Scaling up Child Essential Medicines in Uganda

Presentation to the Diarrhea & Pneumonia Working Group

Washington DC, May 9th 2014

THE REPUBLIC OF UGANDA

CLINTON HEALTH ACCESS INITIATIVE

SHOPS Strengthening Health Outcomes through the Private Sector

World Health Organization

unicef

NMS MEDICAL LOGISTICS Passionate about your Life

JMS JOINT MEDICAL STORE

malaria consortium disease control, better health

USAID FROM THE AMERICAN PEOPLE

brac

LivingGoods Leading the Way to a Better Life

pace Interventions for Health Impact

World Vision

UGANDA NATIONAL DRUG AUTHORITY Safe Drugs Save Lives

Medipharm

APL ABACUS

UHMG UGANDA HEALTH MARKETING GROUP

GPL GITTOES Pharmaceuticals Ltd Tel: +256 414-237 883 / 237 516 Kampala - Uganda.

the ELMA philanthropies

ark absolute return for kids

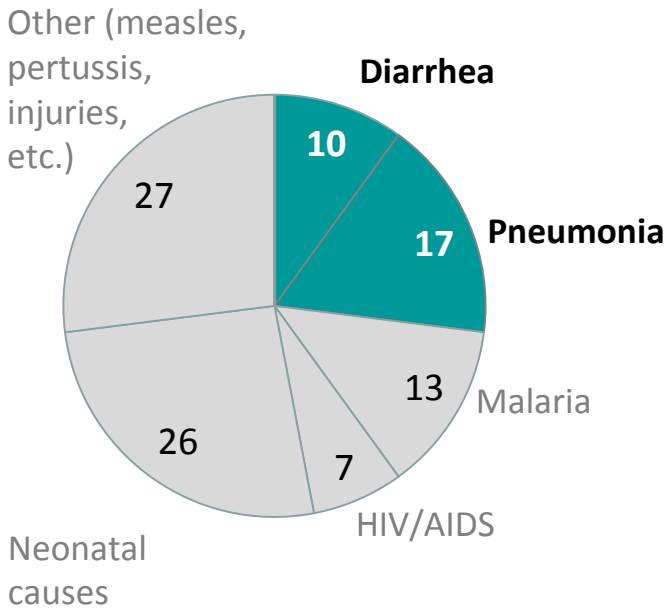
Abt ASSOCIATES

Agenda

1. Background and key issues
2. Progress on enabling environment
3. Key implementation progress to date
4. Case study
5. Key issues/support needed from Working Group

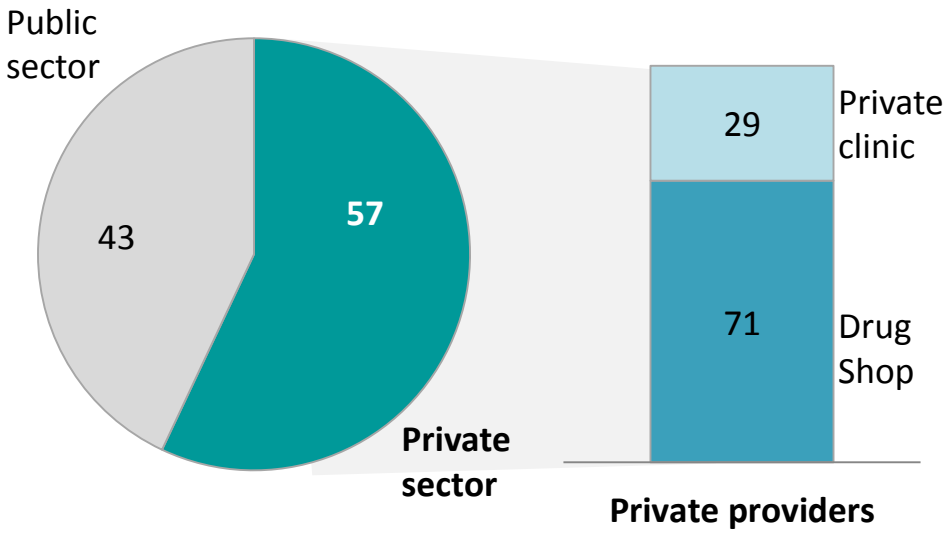
Diarrhea and pneumonia remain the two leading causes of child mortality in Uganda

Distribution of cause-specific deaths among U5 children, 2010



Treatment Seeking by Sector

Respondents with <5 children reporting treatment in the prior 2 weeks for diarrhea and pneumonia



The majority of treatment seeking occurs in the private sector – a focus area for achieving impact

Source: Liu, Li, et al, for the Child Health Epidemiology Reference Group of WHO and UNICEF. Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. The Lancet, Early Online Publication, 11 May 2012. doi:10.1016/S0140-6736(12)60560-1

Back in 2011, low treatment coverage was a result of a lack of supply, low demand and unfavorable environment

1.

Supply

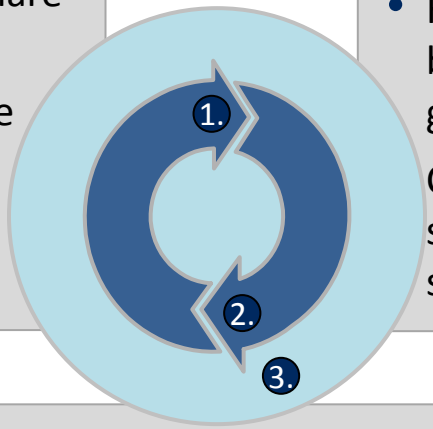
- Low supplier competition for zinc and ORS products: just one, subsidized zinc product was in the market and had 98% market share
- Private supply chain with high mark-ups resulting in expensive products at retail level
- Very limited zinc quantities distributed in the public sector

2.

Demand

- Caregivers & providers do not perceive ORS as a "real" medicine and are unaware of zinc and its benefits
- Health providers unaware of clinical benefits of zinc & ORS and prefer giving antibiotics

Caregivers don't perceive diarrhea as a serious disease and as a result don't seek treatment or delay treatment



3.

Enabling Environment

- Limited political/partner attention, no coordination mechanism
- Very modest funding allocated
- Unfavorable regulatory conditions:
  - ✓ Zinc was a Rx only drug
  - ✓ No price regulation in the private sector

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Over the past 2 years, key progress has been made to improve the political and regulatory environment to support scale-up

Coordination mechanism	• Diarrhea and Pneumonia Coordination Committee (DPCC) formed in 2012 • Attended by MOH, private suppliers/manufacturers, NGOs • More than 10 meetings convened since inception
Strategy and policy	• RMNCH sharpened plan launched and UNCoLSC country plan developed in 2013 • Protect-Prevent-Treat strategy first drafted in 2012 (to be finalized in 2014)
Regulations	• OTC status secured for zinc (Q3 2013) • Maximum Retail Price (MRP) for ORS-Zinc endorsed by DPCC (Q3 2013)
Funding	• $7M in new funding mobilized primarily for ORS/zinc (CHAI, SHOPS, RMNCH Trust Fund) • Cross-cutting funding secured or under discussion: CODES project (UNICEF), GF grant for cross-cutting iCCM component (TBC), PACE for iCCM in the private sector

It will be critical to pursue favorable policy changes for amoxicillin to enable widespread adoption and use in country

- Include amoxicillin DT as 1st line treatment in national guidelines (*URC*)
- Revise the Essential Medicines and Supply List to allow amoxicillin to be distributed at community level (*MSH-SURE project*)
- OTC status for amoxicillin
- Introduce 250mg amoxicillin DT (*PATH*)

A number of partners are driving these activities, with additional support to be provided through the UNCoLSC country plan

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In the private sector, the number of products has increased, import costs have dropped and distribution reach has improved

2013: set up a quarterly supplier forum

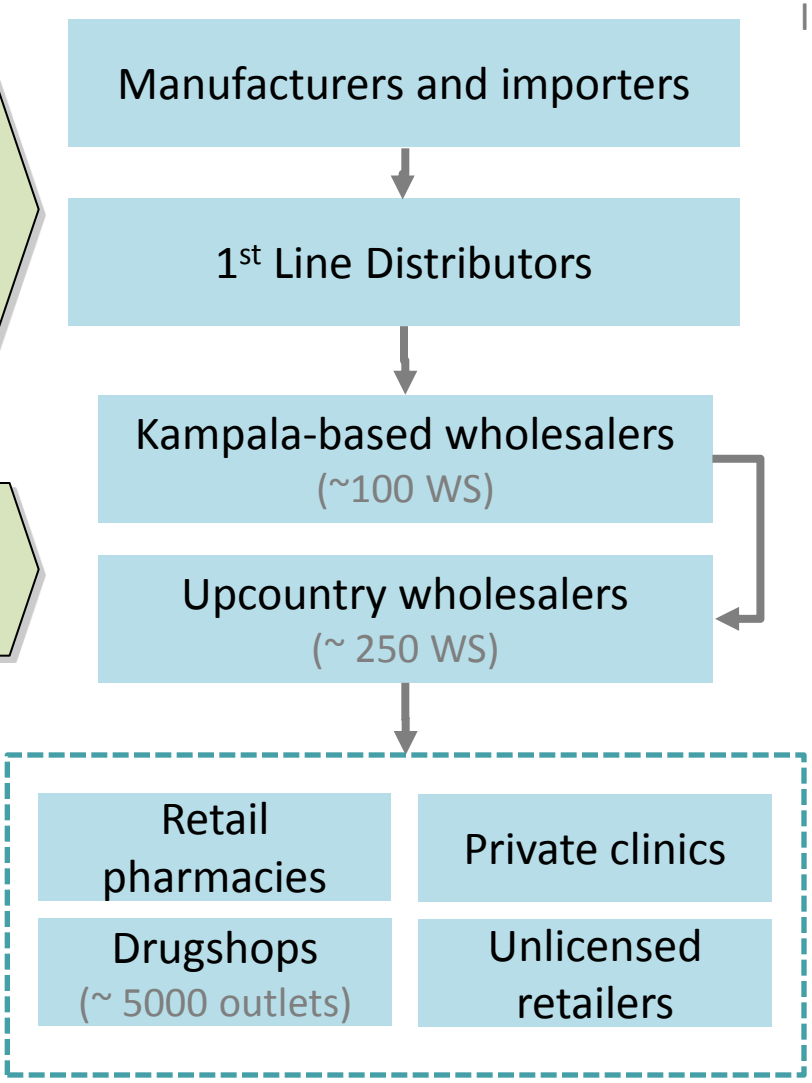
2013: Introduced 4 cheaper Zinc products (fast-tracking registration with NDA)

Q4 2013: signed distribution and promotion agreement with the 2 biggest 1LD

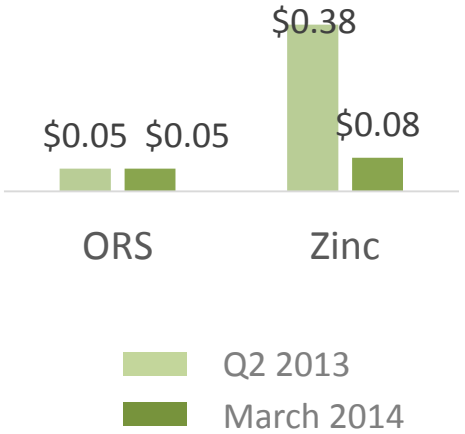
***Q1-Q2 2014**: Wholesaler-based activation targeting ~ 7,000 providers and retailer*

***Q1 2014 onwards**: distributor-led investment in sales and distribution*

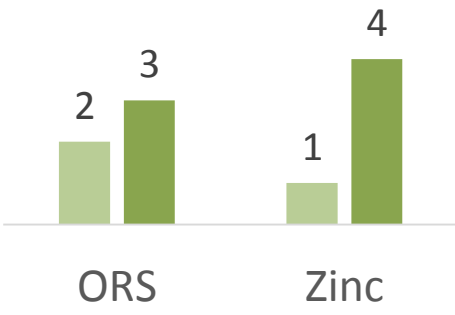
***Q2 2014**: direct distribution pilot*



Import and ex-factory prices



Nbr of products distributed
(*Brand with MS > 5%*)



Sources: manufacturers and distributors data, Retail audit data, Q1 2014 (n= 1,100), SHOPS/CHAI private supply chain study (2013)

