

A woman wearing a colorful orange and blue sari is sitting on a hospital bed, feeding a baby with a spoon. The baby is sitting up and looking towards the camera. In the background, other patients and hospital beds are visible, suggesting a ward setting.

ORS and Zinc as standard of care for diarrhea management: Actions to improve uptake

May 15, 2024

Co-hosted by the Commodities, iCCM, and Private Sector Engagement subgroups of the Child Health Task Force



Language Interpretation *Interprétation linguistique*

This meeting is happening in both French and English via simultaneous interpretation. To listen in English, click on “interpretation” and select “English”. To hear only English, click on “mute original sound”.

Cette réunion se déroule en français et en anglais via interprétation simultanée. Pour écouter en français, cliquez sur “interprétation” et sélectionnez “français.” Pour n'entendre que le français, cliquez sur “couper le son d'origine.”

15 May 2024

MNCHN Asset Tracker

Oral Rehydration Salts and Zinc

Child Health Taskforce webinar





About MNCHN Asset Tracker

Tracking the journey to scale for key maternal, newborn, child health and nutrition interventions

PATH aggregates data from policies, guidelines, surveys, HMIS, and key informant interviews to understand the status of scale of **22 MNCHN “assets”** including key barriers and enablers to scale.

Approach

- Perform rapid literature review and data mapping
- Collate secondary data for milestones aligned with scale up framework
- Conduct global-level and country-level key informant interviews to contextualize scale up progress and garner recommendations
- Triangulate and synthesize data; update dashboard visualizations



22 MNCHN interventions across the continuum of care included in the Asset Tracker



Antenatal

Fostering healthy births and positive pregnancy experiences

Management of pre-eclampsia / eclampsia

- Calcium supplementation
- Low-dose aspirin
- Magnesium sulfate

Nutrition during pregnancy

- Iron folic acid
- Multiple micronutrient supplementation
- Balanced energy protein supplementation



Labor and delivery

Fostering healthy births and positive pregnancy experiences

Management of postpartum hemorrhage

- Oxytocin
- Misoprostol
- Tranexamic Acid

Improving preterm birth outcomes

- Antenatal corticosteroids
- Tocolytics

Reducing maternal sepsis

- Azithromycin



Postnatal

Preventing neonatal mortality and focusing on maternal and newborn health and well-being

Essential newborn care

- 7.1% Chlorhexidine for umbilical cord care
- Newborn resuscitation

Small and sick newborn care

- Continuous Positive Airway Pressure
- Kangaroo Mother Care
- Feeding of small and sick newborns



Infants and children

Supporting Early Childhood Development and healthy growth

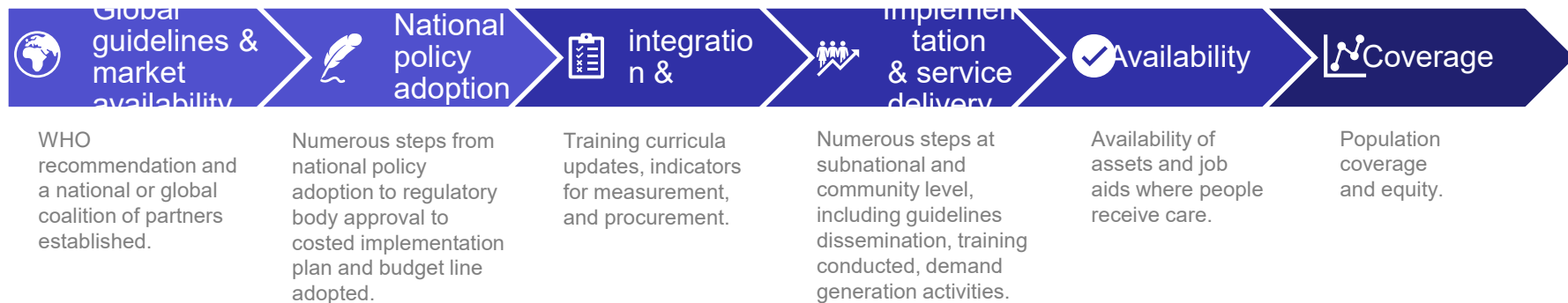
Nutrition

- Management of acute malnutrition
- Early initiation and exclusive breastfeeding

Treating infections

- Amoxicillin Dispersible Tablet
- Community Regimen for the Treatment of Possible Severe Bacterial Infection
- **ORS and Zinc**

