

A Situational Analysis on ORS and Zinc Supply Chain in Zambia – *A PAED Perspective*

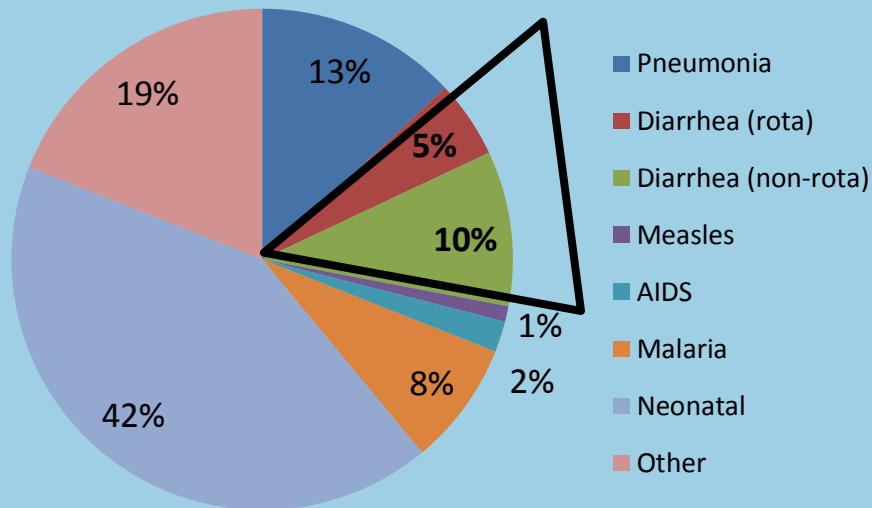
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Pneumonia and Diarrhoea Working Group

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Global Problem

- 12 million under-5 deaths annually
- 2nd largest global child killer



- Essentially neglected/very little investment: \$5.7bn for new vaccines in 8 years compared to over \$12bn for HIV in one year
- Largely preventable – lack of utilisation of existing tools – 1% properly treated

Zambian Reality

- 3rd largest killer (after pneumonia & Malaria) in U5s; annually:
 - 10.5 million episodes diarrhoea
 - 63,000 hospitalised
 - Estimated 15,000 deaths
- Weak health system & lack of investment in health
 - 2012 Budget: 9% health spending; expected 30% from donors against Abuja target of 15%
- High doctor & nurse to population ratio

Doctor: Population = 1: >14,000

Nurse: Population = 1: >1,700

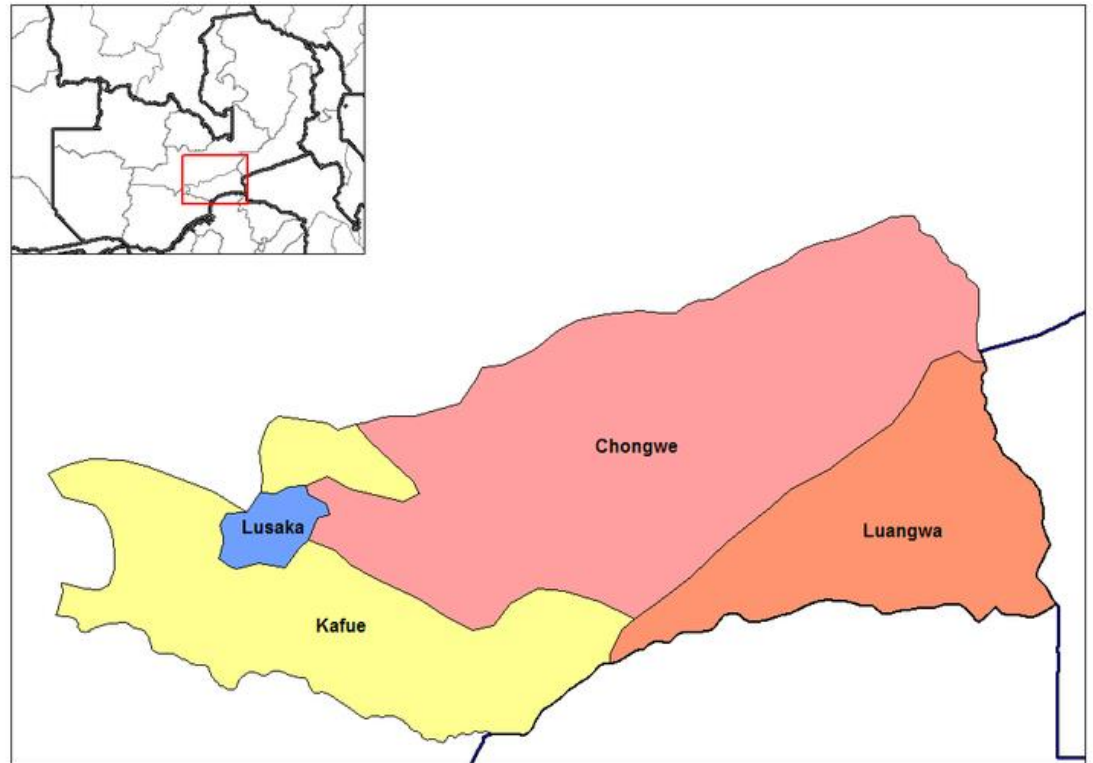
Heavily dependant on untrained volunteers