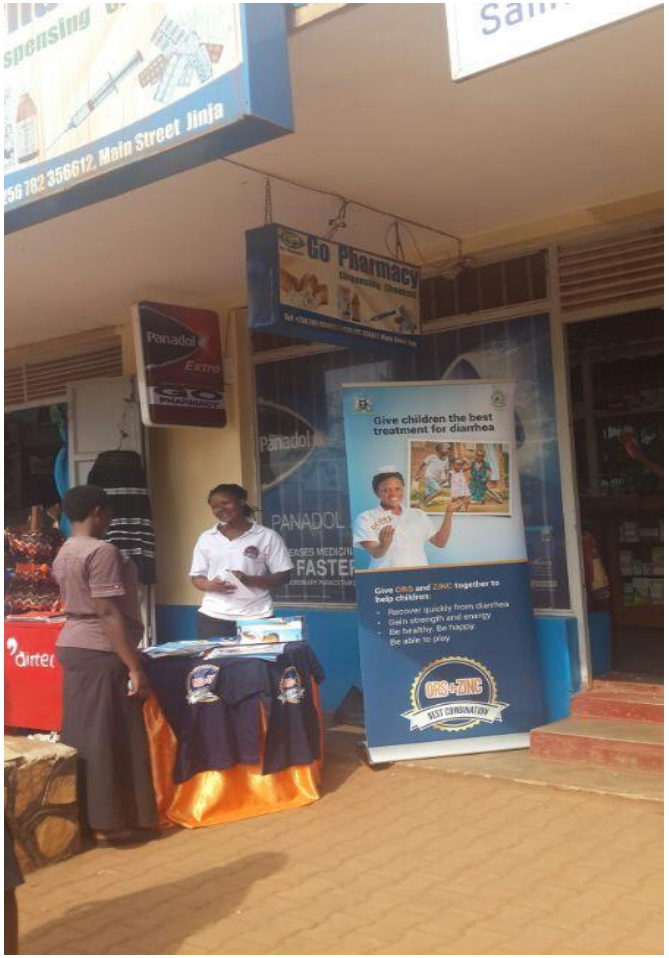
A focus on wholesaler activation has helped to ensure products are available in the most remote areas

Wholesaler Activation Program

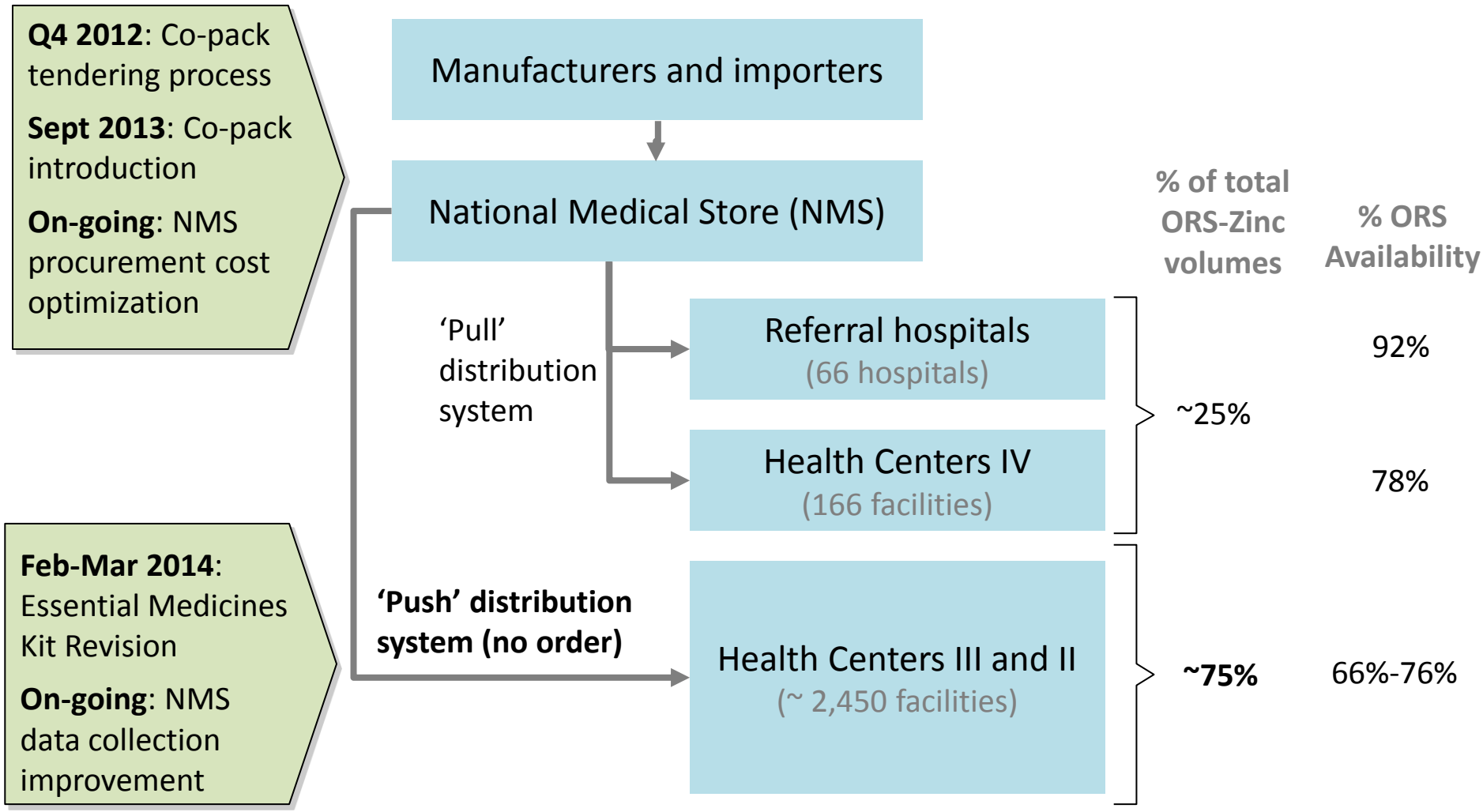
Launched February 1 to promote/sell zinc/ORS to drug shop operators as they come to market centers for resupply.

Results to date(by 26th April, 2014):

- About 10,000 contacts made (target=7500).
- 40.76% purchased zinc/ORS (target 65%);
- 288,627 zinc treatments(2,886,270 tablets) and 392,565 sachets of ORS sold.



In the public sector, co-pack has been introduced and is now distributed to 95% of health facilities in the country



Sources: MOH data, NMS issue data, SPARS assessment, Q4 2013

Lessons from early iCCM efforts highlight an opportunity for more sustainable impact at the community level

Impact/results

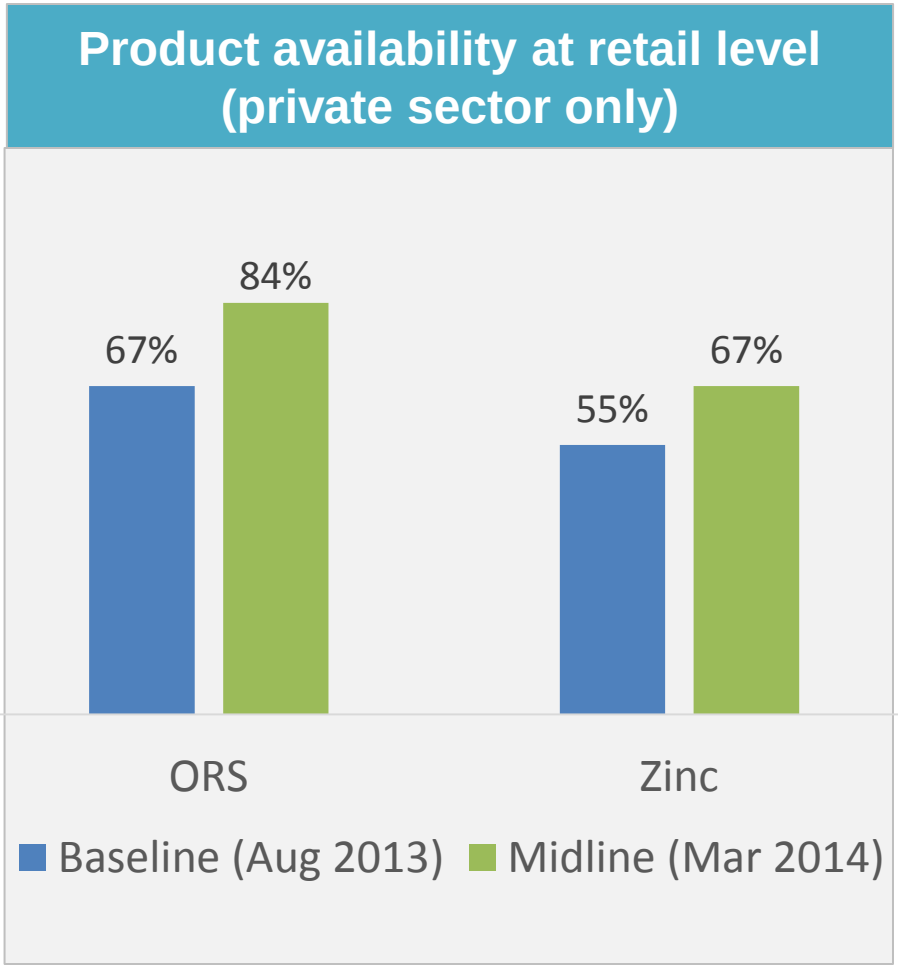
- 12,500 VHT trained in districts covered by Malaria Consortium
- Access to **timely** and **appropriate** treatment of sick children has increased with the introduction of ICCM
- 1st choice in seeking treatment shifted from both public and private to VHT

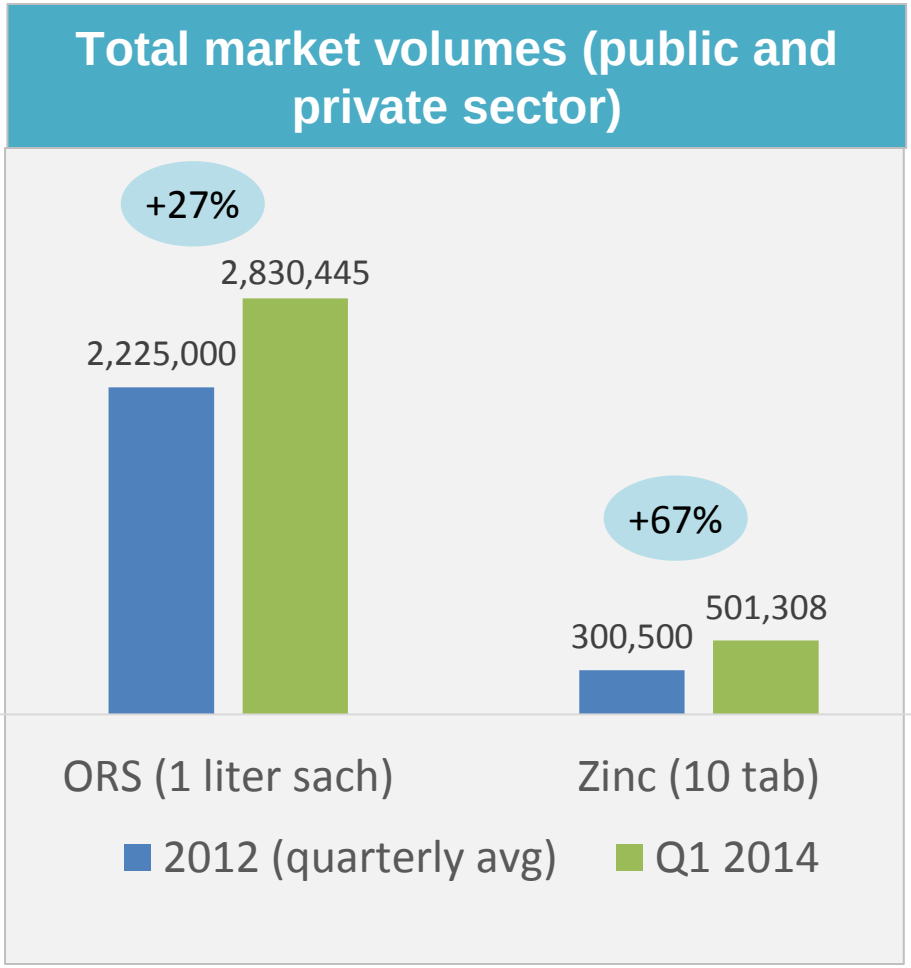
Key challenges

- Lack of integration into MOH/DHO systems and structures
- Lack of integration into national supply chain
- Unsustainable funding, notably for commodities

Moving forward, a focus on integrating iCCM into existing systems will be important. Partners are currently preparing an iCCM gap analysis and aim to include iCCM needs in the Global Fund proposal (and other RMNCH financing opportunities)

