

Transforming Diarrhea and Pneumonia Treatment – *A cost-effective opportunity to reduce child mortality*

Diarrhea & Pneumonia Working Group
April 2013

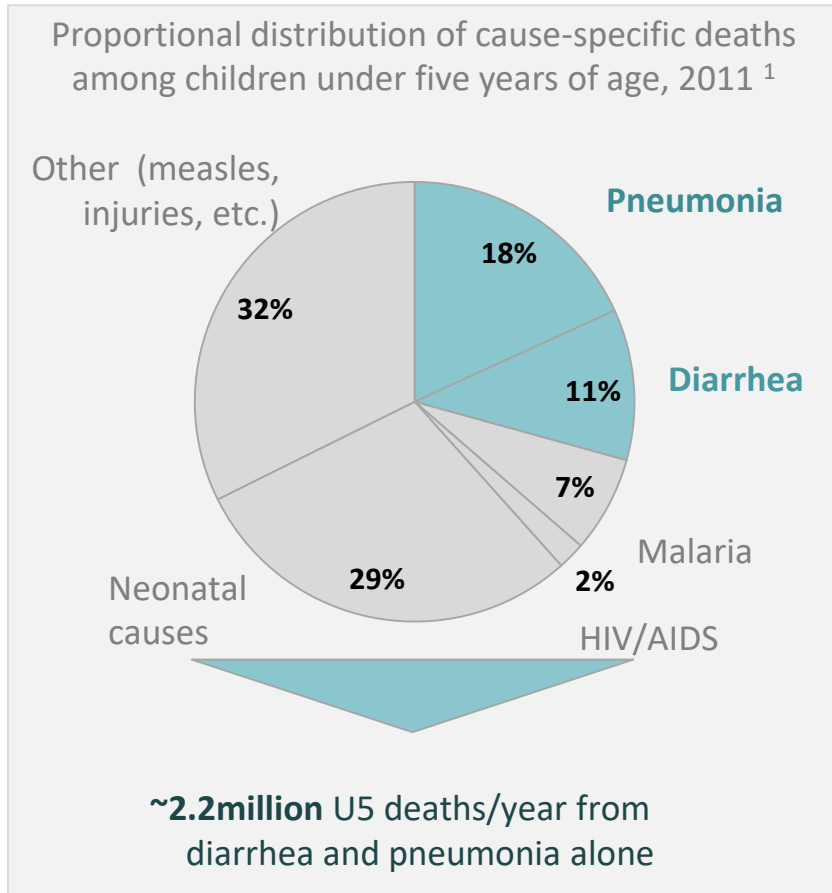


Executive summary

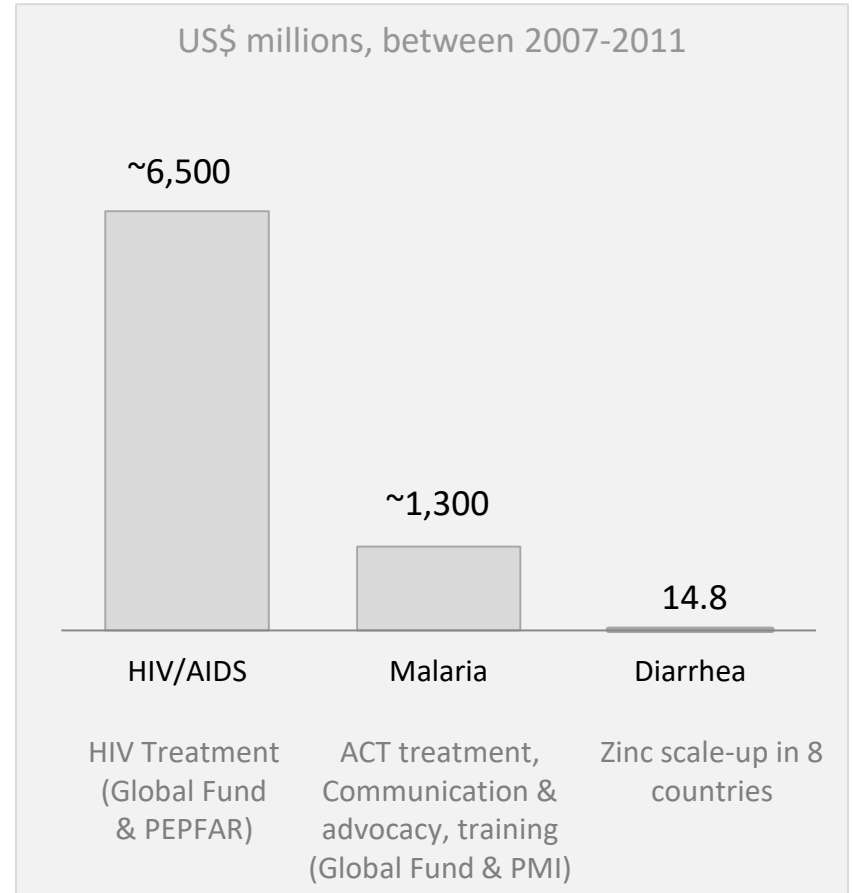
- Despite progress made over the past years in reducing child deaths, **significant acceleration is required** to reach MDG4 of reducing child mortality by two-thirds by 2015.
- Each year, **1.5 million children die from diarrhea and pneumonia globally** despite the availability of simple and affordable treatments; over 60% of these deaths occur in just **10 countries**— Bangladesh, DRC, Ethiopia, India, Kenya, Niger, Nigeria, Pakistan, Tanzania, and Uganda
- **National Strategies** have been developed in these 10 countries to support increases in treatment coverage through four key interventions:
 1. Generate **demand** for appropriate treatment and promote care-seeking
 2. Ensure wide **availability** of high-quality, affordable treatments in public and private sectors
 3. Improve **health provider awareness** and knowledge of appropriate treatments practices
 4. Secure a conducive and supportive **policy and regulatory environment**
- Diarrhea and pneumonia offer a particularly ripe **opportunity for impact** and offer significant potential to decrease child mortality, since ...
 - ... Global and national leaders have demonstrated **unprecedented leadership** around this opportunity and many countries are primed for implementation
 - ...Implementation of the national scale-up plans has potential to save **1 million lives** by 2015