Framework: we adapted existing scale-up frameworks to propose a six-stage framework that *moves closer to equitable, effective coverage*



REVIEW OF EXISTING FRAMEWORKS & FRAMEWORK DEVELOPMENT

We reviewed and analyzed existing theoretical frameworks and models that aim to provide a pathway for scaling up high-impact health interventions to achieve effective and equitable coverage. These included the International Development Innovation Alliance (IDIA) model for scaling up innovation,¹ Primary Health Care Performance Initiative (PHCPI) framework,² the WHO ExpandNet framework,³ Consolidated Framework for Implementation Research (CFIR),⁴ and the WHO health systems building blocks framework.⁵

This high-level process model defines six stages with corresponding milestones.

Maternal, Newborn, Child Health and Nutrition Asset Tracker

- Cover Page
- Framework
- Country Progress
- Scale Up Map**
- Cascades
- Time Series
- List of Data

For each indicator in the Framework, view global progress by indicator and compare across countries. Includes both numerical and categorical responses.



Step 1: Select an Asset from the dropdown

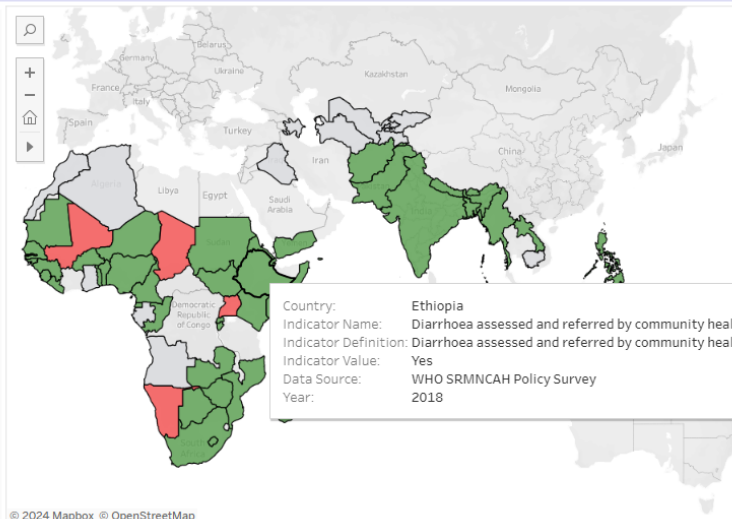
Color Key:



Download

Step 2: Scroll and click on an indicator name below

Milestone and ID	Indicator
1.1 - WHO Guidelines	Presence of WHO guideline on ORS
1.2 - Global partners	Presence of global coalition/network on ORS
1.3 - WHO/SRA Delineated Manufacturers	Asset listed in UNICEF Supply catalogue
2.1 - National SRA/Regulatory Body Approval	Market authorization verified for ORS
2.2 - Policy Adopted/Revised for Asset	Diarrhoea assessed and referred by community health workers
	Diarrhoea assessed and treated by community health workers
	Management of childhood diarrhoea policy/guideline available
	National policy on ORS



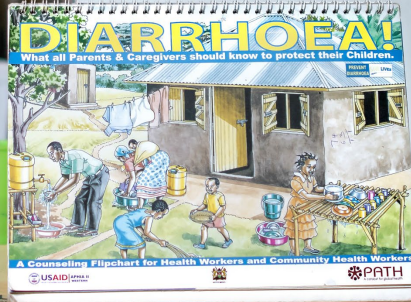
Oral rehydration salts (ORS) and zinc

ASSET DEFINITION:

ORS powder for dilution and zinc (syrup, suspension, or dispersible tablet) to prevent or treat dehydration from diarrhea in children under five years old



*“Why ORS and Zinc have failed to become standard of care is one of the biggest collective failures of the child survival community”
(Global advocate)*



Asset overview



ORS-Zinc is a major intervention to improve survival of childhood diarrhea

Major progress has been made, but uptake remains static over the last decade (47% for ORS; 29% for zinc; 19.6% for both).

