



a decade in communicable disease control and child health

Project Monitoring & Evaluation Results & Highlights

Geoffrey Namara
30th May 2013



PREVENTION



DIAGNOSIS



TREATMENT



RESEARCH

Outline

■ Routine monitoring

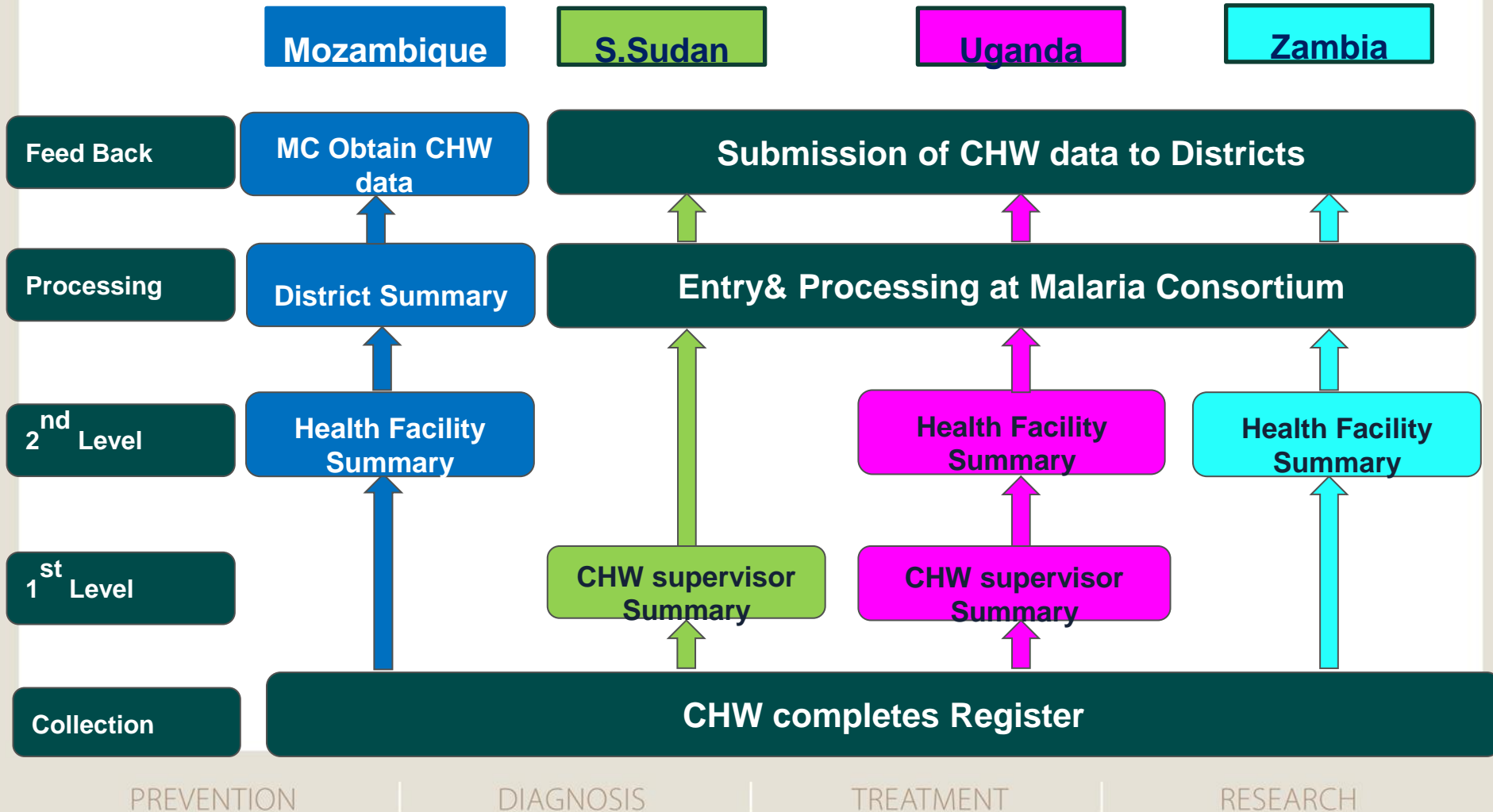
- Routine data collection methods
- Scale and duration of data collection
- Results & highlights from routine data

■ Project evaluations

- Evaluations conducted (methods & timelines)
- Results & highlights

Project Routine Monitoring

■ Routine data transmission across countries



Scale & Duration of routine data collection

■ CHW Training

	Mozambique	S. Sudan	Uganda	Zambia	Overall
Targeted	175	871	6,800	1332	9,178
Trained	165	802	6,774	1332	9,073
% trained	94%	92%	100%	100%	99%
Dropped out	3	42	485	68	
Attrition	1.8%	5.2%	7.1%	5%	

