

J.C. FLOWERS FOUNDATION



Cross-Border Effectiveness: 10 Years of Experience in Zambia

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**ROLL BACK
MALARIA**



ISDELL:FLOWERS CROSS BORDER MALARIA INITIATIVE

Background

J.C. FLOWERS FOUNDATION

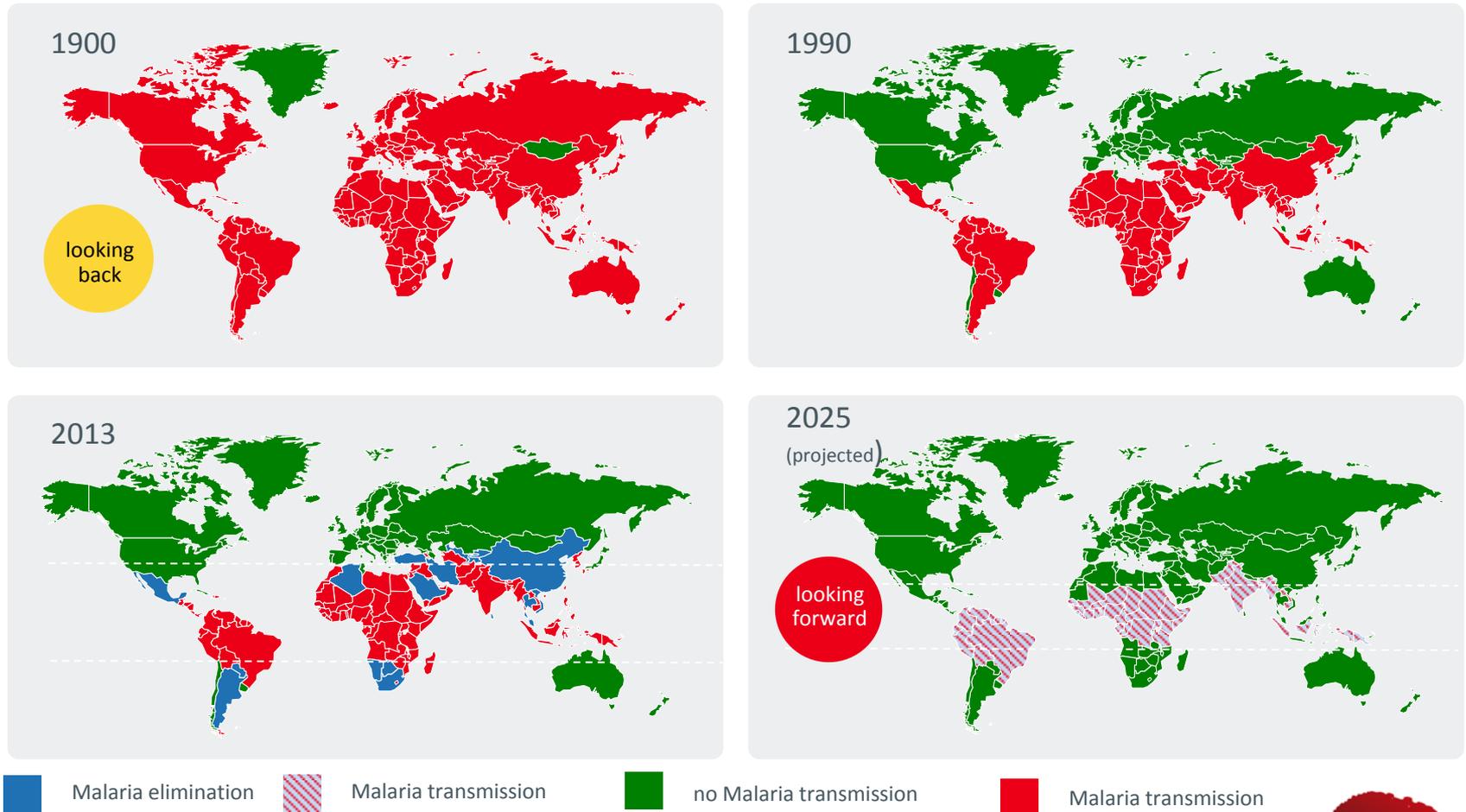


- J.C. Flowers Foundation – founded by Chris Flowers – has worked extensively to reduce malaria since co-launching NetsforLife in 2004 in Zambia.
- The focus has always been to provide services to hard to reach – last mile communities.
- Since 2004, the focus has gradually shifted from malaria control to elimination and the geography has shifted to a focus on cross border.
- In 2010, determined to bring comprehensive malaria programs to these “last mile” communities, Chris Flowers and Neville Isdell founded the **Isdell:Flowers Cross Border Malaria Initiative**, with a focus not just on malaria control but on elimination.