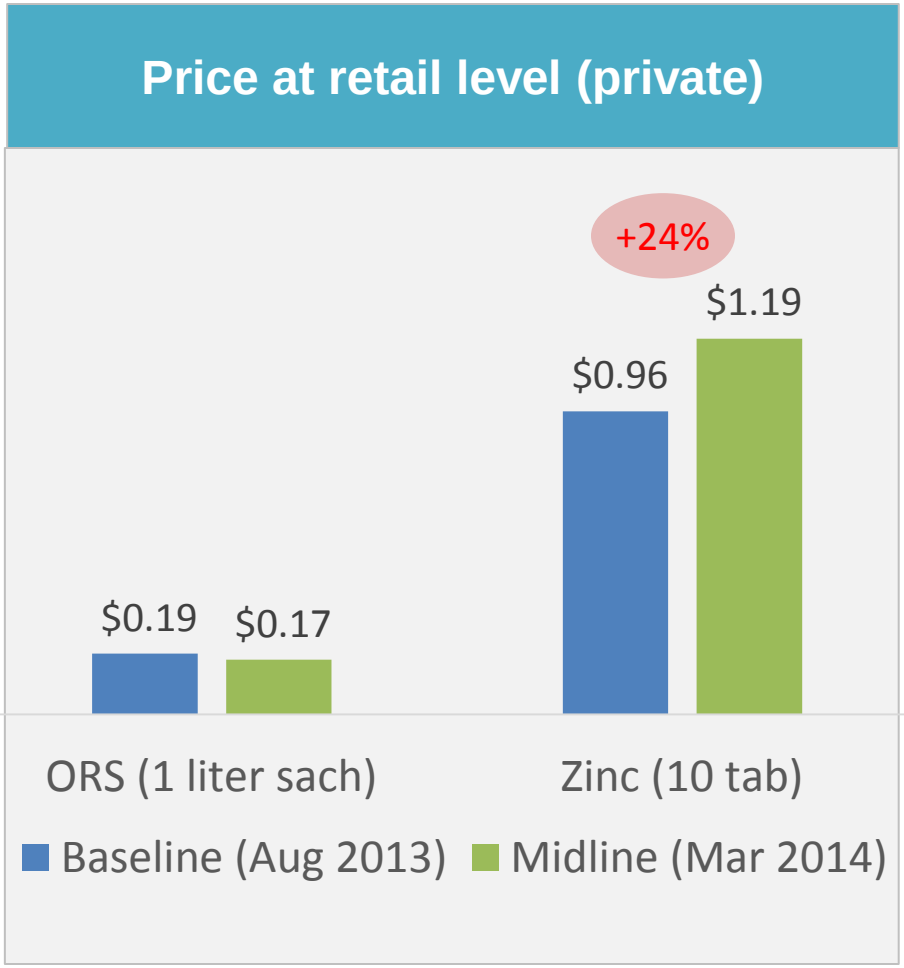
Total volumes and distribution reach have improved significantly compared to baseline

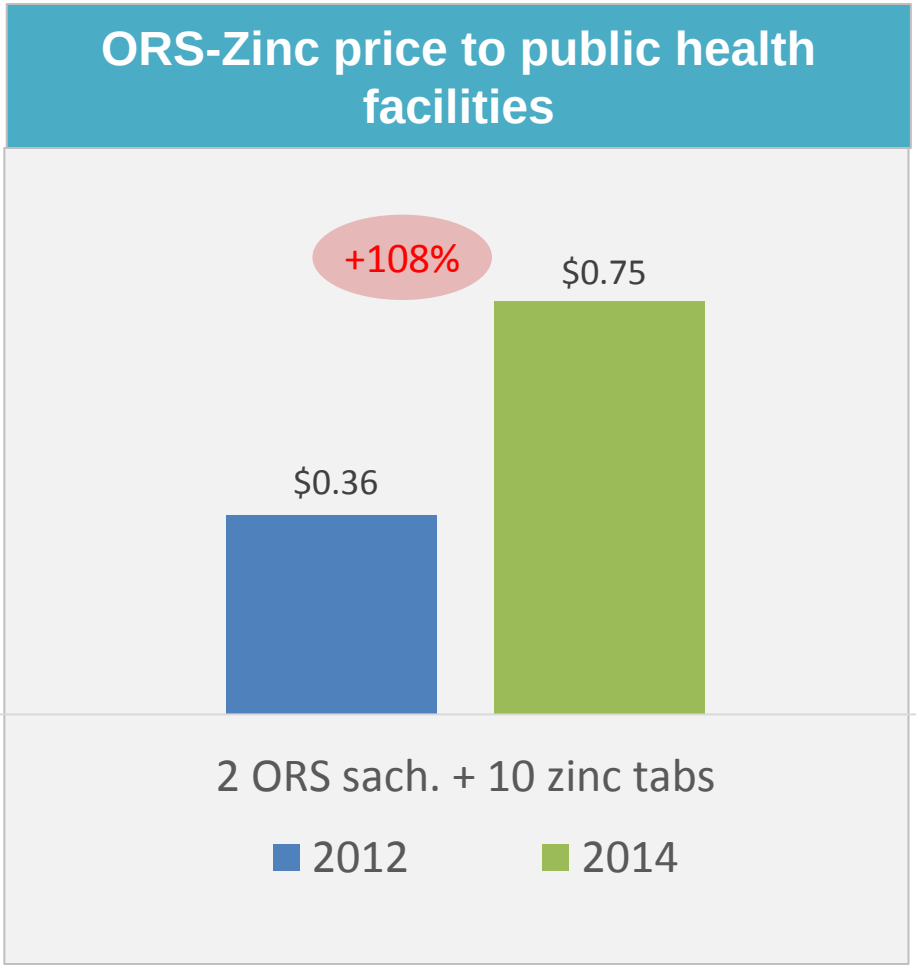




Sources: CHAI baseline retail audit data (n = 850) Aug 2013, RWI monthly retail audit data, Q1 2014 (n= 1,100), manufacturers and distributors data,

However, high retail prices in the private sector and price to public health facilities are major roadblocks to greater access





Sources: CHAI baseline retail audit data (n = 850) Aug 2013, RWI monthly retail audit data, Q1 2014 (n= 1,100), NMS data

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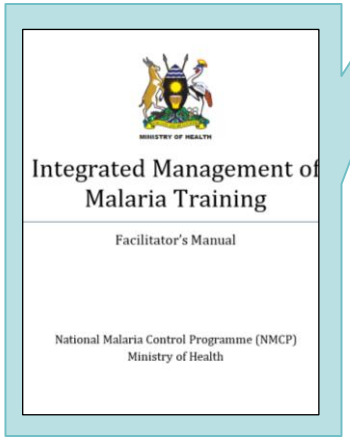
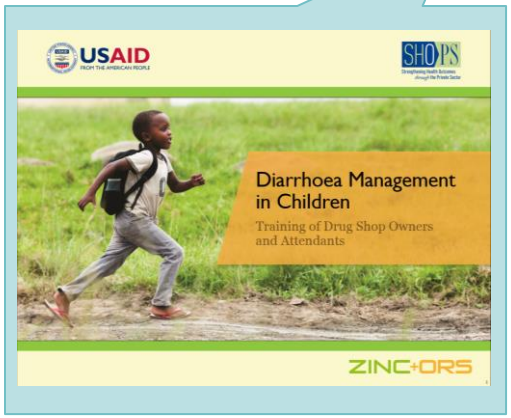
Given providers decisive influence over treatment choice and current inappropriate Rx practices, several nationwide training programs have been rolled out





Integrated management of malaria for public providers

CHAI worked with NMCP to incorporate d**iarrhea management** into Global Fund-supported Integrated Management of Malaria trainings for ~**10,000 public healthcare workers**

Diarrhea management training for private providers (SHOPS/CHAI)

In partnership with the NDA and the PSU, SHOPS trained **12,263 private druggists in 97 Districts** of the 112 Ugandan Districts, 365 pharmacists, 289 pharmacy auxiliary staff and 67 pharmacy interns. Used McCann materials to enhance presentation and handouts

New trainings and CMEs planned in 2014 with various partners:

- IMCI trainings in partnership with MOH, targeting **~ 600 public health workers** in 10 districts
- Joint CMEs with Marie Stopes Uganda (target: 2,500 public and private providers)
- CME for ~ 650 facilities of faith-based orgs and NGOs
- Training for 70 new interns and 300 new technicians (SHOPS)
- Training of 181 providers in partnership with PACE/PSI

Continuing Medical Education for FBO/NGO and other private clinics and hospitals

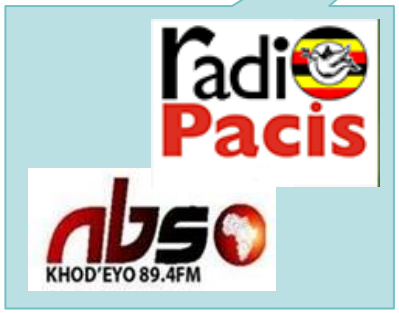
- Health Facility based CMEs are being conducted for over 10,000 providers from over 623 Health Units of 3 FBO NGOs countrywide.
- CMEs started on 24th March and will run up to June 2014.

***Results to date(by 19th April, 2014)*:**

- 34 TOTs from 19 sub regions were trained to conduct CMEs.
- A total of 4523 providers have so far been trained.
- Program is still on-going

A Trainer conducting a CME in Moroto District

Caregivers lack of knowledge of Zinc and preference for 'effective' treatments call for targeted investments in caregiver demand generation



ORS-Zinc campaign approved by MOH in December 2013

Broad approval for provider and caregiver materials and messages. All materials have also been approved by the NDA

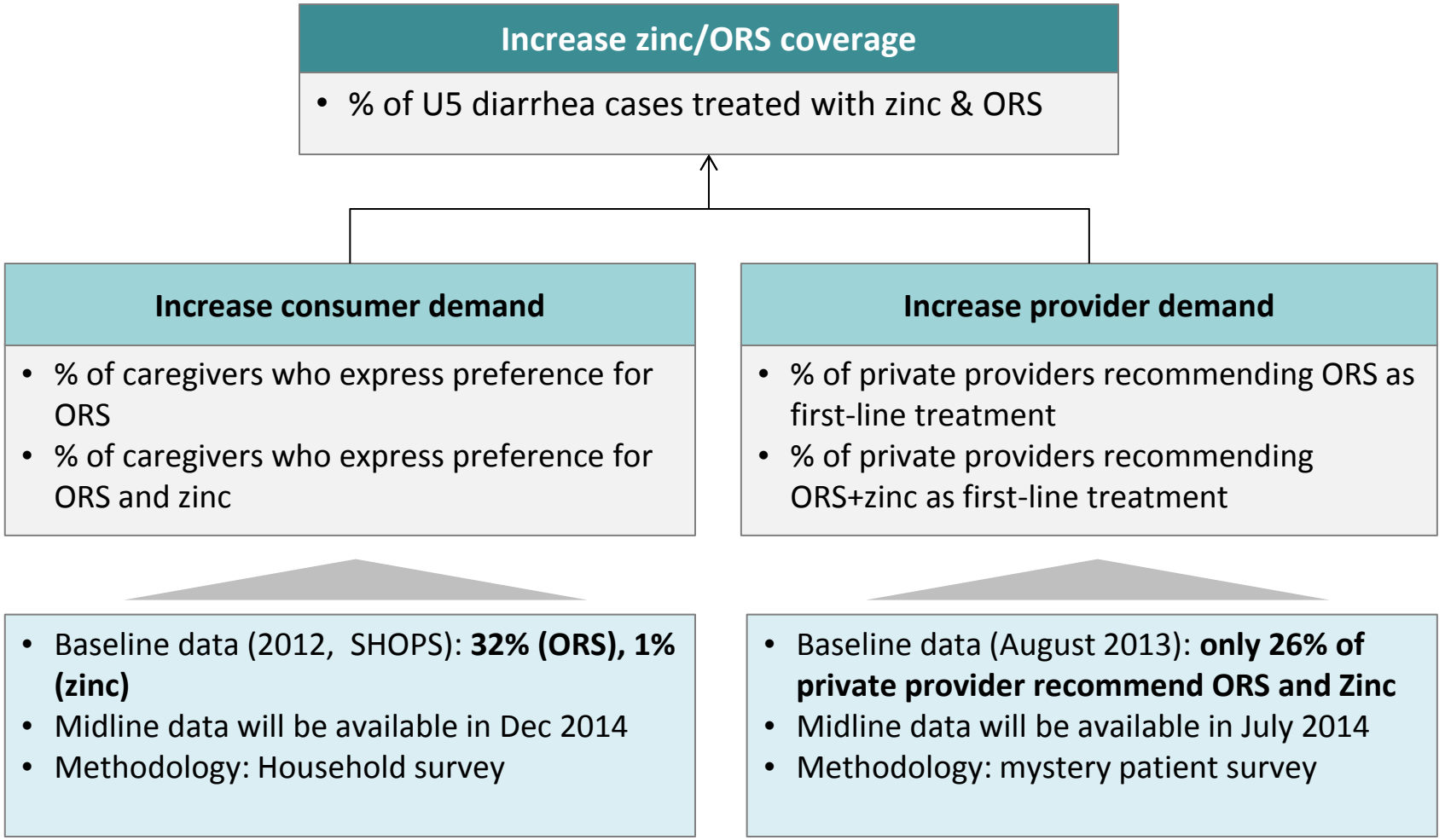
Pilot Radio campaign

Focus on high disease burden regions (East and the North) with 5 regional radios
Formats: 45 sec spot ads, talk shows, testimonials by key influencers, DJ mention (all in local languages)
Duration: 4 months (mid Feb –June)