■ Duration of data collection

	Mozambique	S. Sudan	Uganda	Zambia
Months	8	15	30	25

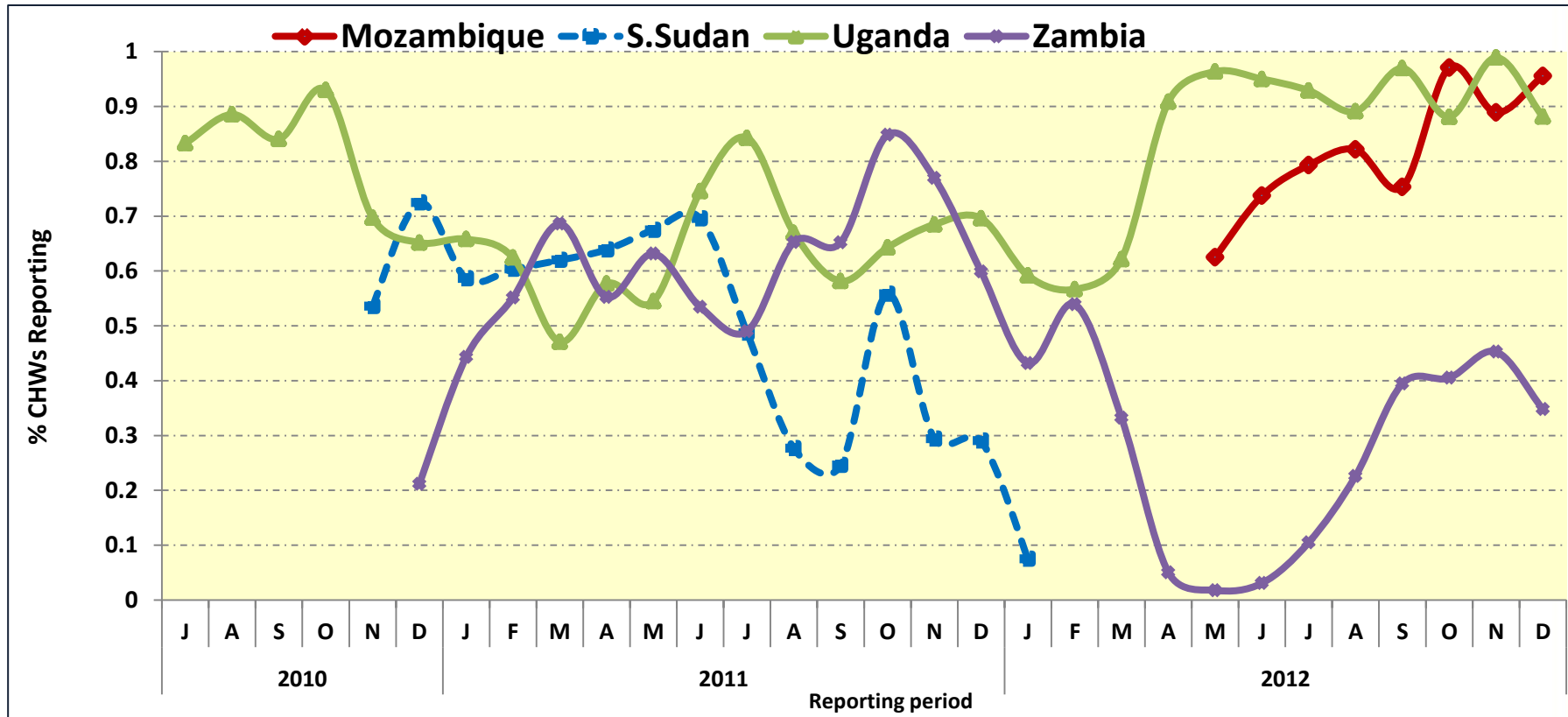
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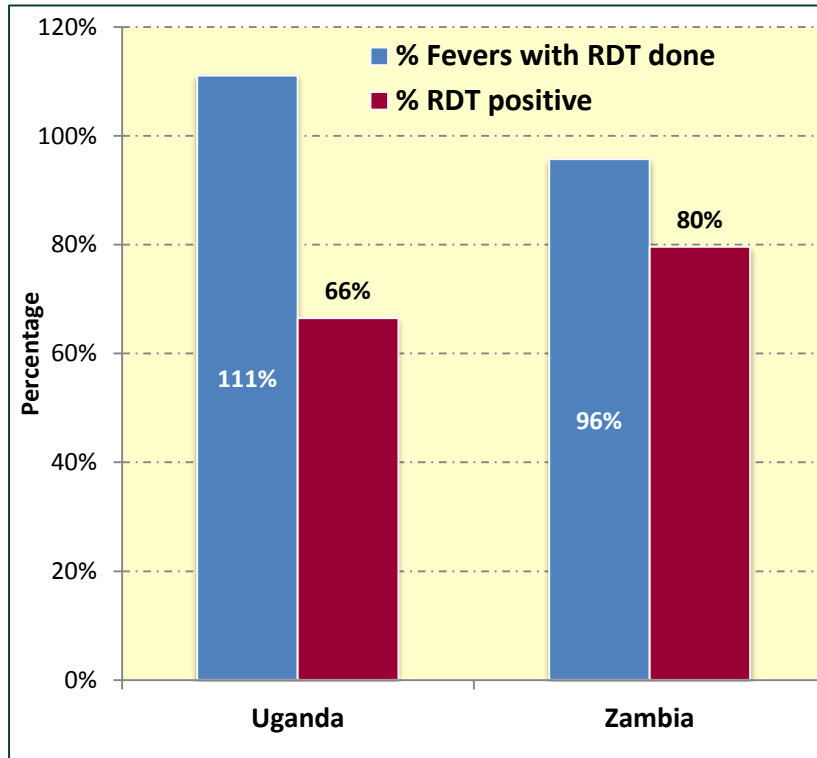
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Monthly CHW reporting rates