What Drives Us

1. Shrinking the Malaria map

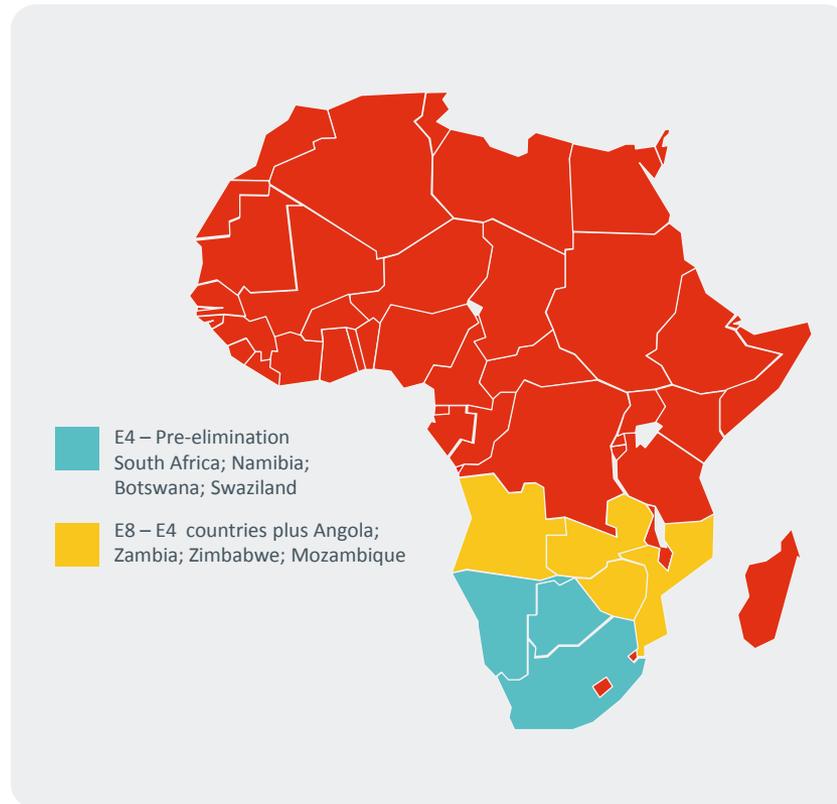


Source: UCSF Global Health Group

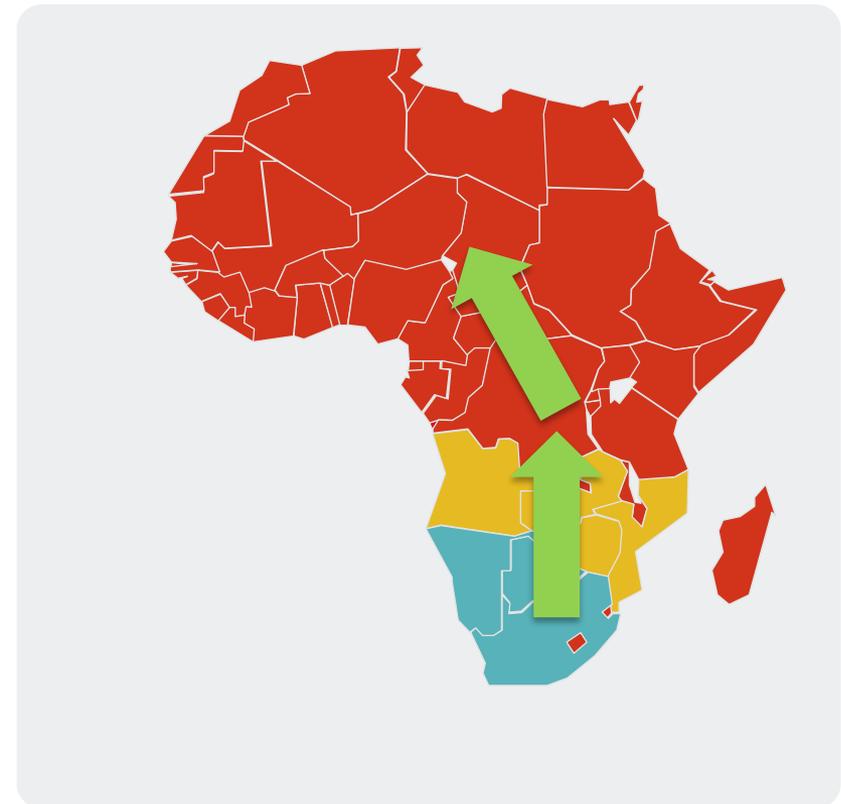


What determines our Geography

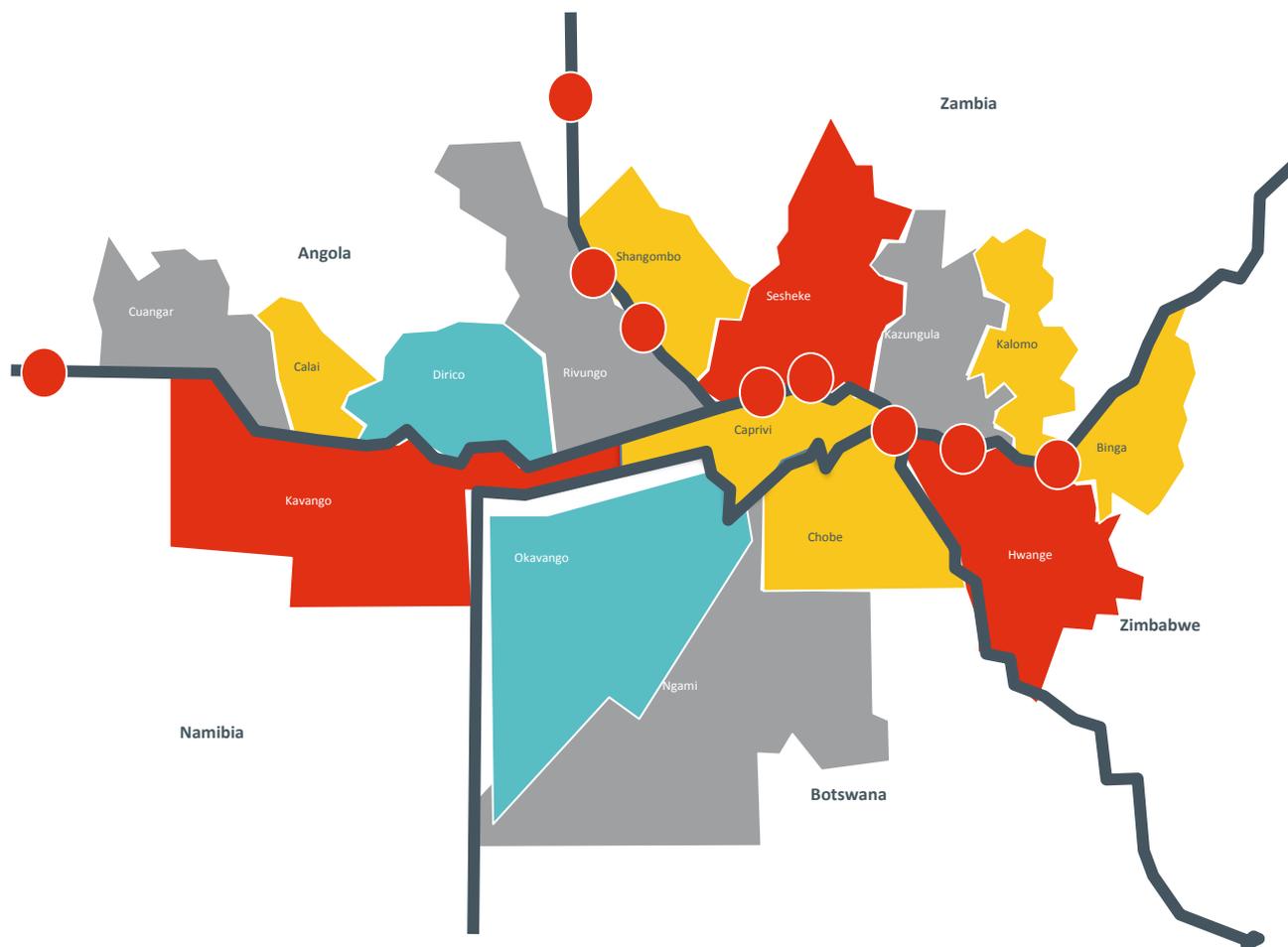
2. Focus on E4 and then E8 countries



3. Start from the South, move North then West



Focus on Cross Border Areas



Since 2010, the Isdell:Flowers Cross Border Malaria Initiative has worked in 11 border communities in Zambia



What is the Process?