Coverage

Coverage	Global aggregate (2022)*	Burkina Faso (DHS 2021)	Ethiopia (DHS 2016)	Kenya (DHS 2022)	Nigeria (DHS 2018)	Pakistan (DHS 2017)
ORS	47%	34.2%	29.5%	48.3%	40%	37.4%
Zinc	28.7%	30.9%	33.3%	39.5%	31.1%	12.5%
ORS + Zinc	19.6% (18.8% - R)	15.9%	16.6%	17.2%	22.8%	8%

Policy/guidelines

- WHO-UNICEF joint statement on acute diarrhea management (2004); statement for iCCM (2012)
- WHO clinical guidelines
- WHO EML and EMLc – ORS, Zinc, co-pack (added in 2019)
- NEMs (out of 55 reviewed): Co-pack (7); both products (24); ORS only (14); Zinc only (5); neither (5)
- Advocated for in GAPPD, Child Survival Action Plan
- New global financing strategies via Global Fund and GFF

* UNICEF Child Health Coverage database (2023)

Indicative and illustrative pricing (in USD)

UNICEF Supply Catalogue (2023):

ORS – 0.06-0.08;

Zinc – 0.14;

Co-pack – 0.64

Pricing in countries, obtained from private pharmacies:

ORS sachet – 0.39 (Ethiopia), 0.26 (Nigeria);

Zinc – 0.40 (Ethiopia);

Co-pack – 0.50 (Burkina Faso), 0.65 (Nigeria);

Main enablers and barriers to ORS-Zinc uptake

GLOBAL POLICY, ADVOCACY, FINANCING	NATIONAL POLICY, ADVOCACY, FINANCING	DATA, ACCESS (INFRASTRUCTURE, SUPPLY)	AWARENESS, KNOWLEDGE, TRAINING
<p>WHO guidelines – critical role, and need to be accompanied with implementation funding/support</p> <p>Global stakeholder prioritization of ORS and Zinc for diarrhea management as part of the “child survival” agenda, but GAPPD expires in 2025 – lack of global advocacy</p> <p>Global Fund; GFF as new financing platforms, but need to be accompanied by solid quantification and robust advocacy</p> <p>Fragmentation of child health programs</p> <p>Global supply chain vs localization of manufacturing</p>	<p>Policy alignment; NEML inclusion; adding to procurement lists; over the counter status</p> <p>Strong political will and role of local government, but creating and maintaining political will is challenging (cultural contexts, multiple competing priorities, etc.)</p> <p>Social marketing programs, but need to be locally-owned</p> <p>Local production, but needs enabling environment, investment in market shaping, commitment of national stakeholders</p> <p>Donor/partner dependence for financing; limited public sector budget; competing health priorities</p>	<p>Availability of epidemiology data at country level, but lack of needed implementation research</p> <p>Evidence-based forecasting, quantification, and procurement; integrated forecasting for broader MNCH commodities</p> <p>Robust aggregation of data on consumption, stock analysis, etc. at facility level up to national level</p> <p>Integrated supply and provision between district and facility levels</p> <p>Wide availability of ORS and Zinc through public and private sectors, especially shops close to where communities live</p> <p>Lack of local GMP-qualified manufacturers (especially in Africa)</p> <p>Quality and sub-optimal quality products in circulation (high osmolarity ORS)</p>	<p>Provider bias and perception (lack of information/education; can be profit-driven)</p> <p>Caregiver perception and bias</p> <p>Leveraging existing community health care worker (CHW) programs (access at doorstep) and immunization campaigns</p> <p>Community engagement and advocacy</p> <p>Training, safety, and ensured availability/accessibility to ORS and Zinc for CHWs</p> <p>Continued education of health care providers / pharmacists</p> <p>Improving broader care-seeking behavior and removing barriers to access to care</p>