- Inadequate vaccine cold chain capacity
- Erratic access to essential medicines
- Poor public awareness of appropriate behaviour for life saving measures

What is PAED?

- A comprehensive diarrhoea control pilot in Lusaka Province
- Collaborative partnership between CIDRZ, ARK, Co Relief, MoH, MCDMCH
- Targeted preventive & treatment interventions

Goal: To reduce all cause under 5 mortality by 15%



PAED Pillars

	Intervention	Original Coverage	Potential Impact
1	Accelerate introduction of rotavirus vaccine into national EPI	•0%	24% mortality reduction 61% efficacy reducing severe diarrhoea Target: 90% coverage
2	Improved case management of diarrhoea/dehydration: <ul style="list-style-type: none"> • Provision of ORS/zinc for treatment • Improving paediatric rehydration & referral 	<ul style="list-style-type: none"> •ORS ~53% • Zinc: No data (<5%) 	Mortality reduction: ORS 93% Zinc supplements 23% Target: ORS/Zinc–75%
3	Caregiver education: <ul style="list-style-type: none"> • Motivating caregivers to practice good hygiene • Exclusive breastfeeding promotion 	<i>Limited data:</i> <ul style="list-style-type: none"> •~20% •15-35% 	48% reduction in mortality 3.5-fold risk reduction Target: EBF – 65% HW—30%