Governments, Church & Isdell:Flowers identify key communities in border areas



We map border areas to determine what and where needs are, training field staff and clergy along the way



We conduct ongoing tracking and monitoring



We implement Activities (net distribution, BCC, etc.) in line with MOH Strategic Plan



We harmonize policies and practices across borders



Zambia - Country Development Indicators

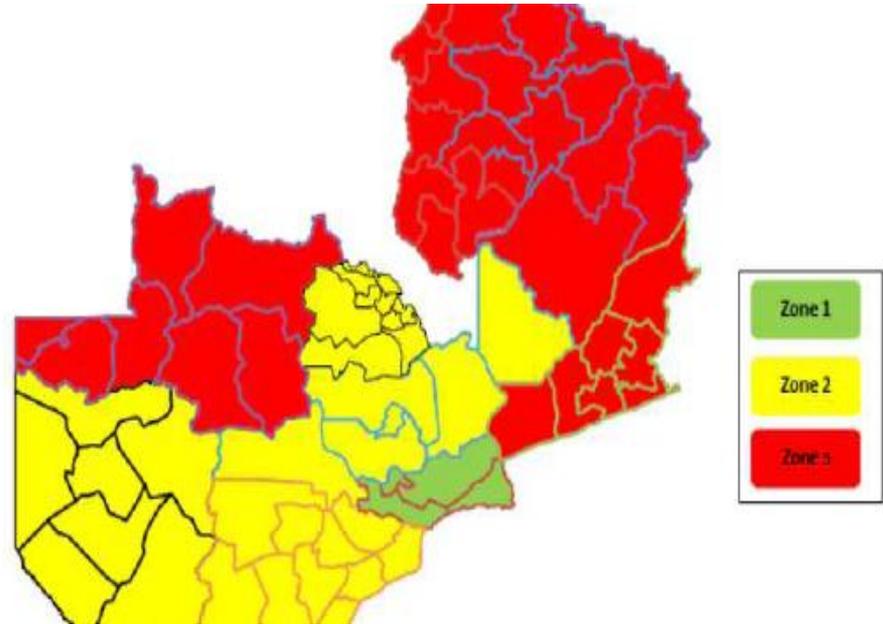
- 2014 estimated population of 14.6 million (2010 census), 40% urban and 60% rural.
- Progress in meeting Millennium Development Goals (MDG) targets for 2015:
 - Under-five mortality has fallen from 192 deaths per 1,000 live births in 1992 to 89 deaths per 1,000 live births in 2012 (UNICEF)
 - Zambia has exceeded the MDG target for HIV/AIDS prevalence of 15.6% with an estimated 14.3% of the population living with HIV/AIDS.
- Despite these positive trends, Zambia continues to face major challenges.

Malaria Situation

- Malaria transmission occurs throughout the year with the peak during the rainy season, between November and April.
- The disease remains endemic but with wide variation in prevalence of infection across districts (Malaria Indicator Survey - MIS 2012).
- Malaria caused by the four main Plasmodium species that infect humans, with Plasmodium falciparum accounting for 98% of all infections.
- All ten provinces of Zambia are endemic for malaria with 90% of the population at risk.

Malaria Epidemiological Zones

- The NMCC first classified the country into three malaria epidemiological zones to better focus their efforts.
- Our work focuses in Zone 2: Areas where sustained malaria prevention and control has markedly reduced transmission, and parasite prevalence is at or under 14% in children <5 at the peak of transmission