Almost one in three child deaths is due to pneumonia or diarrhea, claiming over 2 million lives each year...

Pneumonia and diarrhea remain the two largest killers of children...



...but a disproportionate amount of global funding has been allocated to treat other diseases



... even though simple, affordable treatments exist

Diarrhea

ORS and zinc



Efficacy: ORS can avert **93%** of deaths
Zinc reduces the duration of diarrhea by **25%**

Cost: **<US\$ 0.50** / course
(10 tablets zinc & 2 sachets of ORS)

Availability: **>50 ORS** suppliers (incl. local manuf.)
>25 Zinc suppliers (incl. local manuf./syrup producers)

Pneumonia

Amoxicillin



Efficacy: **Pneumonia case management¹** can reduce mortality by **36-42%**

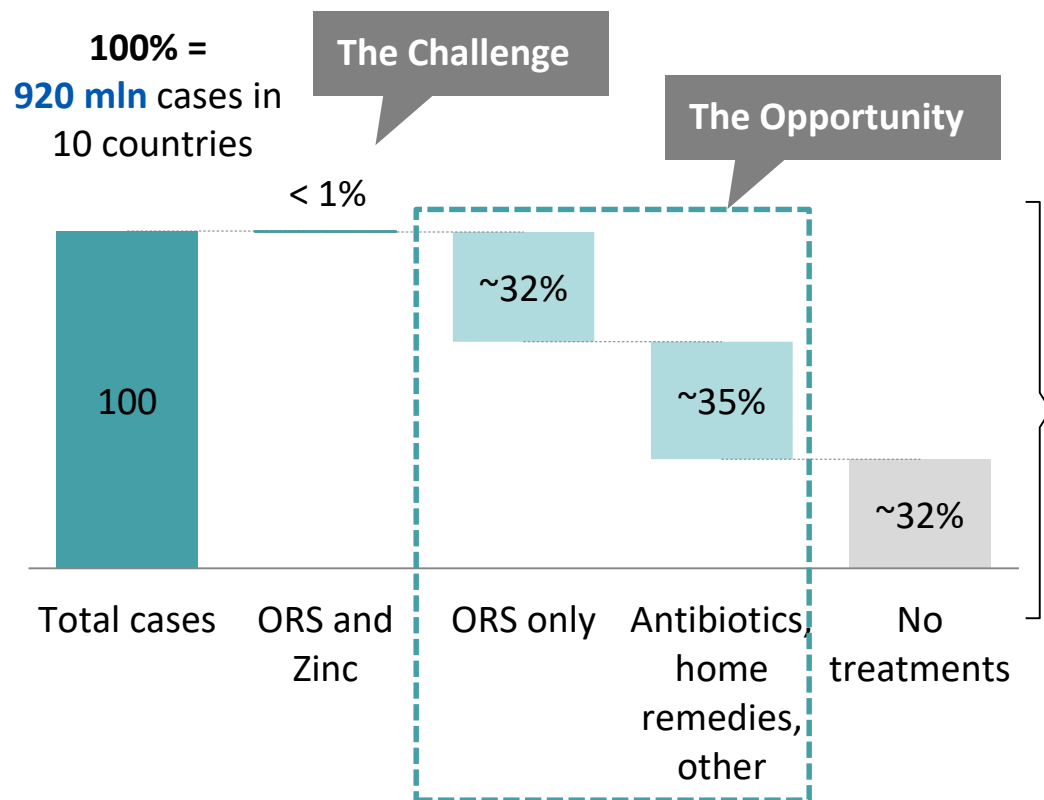
Cost : **\$US 0.21-0.42** /course

Availability: **>50 dispersible amoxicillin** suppliers (majority India based). Variability in quality across manufacturers.

Source: Thwing, J. et al, BMC 2011, April 13; HAI Price Tracking Survey 2011; Sazawal, S., et al. Lancet Infect. Dis. 2003. 3:547–556. Marsh D.R., et. al. Bull World Health Organ. 2008 May; 86(5): 381–389; www.zinctaskforce.org; UNICEF survey among dispersible amoxicillin suppliers; UNICEF draft presentation on dispersible amoxicillin landscape; 27 February 2012. Amoxicillin price: 2010 UNICEF Supply Division catalogue (cost is presented excluding freight)

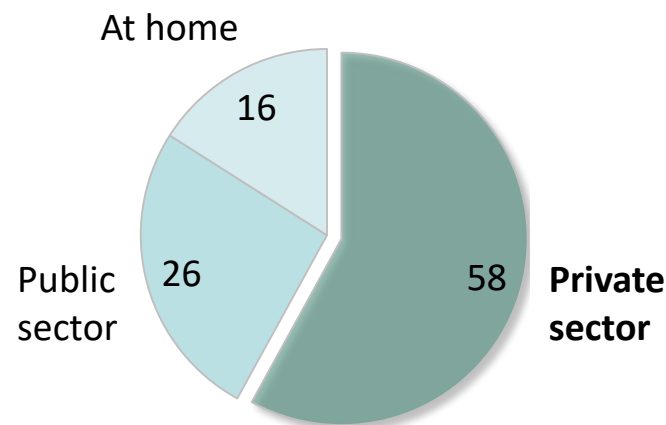
For diarrhea, <1% of children are receiving both zinc/ORS - the majority are receiving sub-optimal treatment