Community based promotion

Village-level health promotion by community health workers (CHW) in partnership with social businesses and NGOs.
A total of 1,000 CHW have been trained and deployed, potentially reaching up to 150,000 caregivers over a 3-month period

Effects of these different demand-side activities will be rigorously assessed. First results on provider behavior will be out in July 2014



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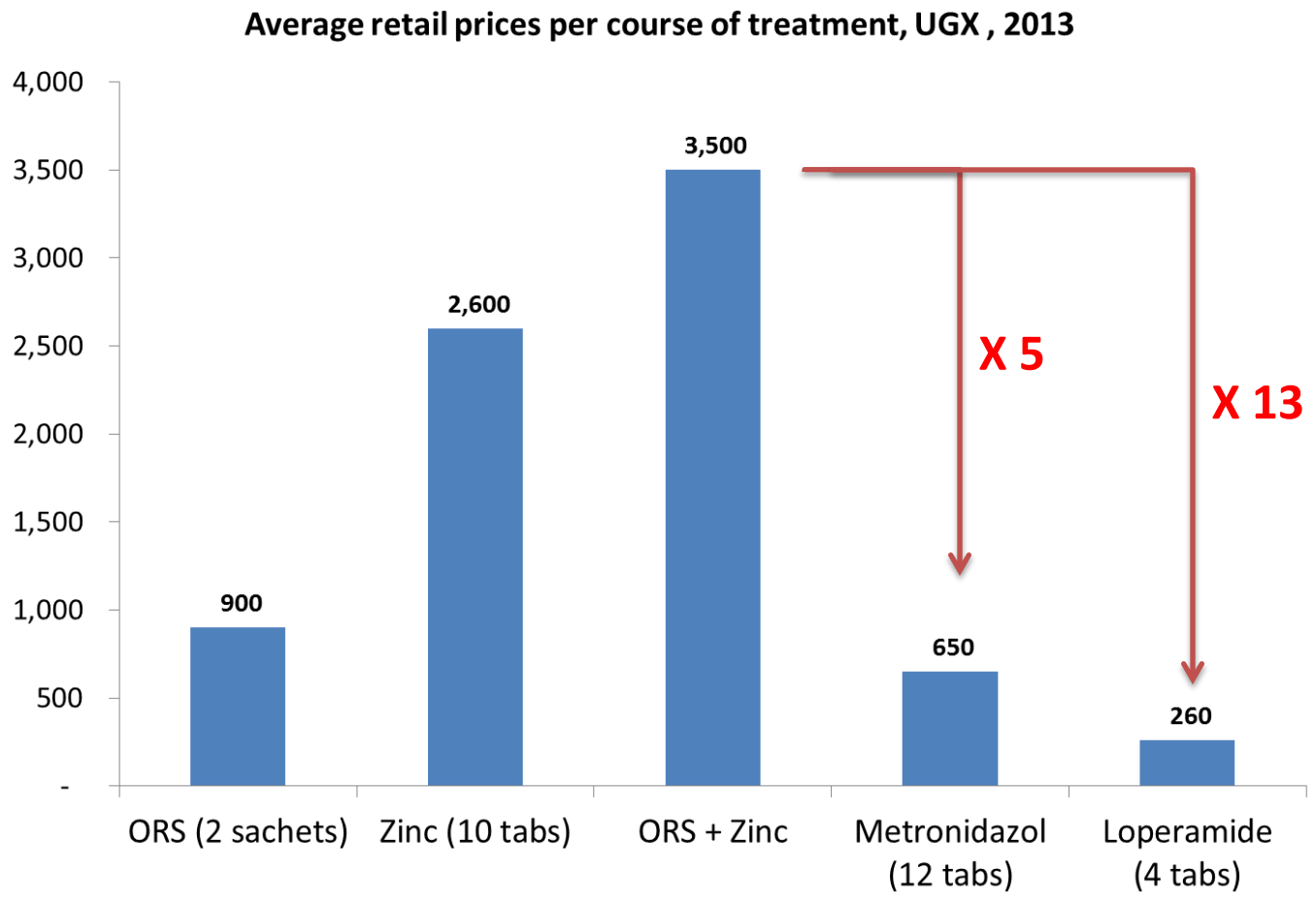
The problem

- 43% of all pediatric diarrhea cases are treated in the private sector, where many people receive inappropriate medicines (DHS 2011)
- Cost is a key barrier to access to recommended treatment
- Despite improvements in the availability of cheaper products registered in the country, more was needed to ensure price reductions reach the consumer

A full course of treatment with ORS+zinc is 5 to 13 times more expensive than alternative treatments (antibiotics, antidiarrheals)

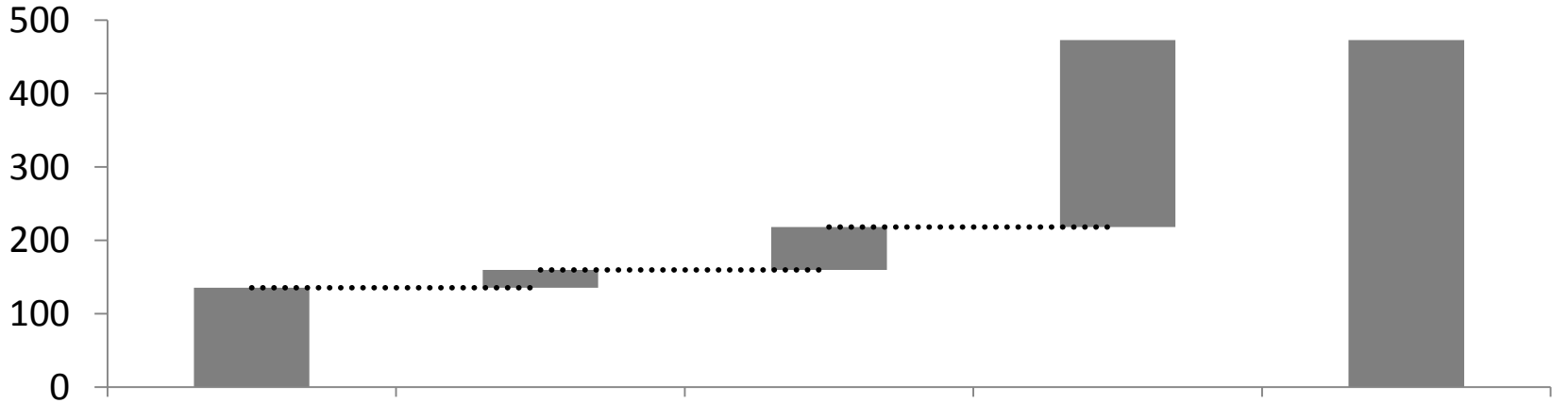


Source: CHAI/Abt Associates private supply chain study, Feb-April 2013

As of July 2013, two ORS products were available on the market…

2 ORS products on the market		
1	Medipharm (local)	Locally manufactured; 1lt sachets only; 75% unflavored (remainder Orange)
2	UHMG (FDC)	Imported (India) and re-branded; unflavored 1lt sachets only

Average ORS price (1 sachet) / UGX

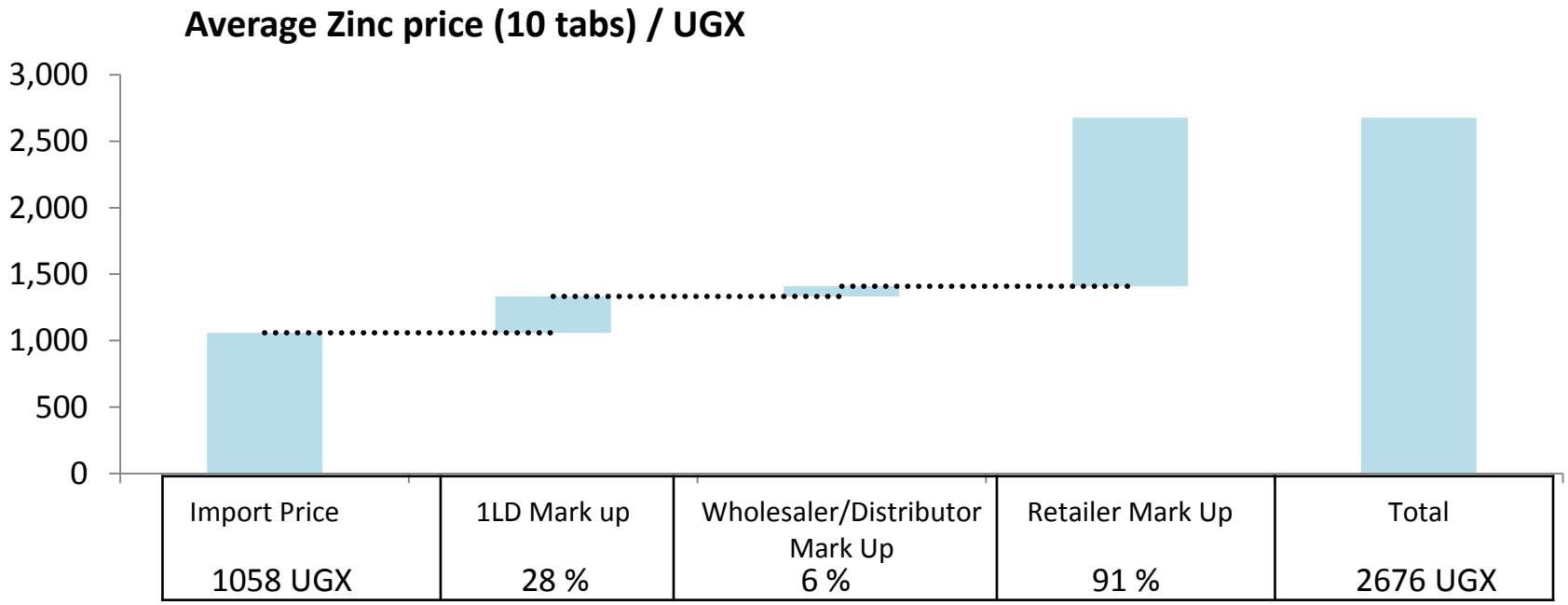


Manufacture price	1LD Mark up	Wholesaler/Distributor Mark Up	Retailer Mark Up	Total
135 UGX	18 %	37 %	117 %	472 UGX

Source: CHAI/Abt Associates private supply chain study, Feb-April 2013

…and three products for zinc

3 Zinc products are currently on the market		
1	Abacus (Alkem)	Only sold into public market
2	Medipharm (local)	Syrup (very low availability)
3	UHMG (Nutriset)	Sold in the private market (98% market share)