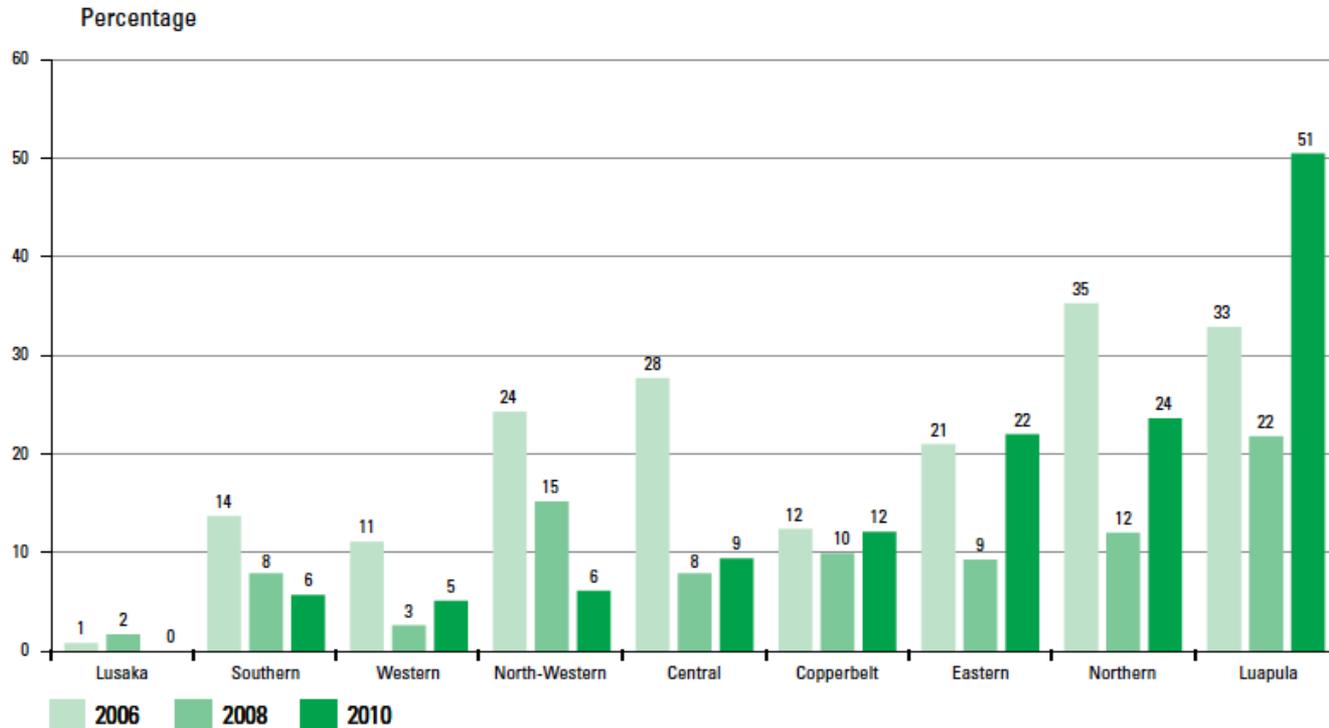
Malaria Burden

- Overall, the number of reported malaria cases (clinical and confirmed) to the National Health Management Information System (HMIS) increased from 3,250,128 to 4,892,813 (2009-2013).
- There have been substantial declines over the past three years of reported inpatient malaria deaths for all ages from 3.9 per 10,000 to 2.8 per 10,000 (2010- 2012).
- Malaria parasite prevalence by smear microscopy has declined.
- The national-level numbers are not representative of all the trends across the country. For example:
 - The largest relative decline in parasite prevalence by microscopy was observed in Luapula Province (51% - 32%) compared to 2010.
 - North-Western Province had the largest relative increase in parasite prevalence (6% - 17%), while Northern Province remained relatively unchanged (24%).

Prevalence by Province 2006-2010

Malaria parasite prevalence among children under five, by province, Zambia, 2006–2010

This figure illustrates the fact that reductions in prevalence could be sustained except where ITNs could not be replaced due to lack of resources, most notably in Eastern, Northern and Luapula provinces.



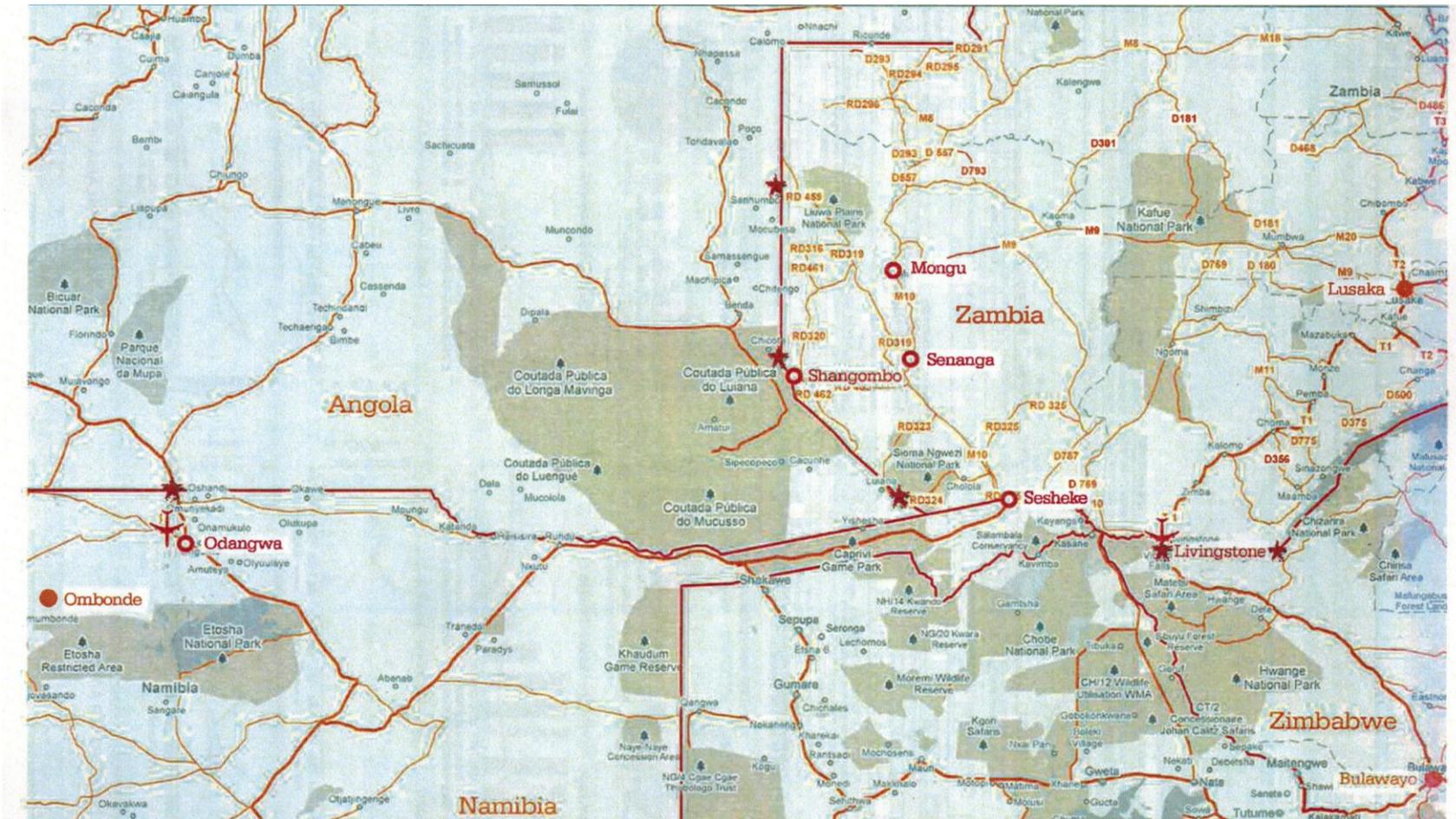
Source: MIS.