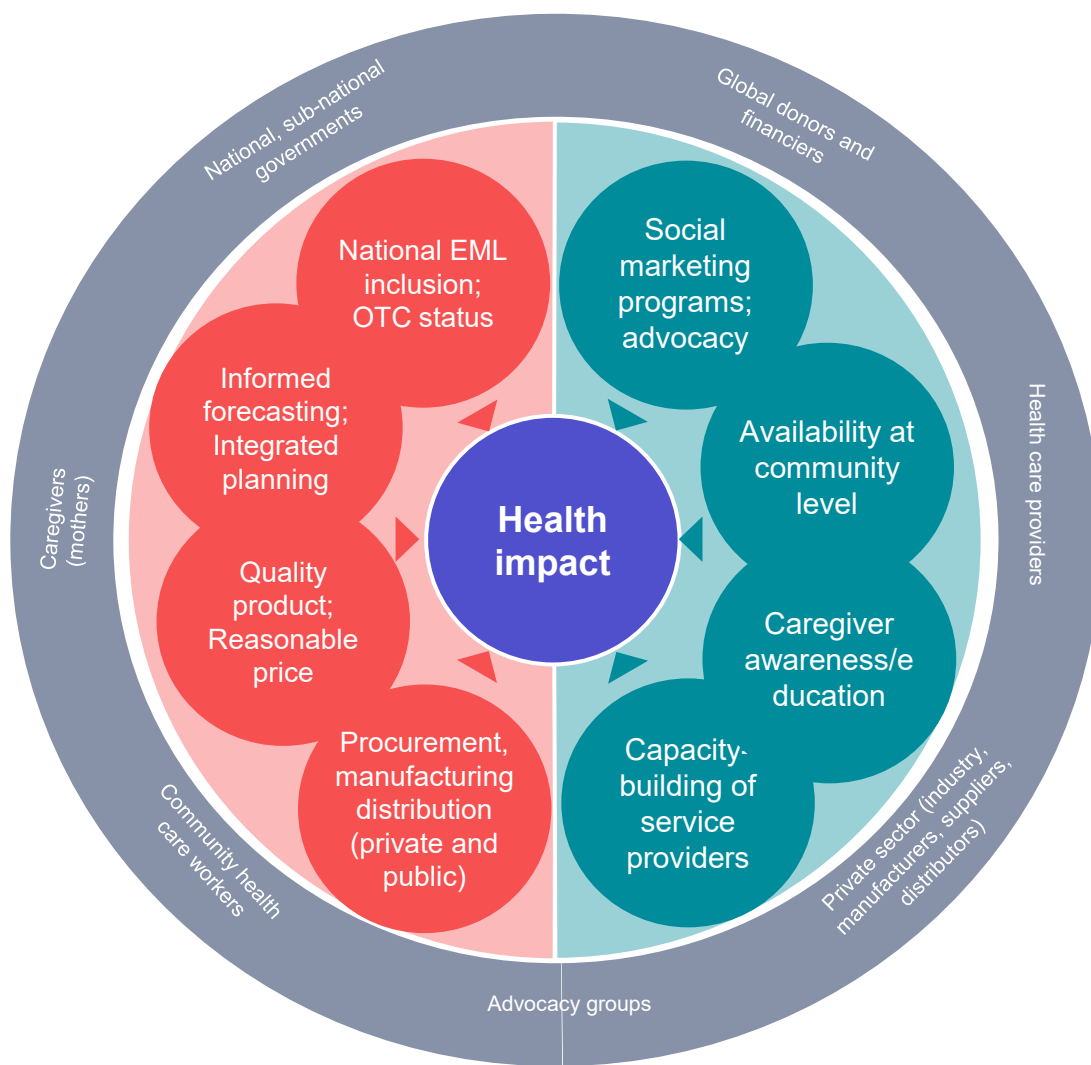
Main enablers and **barriers** to ORS-Zinc uptake – country learnings

	NATIONAL POLICY, ADVOCACY, FINANCING		AWARENESS, KNOWLEDGE, TRAINING
Burkina Faso	IMCI and iCCM NEML (ORS, Zinc) Limited partner / stakeholder base	Procurement established through CAMEG (co-pack) Local co-pack manufacturer (ProPharm) HMIS Estimation gaps Poor medical records and patient monitoring	In-service training No job aids for co-packaged ORS-Zinc Provider/caregiver knowledge gaps
Ethiopia	IMNCI and iCCM NEML (ORS, Zinc, co-pack) Limited advocacy for domestic funding	Market authorization for ORS, Zinc (no co-pack) Procurement primarily via gov (dependence on donor supply for co-pack) Strong IMNCI implementation Frequent stockouts (esp. Zinc) HMIS Estimation gaps	In-service training No specific job aids, guidelines for co-packaged ORS-Zinc
Kenya	Strong policy alignment; IMCI and iCCM Partner-driven national advocacy strategy	HMIS Available at all facility levels (1-6)	Pre-service training CHW lack training in DD management Provider/CHW/caregiver knowledge gaps Procurement practices Profit seeking behavior
Nigeria	IMCI and iCCM (but weak implementation) NEML (ORS, Zinc) Nat/state gov commitment No dedicated guideline at national level	Competitive local manufacturer market (ORS, Zinc, co-pack) Strong private market Product quality (procurement through vendors who are not PQed) HMIS Partner support for quantification training Estimation gaps	Strong community-level provision programs Training and job-aids Poor care seeking behavior Reliance on traditional methods
Pakistan	NEML and provincial EML (ORS, Zinc, co-pack/joint administration) No guidelines for co-packaged ORS-Zinc Dependence on international partners	Market authorization for ORS, Zinc Local manufacturing (but profit margin is problematic) Frequent stockouts (esp. Zinc) HMIS Estimation gaps Lack of monitoring and supervision	NEML and provincial EML (ORS, Zinc, co-pack/joint administration) No guidelines for co-packaged ORS-Zinc Dependence on international partners