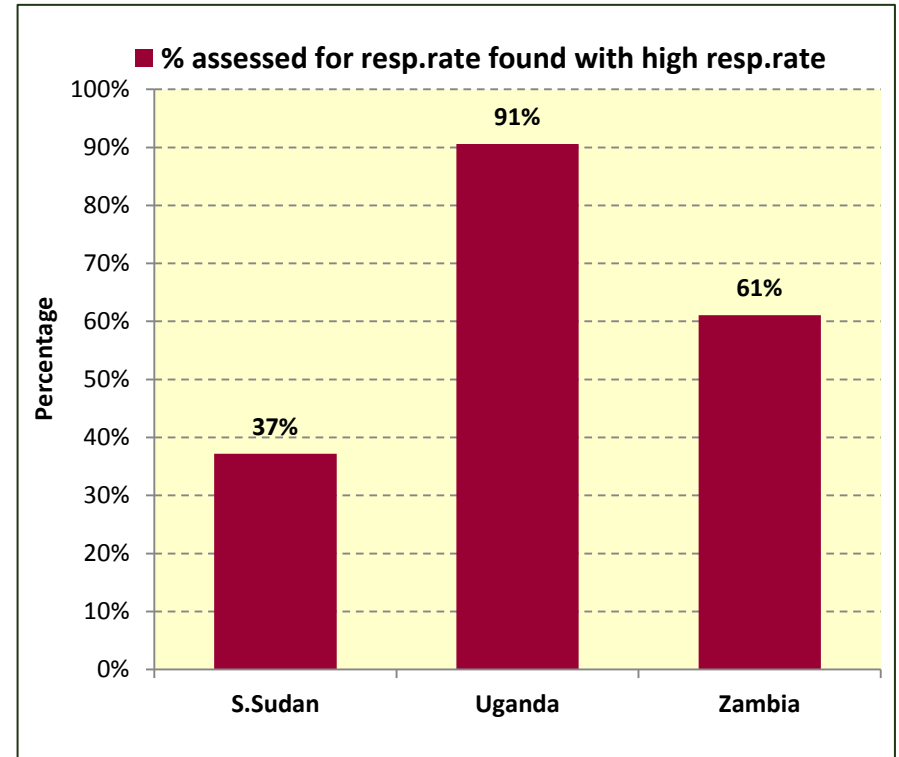


Uptake of diagnostic tests & positivity rates

Malaria



Pneumonia



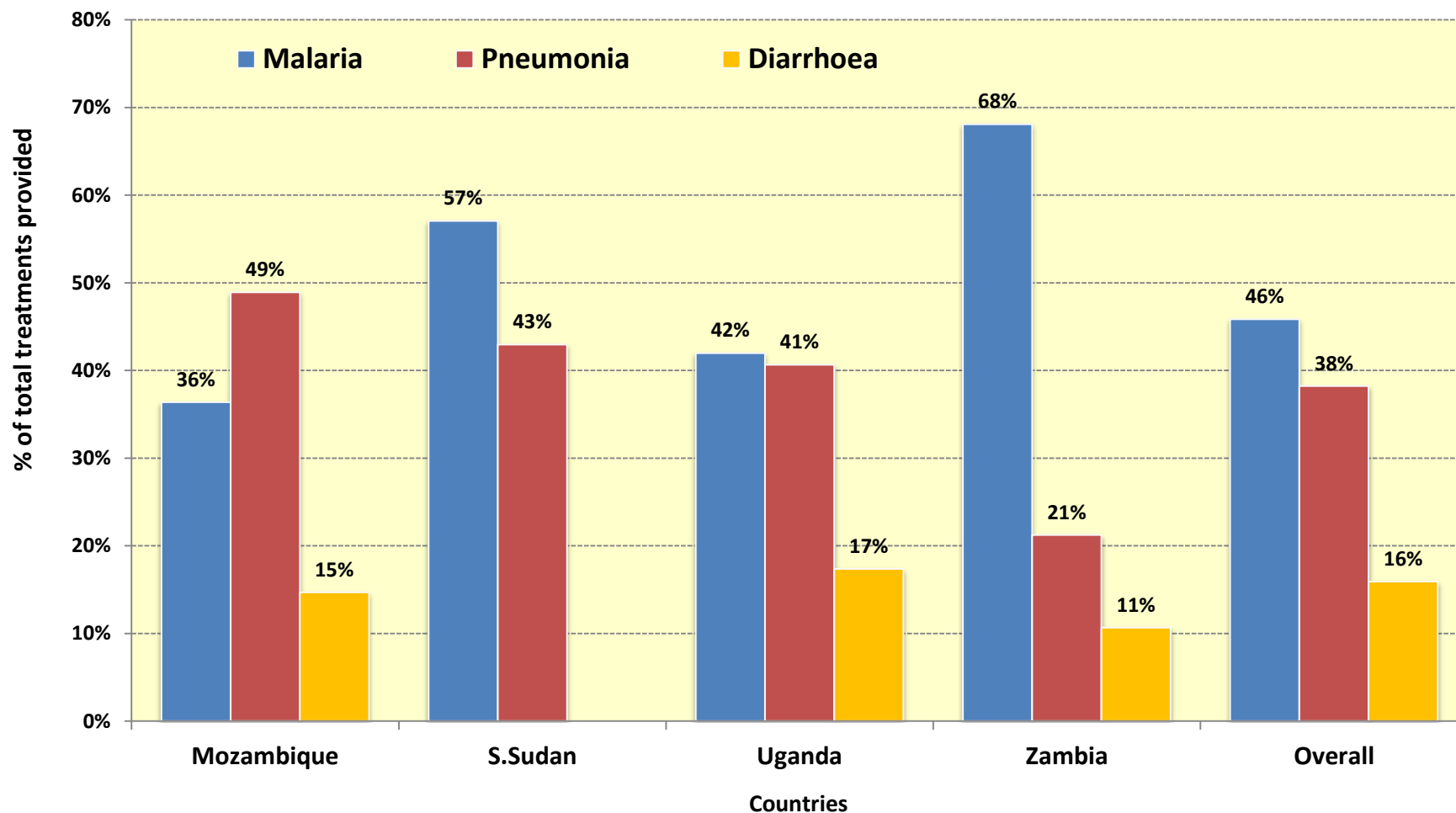
Cases seen & treatments provided by CHWs

