

WHO Consultation on universal access to core malaria interventions in high burden countries: main conclusions and recommendations



12-15 February 2018
Salle XI, ILO Building, Geneva, Switzerland

Global **Malaria** Programme



World Health
Organization

Country share of estimated malaria cases in 2016

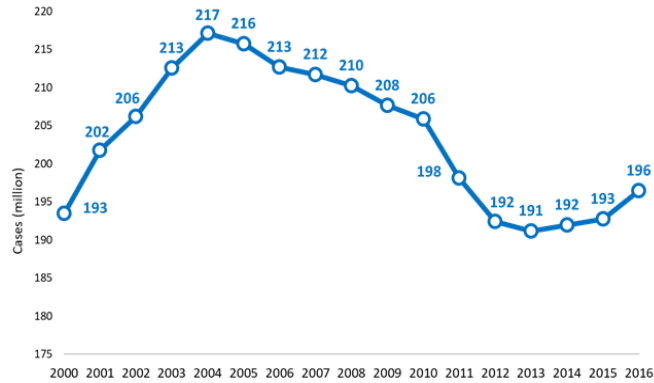


Figure 2: Malaria Cases in WHO African Region

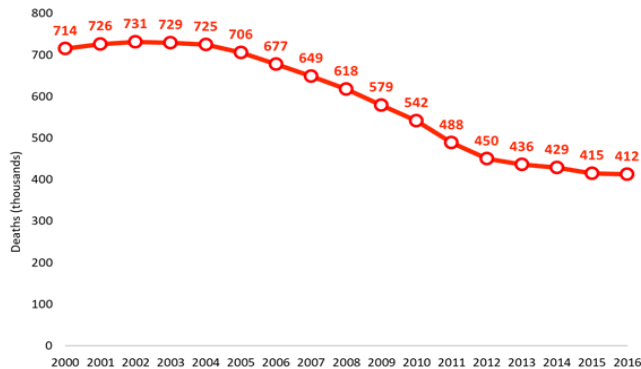


Figure 3: Malaria Deaths in WHO African Region

WORLD MALARIA REPORT 2017



The priority addressed in the Consultation is how to “bend the curve” of malaria deaths back down

Objectives of the meeting



1. To identify population **groups associated with high malaria mortality and the risk factors** for dying, **including coverage gaps** of the malaria vector control and access to malaria diagnosis and treatment **in high burden malaria countries**.
2. To characterize **access to current malaria core interventions** (long-lasting insecticidal nets, indoor residual spraying, intermittent preventive treatment of pregnant women, seasonal malaria chemoprevention and utilization of malaria diagnostic testing and treatment services), and identify **bottle-necks in service provision** (whether it is global supply, supply management, policy/regulations, population access to health facilities, availability of staff and equipment, uptake of services by the population etc) in high burden malaria countries.
3. To identify the most effective strategies to **increase progress in reducing malaria mortality** and to increase access to malaria core interventions in high burden countries to meet the GTS 2020 milestones.
4. To review existing **data sources and methods to estimate access** to malaria core interventions and to provide clear recommendations for strengthening surveillance via routine HMIS, health facility and household surveys in high burden countries.
5. To identify other factors relevant to the provision of effective intervention coverage and characterize these so as to inform **enabling actions with expected maximal impact on malaria mortality**.

Day 1 & 2

- Analysis of current situation, determinants and risk groups, based on presentation and plenary discussion of the working papers, with the objective of completing the landscape analysis and documenting cost-effective scale-up strategies targeting the most vulnerable groups.