Malaria Indicators

	2006	2010	2012
ITN Ownership	38%	64%	68%
ITN Usage (<5)	24%	50%	57%
ITN Usage (Pregnant)	25%	46%	58%
1:1 Net usage per sleeping space	--	34%	55%
IPTp	59%	70%	72%
ACT	18%	76%	85%
Parasitemia (Microscopy)	22%	16%	15%



Where We Work



Current project sites in Zambia

Country	Province	DISTRICT	PROJECT SITE
Zambia	Western	Mongu	Simulumbe
	Western	Mongu	Namaumba
	Western	Senanga	Lui River
	Western	Sikongo	Sikongo
	Western	Sesheke	Katima
	Western	Sesheke	Zambezi
	Western	Sesheke	Mkusi
	Western	Sesheke	Mulimambango
	Western	Sesheke	Silumbe
	Western	Shangombo	Shangombo central
	Western	Shangombo	Sipuma
	Southern	Kazungula	Kazungula Central
	Southern	Kazungula	Mambova
	Southern	Mulobezi	Mulobezi
	Southern	Livingstone	Libes (Nakatindi and Kashita)
	Southern	Livingstone	Libuyu

I:F CBMI Inputs by Year

	LLIN's Distributed	# People Reached by LLIN's	RDT's	Direct Beneficiaries
2010	18,000	32,400	8,500	58,900
2011	59,000	106,200	14,784	179,984
2012	80,000	144,000	9,000	233,000
2013	11,625	20,925	18,553	51,103
2014	61,200	110,160	2,000	173,360
Totals	229,825	413,685	52,837	696,347



Rapid response. Use of technology. Tracking metrics.



Key focus on tracking metrics & community surveillance



Rapid response based on immediate diagnosis



Map by cellphones and target “hot spots” to better target scarce resources



Extensive metrics and evaluation for regular impact assessment of the Cross Border Programme



M&E Data (Sample)

Isdell:Flowers Cross-border Malaria Initiative - M&E Indicators

		Indicator	Data collection frequency	Reporting Frequency	Source	Target	Baseline	
							DATE	VALUE
Impact								
All	1	To Control Malaria (reduce morbidity and mortality) or Eliminate malaria (Zero cases of malaria)	Incidence of malaria (confirmed cases per 1,000)	Monthly	Annually	MOH		
Namibia	2		Total # of confirmed malaria cases	Monthly	Annually	MOH	0	
All	3		Number of confirmed malaria deaths	Monthly	Annually	MOH	0	
Outcome								
All	4	Universal coverage of LLINs (control)	Percentage of households with at least one LLIN per two people	Monthly, Baseline/midline/end term survey	Annually	Surveys (baseline, midline, endline)	90%	
	5		Percentage of bedspaces in targeted communities that are covered with LLINs	Monthly, Baseline/midline/end term survey	Annually	Surveys (baseline, midline, endline)	85%	
All	6		Percentage of people in targeted communities who reportedly slept under an LLIN the previous night	Monthly, Baseline/midline/end	Monthly	Routine monitoring data	85%	
Country specific	7		Percentage of pregnant women in targeted communities who reportly slept under an LLIN the previous night	Monthly, Baseline/midline/end	Annually	Surveys (baseline, midline, endline)	90%	
Country specific	8		Percentage of children under 5 years of age in targeted communities reported to have slept under an LLIN the previous night	Monthly, Baseline/midline/end term survey	Annually	Surveys (baseline, midline, endline)	90%	
All	9	Improved knowledge, attitudes and behaviour related to Malaria and Malaria control interventions.	Number of people reached with BCC messages through community meetings, drama, school performances, etc.	Activity reports	Quarterly	Routine monitoring data		
All	10		Percentage of households reached by "malaria control volunteers" with malaria preventative messages in targeted communities	Monthly, Baseline, midline, end term.	Monthly	Routine monitoring data	85%	
All	11		Percentage of people in target communities who know at least 3 symptoms of malaria	Surveys - baseline, midline, end term	Annually	Surveys (baseline, midline, endline)	85%	
	12		Percentage of people in target communities who know 3 or more ways to prevent malaria	Surveys - baseline, midline, end term	Annually	Surveys (baseline, midline, endline)	85%	
	13		Percentage of people in target communities who know the treatment for malaria	Surveys - baseline, midline, end term	Annually	Surveys (baseline, midline, endline)	85%	
Process								
All	14a	LLIN distribution	Number of LLINs distributed					
All	14	Harmonization	Number of cross-border meetings conducted at partner level	Activity reports, Minutes from meetings	semi-annually	Partner reports		
All	15		Number of BCC/IEC messages and/or training materials shared between partners across borders	Activity reports	semi-annual	Partner reports		
All	16		Number of trainings/activities conducted in conjunction with cross border partners	Activity reports	semi-annual	Partner reports		

Implemented new M&E System- Training of Volunteers



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AKROS & Isdell:Flowers Partnership

dhis2

National Malaria Control Centre

Apps

Profile

Profile

Messages

Interpretations

Groups

Search for users, charts, maps, reports and resources

Search

Add

Manage

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District Dashboard_Zimba

HMIS malaria

Isdell Flowers

Lusaka Clinic Logins

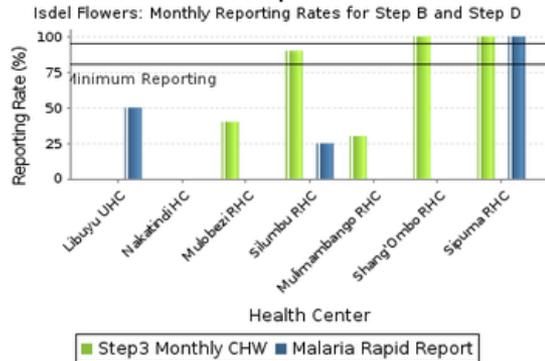
Provincial Dashboard

Reporting Rates (Step D)

Step C (MDA Campaign areas)

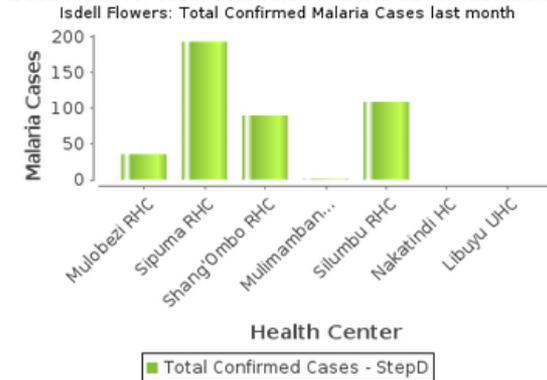
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Isdell Flowers: Monthly Reporting Rates for Step B and Step D