**Market
Access
Approach**

SUPPLY-SIDE

Availability



DEMAND-SIDE

Scalability

PATH
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Updating WHO Childhood Pneumonia and Diarrhoea Management Guidelines: Process

Yasir Bin Nisar, M.B;B.S, MMed (Paeds), MPH, PhD

Department of Maternal, Newborn, Child and Adolescent Health and Ageing (MCA), WHO, HQ, Geneva

ORS and Zinc as standard of care for diarrhea management: Actions to improve uptake
webinar, 15th May 2024



Protect, Prevent and Treat framework

PROTECT

Children by establishing good health practices from birth

- Exclusive breastfeeding for 6 months
- Adequate complementary feeding
 - Vitamin A supplementation

Reduce
pneumonia and
diarrhoea
morbidity and
mortality

PREVENT

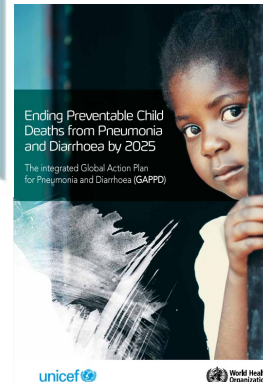
Children becoming ill from pneumonia and diarrhoea

- Vaccines: pertussis, measles, Hib, PCV and rotavirus
 - Handwashing with soap
- Safe drinking-water and sanitation
 - Reduce household air pollution
 - HIV prevention
- Cotrimoxazole prophylaxis for HIV-infected and exposed children