Source: CHAI/Abt Associates private supply chain study, Feb-April 2013

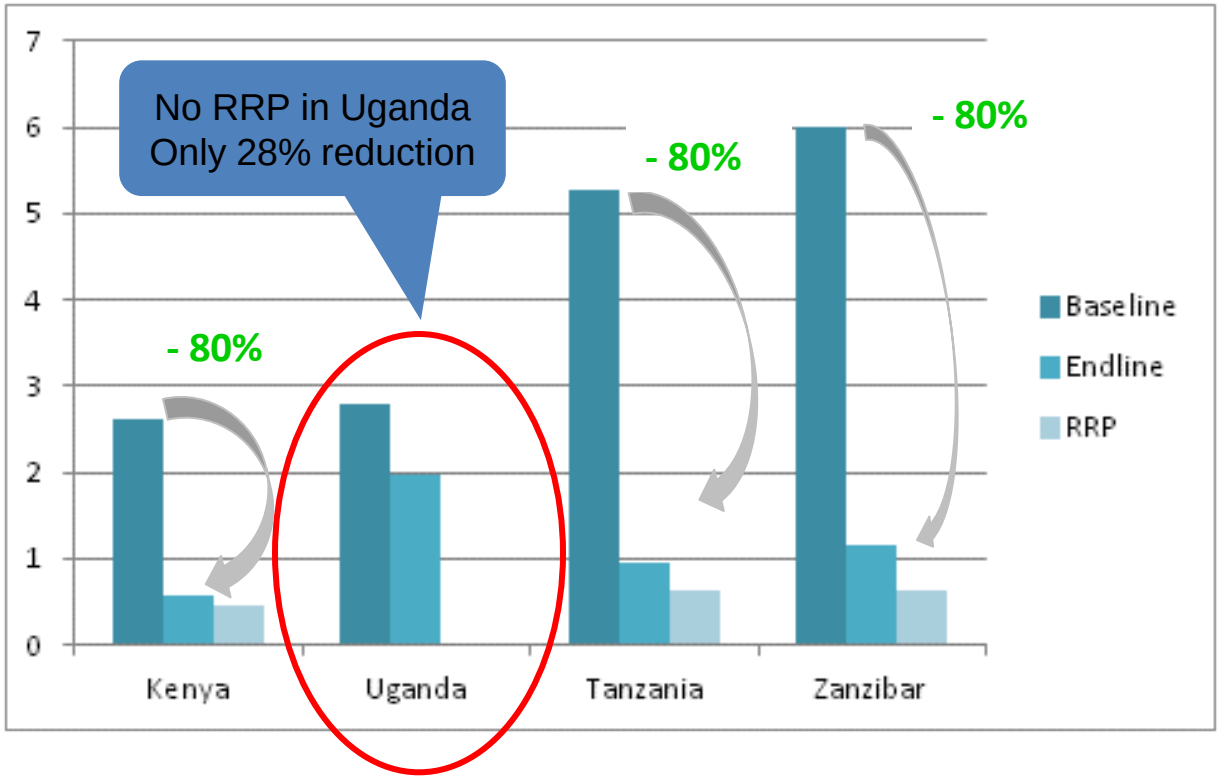
Significant cost-savings have been achieved at import level with the new Zinc products

<u>But</u> without medicine price regulation and with a fragmented supply chain, passing this cost-saving to the end consumer is a major challenge

AMFm ACTs prices decreased to an affordable level in countries that implemented a recommended retail price

Learning from the AMFm experience

Cost* to patients of Quality-Assured ACTs, AMFm Baseline and Endline

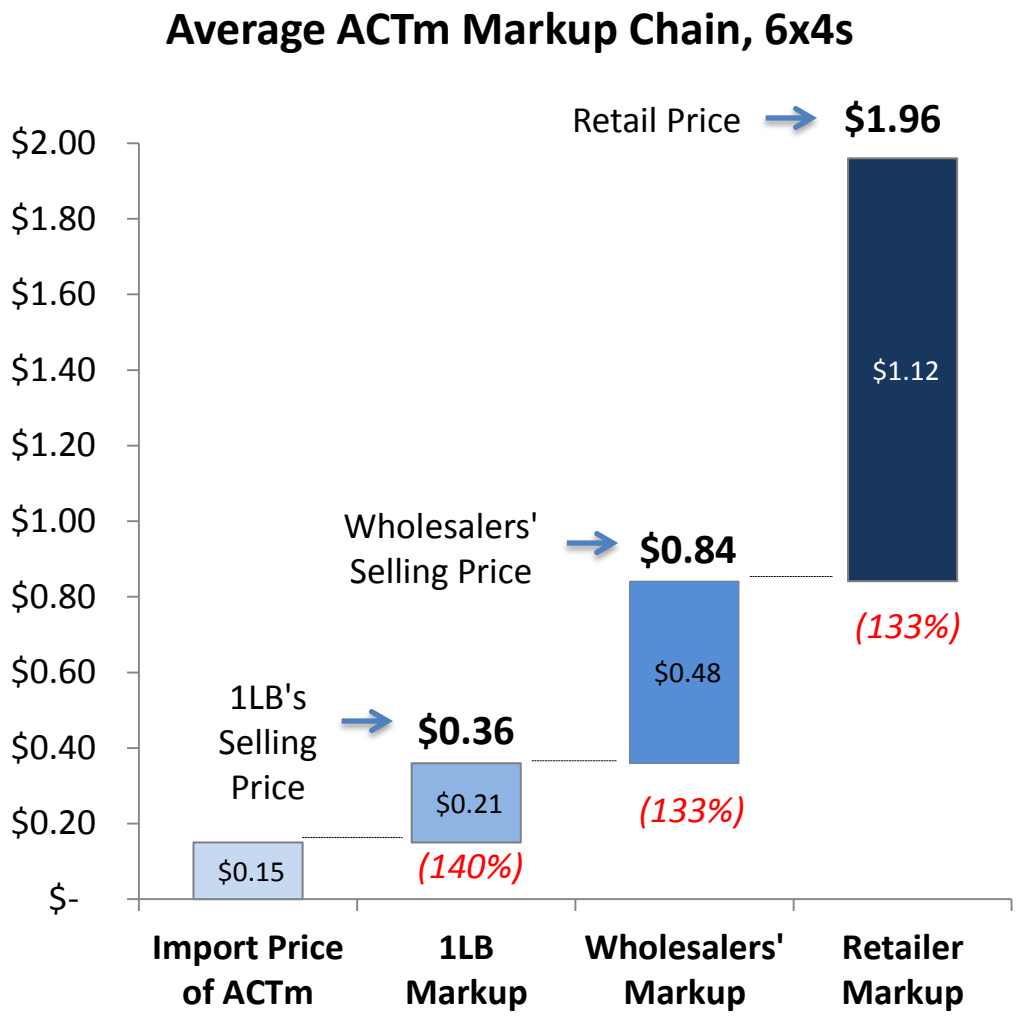


* Prices in USD

Source: *AMFm Independent Evaluation (2011)*

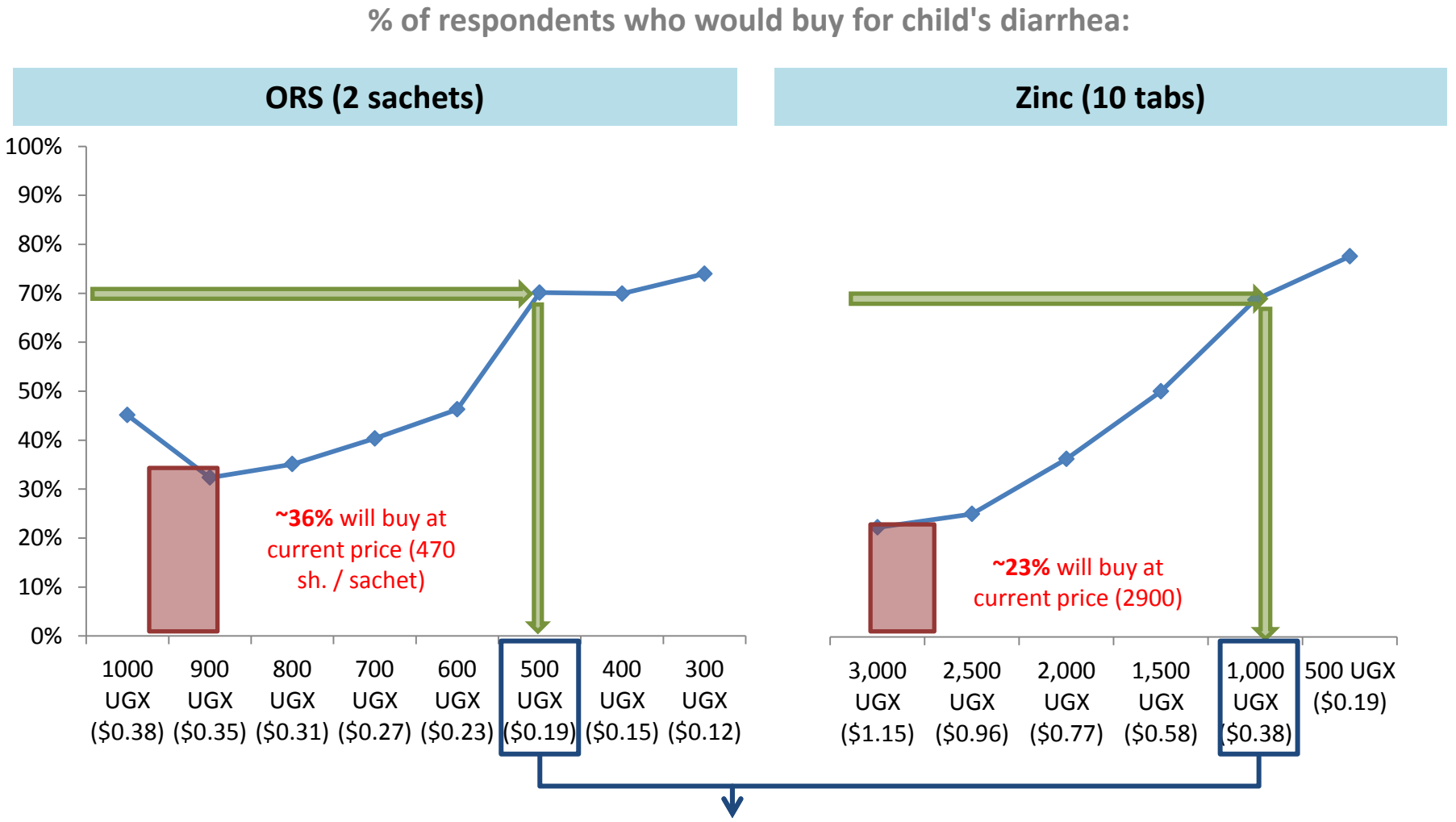
ACT prices in Uganda did not drop as significantly as expected during the pilot due to mark-ups at the wholesale and retail level

Learning from the AMFm experience



Note: Import price and 1LB markup data come from Phillips, which carries a premium product. Retail price and markup are based on median values from the Independent Endline Evaluation. 6x1s correspond to IE data on peds doses, which are meant to capture age-weight bands for children 2 years of age or 10 kg.

A first step was to understand the willingness to pay for ORS and Zinc from the consumer perspective

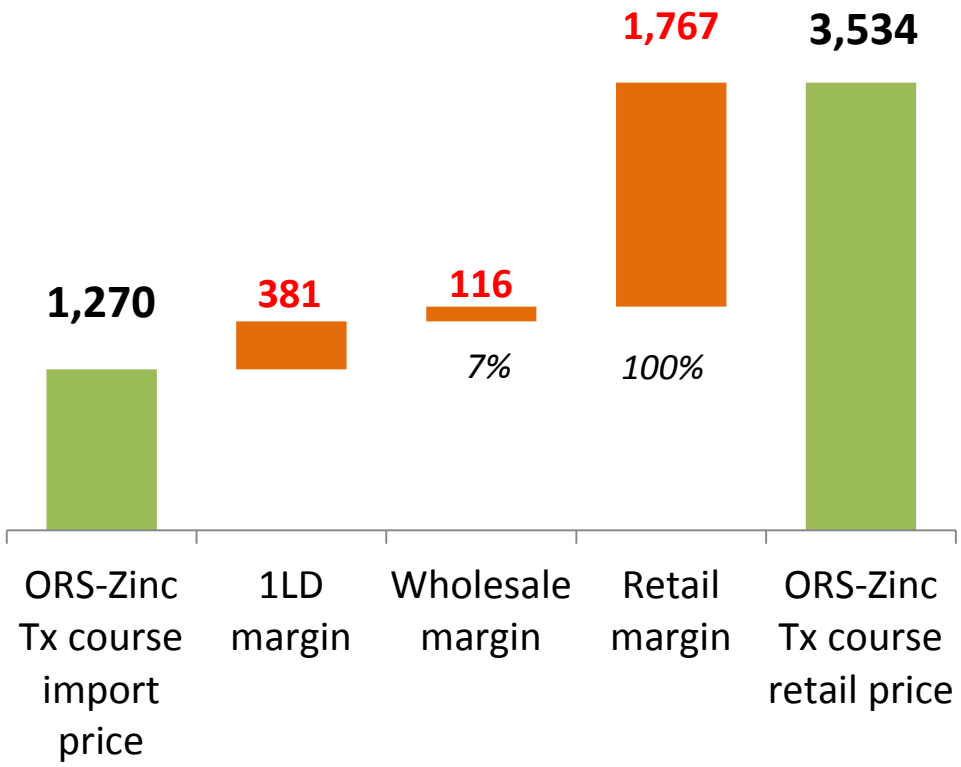


To be affordable for 70% of the population, a full treatment course should be priced at max. 1,500 shilling