Treatment of child diarrhea in 10 high burden countries¹, percentage



Diarrhea treatment seeking behaviour

Percentage, 2010 estimates

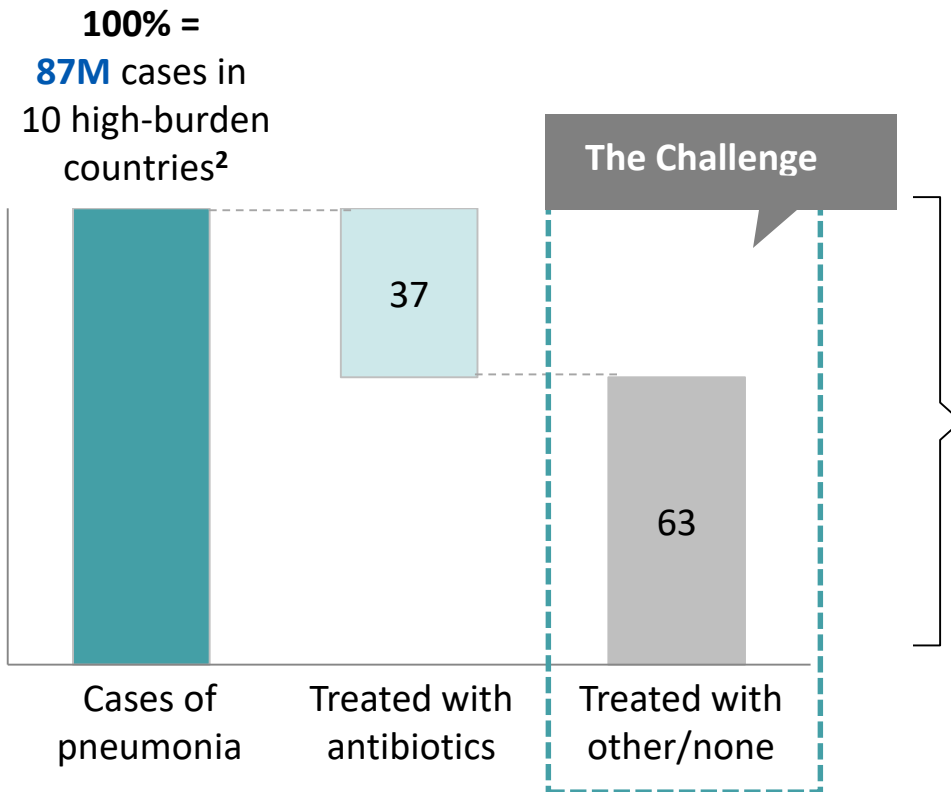


¹ Bangladesh, Dem. Republic of Congo, Ethiopia, India, Kenya, Niger, Nigeria, Pakistan, Tanzania, Uganda

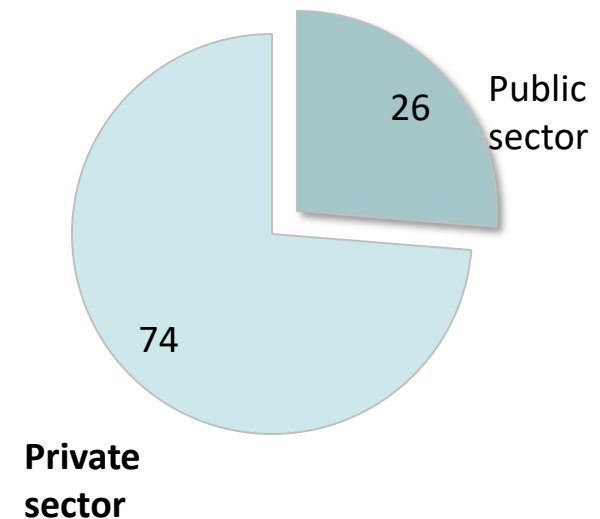
SOURCE: National household survey data (2005-2011); Fischer Walker et al. Global burden of childhood pneumonia and diarrhea. Lancet. 2013; Private Healthcare in Developing Countries: www.ps4h.org/globalhealthdata.html;