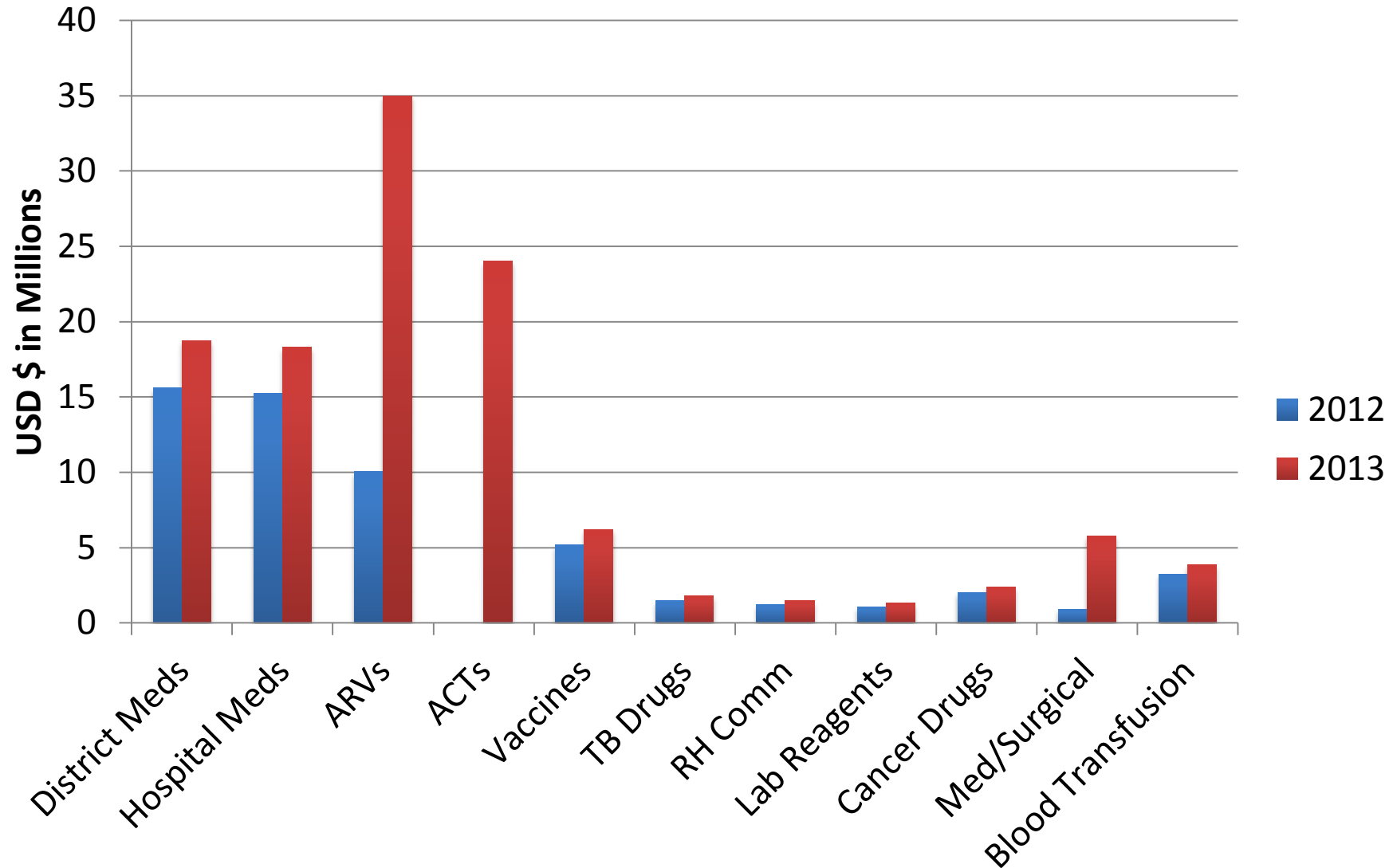


Addressing ORS & Zinc Supply Chain Gaps

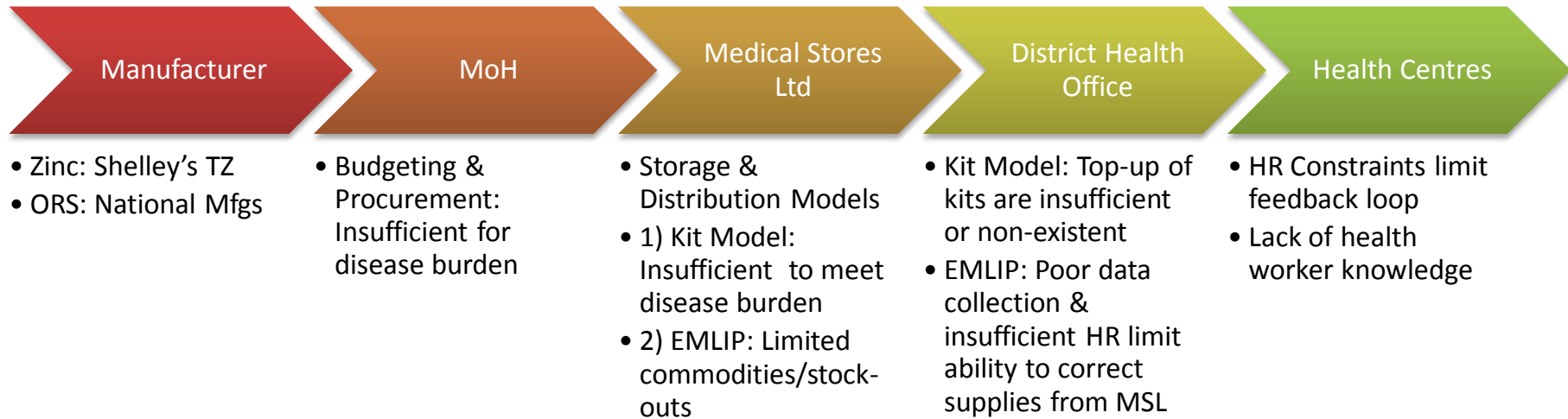
Public Sector Situational Analysis of ORS & Zinc in Zambia