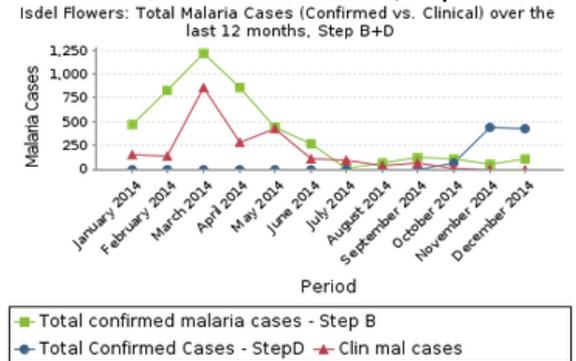
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Isdell Flowers: Total Confirmed Malaria Cases last month



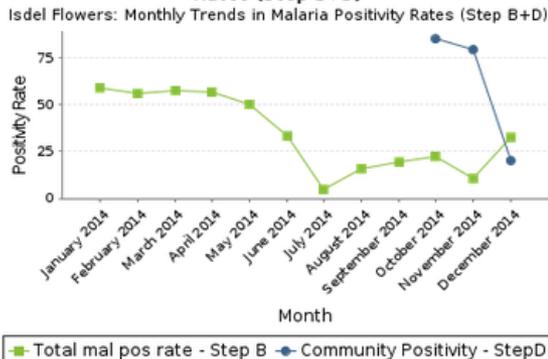
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Isdell Flowers: Total Malaria Cases (Confirmed vs. Clinical) over the last 12 months, Step B+D



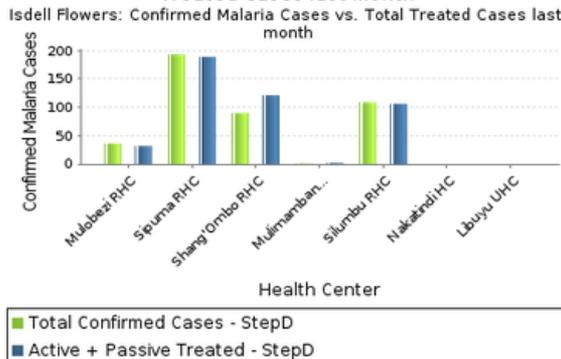
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Isdell Flowers: Monthly Trends in Malaria Positivity Rates (Step B+D)



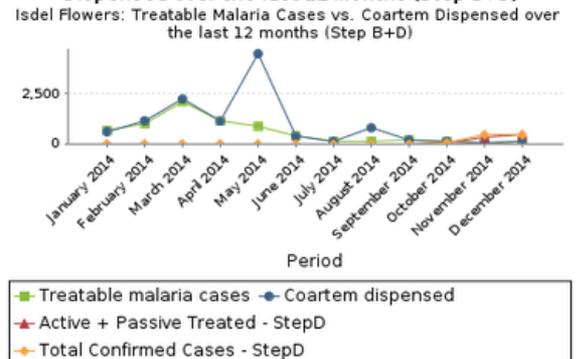
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Isdell Flowers: Confirmed Malaria Cases vs. Total Treated Cases last month