For pneumonia, there is need to improve treatment seeking and “reach the unreached”

Treatment of pneumonia in children under five, percentage, 2010 estimates¹



Pneumonia treatment seeking behaviour
Percentage, 2010 estimates³



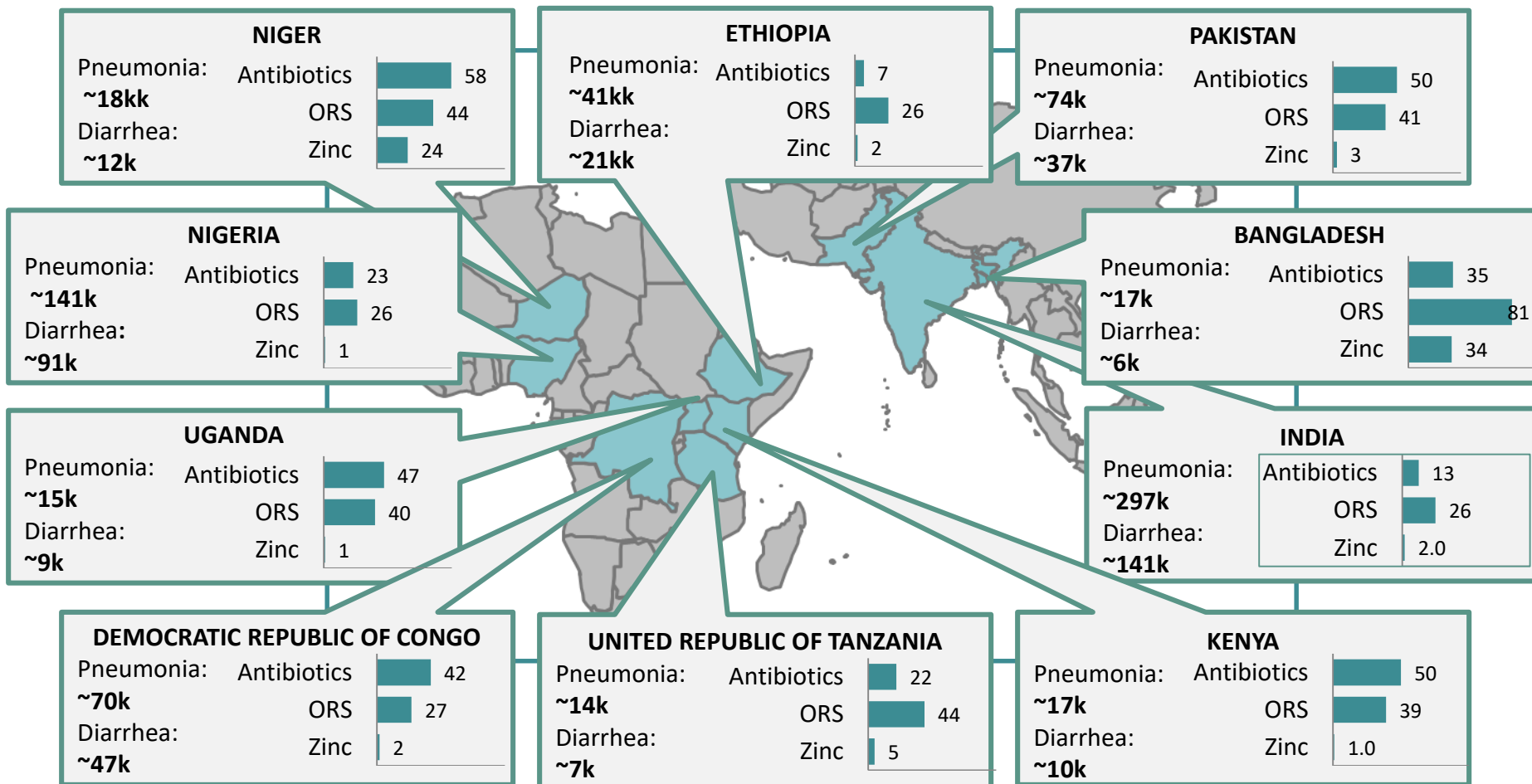
¹ Population from UN Population Division, multiplied by incidence rates from Rudan, et al; Epidemiology and etiology of childhood pneumonia, 2008. Midpoint of incidence range selected for Kenya, Niger and Uganda (countries for which only the range of incidence was given). UNICEF Childinfo (http://www.childinfo.org/pneumonia_countrydataantibiotics.php)