- Majority of the population in Zambia seek health care in public-sector facilities.
- Zinc was only recently adopted into the national treatment policy in 2009.
- Insufficient budgetary allocations for essential medicines by MoH to procure enough stock—therefore frequent stockouts.

2012/13 National Medicines Budget

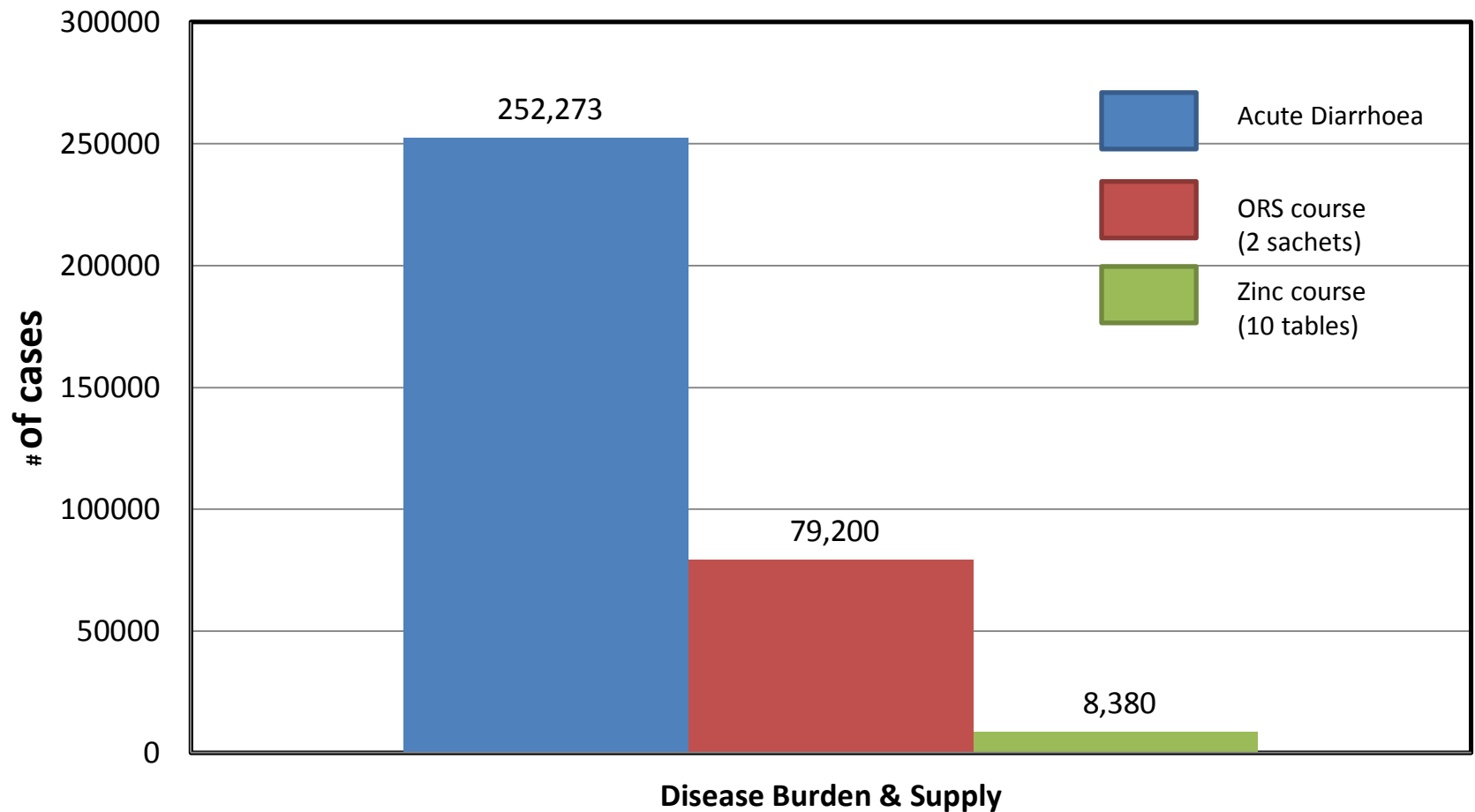


Public Sector ORS/Zinc Flow Chart



Acute Diarrhoea Burden vs. ORS/Zinc Supply

Lusaka Province, 2011-12



Source: ORS and zinc statistics obtained from medical Stores Limited. Disease burden obtained from HMIS

Private Sector Situational Analysis of ORS & Zinc

- All zinc is imported—no local pharmaceutical manufacturer
- Low awareness of zinc; therefore no incentive to stock it
- Lack of regulatory oversight for private sector
- Low awareness of zinc among mothers/caregivers



ZINC
\$2

ORS
\$0.3

**Zinc price may be considered costly for the average
Zambian earning a paltry
\$1.25 per day**

Private Sector Supply Chain



What are we doing about the
gaps in awareness of ORS & Zinc?

Addressing Behaviour Change

- Conducted formative research with the LSHTM
- Investigating key behavioural practices for prevention of U5 diarrhoea
 - Considering environment, motive, social influences
- Looked at 3 behaviours
 - Hand-washing with soap
 - EBF to 6 months
 - Correct use of ORS and zinc

Formative Research Findings

At home

- Paracetamol; other left-over medicines, e.g. Flagyl
- Traditional/herbal remedies
- Homemade ORS – sugar/salt solution
- ORS – at home from previous clinic visit, bought, sub optimally prepared
- Zinc course shared & failure to complete course

Going to the clinic

- When family judges child is not improving
 - Stops playing or eating, becomes visibly weak or worse