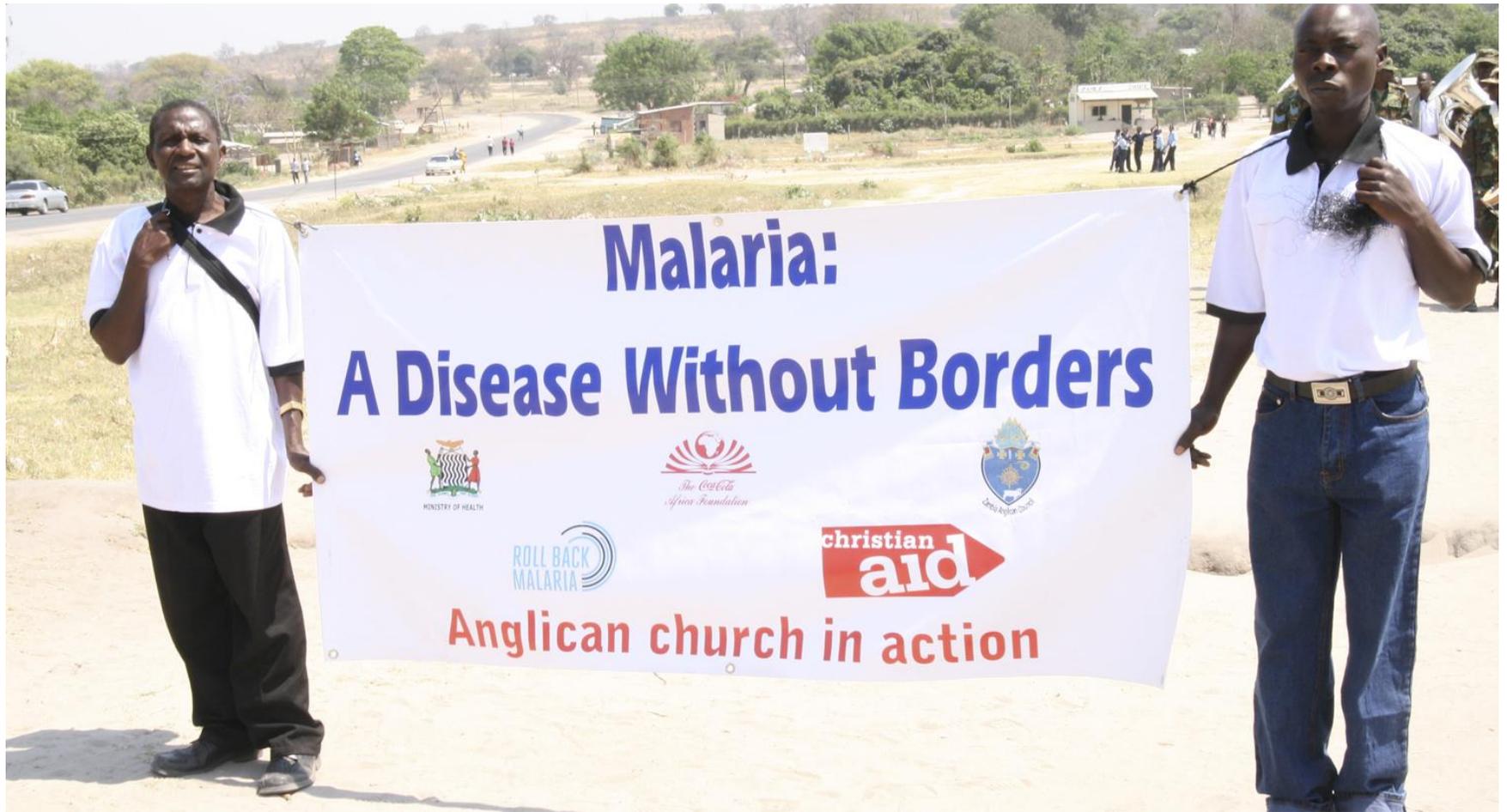


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Isdell Flowers: Treatable Malaria Cases vs. Coartem Dispensed over the last 12 months (Step B+D)



RESULTS



WESTERN PROVINCE

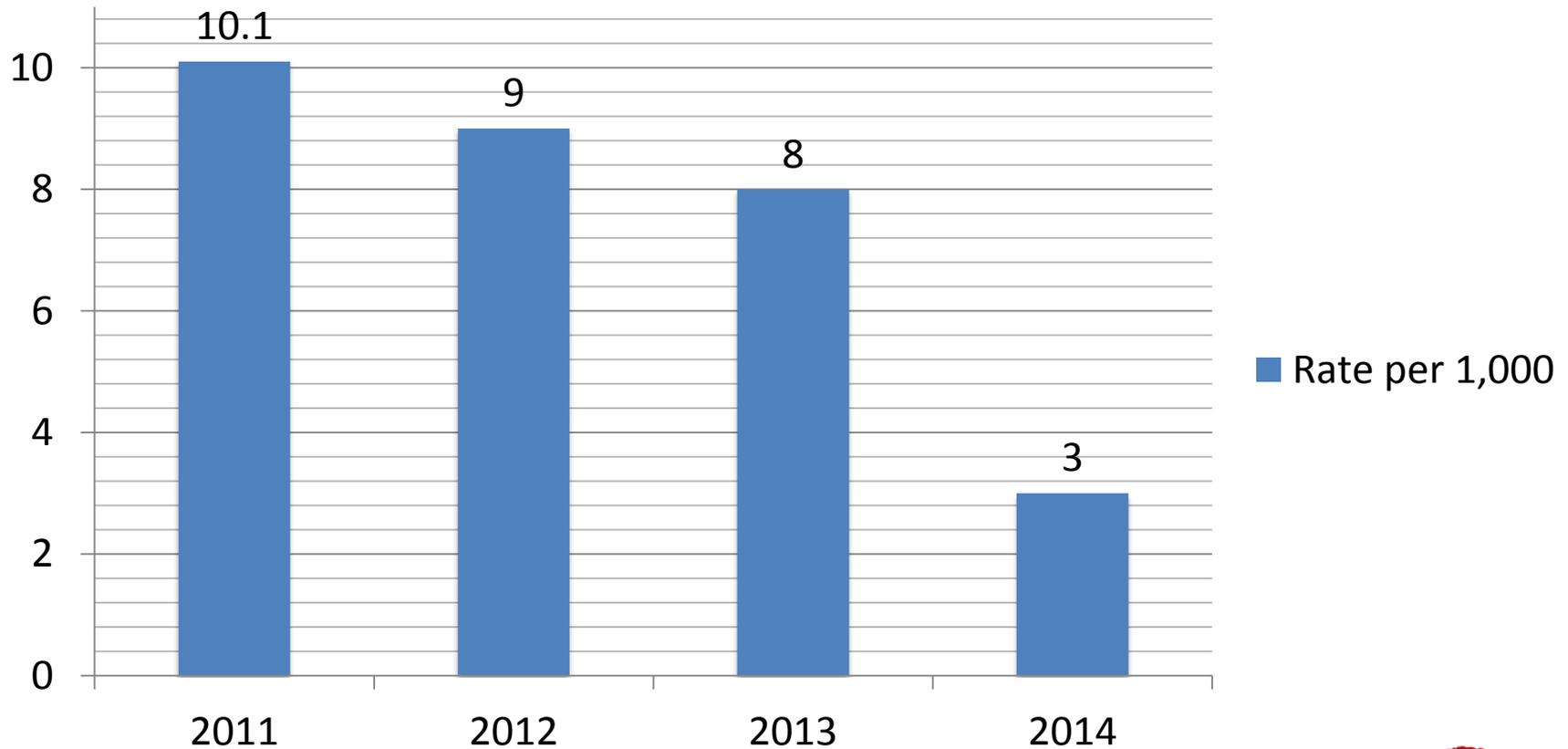
Malaria Incidence Rates 2010-2103 by Health Facility

HEALTH FACILITY	2010	2011	2012	2013
Simulumbe	7.1	27	79.8	88.6
Sipuma	42.5	12.6	44.3	21.9
Shangombo	1.5	9.3	27.8	0
Senanga – Lui RIVER	0.21	7	22.8	11.5
Sesheke - Katima	3.5	0.97	5.2	21.1
Sesheke - Mkusi	7.7	12.7	88.4	98.8
Sesheke - Zambezi	3.6	1.5	37.5	15.9
Mulimambango	3.1	1.7	1.9	18.2

SOUTHERN PROVINCE

Livingstone District

Malaria Incidence Rate



SOUTHERN PROVINCE

Livingstone District 2011-2014

District Picture

CASES	2011	2012	2013	QTR 1 2014
Confirmed	773	1215	1239	468
Clinical	684	98	115	24
Mortality (all ages)	0	0	0	0
Mortality <5	0	0	0	0
Mortality in Pregnancy	0	0	0	0