² Bangladesh, Dem. Republic of Congo, Ethiopia, India, Kenya, Niger, Nigeria, Pakistan, Tanzania, Uganda

³ UNICEF Childinfo (http://www.childinfo.org/pneumonia_careseeking.php); www.ps4h.org/globalhealthdata.html

Overall, treatment coverage for diarrhea and pneumonia is unacceptably low across the ten highest burden countries

**Total number of deaths due to diarrhea and pneumonia (2012);
Diarrhea (ORS and zinc) and pneumonia (antibiotic) treatment coverage (%)**



These 10 countries represent over 60% of the global burden for diarrhea and pneumonia

The root cause of this issue is not complex: a 'market trap' has prevented treatment from being available at every street corner

Example: Market Dynamics for ORS/Zinc

1.

Demand

- Caregivers are aware of ORS yet usage remains low; awareness of zinc is typically well below 5%
- Providers unaware of clinical benefits of zinc & ORS and prefer giving antibiotics, offering immediate relief

2.

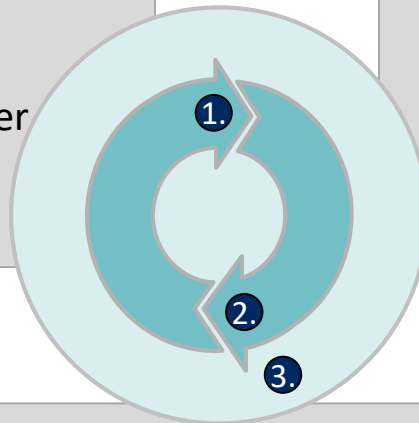
Supply

- Currently, zinc and ORS are low volume, low margin products, and as such, are de-prioritized in promotion and distribution efforts
- Limited competition, high margins and high consumer prices, especially for zinc

3.