- Took up to 9 days for caregivers to go to clinic
- Children often seriously ill when present at clinic

At the clinic

- Frequent stock outs of ORS and zinc
- ORS and zinc prescribed and given at pharmacy
- If no supplies told to buy elsewhere or come back next day & zinc not usually prescribed

Barriers to Scale-up

Public Sector

Low Budget

Stock outs

Poor prescribing behaviours

Weak supply chain system

Low awareness

Alternative treatment

Private Sector

Zinc is expensive

Limited importers/distributors

Low awareness

Weak supply chain system

Lack of local manufacturing

Preference for antibiotics/anti-diarrhoeals

What are we going to do?

Advocacy

- Advocacy work for increase of ORS and zinc budgetary allocations
- Engaged with key stakeholders (WHO, JSI) to lobby for inclusion of ors and zinc on MoH list of 40-50 essential drugs
- Supporting potential ors and zinc manufacturers with PRA registration – Pharmanova & Baxy Pharmaceuticals
- Monitoring progress of creation of health shops
- Training of dispensers on ors and zinc management

Piloting the BCC Intervention

- ORS and zinc to be piloted in 8 randomly selected sample sites in peri-urban and rural districts of Lusaka province.
- Pilot to include private and public sector intervention sites
- Pilot will allow the PAED to evaluate the most effective approach to increasing access to ORS and zinc.
- Facilitating linkages of small-scale retailers in rural and peri-urban settings to cut-out several layers of middle profiteers and to reduce the end user price.
- Leverage our behaviour change campaign to influence the private sector to increase supplies of ORS and zinc and drive down the cost.

Concluding Remarks

- Children continue to die despite existence of cheap life saving commodities

CIDRZ Wants to Change That!