Treatments (doses)	Mozambique	S. Sudan	Uganda	Zambia	Overall
ACTs	8,013	30,197	610,048	160,594	808,852
Amoxicillin	10,771	22,732	590,667	50,054	674,224
ORS	3,238	---	252,401	25,181	280,820
Zinc	---	---	263,156	8,997	272,153
Paracetamol	---	---	---	55,700	55,700
Total Treatments	22,022	52,929	1,716,272	300,526	2,091,749
Total cases seen	25,383	47,379	1,406,342	245,038	1,724,142

Adjusted for under reporting

	Mozambique	S. Sudan	Uganda	Zambia	Overall
Total Treatments	26,216	110,269	2,319,286	462,348	2,918,119
Total cases seen	30,218	98,706	1,900,462	376,982	2,406,368

Relative frequency of disease treatments



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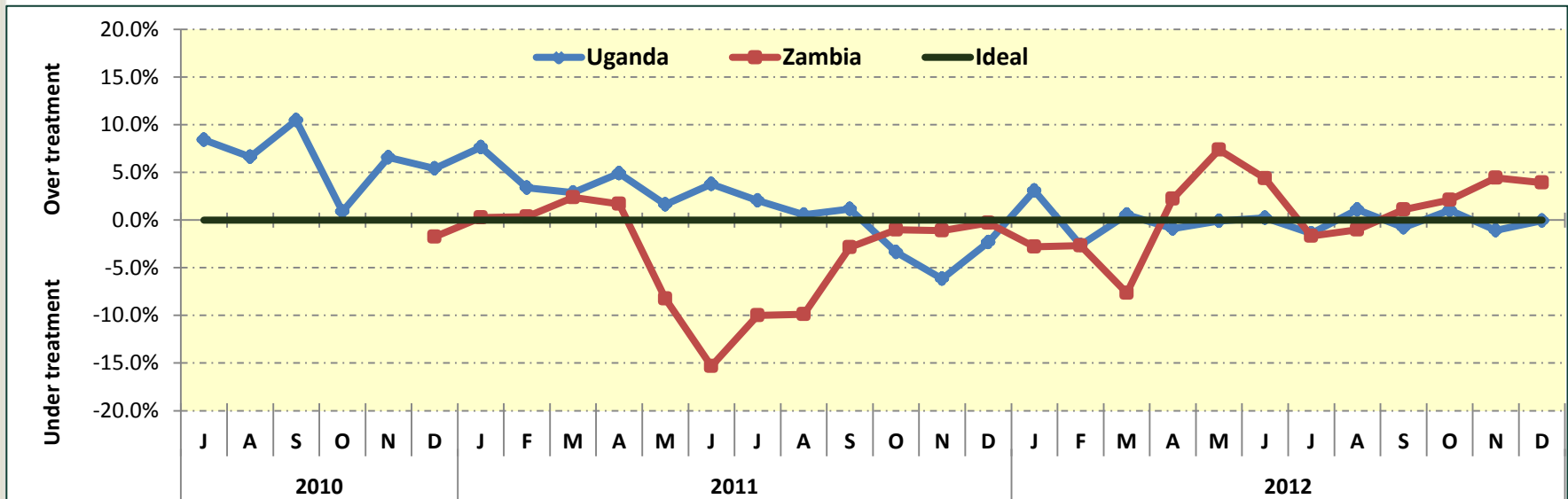
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Variation between test results & treatment

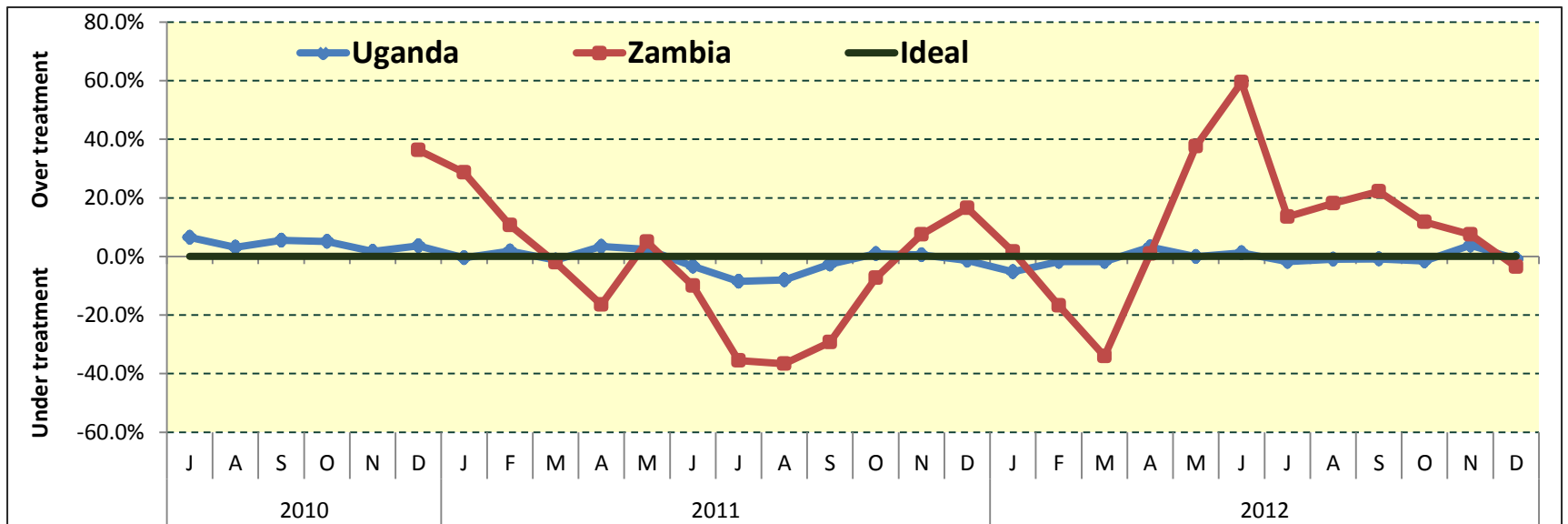
Malaria

- ACTs distributed should equal RDT positives i.e. no variation
- More ACTs than RDT positives would indicate over treatment
- Less ACTs than RDT positives would indicate under treatment