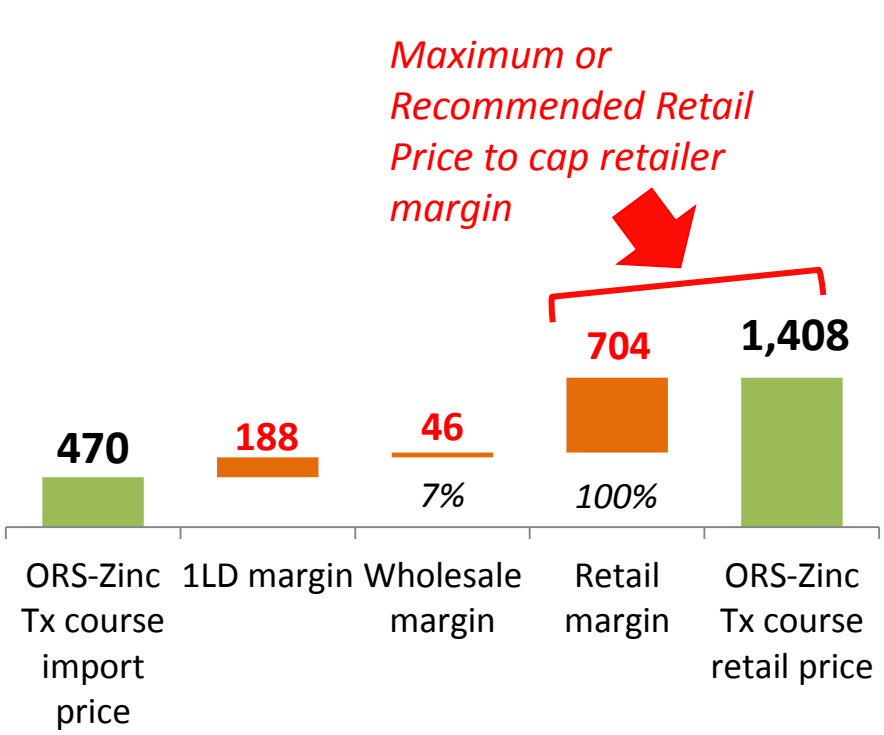
Source: Omnibus Household survey conducted by Ipsos Uganda in May 2013 on a representative sample of the population (n = 2000)

Proposed strategy: a Recommended (or Maximum) Retail Price for ORS and Zinc

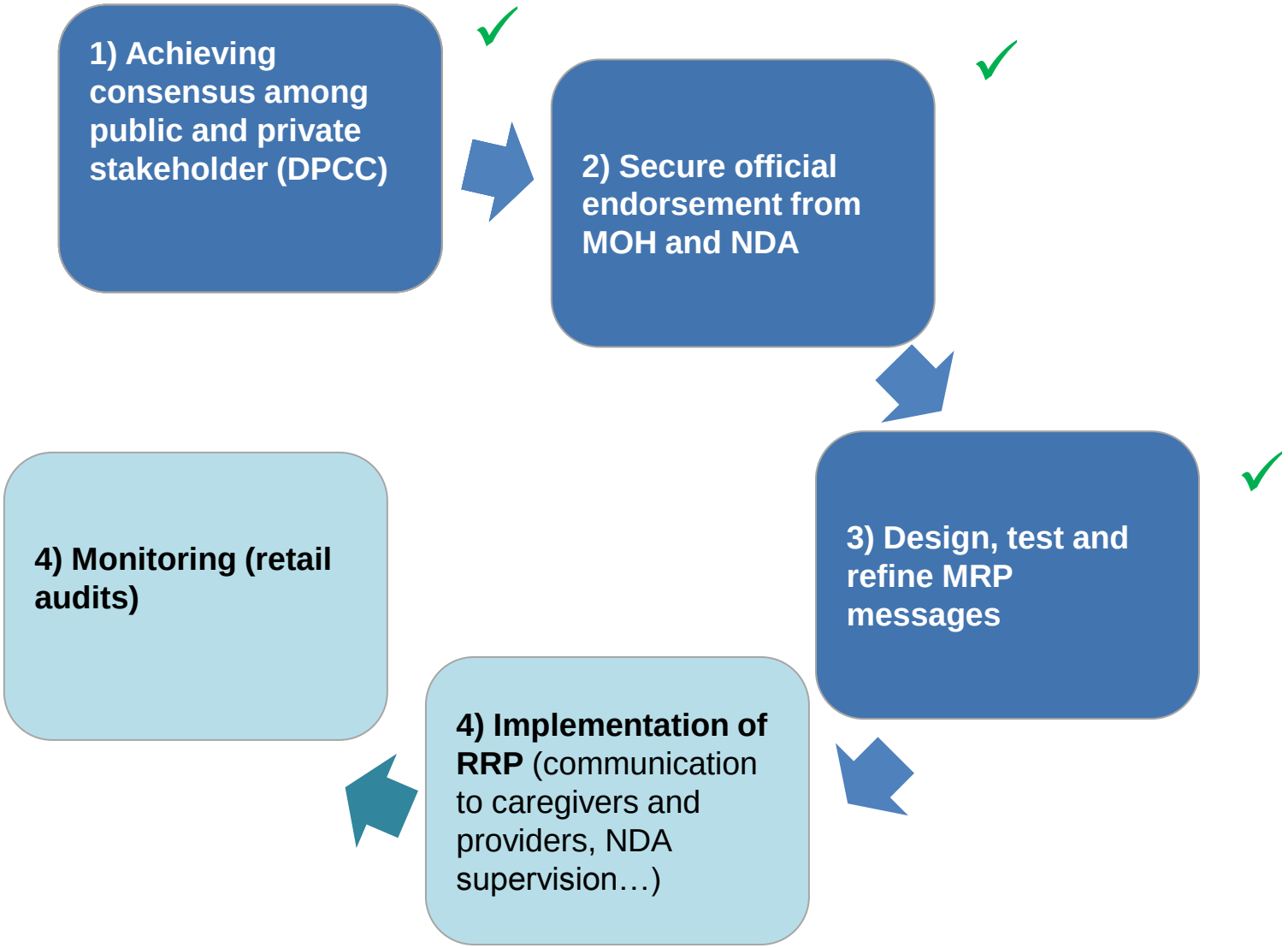
Current margin structure



Proposed margin structure w/ RRP



Based on the AMFm experience in Uganda, we think MRP can be achieved by taking the following steps



Sample of MRP communication materials: POS posters and detailing aid

POS poster

Detailing aid for reps

Lessons learned

- Securing a consensus on a MRP among public and private stakeholder was the easy part
- Implementing it within a weak regulatory environment and a fragmented supply chain will be a massive challenge
- There are already signs of backlash from the supply chain regarding MRP
- This calls for a multi-pronged strategy targeting the wholesalers, the retailers and the consumers

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Key issues/questions for discussion

- How to strengthen partner coordination to ensure new initiatives/activities are complementary to existing scale-up efforts (e.g., UNCoLSC)? Potential to leverage DPCC as a mechanism for coordination?

- What is the follow-up to the RMNCH sharpened plan? (Will the strategy be funded implemented?)

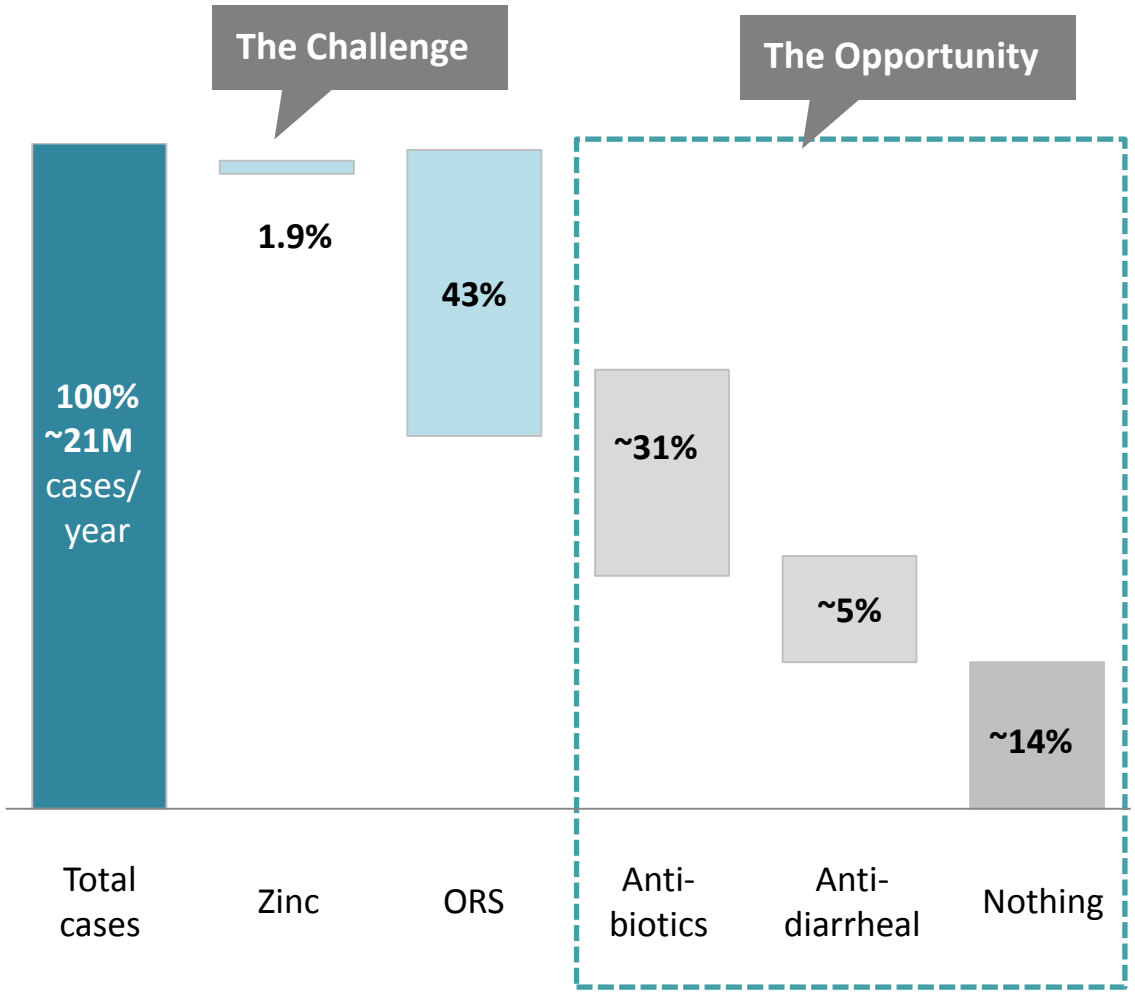
- How to ensure sustainable scale-up of iCCM and integration within existing systems?