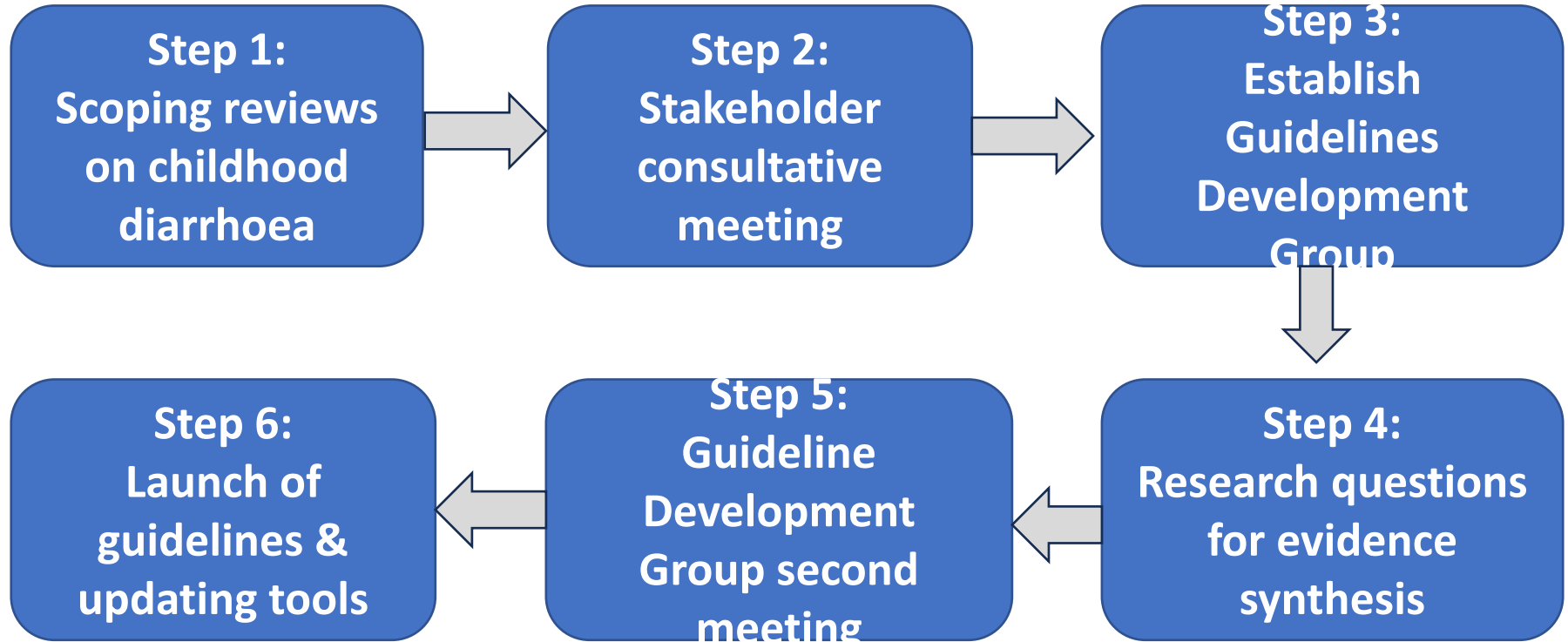
TREAT

Children who are ill from pneumonia and diarrhoea with appropriate treatment

- Improved care seeking and referral
- Case management at the health facility and community level
- Supplies: Low-osmolarity ORS, zinc, antibiotics and oxygen
- Continued feeding (including breastfeeding)



Updating WHO diarrhoea management guidelines - Steps



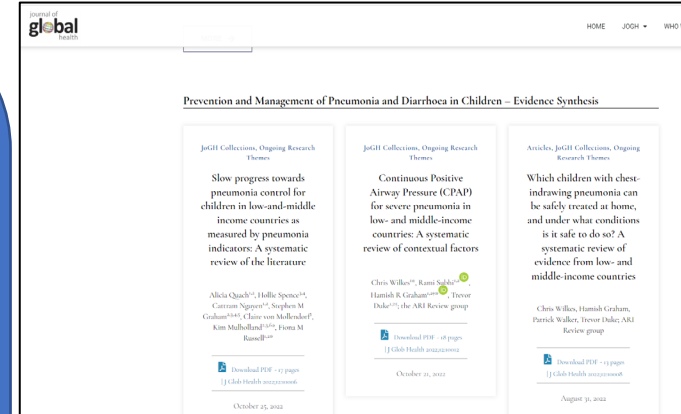
Step 1: Scoping reviews on childhood diarrhoea

WHO updated guidelines in 2005

Commissioned academic institute in 2020-2021

Three thematic areas:

1. The Burden of Diarrheal Disease in Children
2. The Management of Diarrheal Disease in Children
3. The Prevention and Control of Diarrheal Disease in Children



<https://jogh.org/jogh-collections/>

Step 2: Stakeholder consultative meeting – Oct 2021

Facilitated a 3-day virtual stakeholder consultative meeting in Oct 2021

Objectives:

- Present the findings of the systematic reviews;
- Discuss the implications of the findings for future guidelines
- Discuss the implications of the findings for strengthening programme implementation
- Discuss gaps in knowledge and the need for further research

>100 experts (researchers, academics, clinicians, programme managers)

Guidelines:

- Review and update guidelines for diarrhoea management upto 10 years of age
- Update tools (IMCI chart booklet, the Pocket Book, community case management)

Stakeholder consultative meeting on prevention and management of childhood pneumonia and diarrhoea report, 12–14 October 2021



Step 3: Establish Guidelines Development Group – March 2023

- Initiated the process in 2022
- Reviewed the current guidelines and guidance at all three levels of care
- Developed scope and key areas
- Established a guideline development group (GDG), 27 experts, including academics, researchers, programme managers, clinicians, all WHO regions
- Obtained all necessary administrative approvals
- Facilitated a 3-day virtual meeting of GDG in March 2023 to discuss and finalise scope and key thematic areas of guidelines



Scope:

- Age up to 10 years
- Non-hospital settings (hospital settings, pocketbook updates)
- Thematic areas:
 1. Treatment and
 2. Risk assessment for further management

Step 4: Research questions for evidence synthesis

1. Use of antibiotics for acute watery or persistent diarrhoea
2. Use of antibiotics for diarrhoea with blood in stools
3. Use of oral zinc for persistent or acute watery diarrhoea
4. Use of probiotics for acute watery or persistent diarrhoea
5. Use of low-osmolarity oral rehydration solution (ORS) for acute watery or persistent diarrhoea and dehydration
6. Use of enhance care for acute watery or persistent diarrhoea with risk factors