Day 3

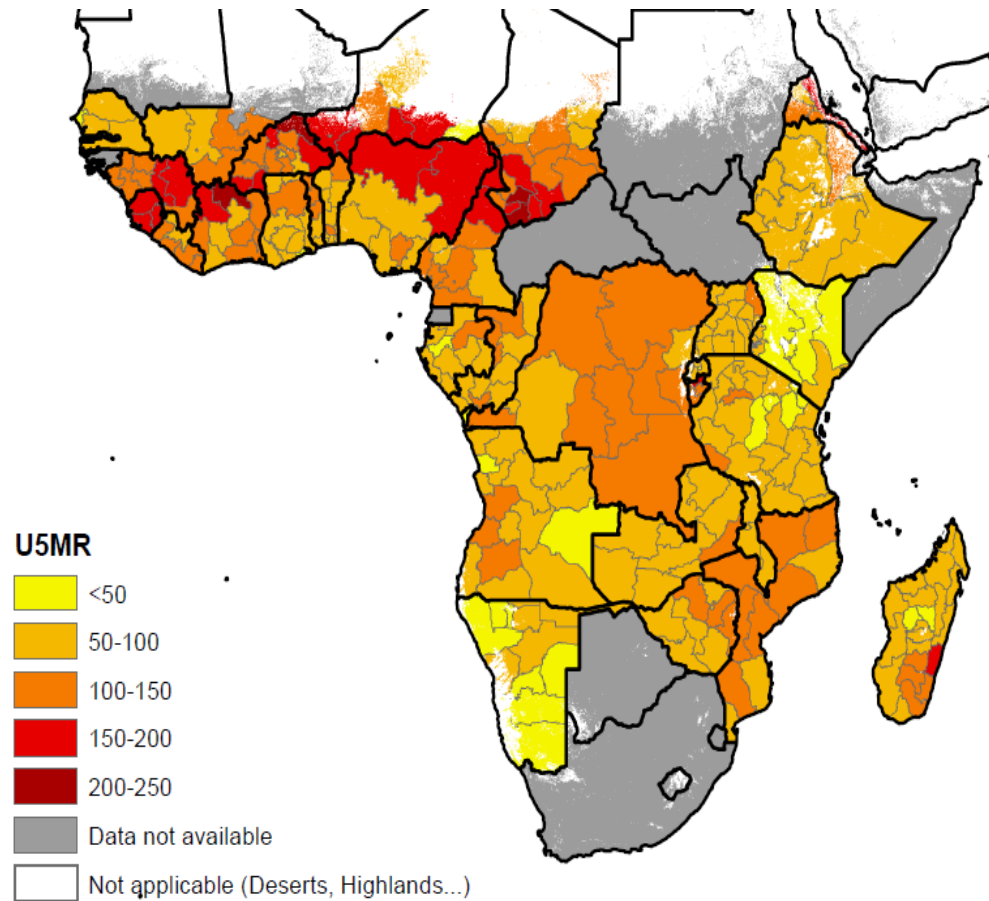
- In working groups, identification of the most promising strategies to increase access to malaria core intervention in the high burden countries reflecting different regional/health system context.

Day 4

- **Consensus building on core conclusions and recommendations to increase access to core malaria interventions in high burden countries to meet the 2020 milestones set by the Global Technical Strategy for malaria.**
- The report of the meeting, after review and endorsement by participants and WHO Secretariat, is submitted for review to the Malaria Policy Advisory Committee in April 2018, to serve as foundation for global initiatives led by WHO and major partners.

- Determinants of high mortality in children under 5 in sub-Saharan Africa – the population most vulnerable to malaria;
- Financial factors affecting access to core interventions – funding affecting supply and financial barriers affecting demand for services;
- Technical and operational factors affecting access to each of the interventions – vector control, quality diagnosis and treatment, and chemoprevention (intermittent preventive treatment in pregnancy and seasonal chemoprevention);
- The importance of bringing care close to the patient and the role of integrated community case management and community health workers in achieving this;
- Delivery of care by the private sector and treatment-seeking in the informal sector;
- Prioritization of interventions to target those at highest risk of malaria and dying from it;
- The strengthening of information systems to ensure evidence-based decision-making.

Distribution of under-5 mortality rate (U5MR)



The distribution of U5MR is uneven across Sub-Saharan Africa and also within countries. The highest under-5 mortality rates are in West Africa, where malaria prevalence is highest and transmission tends to be highly seasonal. To reduce malaria mortality, interventions need to target those at highest risk of dying:

- Under-fives
- Pregnant women
- Populations in difficult to reach remote areas
- Mobile and displaced populations

Source : WHO calculation using Demographic and Health Surveys and Malaria Indicator Surveys (as of 15 March 2018). The indicator is defined as the probability of dying before the fifth birthday (in the ten years preceding the survey per 1000 live births).

