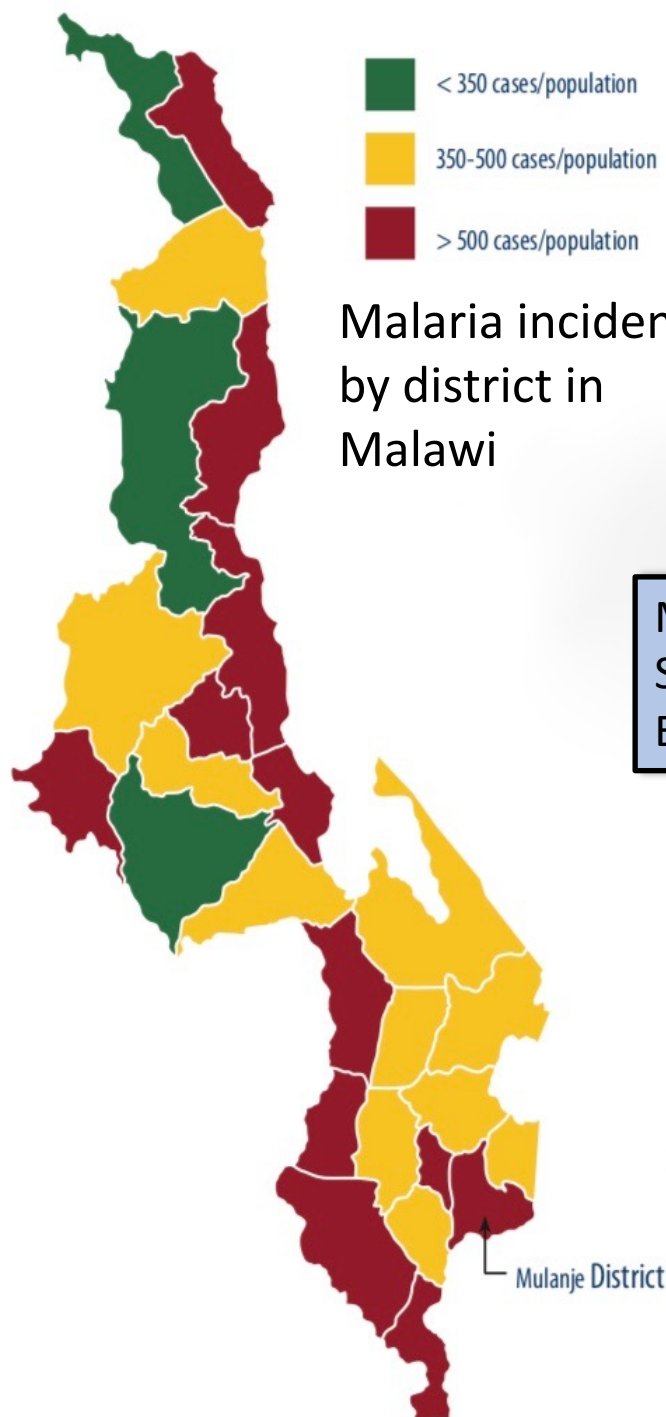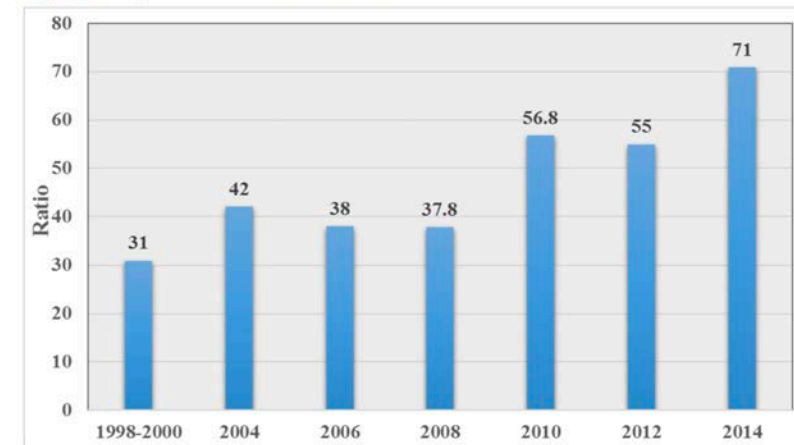# Partnering for Impact