Enabling Environment

- Limited political/partner attention
- Very modest funding allocated
- Unfavorable regulatory conditions



The Diarrhea & Pneumonia Working Group was formed in 2011 to drive treatment scale-up across these 10 countries

OVERVIEW

Geographic focus

10 countries accounting for ~60% of total global burden

Primary goal

Catalyze significant scale up of diarrhea and pneumonia treatment

Specific objectives

1. Secure an **enabling environment** for implementation
2. Ensure **availability** of high-quality, affordable supply
3. Generate **demand** among caregivers and providers
4. Establish mechanism to **track progress**

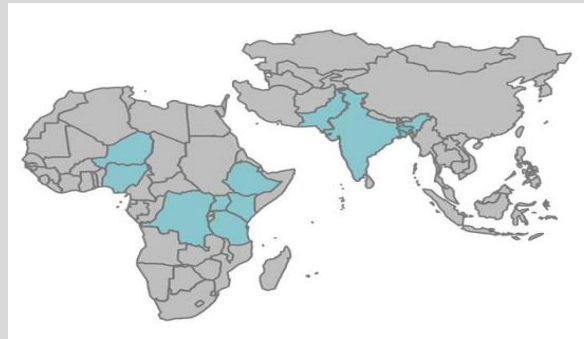
MEMBERSHIP & STRUCTURE

Co-chairs



Lead Partners

DRC
Ethiopia
Kenya
Niger
Nigeria
Tanzania
Uganda



Bangladesh
India
Pakistan

Members



BILL & MELINDA
GATES foundation



fhi360
THE SCIENCE OF IMPROVING LIVES



McCANN
HEALTH



THE MDG Health Alliance



Three global initiatives provide high-level platforms for prioritizing treatment scale-up as a key intervention for reducing child deaths

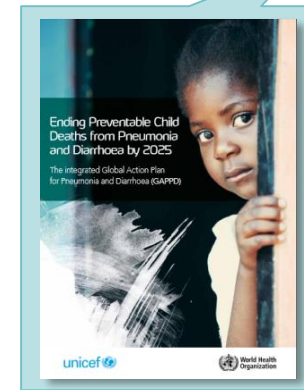
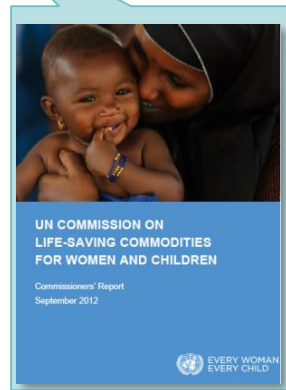
2012

2013

June

September

April



A Promise Renewed/ Call to Action

Pledge made by 165 governments to redouble efforts to end preventable child deaths, a response that emerged from the Child Survival Call to Action Summit in Washington DC.

UN Commission on Life-Saving Commodities for Women & Children

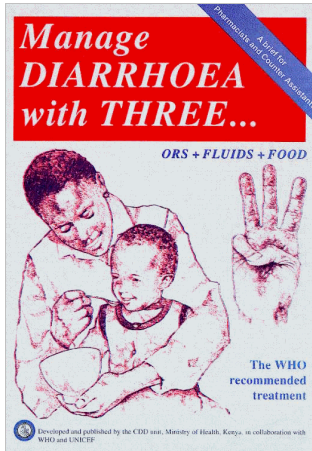
Aims to increase access to 13 essential commodities through implementation of 10 clear recommendations. Led by President Goodluck Jonathan of Nigeria and Prime Minister Jens Stoltenberg Norway .

Global Action Plan for the Prevention and Control of Pneumonia & Diarrhea (GAPPD)

A framework for countries and governments to simultaneously tackle pneumonia and diarrhea, including latest strategies and evidence-based interventions

Across the 10 countries, national scale-up plans call for four primary interventions that have been part of successful small programs

Generate awareness & demand



- Launch a **national action campaign** for child health
- Use partnerships with **mobile operators**
- **Health diplomacy** through national & community leaders

Ensure availability of the product

- Engage manufacturers to ensure availability of an affordable product
- Optimize **packaging & branding**
- **Incentivize** expanded distribution in the private sector

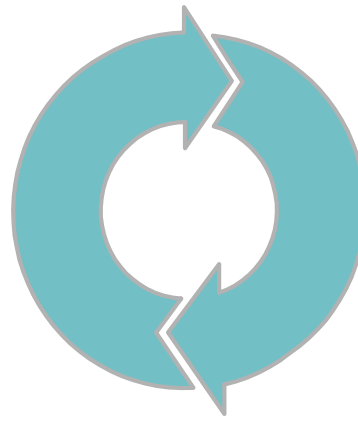


Increase provider awareness



- Improve **skills and knowledge** of public and private health workers
- Facilitate supplier promotional reach of rural areas through **facilitated detailing**