The meeting agreed that the most important bottlenecks for access to the core interventions necessary to reduce mortality were financial

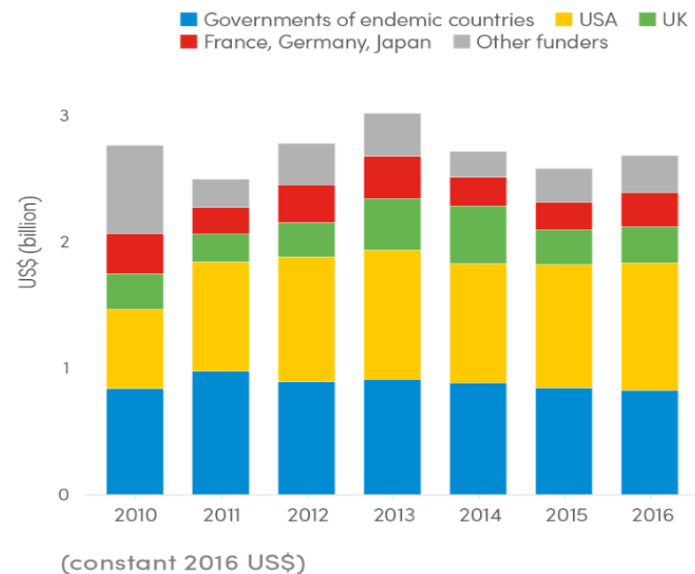


Figure 6: Malaria funding by source 2010-2016

1. There is a significant gap in the funding needed to achieve the Global Technical Strategy milestones and targets. In addition to higher levels of funding from multilateral and bilateral agencies, development banks and foundations, and other nongovernmental organizations, a significant increase in domestic and innovative funding is necessary.

- For 15 high burden target countries with available gap analyses **for 2015–2017**, countries estimated that approximately USD 7 billion was required to fully implement their National Strategic Plans (NSPs). Countries estimated that only about 65% of plans were funded, leaving them with a **gap of USD 2.5 billion**
- An analysis of countries receiving Global Fund malaria funding showed that NMCPs prioritized interventions based on available funding as follows:

High Priority	- Commodities and running costs for case management in public-sector facilities - Universal coverage of vector control with LLINs and/or IRS where appropriate
Medium Priority	- Severe malaria management - Basic surveillance, monitoring and evaluation - Intermittent Preventive Treatment in Pregnancy (IPTp)
Low Priority	- Integrated Community Case Management - Private-sector case management

