -SFP	Outreach	Initial Utilization	Continuous utilization	Quality
		29%	82%	24%	23%	22%	15%
48% (Acceptable)	69% (Acceptable)	(Poor)	(Good)	(Poor)	(Poor)	(Poor)	(Poor)

# **Supply Related Bottlenecks**



- Lack of buffer stocks to fill RUTF distribution gaps
- Logistical challenges
- Weak supply forecasting due to data unreliability
- Inadequate storage space at district level and health facility .
- Pilferage of supplies
- Late and low Reporting rates
- Inadequate supervision and monitoring.

# **Root Causes**



- Weak control systems led to abuse of nutrition supplies
- Weak supplies monitoring at all levels (Central and Districts)
- Logistical issues at Central level such as:
  - Lengthy quality assurance procedures
  - Inadequate transport availability to equitably distribute RUTF supplies alongside other health supplies
  - RUTF not included in the EML to be managed as other medical supplies
  - Low production of RUTF by factories due to unreliable demand and cash flow issues

# Priority in CMAM Operational Plan



Malawi National Community-Based Management of Acute Malnutrition (CMAM) Operational Plan 2017–2021

#### Table 3.1: Prioritised Actions to Improve Availability and Access to CMAM Supplies and Equipment

1. Integrate CMAM supplies and equipment into the national health commodity logistics system

- Advocate to Central Medical Stores (CMS) for increased allocation and long-term funding for RUTF as an essential drug and/or supply
- Ensure manufacturers and suppliers register therapeutic and supplementary food supplies with the Pharmacy Medicines and Poisons Board (PMPB)
- Adopt international technical specifications or reference ranges for quality control checks for locally
  produced therapeutic and supplementary food supplies
- Perform quality control certification of therapeutic and supplementary food supplies at Malawi Bureau of Standards (MBS)
- 6. Conduct annual national quantification of CMAM supplies with all stakeholders
- 7. Procure essential CMAM supplies and equipment based on annual needs
- 8. Implement a national CMAM supplies real-time monitoring and reporting system at all levels
- 9. Train service providers and managers on CMAM supplies and logistics management
- 10. Establish sufficient warehouses and safe storage facilities at central, district, and facility levels
- 11. Improve efficiency of transport of SAM and MAM supplies to the health facility and beneficiary

# SAM Deep Dive Commitments



- Short term: Integration Of CMAM Supplies Into The Essential Medical List (EML) by December 2017
- Long term: Integration Of SAM Activities Into The Community Systems e.g. Integrated management of childhood illnesses (IMCI)



# Learning Visit to Nairobi

- Strong Government commitment and leadership
- Delivery through government system is more efficient despite initial challenges.
- Improved ownership at facility -supply comes through government channels
- Improved effectiveness and efficiency-Facilities request based on consumption through LMIS
- Integration into one national supply chain system managed by KEMSA is a more sustainable process
- Government led coordination arrangements
- Direct delivery to facilities Improved order turnaround time (7.6 days)





# High level Advocacy Meeting in Blantyre



## Workshop Commitments

- Product selection: Therapeutic nutrition products for the treatment of SAM will be added to the must have list and managed in line with existing MoH supply chain processes
- Funding & Procurement:Gradual domestic investment to the procurement of nutrition commodities.Inclusion of the nutrition commodities in the drug budget
- Local Production & Quality Control:by December 2018 Malawi WILL HAVE the capacity to conduct quality control of the locally produced nutrition commodities based on procedures and standards to be agreed upon BY RELEVANT AUTHORITIES
- Warehousing, Distribution & Inventory Management :Storage at Central and Regional levels by CMST. Well documented volume and weight of CMAM supplies. All storage facilities de-junked and commodities adequately disposed Expansion of identified warehouse requirements done LMIS tools revised, printed and disseminated
- LMIS, Human Resources & Governance:in 6 – 18 months pharmacy should be in-charge and accountable for all CMAM commodities in Malawi