- Promoting a holistic approach to pneumonia (not just amoxicillin scale up but also proper diagnosis and severe pneumonia management)

ANNEXES

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

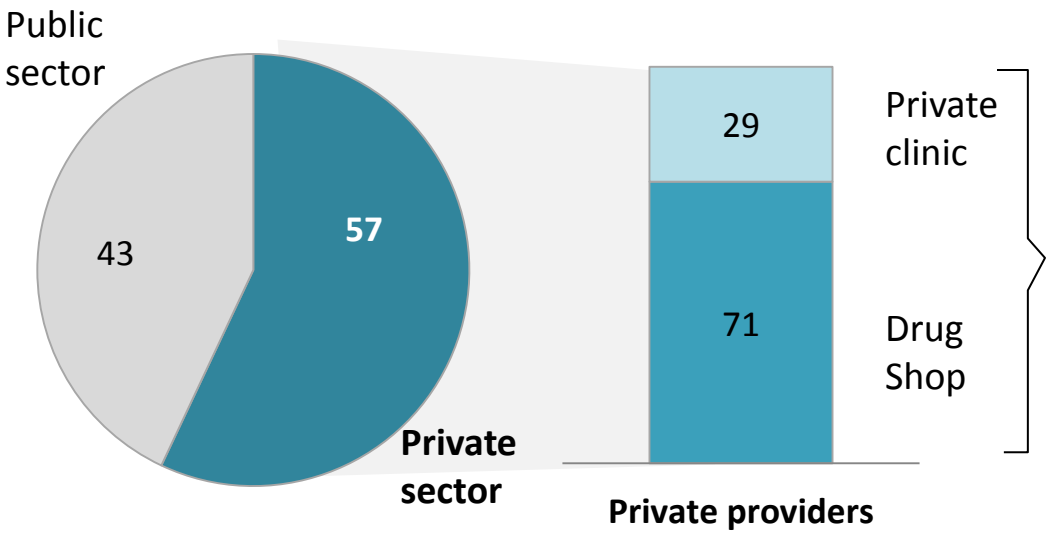
Treatment of diarrhea in children under five in Uganda[1], 2011 estimates



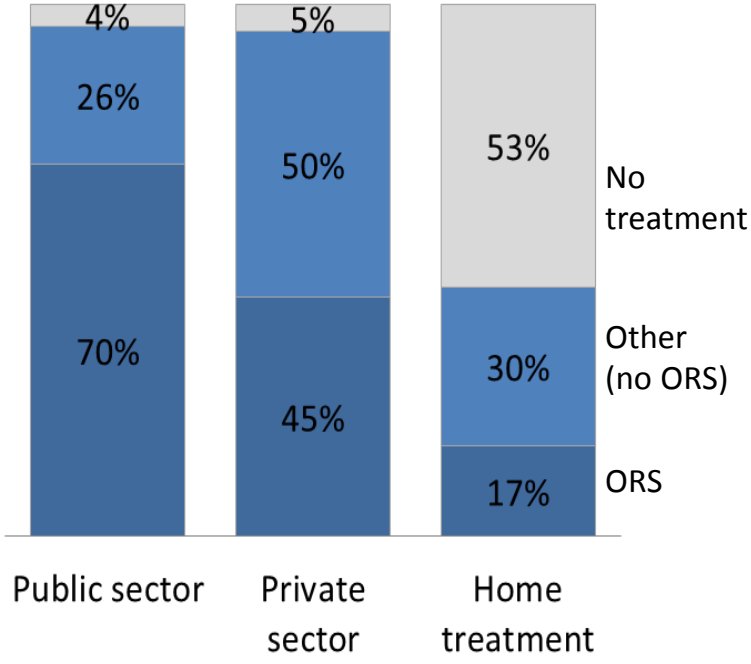
**Note: Some overlap exists between treatments, leading to a total of greater than 100%*

The majority of diarrhea treatment occurs in the private sector – a focus area for achieving impact

Treatment Seeking by Sector
Respondents with <5 children reporting treatment in the prior two weeks for diarrhea and pneumonia in Uganda



Type of treatment per source
Percentage, DHS 2011

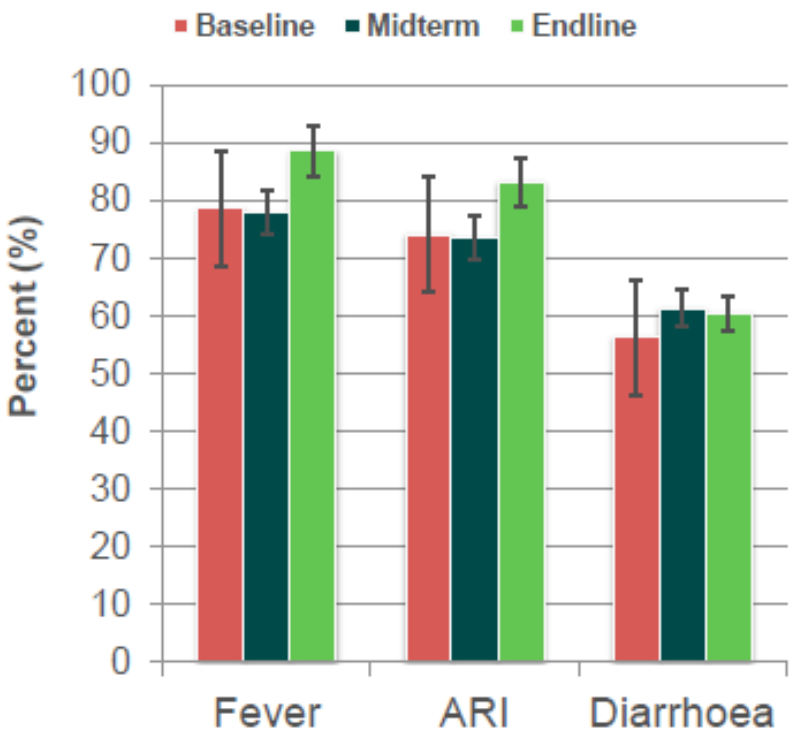


The private sector is more abundant:
There are **440** pharmacies, **~5,000** drug shops and **~6,000** unlicensed drug retailers in Uganda
Versus **~2,250** public health centers.

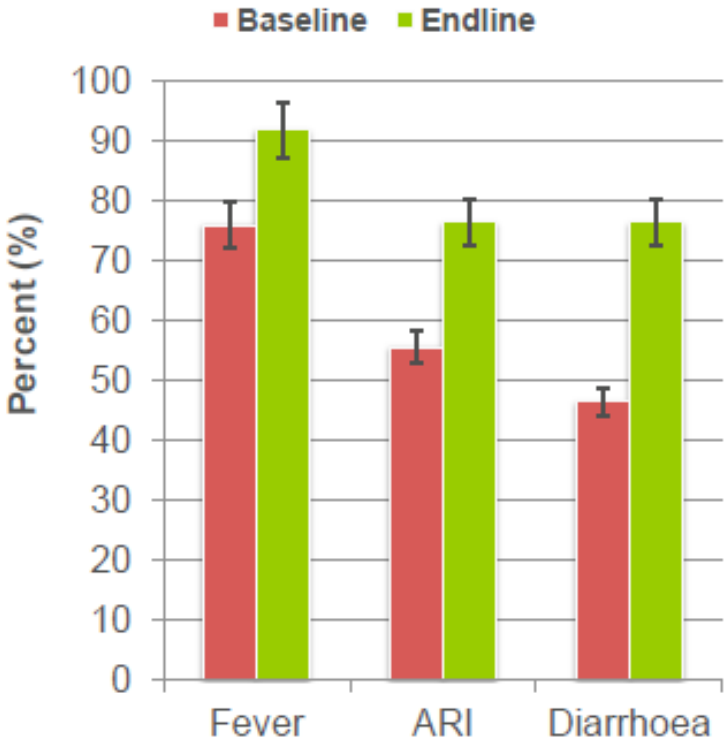
Source: Private Sector for Health in Developing Countries (PS4H), data drawn from Uganda DHS 2006, **Source of treatment is a summary of respondents with <5 children reporting treatment in the prior two weeks for diarrhea (1633 reporting) and fever/ cough (3570 reporting (write for uganda)**

Surveys results: Treatment Seeking

Mid-western

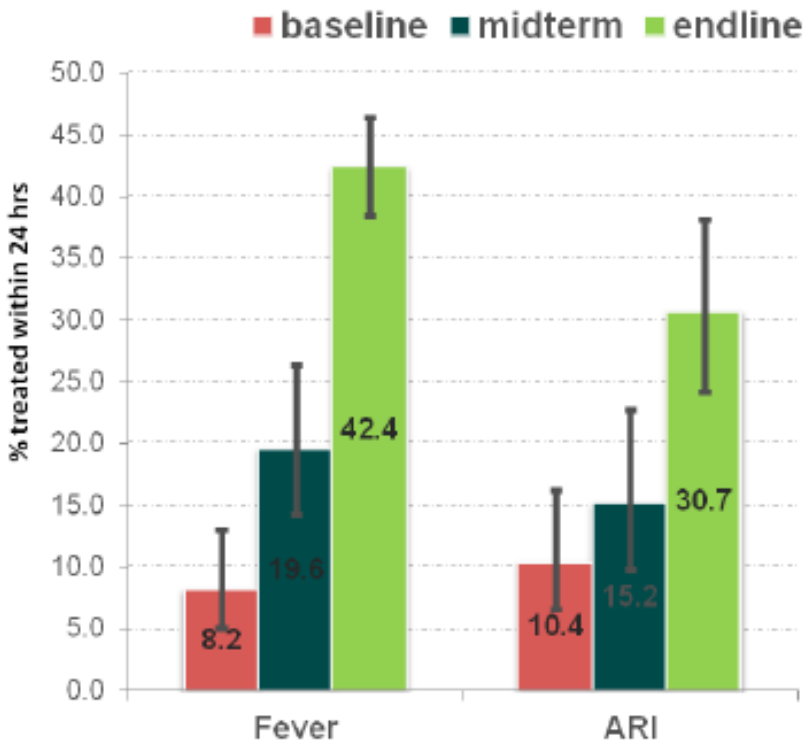


Central



Surveys results: Treatment within 24 hours

Mid-western



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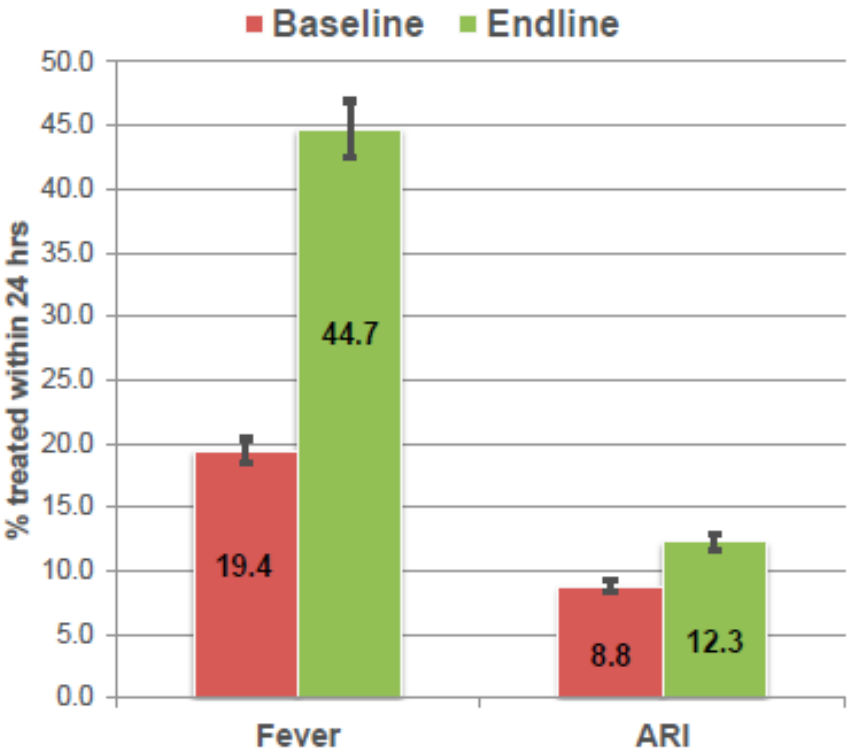
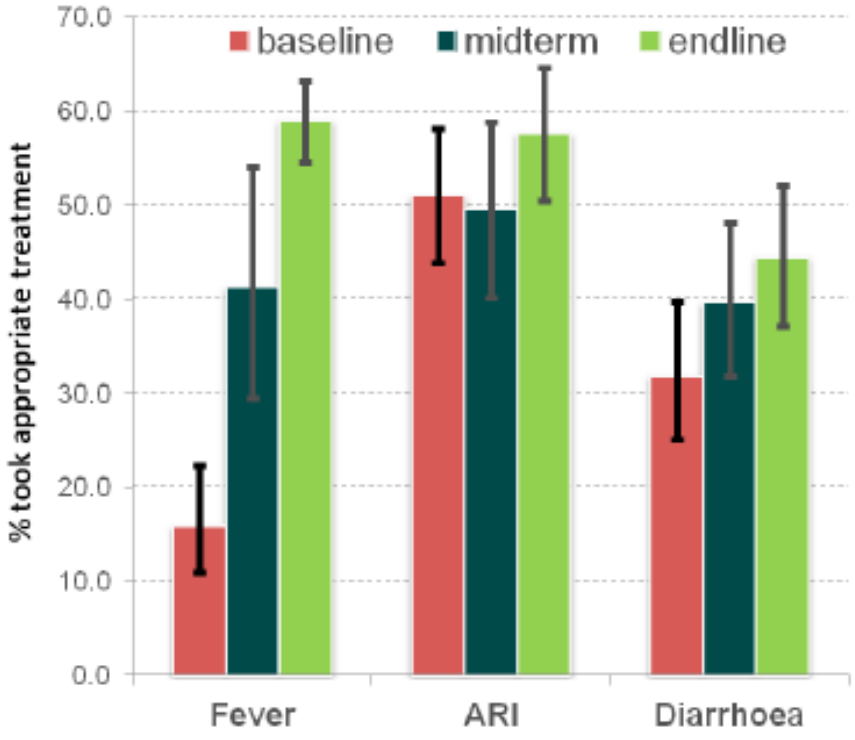