Awareness and demand interventions motivate supply



Increased supply further drives demand and builds awareness

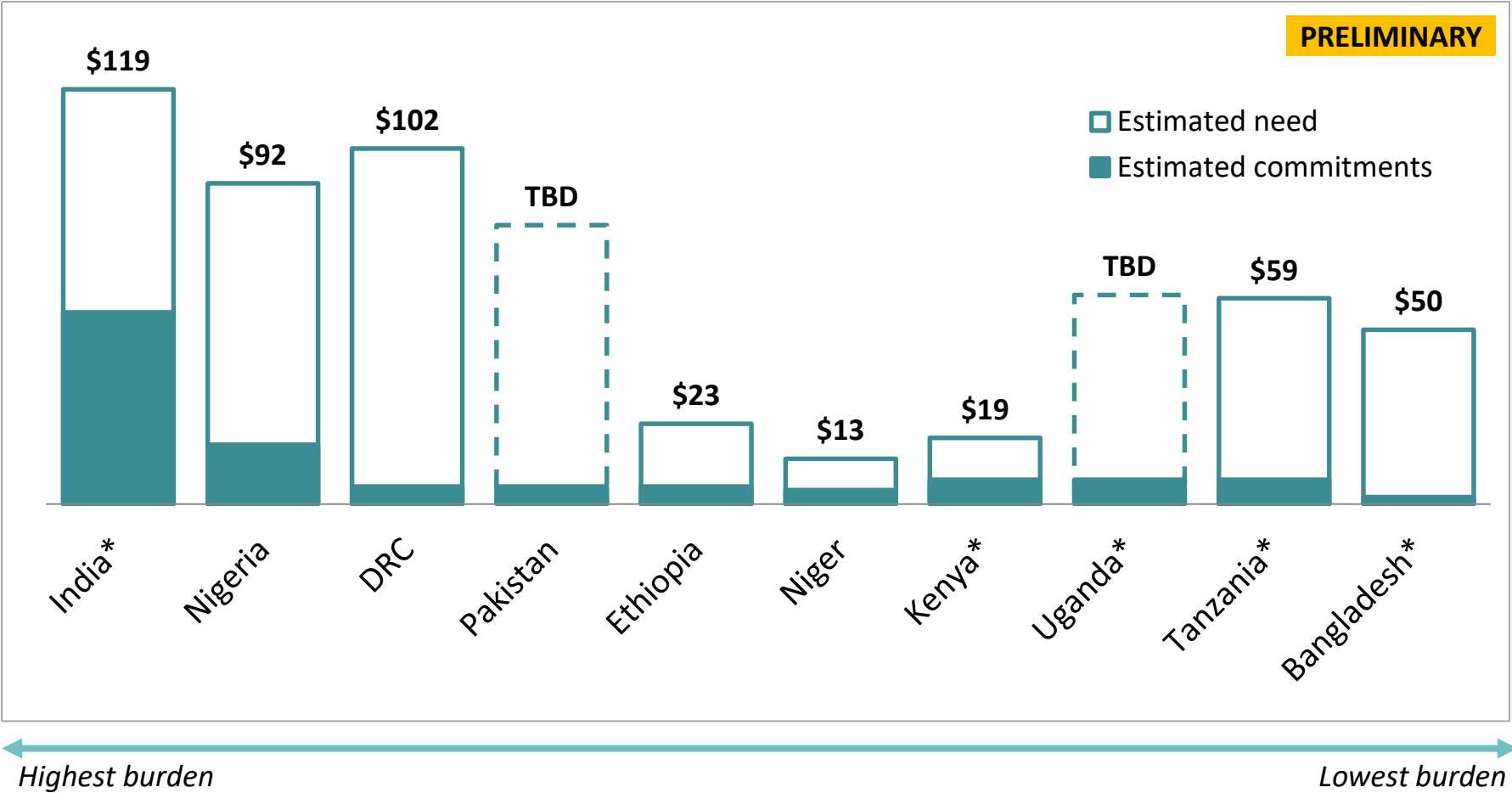
Secure a conducive policy environment

- Build **broad support** and mobilize **additional resources** from local & international donors
- Ensure adjustment & wide dissemination of **treatment guidelines**
- Ensure **OTC** and **EML** status









To date, countries have secured significant funds to support scale-up but more is needed to drive large-scale impact

Funding Overview by Country, 2013-2015, in USD millions
(in order of decreasing burden)

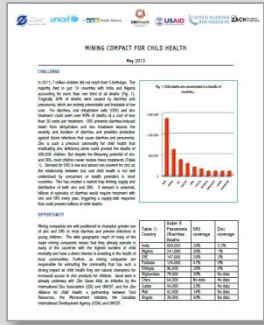


*India: for 3 states (MP, UP, Gujarat); Kenya: 2013-2014 financial year only; Uganda: pending revision of PPT strategy; Bangladesh: 2014-2015 only; Tanzania: pending provincial level engagement