Step 5: GDG second meeting to discuss implication of systematic reviews

- Completed the evidence synthesis in Nov 2023
- 4-day face-to-face meeting of GDG on 28 Nov 1 Dec 2023
- Presented and discussed each systematic review and finalised the recommendations

Step 6: Launch of guidelines & updating tools

- Preparation of guideline document
- Obtain necessary approvals
- Launch guidelines
- Updates tools (IMCI, iCCM, pocketbook)

Thank you



ORSZCA Update – May 2024



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Simon Berry
ORSZCA Secretariat

15-May-2024

ORSZCA is currently supporting three actions

1. A WHO/UNICEF Joint Policy Brief on co-packaging
2. The DHS Questionnaire review and
3. The indicative pricing of co-packs in the UNICEF catalogue

1. WHO/UNICEF Joint Policy Brief on co-packaging

Action points agreed at our last meeting in March

1. WHO would draw up a list of key questions to be addressed in a joint policy brief – **this has been done**
2. ORSZCA would research into available evidence to address the questions – **this has been done**
3. We also agreed that we would draw up a timeline for the Joint Policy Brief at our next meeting which is due now.

2. The DHS Questionnaire review

- The managing contract for the DHS Program is renewed every five years
- Immediately after renewal the questionnaires are reviewed
- A new contract has just been awarded (24 April) so the questionnaire review is imminent
- ORSZCA is assembling a team to suggest a change to the Women's Questionnaire to include a question on co-packaging

The objective here is to have mechanism to monitor co-pack uptake and impact into the future.

3. Indicative co-pack pricing UNICEF Catalogue

- The high indicative prices for co-packs in the UNICEF Catalogue are very high (currently 1.5 times the price of separates)
- ORSZCA is concerned that this is a barrier to uptake
- Discussions on this started in Sep 2021
- The current issues are that it is unclear how the indicative prices are calculated and who they apply to
- ORSZCA has suggested text for the better explanation of indicative prices but these have not been taken up

We call on UNICEF Supply Division to explain to users of the catalogue how the indicative prices are calculated and who this pricing might apply to.

ORSZCA Update – May 2024



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Thank you!

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15-May-2024

ORSZCA
ORS/Zinc Co-pack Alliance



unicef 
for every child

UNICEF. Update on procurement of ORS and Zinc

Francisco Blanco
Chief, Medicines and Nutrition Centre
UNICEF Supply Division,
15th May, 2024

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UNICEF focus areas for Medicines and Nutrition

Procurement focus that addresses UNICEF [programmatic priorities](#)

Follow and promote [WHO recommendations](#) on selection and use of medicines and international guidelines on nutrition

Ensure [availability of affordable](#) essential medicines and nutrition supplies for primary health care and emergency relief

Develop [sources and market](#) for priority products

Ensure capacity to excel in [procurement activities](#) (quality assurance, selection, contracting, supply chain management)

<https://www.unicef.org/supply/>

ORS and Zinc: Products and procurement 2014-2023

ORS 20.5g/1L	flavoured, unflavoured	10, 10x10, 100
ORS 15.4g/0.75L	unflavoured	10x10, 100
ORS 10.2g/0.5L	flavoured, unflavoured	10x10, 100
ORS 4.1g/0.2L	flavoured, unflavoured	10x10
ORS 1L x2 + Zinc 20mg x10	flavoured	
ORS 0.5L x4 + Zinc 20mg x10	flavoured	
Zinc 20mg tabs x100		

Supplied as individual items and in:

- IEHK2017, kit, basic unit
- AWD Community and Periphery kit Drug
- Country specific CHW, IMCI and PHC Kits

692 million sachets of ORS procured

542 million sachets (indiv.)

150 million sachets in 68 million co-packs

176 million Zinc treatments (10 tabs)

68 million treatments in co-packs

108 million treatments (indiv.)