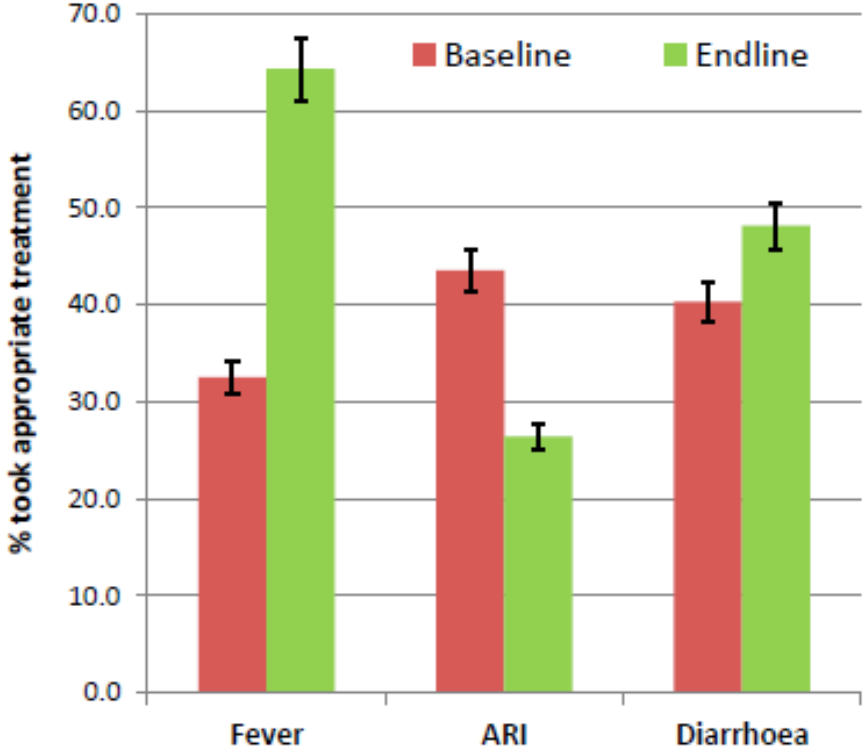
Seeking treatment within 24 hours improved

Surveys Results: Appropriate treatment

Mid-western



Central



Appropriate treatment for all three diseases improved, except for ARI in the Central Region; which may be due to stock outs of Amoxycillin

Objective 1:	**Improve markets for LSC by shaping global markets and local delivery markets, innovative financing, quality strengthening, and regulatory efficiency**
Expected result:	*i) Evidence for marketing shaping ii) Enabling Policy environment*

Planned activities	Implementing Partner	Budget		Cost explanation *(explain what is being costed for this activity)*	Milestone / Target at:	
		Months 1-6	Months 7-12		Month 6	Month 12
Planned activities area 1: Generating evidence for shaping global and local delivery markets						
Activity 1.1.1: Establish local info-mediary data and demand forecasts system for priority commodities (Implants, amoxicillin, injectable antibiotics, Zinc, MgSO4, & oxytocin).	WHO, MoH	23,200	50,000	TA/HR, Meetings and Workshops/ Printing	Consensus on Info-mediary data framework	Capacity building for data colection & demand forecasts for priority commodities
Activity 1.1.2: Support Diarrhea and Pneumonia Coordinating Committee (DPCC) to engage local manufacturers to identify potential local market shaping interventions and align the GAPP & the Protect-Prevent-Treat (PPT) strategy	CHAI, MoH	17,000	31,000	TA/HR, Meetings and Workshops/ Printing	Diarrhea Pneumonia Protect-Prevent-Treat (PPT) strategy aligned with GAPPD and dissmeinated	Amox ex-factory retail and public sector price reduced; volume guaranteed at least 1 manufacturer of Amox, ORS, Zn signed
Sub-total Activity 1		40,200	81000			
Activity 1.2.1: Lanscaping of existing local pharmaceutical manufacturers and prequalify them for production of quality assured Chlorohexidine, Dispersible Amoxicillin	PATH, MoH	30,000	30,000	TA–Local & WHO/HQ/ Meetings	Profile local pharmaceutical manufacturers	Potential candidates for prequalification selected

Objective 2:	Improve national delivery of LSC by increasing supply and awareness, increasing demand and utilization, reaching women and children, and increasing performance and accountability
Expected result:	*i) Robust demand forecasts for commoditiesin place where demand visibility is a barrier to access and ii) Optimized implementation of recent WHO guidelines pertaining to commodity use through Information and communication technology (ICT) best practices built on to improve supply of LSC*

Planned activities	Implementing Partner	Budget		Cost explanation *(explain what is being costed for this activity)*	Milestone / Target at:	
		Months 1-6	Months 7-12		Month 6	Month 12
Planned activities area 1: **Demand, awareness and advocacy**						
Activity 2.1.1: Demand generation assessment and develop BCC and marketing strategy, messages on (i) CHX to replace harmful practices (ii) Prompt pneumonia treatment (iii) adherence for Amox, ORS+ Zinc iv) recognition of PET symptoms (v) HW use of misoprostol for PPH & MgSo4 for PET	JHUCCP/USAID, MoH	61,040	42,000	TA/Contract/HR/tools/desk review/ stakeholder meeting/reporting/ dissemination/ fieldwork	Materials and Literature reviewed on use, social behavioral drivers and barriers reviewed used to design a BCC and marketing strategy	Information packages, job aids for HW including pharmacists
Activity 2.1.3: Develop guidelines for quantification, distribution and forecasting, and a sustainability plans for ICCM medicines kits (Amoxicillin, ORS, Zinc,ACTs, RDTs, Rectal Artesunate) for VHTs inlcuding integration of commodities like LLITNs	WHO, MoH	57,500	10,000	TA-local/contract HR/ Meetings, Workshops	(i) Prototype or quantification and proof of concept in selected sites (ii) Quantification report	Dissemonation of reports and revision of VHT Essential Medicine kits
Activity 2.1.4: Formative study on feasibility and perceptions on use of age specific color coded pre-packaging of Amoxicillin at facility and use of different packs for facility and community to cater for new dosing guidelines	HCU, MoH	43,500	21,500	TA-HR/ contract/material design/ Workshops/ /printing	(i) Prototype for unit dose color coding (ii) Results and design of materials	Pre-Packaged Medicine integrated in EM kits for VHTs

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Expected result:	*i) Robust demand forecasts for commoditiesin place where demand visibility is a barrier to access and ii) Optimized implementation of recent WHO guidelines pertaining to commodity use through Information and communication technology (ICT) best practices built on to improve supply of LSC*

Planned activities	**Implementing Partner**	**Budget**		**Cost explanation** *(explain what is being costed for this activity)*	**Milestone / Target at:**	
		Months 1-6	**Months 7-12**		**Month 6**	**Month 12**
Planned activities area 3: Supply chain and awareness						
Activity 2.3.1 : Review the existing multiple LMIS and inventory management practices for LSC in the public and private sector and design a data warehouse based at national level that will import information from various sources and levels (JMS, NMS, HMIS, UHMG, Medical Access etc.)	USAID-SURE, MoH	45,600	25,000	TA – SURE/ Meetings and Workshops/ software/Computers	Consensus recahed on harmonised template for LMIS	Framework for data ware house adapted
Activity 2.3.2: Support the NMS to build s including regular revision of the essential medicine kit to take into account volume increases correlating with demand generation efforts, and avoid stock outs of LSC including community supplies	CHAI, MoH	11,000	11,000	TA – SURE/ Meetings	Guidelines and training of trainers and supervisors	Training Supervisors

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Expected result:	*i) Robust demand forecasts for commoditiesin place where demand visibility is a barrier to access and ii) Optimized implementation of recent WHO guidelines pertaining to commodity use through Information and communication technology (ICT) best practices built on to improve supply of LSC*

Planned activities	**Implementing Partner**	**Budget**		**Cost explanation** *(explain what is being costed for this activity)*	**Milestone / Target at:**	
		Months 1-6	**Months 7-12**		**Month 6**	**Month 12**
Planned activities area 4: Performance and Accountability - Standards and guidelines						
Activity 2.4.1: Review/update Essential Medicine List (EML) to include (i) ACS for fetal lung maturation/management of PTL (ii) Amox use by VHT (iii) CHX for cord hygiene and antisepsis at birth and 1st week of life (iv) 50% MgSo4 solution (iv) Gentamicin and Ceftriaxone use for neonatal sepsis at HC II	MSH-SURE, MoH	29,000	8,000	TA/HR, Meetings and Workshops/ Printing	EML updated and disseminated	Updated EML disseminated to all health facilities
Activity 2.4.3: Review/update and produce Standard Clinical Treatment Guideline (STG) to include (i) Dexamethasone for fetal lung maturation (ii) Amox as 1st line treatment for pneum, update dosage according new WHO guidelines (iii) CHX for cord hygiene in 1st wk	URC, MoH	30,000	21,000	TA/HR, Meetings and Workshops/ Printing	STGs updated and disseminated to all health facilities	Updated STG disseminated to all health facilities

Objective 2:	Improve national delivery of LSC by increasing supply and awareness, increasing demand and utilization, reaching women and children, and increasing performance and accountability					
Expected result:	*i) Robust demand forecasts for commoditiesin place where demand visibility is a barrier to access and ii) Optimized implementation of recent WHO guidelines pertaining to commodity use through Information and communication technology (ICT) best practices built on to improve supply of LSC*					
		Budget		**Cost explanation**	**Milestone / Target at:**	
Planned activities	**Implementing Partner**	**Months 1-6**	**Months 7-12**	*(explain what is being costed for this activity)*	**Month 6**	**Month 12**
Planned activities area 5: Performance and Accountability - Effectiveness of Guideline						
Activity 2.5.2: Conduct implementation research on impact of existing guidelines including factors affecting health worker non use of the guideline focusing on (i) MgSo4 for preclampsia/eclampsia (ii) Uterotonics (Misoprostol and Oxytocin) for prevention and management of PPH (iii) Zinc for diarrhoea management (iv) Gentamycin for neonatal sepsis	AMREF, MoH	53,000	22,000	TA/tools/desk review/stakeholder meeting/reporting/ dissemination	Guideline effectiveness review plan and assessment results	Results dissemination and used to influence policy
Activity 2.5.3: Design/adapt a simple integrated patient management and referral algorithms for LSC– designed to be motivating and attention getting and thereby more likely to influence providers behavior e.g. ACS, MgSo4, community management of pneumonia and diarrhea by adapting open access software e.g. m-Allinace/ commcare.	WHO, MoH	32,500	3,500	TA/Contract, meetings and workshops/field work	Algorithm designed and integrated in existing referral system	Algorithm implemented
Planned activities area 6: Non institutional learning						
Activity 2.6.2: Educate, supervise public and private providers using e-learning curricula (i) Computer assisted IMCI training - ICATT (ii) Community HW USSD Health Wiki eLearning for ICCM, Newborn care and Maternal health - and develop and distribute job aids tailored to this training (Charts, Treatment algorithm) including support/supervision tools	UNICEF, MoH	141,000	60,000	TA/Contract, meetings and workshops/field work	e-learning curricula (ICATT, health Wiki eLearning including support/supervision tools	Capacity built for implementing e-learning curricula (ICATT, health Wiki eLearning including support/supervision tools

Objective 3:	**Improve integration of private sector and consumer needs**					
Expected result:	*write here the indicator that traces progress toward achieving the objective*					
		Budget		**Cost explanation**	**Milestone / Target at:**	
Planned activities	**Implementing Partner**	**Months 1-6**	**Months 7-12**	*(explain what is being costed for this activity)*	**Month 6**	**Month 12**
Planned activities area 1: Product improvement						
Activity 3.1.2: Work with technology innovators to develop and test prototypes for (i) BP machine with beeper to alert providers recognition and prompt response to PET (ii) Mobile-phone-based application for detecting fast-breathing (iii) User-friendly durable RR counters for HWs and VHT (iv) Proof of concept for electronic MCH passport	M-Health Aliance, MoH	110,000	46,000	TA/tools/desk review/stakeholder meeting/software/reporting/ dissemination	Clarity of the target product profile or prototype	Improved acceptability of both health professionals and clients
Activity 3.1.3: Adapt the backpack intervention package for MNCH including linkages with health system design	UNICEF, MoH	70,000	25,000	TA/tools/desk review/stakeholder meeting/innovation/reporting/ dissemination	BP adapted tested for feasibility and cost effectiveness	Implementation of new innovation supported