Variation between test results & treatment

Pneumonia



Project Evaluations

Project was evaluated using two approaches

■ Surveys

- Conducted at baseline and endline
- Main outcome, child mortality
- Other outcomes: child morbidity & treatment seeking behaviour

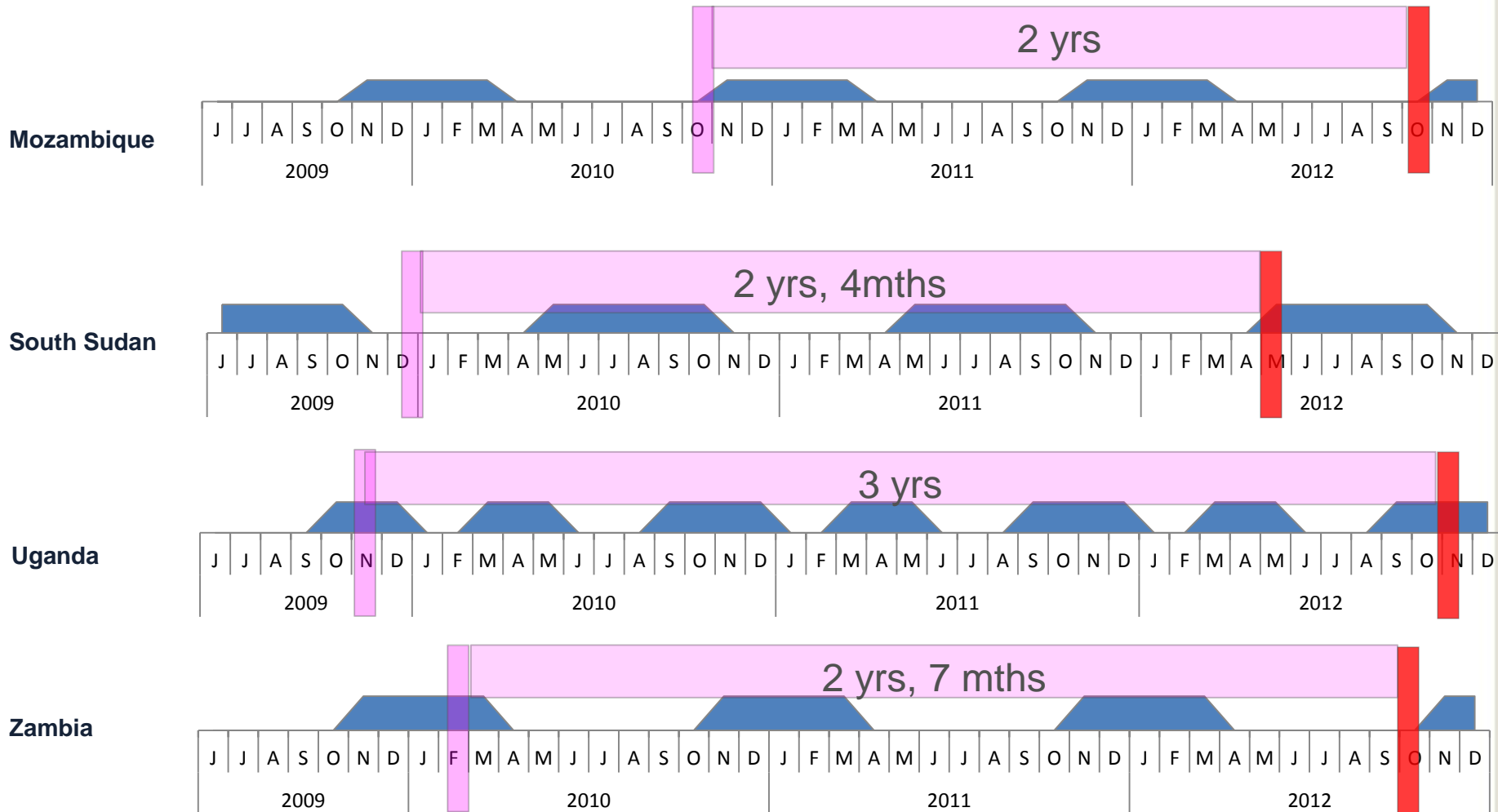
■ Modelling Impact – mortality and lives saved

- Impact modelled using Lives Saved Tool (LiST)

Surveys - Design & Methods

- Cross sectional household survey at each round (baseline & endline)
- Mortality sample required 4000 households (100 clusters)
 - Mortality survey only conducted at endline (using birth history)
- Child health sample required 1600 households (40 clusters)
 - Similar clusters at baseline surveyed at endline
- Used 2-stage cluster sampling technique
 - Sample clusters using probability proportionate to size, then households
- Data collection, processing & analysis followed standard Demographic & Health Surveys procedures

Surveys - Timelines



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Child Morbidity: 2 week disease prevalence

1. Reported Fever

country	Baseline	Endline
Mozambique	23.2 [19.1,28.0]	27.9 [25.4,30.5]
Uganda	37.5 [32.5,42.8]	30.8 [25.5,36.7]
Zambia	37.6 [31.2,44.4]	37.7 [33.5,42.1]

2. Reported ARI

country	Baseline	Endline
Mozambique	20.5 [16.6,25.1]	9.5 [8.0,11.1]
Uganda	21.8 [19.1,24.7]	31.5 [29.1,33.9]
Zambia	16.1 [13.5,19.1]	15.6 [13.2,18.4]