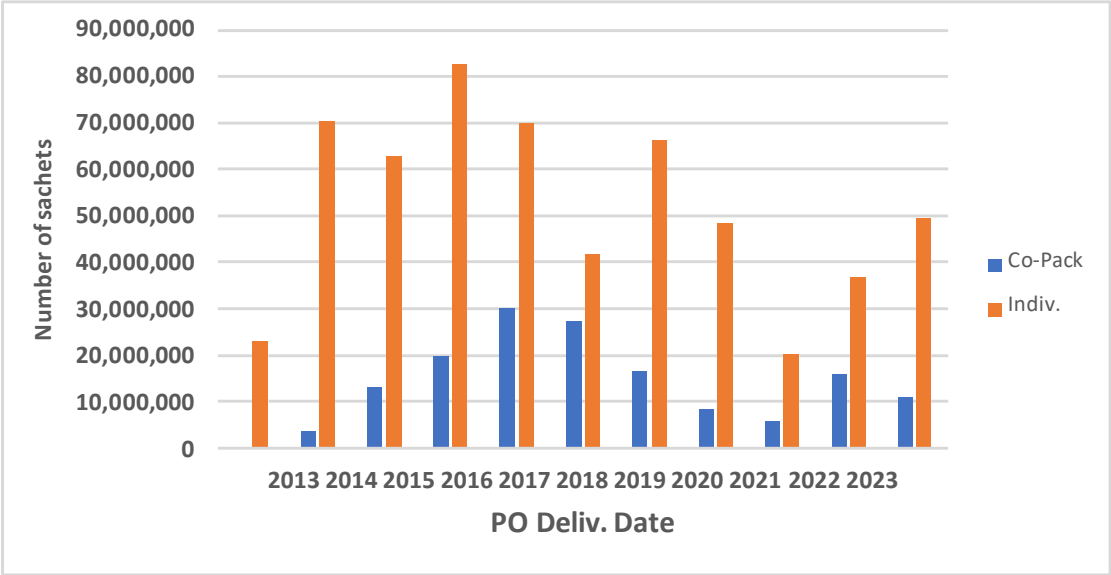
USD 35.3 million

USD 29.5 million

USD 14.3 million

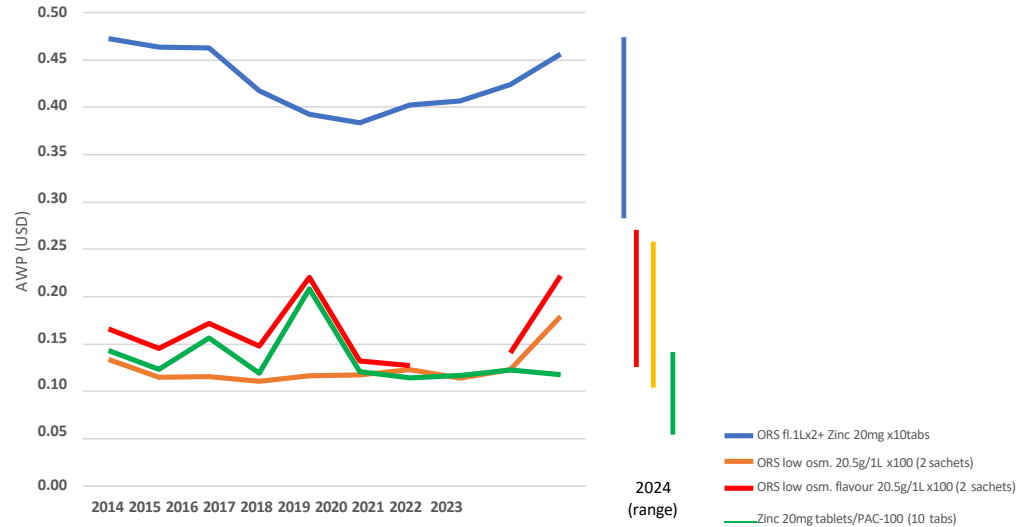
ORS + Zn co-pack delivered to over 40 countries since 2014, mostly to Africa, Afghanistan and Pakistan

ORS: Sachets procured 2013-2023 (*)



(*) by PO Deliv. Date

ORS and Zinc: Price trends



Price is AWP based on procurement date. 2018 AWP for ORS flavoured and Zinc is an outlier due to low volume for specific materials and new entrants

ORS and Zinc: Sources 2024

Vendor	ORS	Zinc	Co-pack
Universal (Kenya)	+	+	+
Reyoung (China)	+	+	+
Renata (Bangladesh)	+		+
ACME (Bangladesh)	+	+	
Mepro (India)	+		
FDC (India)	+		
KBI (Germany)	+		
Nutriset (France)		+	
Ipca (India)		+	

ORS and Zinc: Priorities

- Support UNICEF programmes and partners in efforts to ensure access to ORS and Zinc
- Increasing number of suppliers in programme countries, focus on quality suppliers in Africa
- Update ORS and Zinc market note (www.unicef.org/supply/market-notes-and-updates)



Thank You