Dr Ruth Shakespeare
Mulanje Mission Hospital
Malawi

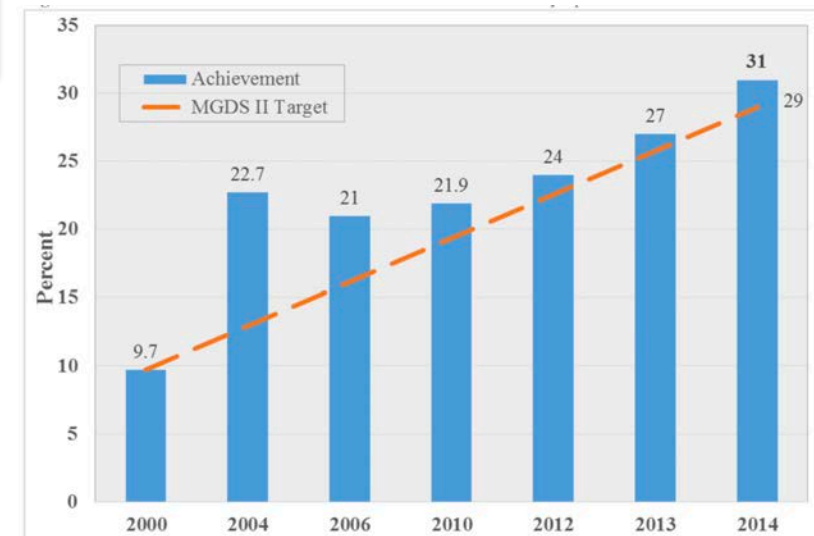Malaria incidence by district in Malawi

Mulanje District

Malawi:
Source: UNDP Malawi MDGs Endline Report 2017

% households with at least one ITN

MDG 6: access to malaria treatment within 24hrs of onset of symptoms

Mulanje
District
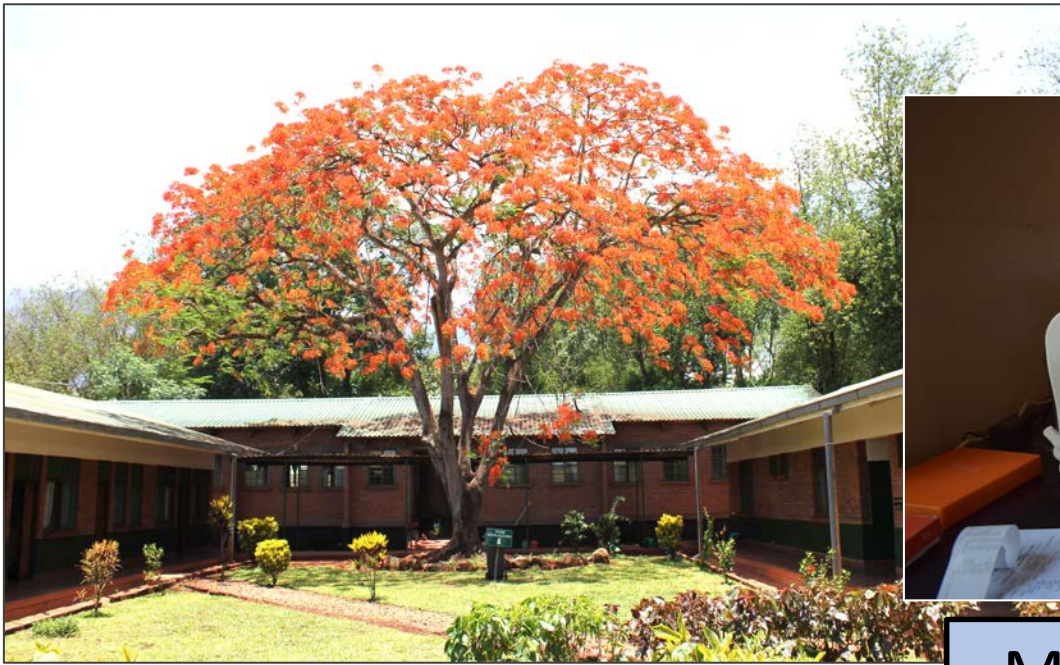
Mulanje Mission Hospital