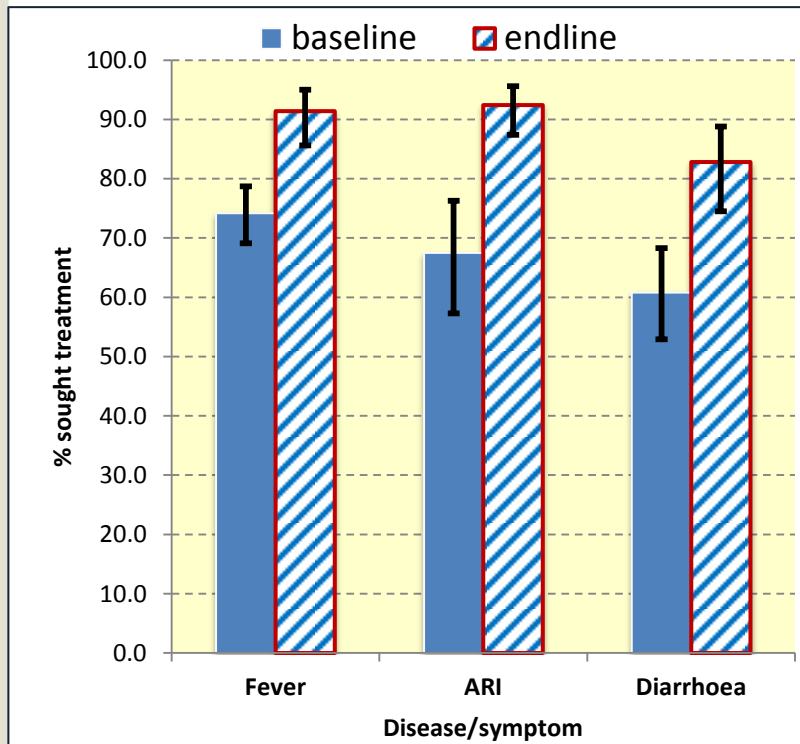
3. Reported Diarrhoea

country	Baseline	Endline
Mozambique	9.9 [7.9,12.4]	10.5 [8.9,12.5]
Uganda	16.9 [14.4,19.7]	14.8 [12.8,17.1]
Zambia	17.5 [14.7,20.7]	14.7 [11.6,18.4]

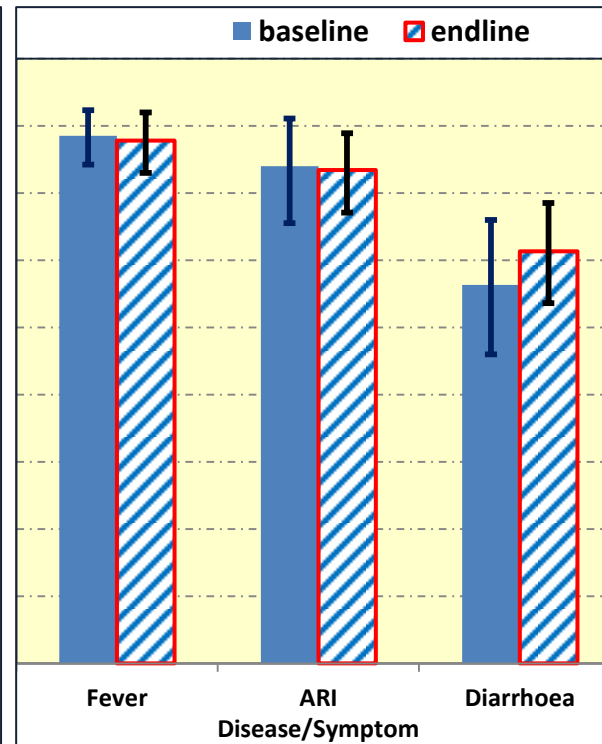
Treatment seeking behaviour:

■ Percentage of sick children who sought treatment

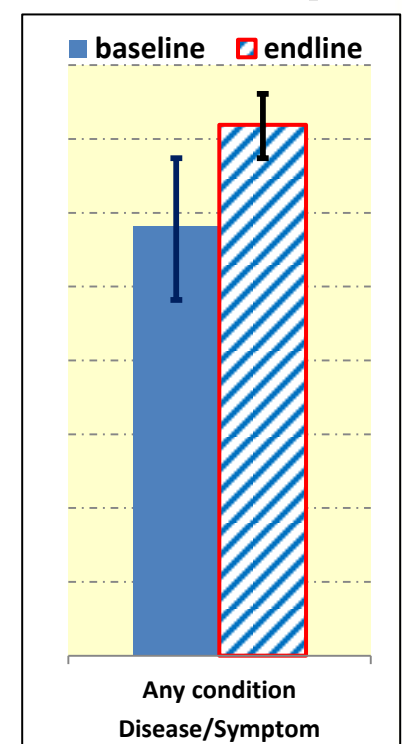
Zambia



Uganda



Mozambique



Treatment seeking behaviour

First point of contact in seeking care

1. Uganda

Source	Fever	
	Baseline	Endline
Public facilities	25.8	9.6
CHW	1.9	40.4
Private sector	68.9	44.3
Other	2.4	5.7

ARI	
Baseline	Endline
28.2	9.0
1.7	33.8
69.2	51.4
1.0	5.8

Diarrhoea	
Baseline	Endline
25.0	17.9
0.7	38.8
69.1	38.9
5.2	4.4

2. Zambia

Source	Fever	
	Baseline	Endline
Public facilities	78.3	24.7
CHW	16.1	68.8
Private sector	3.7	3.2
Other	1.9	3.4