Change in funds per capita in 2014-16 vs 2011-13

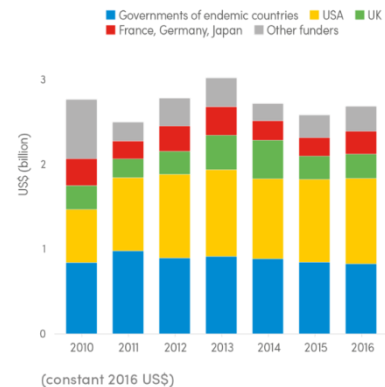
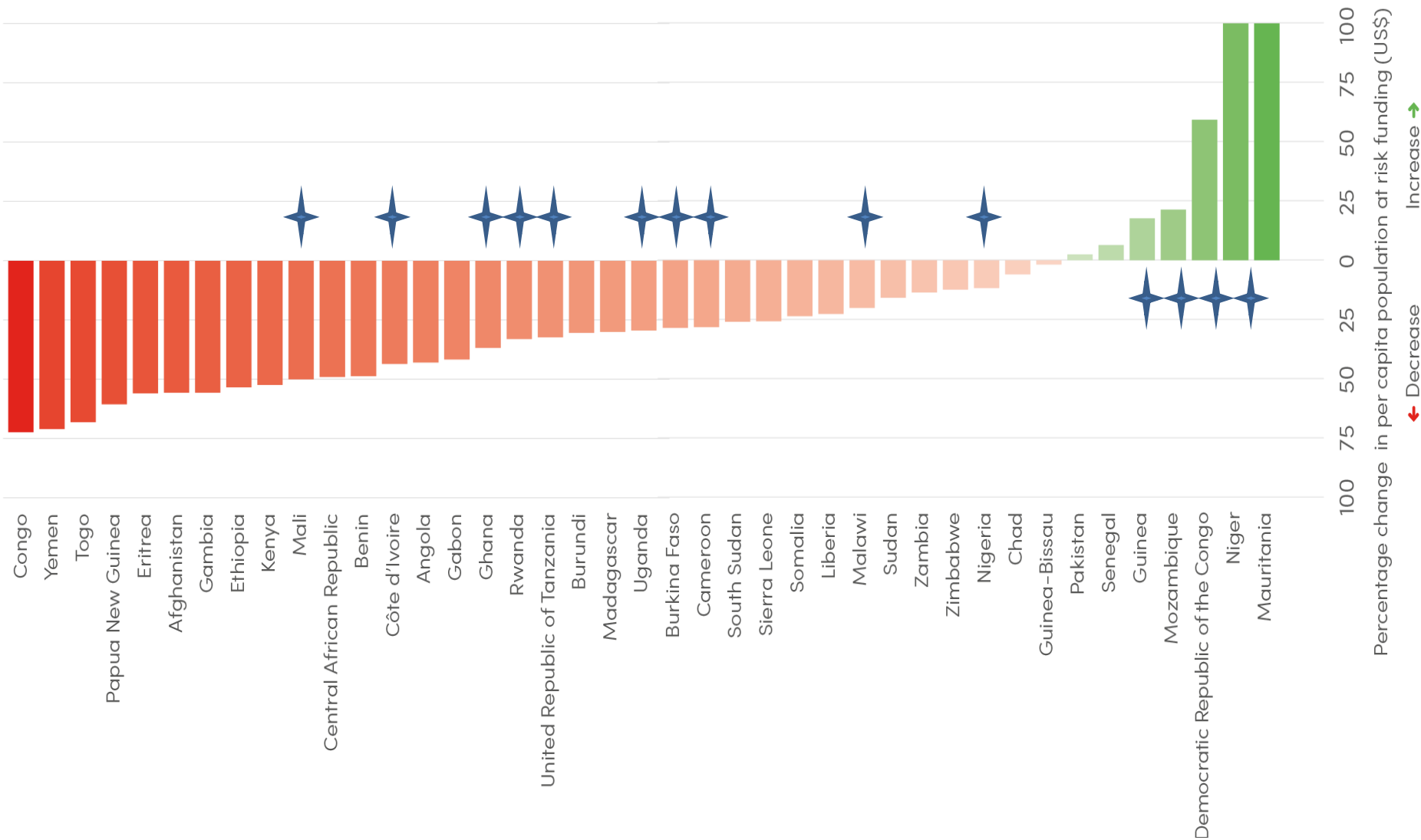


Figure 6: Malaria funding by source 2010-2016



- For the 12 countries with available gap analyses **for the period 2018–2020**, countries have estimated that approximately USD 7.7 billion is required over the next 3 years to fully implement their NSPs. In 2017, countries estimated that approximately 51% of the plans are funded, leaving a **gap of USD 3.7 billion**.
- For the essential commodities, there is a gap of 128 million (26.3%) out of the 486 million LLINs estimated to be required over the next 3 years, a gap of 276 million ACTs (38%) out of the 715 million ACTs needed and a gap of 56 million RDTs (8.7%) out of the 646 million RDTs required. The majority of these gaps will occur in 2020, as countries have frontloaded the available resources in order to avoid gaps in the near future and to give themselves sufficient time to raise additional resources.
- **The gaps in Nigeria represent around 50% of the total gap in essential commodities and their delivery over the next three years.** Given that Nigeria accounted for 27% of malaria cases and 24% of malaria deaths globally in 2016, it is essential that these gaps be filled.