Malaria cases per 100 population by village before IRS

Av. malaria incidence
10.9 /100 population.
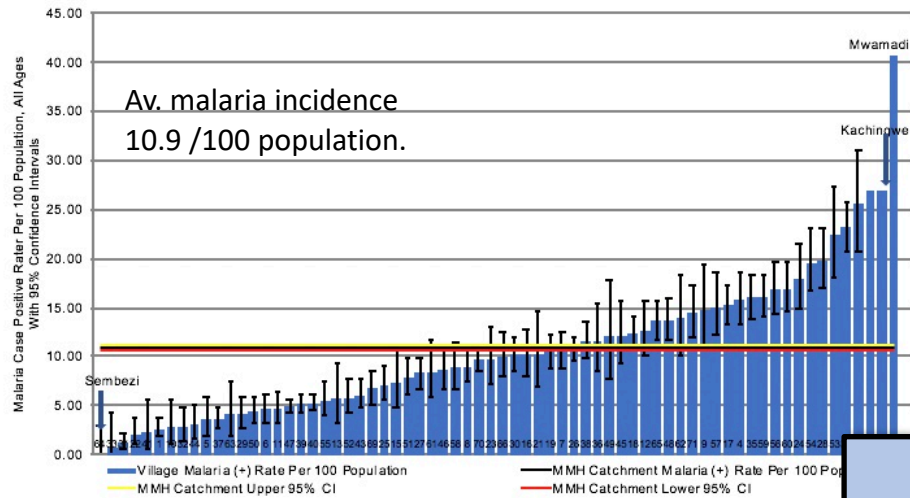
Villages with Statistically Lower, Similar and Higher Rates Compared to the Catchment Average Rate:

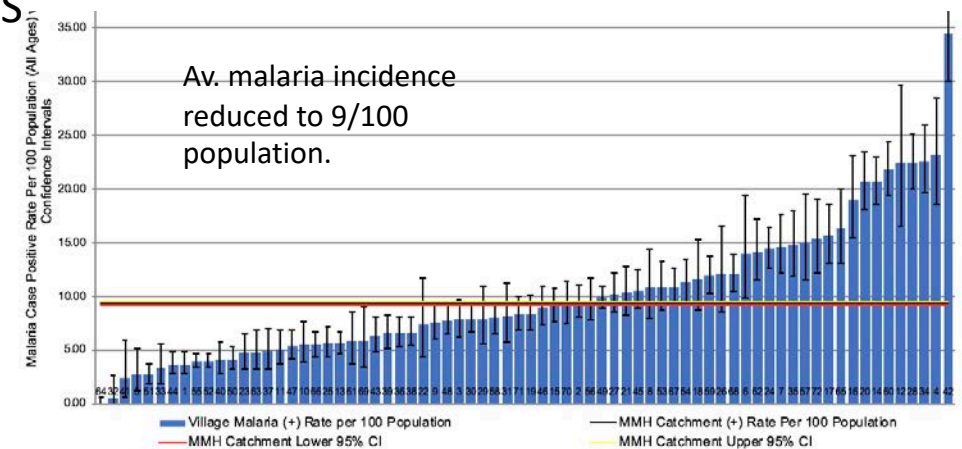| #	Village	#	Village	#	Village
1	Bokosi	26	Makoloma	49	Namputu
4	Chigwembere	27	Makwale	50	Nankhumwa
5	Chikwenda	28	Mamera	51	Ndala
6	Chilembwe	29	Mandanda	52	Ngolowera
7	Chilenga	30	Mangani	53	Ng'oma
8	Chilungo	31	Manyangala	54	Njema
9	Chitambi	32	Mataka	55	Nkhonya
10	Demula	33	Mbwina	56	Nkhuku
11	Ekhamuno	34	Misanjo	57	Nkumbi
12	Gilbert	35	Misyenje	58	Nkutha
13	Gulumba	36	Mitumbira	59	Robeni
14	Kachingwe	37	Mmina	60	Salamba
15	Kadewere	38	Mphika	61	Salimu
16	Kandulu	39	Mponda	62	Samson
17	Kang'oma	40	Musisi	63	Sapuwa
18	Kathebwe	41	Mwachumu	64	Sembezi
19	Khoviwa	42	Mwamadi	65	Sikoya
20	Kumponda	43	Mwanamvula	66	Sitolo
21	Kunthanguwo	44	Nakhutho	69	Tchaluwa
22	Liwaya	45	Naliya	70	Waluma
23	Lowa	46	Namakhutcha	71	Wasi
24	Luwanje	47	Namatingwi	72	Zipangani
25	Majawa	48	Namijingo		