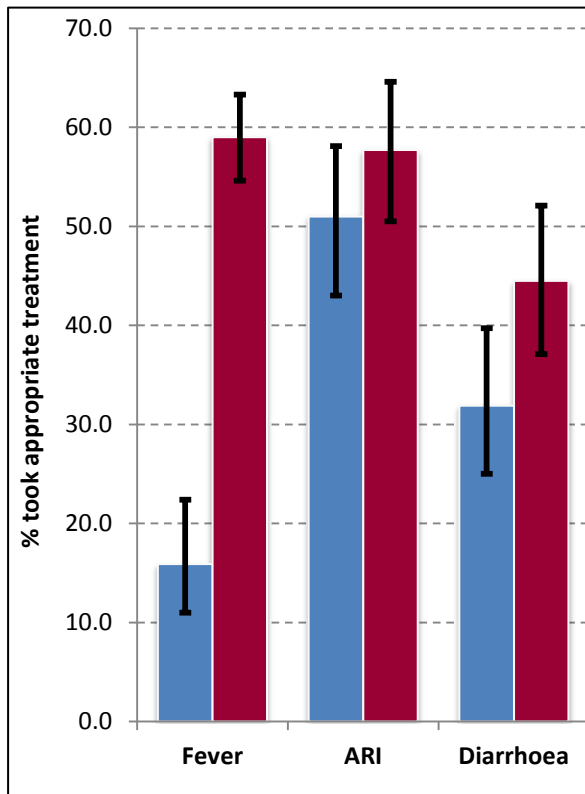
ARI	
Baseline	Endline
96.6	25.8
1.3	62.7
0.0	4.2
2.1	7.3