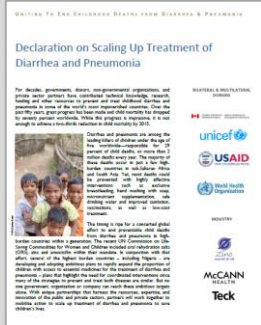
Several commitments have been made

Funding source	Commitment	Amount (USD)
 Canadian International Development Agency	Supporting scale-up of diarrhea and pneumonia treatments in Tanzania, Ethiopia, Niger, and Kenya. Implemented by UNICEF	\$20M
	Shaping local diarrhea treatment market for zinc and ORS in Nigeria; also supporting implementation of UN Commission recommendations at global level and in 8 pathfinder countries	\$9M (w/potential for add'l funding)
 	Jointly supporting efforts to scale-up zinc and ORS in 3 states of India (Uttar Pradesh, Madhya Pradesh, Gujarat).	\$24 million (India)
	The IKEA Foundation is also investing in similar efforts in Kenya	\$10 million (Kenya)
	Supporting improved access and use of zinc and ORS in India, Ethiopia, Burkina Faso, Senegal, and Ethiopia	\$25 million

Platforms for additional commitments



Mining Compact for Child Health



Declaration on Scaling Up Diarrhea & Pneumonia Treatment

Countries have also made significant progress priming them for implementation and additional investments (1 of 2)

Country	Lead Partner ¹	National plan endorsed	Zinc OTC status secured	Amoxicillin recommended as 1 st -line	Amoxicillin policy change	Coordinating mechanism established ²	Initial seed funding secured? ³
Bangladesh	Icddr,b	Achieved	Achieved	Achieved	Achieved	Achieved	Not yet achieved
DRC	MSH	Achieved	In progress	In progress	Achieved	Achieved	Not yet achieved
Ethiopia	PATH	In progress	In progress	Achieved	In progress	Achieved	Achieved
India	CHAI	Achieved	Achieved	In progress	In progress	In progress	Achieved
Kenya	CHAI	Achieved	Achieved	In progress	In progress	Achieved	Achieved
Niger	UNICEF	Achieved	Achieved	Achieved	In progress	Achieved	Achieved
Nigeria	CHAI	Achieved	Achieved	In progress	In progress	Achieved	Achieved
Pakistan	STC	In progress	Achieved	Achieved	Achieved	In progress	Not yet achieved
Tanzania	PSI	Achieved	Achieved	Achieved	In progress	Achieved	Achieved
Uganda	CHAI	In progress	Achieved	In progress	In progress	Achieved	Achieved

¹Focal point in country responsible for driving resource mobilization, partner coordination, and scale-up efforts in country

²Government-led stakeholder group for harmonizing and coordinating efforts across projects/partners with scale-up objectives

³At least USD \$3 million for programs that include both public and private sector activities to support scale-up of diarrhea and pneumonia treatment

Countries have also made significant progress priming them for implementation and additional investments (2 of 2)

1.

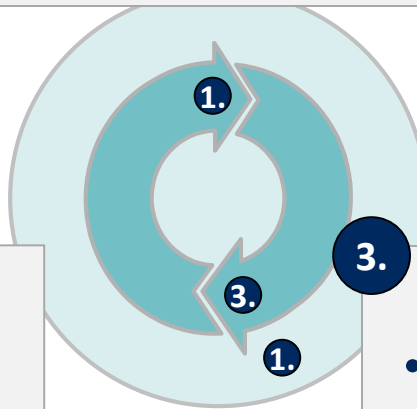
ENABLING ENVIRONMENT

- Developed **national scale-up plans** (aligned with UNCoLSC, APR, GAPPD)
- MOH-led, **local coordinating mechanisms** established / identified
- **Seed funding (>\$5M) secured** in 7 countries to jumpstart implementation
- **OTC status** secured for zinc in 8 countries
- AMX DT recommended as **1st-line treatment** in 5 countries; policy allowing **community providers to dispense** AMX DT in 3 countries

2.

DEMAND

- Large-scale **demand generation strategies** developed in 7 countries
- **Initial activation** among caregivers and providers in 8 countries (incl. local adaptation of new HCP tools)



3.

SUPPLY

- Over **10 high-quality, affordable zinc/I-ORS products** introduced
- **60-80% price reductions for zinc/ORS** achieved in 3 countries due to more competitive supply landscape