(green)	Villages with a statistically lower rate than the MMH catchment rate
(yellow)	Villages with a statistically similar rate to the MMH catchment rate
(red)	Villages with a statistically higher rate to the MMH catchment rate

MMH 2011-12

`zCases per 100 population by village after Year One IRS

Av. malaria incidence reduced to 9/100 population.

MMH Approach: Integrated vector control
- ITNs
- IRS – from 2012
- LSM – from 2017
- Case management
- IPTp
- Surveillance and sensitivity testing

MMH Malaria control strategy

IRS: summary of MMH programme

Year One	2012/13	4 villages	alphacypermethrin
Year 2	13/14	22	alphacypermethrin
Year 3	14/15	40	alphacypermethrin
Year 4	15/16	55	alphacypermethrin
Year 5	16/17	35	Actellic 300CS
Year 6	17/18	51	Actellic 300CS
Year 7	18/19	42	Actellic 300CS
Year 8	19/20	target 50	Sumishield

Resistance in MMH catchment 2016

INSECTICIDE	INSECTICIDE CLASS	MEAN MORTALITY (%)
Alphacypermethrin	Pyrethroid	53
Fenithrothion	Organophosphate	94
DDT	Organochlorine	95
Propoxur	Carbamate	47
Permethrin	Pyrethroid	73

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INDEPENDENT

News

Malawi: Nine killed and 250 arrested after mob attacks people believed to be 'vampires'

Some of the Challenges

Constant effort required to secure funds to maintain and develop services
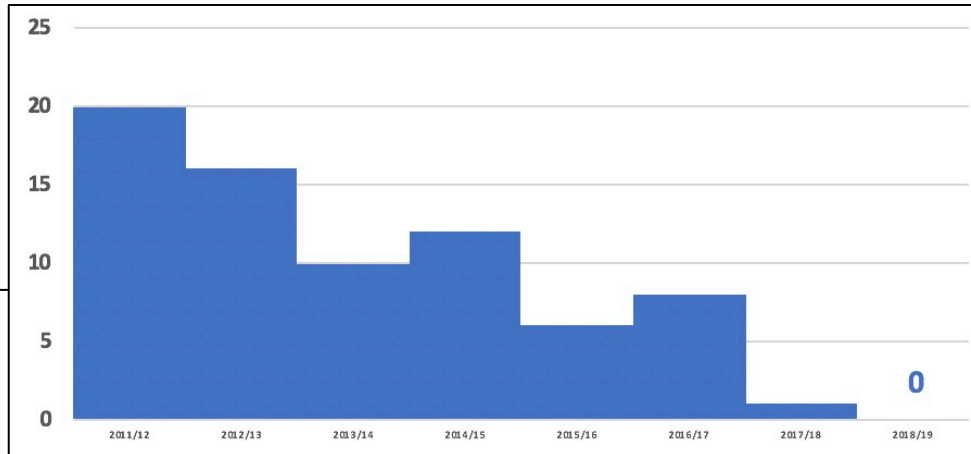
……. and a few others