Diarrhoea	
Baseline	Endline
75.6	23.4
17.5	66.4
1.6	4.1
5.3	6.2

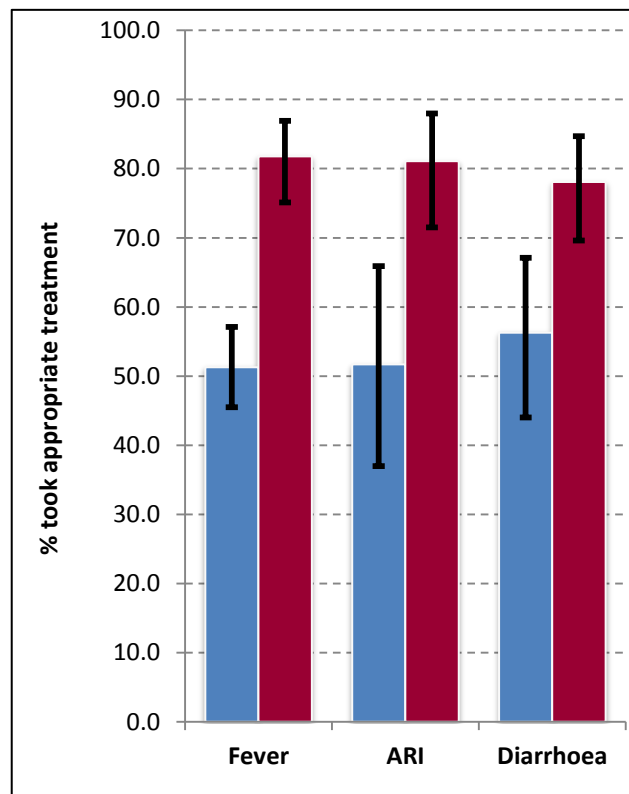
Received appropriate treatment

Percentage of children that received appropriate treatment

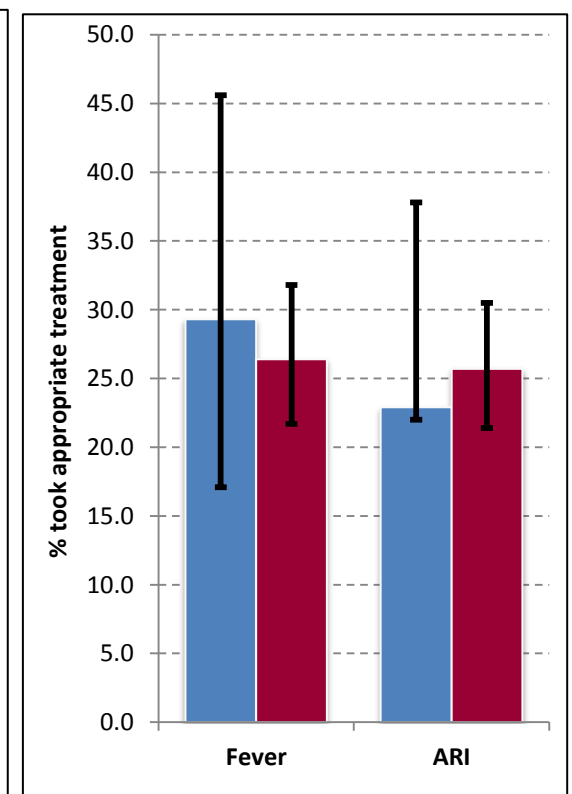
Uganda



Zambia



Mozambique



Baseline Endline

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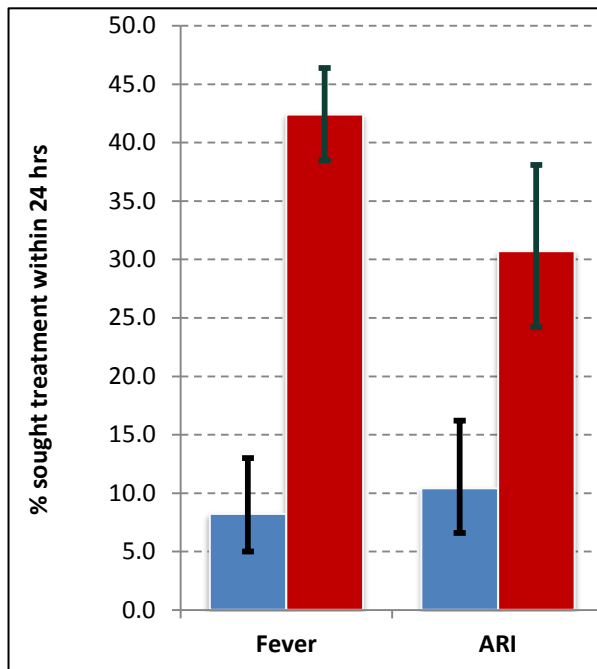
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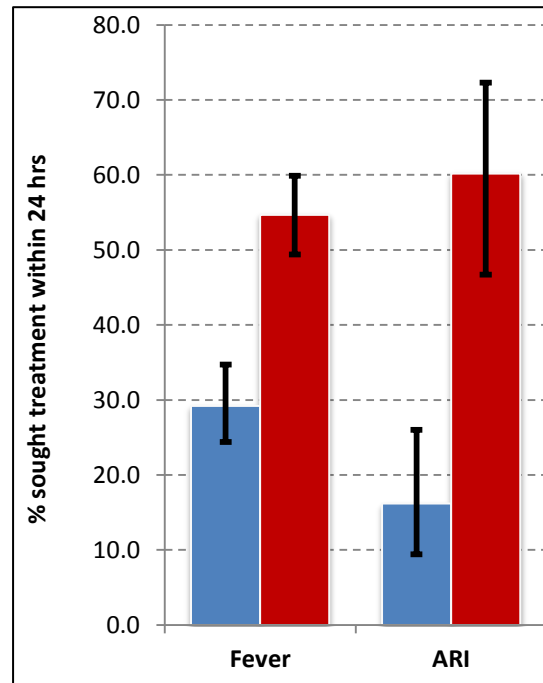
Timing of treatment

Treatment within 24 hours of onset of fever or ARI

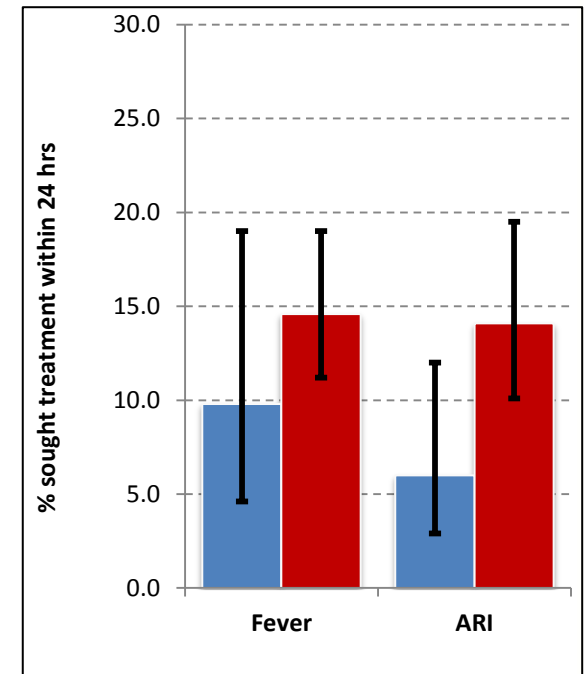
Uganda



Zambia



Mozambique



■ Baseline ■ Endline

Impact Modelling-LiST

- **LiST (Lives Saved Tool)**
 - Part of a compendium of modelling modules (SPECTRUM) that aid projection of impact of existing interventions
 - Computer programme module focusing on child survival
 - Developed under collaboration of
 - Futures Institute,
 - CHERG
 - International Child Development Steering Group
 - How it works: projects changes child survival based on changes of coverage of child health interventions

LiST: Modelling Impact of ICCM

■ Model Inputs

- Population covered by age category, population growth rate
- Child health indicators before & after ICCM implementation
- Expected trend in non implementation areas

■ Model outputs

- Changes in mortality estimates during the period
- Lives saved (deaths averted)
- Projected changes over a longer period (5 years)

LiST: Modelling Impact of ICCM

Results

1. Uganda

indicator	Implementation period				projections		
	2009	2010	2011	2012	2013	2014	2015
U5 Mortality rate	100	96	90	86	79	75	72
Lives saved (1-59 months)	0	151	297	439	574	614	629
% deaths averted	4%				7%		

2. Zambia

indicator	Implementation period				projections		
	2009	2010	2011	2012	2013	2014	2015
U5 Mortality rate	102	96	88	81	75	73	72
Lives saved (1-59 months)	0	103	207	317	430	479	409
% deaths averted	7%				12%		

LiST: Modeling Impact of ICCM


■ Results

1. Mozambique

indicator	Implementation period					projections	
	2009	2010	2011	2012	2013	2014	2015
U5 Mortality rate	117	111	104	97	91	87	84
Lives saved (1-59 months)	0	139	278	418	555	656	612
	% deaths averted				5%	9%	

Learning

- It is feasible for non-medical community-based agents to deliver life saving medicines according to national guidelines
- Community-based agents can provide a complementary & acceptable source of effective treatment
- Access to timely treatment of sick children has increased with the introduction of ICCM
- Model projections illustrate a potential for mortality reductions with sustained ICCM

A close-up photograph of a group of children, likely in a developing region, smiling and looking upwards. The children are dark-skinned and appear to be of various ages. The background is slightly blurred, showing other people and a simple outdoor setting. The overall mood is positive and hopeful.

ICCM is a feasible approach for increasing access to effective treatment for childhood illnesses; urgent scale up is needed to enable countries to achieve MDG 4



a decade in communicable disease control and child health

www.malariaconsortium.org

Thank you



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