# Progress on nutrition supply chain integration

# Progress on Integration of Nutrition Therapeutic Products



<b>Supply function</b>	Key achievements
Product selection	• Therapeutic nutrition commodities have been included on National Essential Medicines List (NEML) and CMST catalogue
Forecasting & Quantification	<ul> <li>Nutrition Supplies are part of the MOH National quantification TWG workshop and 2018-2021 quantification</li> </ul>
Procurement & procurement planning	<ul> <li>Government procured therapeutic nutrition commodities for 2017/18 fiscal year</li> <li>MOH/UNICEF leads in procurement planning</li> <li>Procurement plans shared with local manufacturers for production planning.</li> </ul>
Warehousing & Distribution	<ul> <li>Warehousing, distribution &amp; inventory management currently managed by CMST</li> <li>MOH/UNICEF coordinates the distribution planning 24</li> </ul>

# Warehousing and Last mile Distribution by CMST to all 29 districts









NUTRITION PROGRAM THERAPEUTIC PRODUCTS							
TBD	Ready-to-use Therapeutic Food (RUTF) spread	each	7/				 
TBD	F-75 Therapeutic milk	each Cl	77		J	     	       
TBD	F-100 Therapeutic milk	each					
TBD	ReSoMal	each				1 1 1	   
TBD	Retinol 200,000IU soft gel caps	Capsule				   	     
TBD	Amoxicillin powder/oral sus 125g/ 5ml/bottle-100	Bottle					
Prepared	Prepared/Submitted by [Name]:						
Data Pro	Data Processing by[Name]						
Review/a	Review/approval by Health Facility In-Charge:						
Remarks	Remarks:						

# Progress on Integration of Nutrition Therapeutic Products



Supply function	Key achievements				
	• Capacity strengthening of CMST in warehousing and inventory management with UNICEF support				
	• Training for district nutritionists and pharmacists in revised Logistics management information System(LMIS) as trainers				
Human Resources	• Training of 1,201 health facility nutrition and pharmacy staff from 29 districts in revised LMIS				
	• Developed training package in integrated nutrition supply chain management and roll out in 3 districts.				
	• Trained 180 health facility in-charges, nutrition and pharmacy staff				
	<ul> <li>Joint post training support &amp; monitoring - MOH, Health Technical Support Services (HTSS), CMST &amp; UNICEF</li> </ul>				

## **Progress on Integration of Nutrition** Therapeutic Products ......



Supply function	Key achievements
Information management	<ul> <li>Review and reprinting of Logistics Management Information Systems (LMIS) reporting forms to include nutrition supplies</li> <li>Inclusion of nutrition stock status reports on the national open LMIS platform</li> <li>Districts currently reporting nutrition supplies through OLMIS</li> </ul>
Financing	<ul> <li>Financing of distribution of therapeutic nutrition commodities is currently being done by UNICEF on behalf of MOH.</li> <li>CMST charges the warehousing and distribution handling costs based on the costs of the commodity volumes. This is currently at 10% of the commodity cost.</li> <li>Government created a budget line for RUTF procurement</li> <li>Strong partner commitment supporting the integration</li> </ul>

# **Best Practices & Lessons Learnt**



- Strong government leadership DNHA,MOH,HTSS, pharmacy has successfully driven the integration agenda
- Joint Coordination between partners enhances effective planning and implementation
- Strong support from Partners during advocacy and sensitization workshops
- Momentum built during the advocacy workshop maintained through regular government engagement and follow ups
- Integration has increased accountability for nutrition commodities evidenced by significant reduction is stock outs and pilferage