- Managing numerous priorities without neglecting the involvement of key people
- Finding more and more unmet need – by making services more accessible/acceptable
- Technical limitations of an evidence-based approach where evidence is poor or non-existent

Outcome 1: Under 5 mortality
Under 5s: Total malaria deaths in the catchment area

Outcome 2: Under 5 admissions
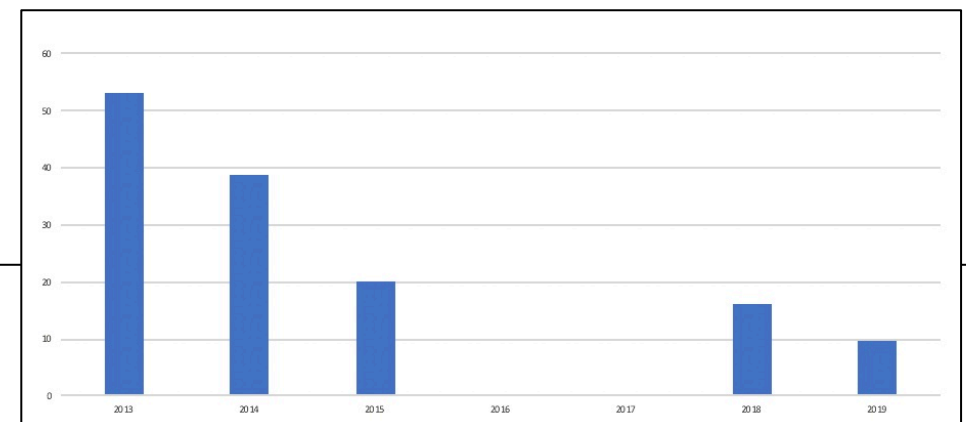## Under 5s: No of malaria admissions Oct – April

2010/11 - baseline	2754
12/13	1482
13/14	1245
14/15	1111
15/16	758
16/17	201
17/18	173
18/19	156

Outcome 3: Malaria Cases 5 yrs +
Total cases seen (IP and OP) 5yrs +

2010/11 - baseline	5304
12/13	3394
13/14	2415
14/15	2806
15/16	3928
16/17	1837
17/18	1249
18/19	713

MMH IRS Outcomes

Outcome 4: parasitaemia
% MRDT+ve Mwamadi village 2013 - 2019

MMH IRS
Outcomes

Impact: Umfumu Mwamadi
         Group Village Headman, Mwamadi village

Increasing impact and sustainability ?

New effective nets NOW

Longer lasting chemicals for IRS
(climate change, constant workload, maintain skills)

Affordable IRS

Better application tools– less room for error, less waste

Better evidence for LSM

Outdoor protection

Improved supply chain management

Improved training tools

Government of Malawi
NMCP

Mulanje Mission Hospital

University of Malawi, Chancellor College

EMMS International
Health for Today, Hope for Tomorrow

IVCC

NgenIRS

U.S. President's Malaria Initiative

Fane Valley
Growing Better Together

The Presbyterian Church in Canada

The Ardbarron Trust

Arysta LifeScience
Public Health

Actellic 300CS
Long lasting residual insecticide

SUMITOMO CHEMICAL
Environmental Health Division
Leading Innovation in Vector Control

Zero by 40?
Together, yes we can!