SOUTHERN PROVINCE, Livingstone District

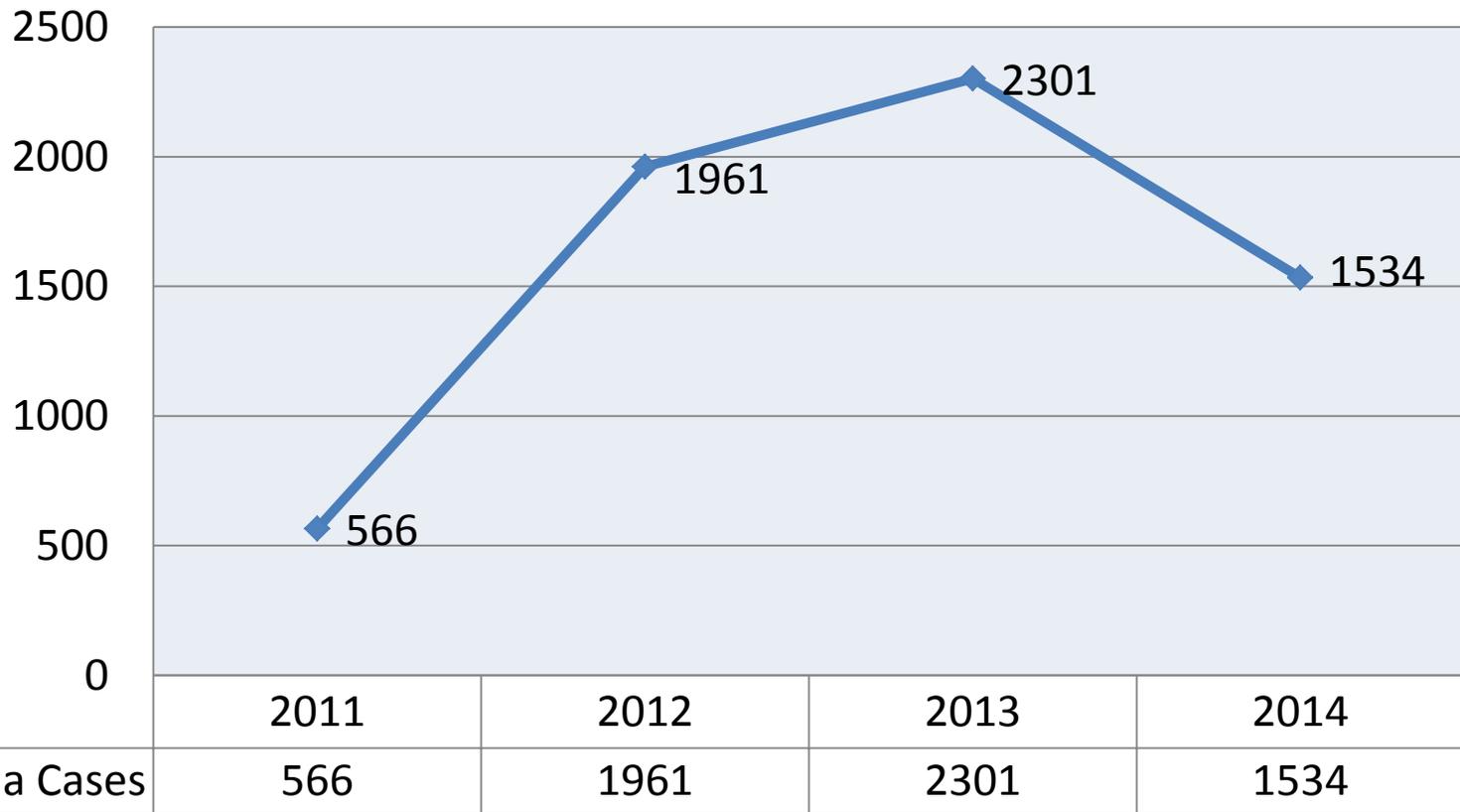
Malaria Cases By Health Centre 2011 -2014 (1ST QTR)

HEALTH FACILITY	2011	2012	2013	2014 QTR 1
AIPORT	20	33	19	1
BOMA	36	39	97	42
DALICE	43	88	52	18
DAMBWA NORTH	37	25	58	9
HILCREST	0	22	32	75
LIBES	38	68	139	12
LIBUYU	86	106	135	78
LINDA	122	85	75	31
GENERAL HOSPITAL	476	447	215	20
MAHATMA GANDHI	192	203	197	73
MARAMBA	289	132	111	26

SOUTHERN PROVINCE

Kazangula District

Malaria Cases



Challenges and Lessons Learned

- Difficulties of data collection
 - We believe our new system will provide real time quality data that can be shared with partners
- Understanding if prevalence is increasing in some areas or if the data collection better.
- Move from Control to Elimination
 - BCC and Surveillance: how to keep momentum of workers as incidence decreases
- Sustainability



Sustaining the Gains

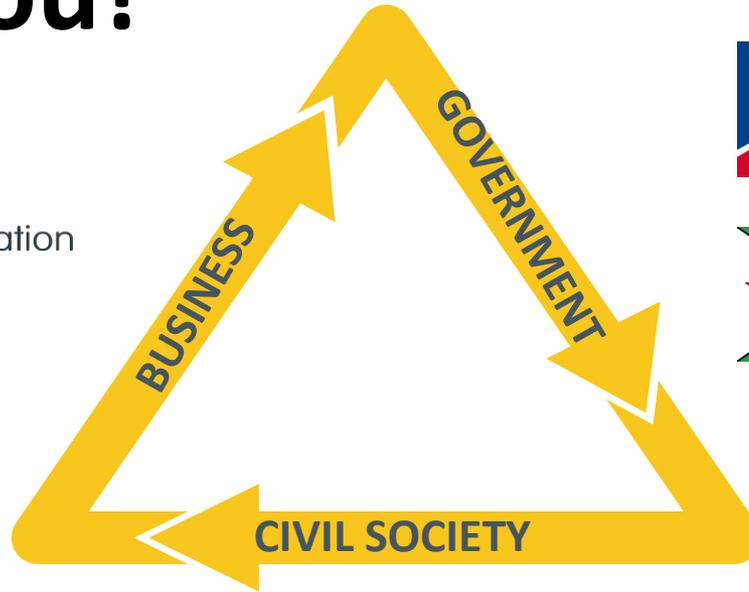
- Surveillance and M&E
- Working closely with MOH
- Working within DHIS2 system which feeds into HMIS
- Cell data reporting for elimination
- Messaging
- Partnerships with other NGOs, Governments, and Communities



Thank you!

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Zambia Anglican Council



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