# NUTRITION COMMODITIES ON GLOBAL AND NATIONAL MEDICINES LISTS – INDIA PERSPECTIVE

Dr. Pawankumar Patil

Director – Technical

Action Against Hunger India



## MALNUTRITION IN INDIA

- Wasting affects 50.5 million children under five with more than half of the world's wasted children, 26.9 million, living in South Asia<sup>(1)</sup>.
- India is among the top three countries with most children who are wasted - 25.5 million while also holding almost a third (31%) of the world's burden for stunting<sup>(1)</sup>.
- According to the latest Global Nutrition Report, India has made no progress towards achieving the target for wasting<sup>(2)</sup>.
- The 2022 Global Hunger Index ranks India 107<sup>th</sup> out of the total 121 reported countries. With a score of 29.1, India has a level of hunger that is serious<sup>(3)</sup>.
- India even has the highest child wasting rate of all countries covered<sup>(3)</sup>.
- Action Against Hunger India works in 4 states of Gujarat, Maharashtra, Madhya Pradesh, Rajasthan for prevention, early detection, and treatment of malnutrition in close collaboration with the local and state Governments.



## OVERVIEW OF WASTING TREATMENT SERVICES

- In India, Health and Nutrition are state-decided subjects.
- There is a variation in protocols of community-based management of wasting and role of Health system across the country.

Two Ministries involved:

- Ministry of Health & Family Welfare (MOHFW) facility based management of children with Severe Acute Malnutrition through Nutritional Rehabilitation Centres (NRC) also known as Malnutrition Treatment Centres (MTC).
- Ministry of Women & Child Development (WCD) identification, tracking and communitybased management of children suffering from Severe and Moderate Acute Malnutrition through the Integrated Child Development Scheme. This community-based management varies across states.
- Frontline Workers representing the two Ministries at grass-roots: Anganwadi Worker (AWW), Accredited Social Health Activist (ASHA) & Auxiliary Nurse and Midwife (ANM)

## CONVERGENCE AT GRASS-ROOTS LEVEL

#### WCD

- Anganwadi Workers screen the children in the community following which they refer the child at risk of malnutrition to the NRC for confirmation and treatment.
- In cases where the caregivers do not readily visit the NRC, then ICDS provides Take-Home Ration (THR) & Hot cooked meals to them.

#### MOHFW

- Once the anthropometry and gradation of malnutrition is confirmed, the Medical Officer suggests the treatment protocol.
- If the child is identified as SAM then treatment with F-75, F-100, Energy Dense Nutritious Supplement (EDNS) or Medical Nutrition Therapy (MNT) is started with appropriate medications.
- There is a variation across states in referral and state at MTC/NRC based on the state-level protocols.

The convergence in rural context is at the Village Health Nutrition Day (VHND) and in the urban context is at Urban Health Nutrition Day (UHND) where the frontline workers of both Departments take up this platform for screening, identification and treatment of malnutrition.

However, this convergence pattern differs across states in terms of the level of convergence and the role of frontline worker in the process of identification & treatment of wasting.



## DESCRIPTION OF FOOD-BASED NUTRITION

## COMMODITY TO TREAT WASTING

#### EDNS and MNT:

Similar in composition to RUTF. At some locations, the use or development of EDNS and MNT with locally-produced food items is also promoted.

• By WCD in Maharashtra and by MOHFW in Rajasthan

**F-75** (starter diet – stabilization phase) & **F-100** (catch-up diet – transition phase)

• By MOFHW

In absence of F-75 & F-100, preparations made out of energy and protein dense locally available foods are used.

#### Hot-cooked meal, THR and other alternatives:

- Provided for reducing the prevalence of malnutrition.
- Hot-cooked meals are provided to children at the Anganwadi Centre and THR was initially composed of pre-mixes or ready-to-eat food.
- Owing to restrictions of COVID-19 IPC measures, raw food items such as rice, dal, etc. are currently being provided.
- In some states, the THR is gradually returning to pre-mixes or ready-to-eat food and other alternatives are under consideration.
  - By WCD

**'Balamrutham'** is the weaning food introduced under **ICDS in Telangana state** to provide improved supplementary nutrition to all children between 7 months to 3 years. The weaning food is a preparation of wheat, chana dal, milk powder, oil and sugar. It is fortified and thus provides 50% of iron, calcium, vitamins and other RDA that children require per day.

### FOOD-BASED NUTRITION COMMODITY AND

### NATIONAL MEDICINES LISTS AT NRC/MTC

Pharmacy supplies	<ul> <li>Antibiotics: (Ampicillin/Amoxycillin/ Benzyl penicillin)</li> <li>Chloamphenicol</li> <li>Cotrimoxazole</li> <li>Gentamycin</li> <li>Metronidazole</li> <li>Tetracycline or Chloramphenicol eye drops</li> <li>Atropine eye drops</li> <li>ORS</li> <li>Electrolyte and minerals</li> <li>Potassium chloride</li> <li>Magnesium chloride/sulphate</li> <li>Iron syrup</li> <li>Multivitamin</li> <li>Folic acid</li> <li>Vitamin A syrup</li> <li>Zinc Sulfate or dispersible Zinc tablets</li> <li>Glucose (or sucrose)</li> <li>IV fluids (Ringer's lactate solution with 5% glucose; 0.45% (half normal) saline with 5% glucose; 0.9% saline (for soaking eye pads)</li> </ul>		
Consumable s	<ul> <li>Cannulas</li> <li>IV sets</li> <li>Pediatric nasogastric tubes</li> </ul>		
Kitchen supplies	<ul> <li>Supply for making Starter and Catch up Diet</li> <li>Dried Skimmed Milk</li> <li>Whole dried milk</li> <li>Fresh whole milk</li> <li>Puffed rice</li> <li>Vegetable oil</li> <li>Foods similar to those used in home (for teaching/use in transition to home foods)</li> </ul>		

## IMPLICATIONS OF FOOD-BASED COMMODITIES IN NATIONAL/STATE MEDICINES LIST

Merits	Demerits
<ul> <li>Treatment protocol will be followed diligently.</li> <li>Awareness of the food-based commodity as a medicine will ensure its appropriate use.</li> <li>Improvement in child growth due to regularized consumption and monitoring.</li> <li>Malnutrition treatment will be given the importance it requires.</li> <li>There will be increased focus on malnutrition treatment as part of formal medical and nursing education.</li> </ul>	<ul> <li>Over-the-counter misuse may prevail unless mandated to be prescribed by Doctors and consumed under medical supervision.</li> <li>Currently, RUTF is supplied without any cost on the beneficiary's end. Once included in the Essential Medicines list, it might incur cost to the beneficiaries.</li> <li>Challenges for standardization and targeted use of RUTF for only SAM children.</li> <li>May risk the commodity being produced by multiple pharmaceutical companies that might bring up misleading claims.</li> </ul>



# CONCLUSION

- Convergence of different stakeholders at the grass-roots remains a challenge which needs innovative solutions.
- Identification, treatment and prevention of wasting at community level necessitates standard national guidelines with a scope for localization based on cultural and demographic factors.
- There needs to be a standardization of alternatives to F-75 and F-100 that provide and ensure the required nutrients in the recommended amounts to match the formulation (as the child is able to tolerate).
- This standardization of the formulation and home-based as well as community-based management can help reduce the prevalence and recurrence of wasting in children.
- Inclusion of RUTF in the essential medicines list can be one of the critical milestones in the nutrition ecosystem context of India.



### THANK YOU

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## **Connect with the us**

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Subgroup information, recordings and presentations from previous meetings and webinars are available on the subgroup page of the Child Health Task Force website: <u>www.childhealthtaskforce.org/subgroups/qoc</u> and <u>www.childhealthtaskforce.org/subgroups/digital-health</u>

\*The recording and presentations from this webinar will be available on this page in a couple days

Join the Child Health Task Force here: <u>https://bit.ly/joinchtf</u> & follow us on LinkedIn: <u>www.linkedin.com/company/child-health-task-force</u>



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