Prioritizing interventions

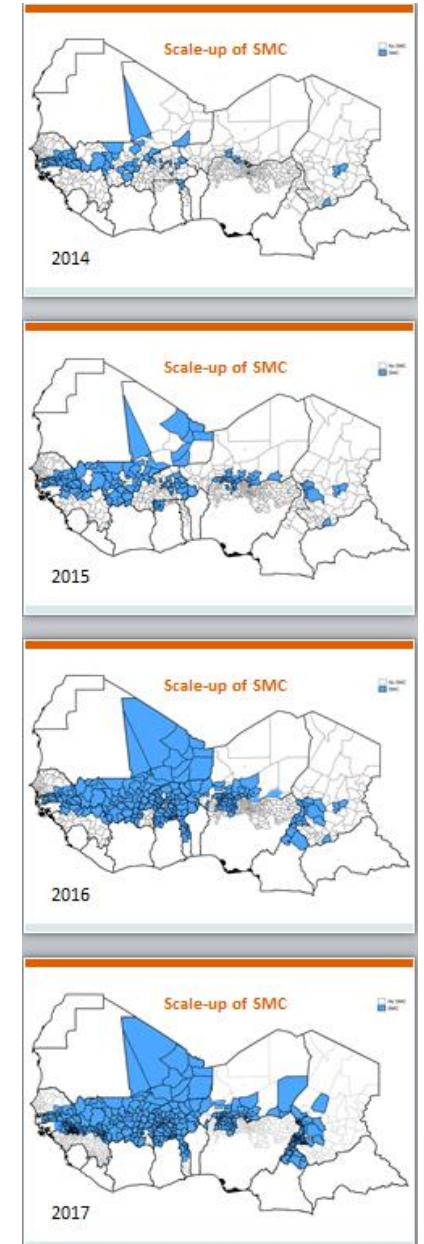


Intervention	Financial cost of protecting one person per year (US\$)	Cost per disability-adjusted life year (DALY, US\$)
ITNs	\$2.20 (\$0.88 - \$9.54)	\$27 (\$8.15 - \$110)
IRS	\$6.70 (\$2.22 - \$12.85)	\$143 (\$135 - \$150)
IPTi	\$0.60 (\$0.48 – \$1.08)	\$24 (\$1.08 - \$44.24)
SMC	\$4.03 (\$1.25 - \$11.80)	
IPTp	\$2.06 (\$0.47 - \$3.36)	
Treatment	\$5.84 (\$2.36 - \$23.65)	Not reported

*Relative cost-effectiveness of core malaria interventions.
Adapted from White et al. [5]*

- All countries should select the **most cost-effective packages** of preventive and curative interventions and decide on the **sequencing** of interventions based on malaria stratification and other considerations, including **programmatic suitability and acceptability**.
- **Decision-making tools** should be developed and made available to NMCP **managers and policy makers** at country level in order to support the selection of interventions based on cost-effectiveness data and to enable an efficient and targeted use of resources.

2. Malaria control programmes should **promote access to the core interventions by the entire population at risk**, namely, malaria diagnosis, treatment and vector control and, where appropriate, intermittent preventive treatment of infants, children and pregnant women. **High-risk areas should be targeted and prioritized** based on stratification of the risk in each country. Interventions should be selected based on their relative **cost-effectiveness** and, **in Sahelian countries** where transmission is highly seasonal, the large-scale implementation **of seasonal malaria chemoprevention** should be extended to all suitable areas, aiming at full coverage. More investments are needed to strengthen surveillance and data-gathering systems, deployment of new technologies and improved planning systems.

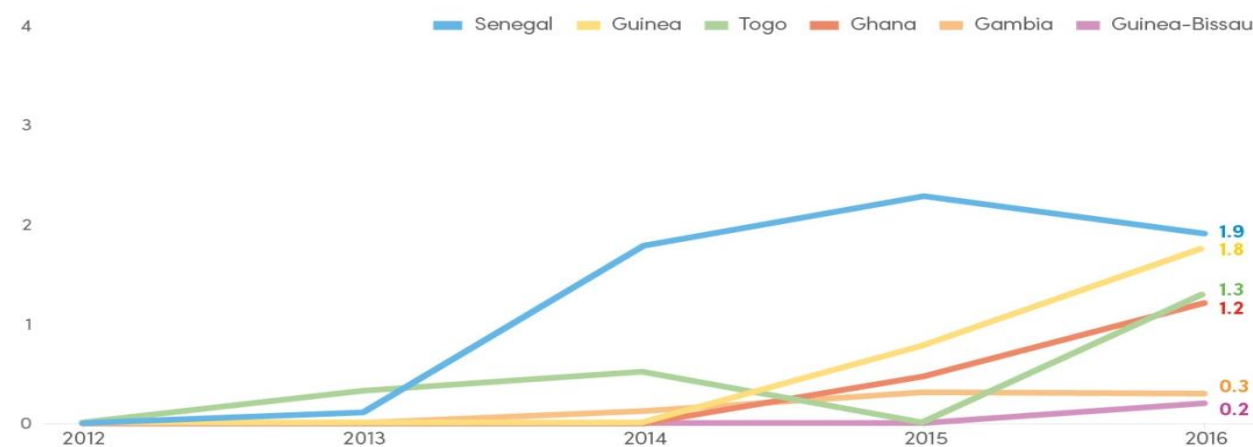
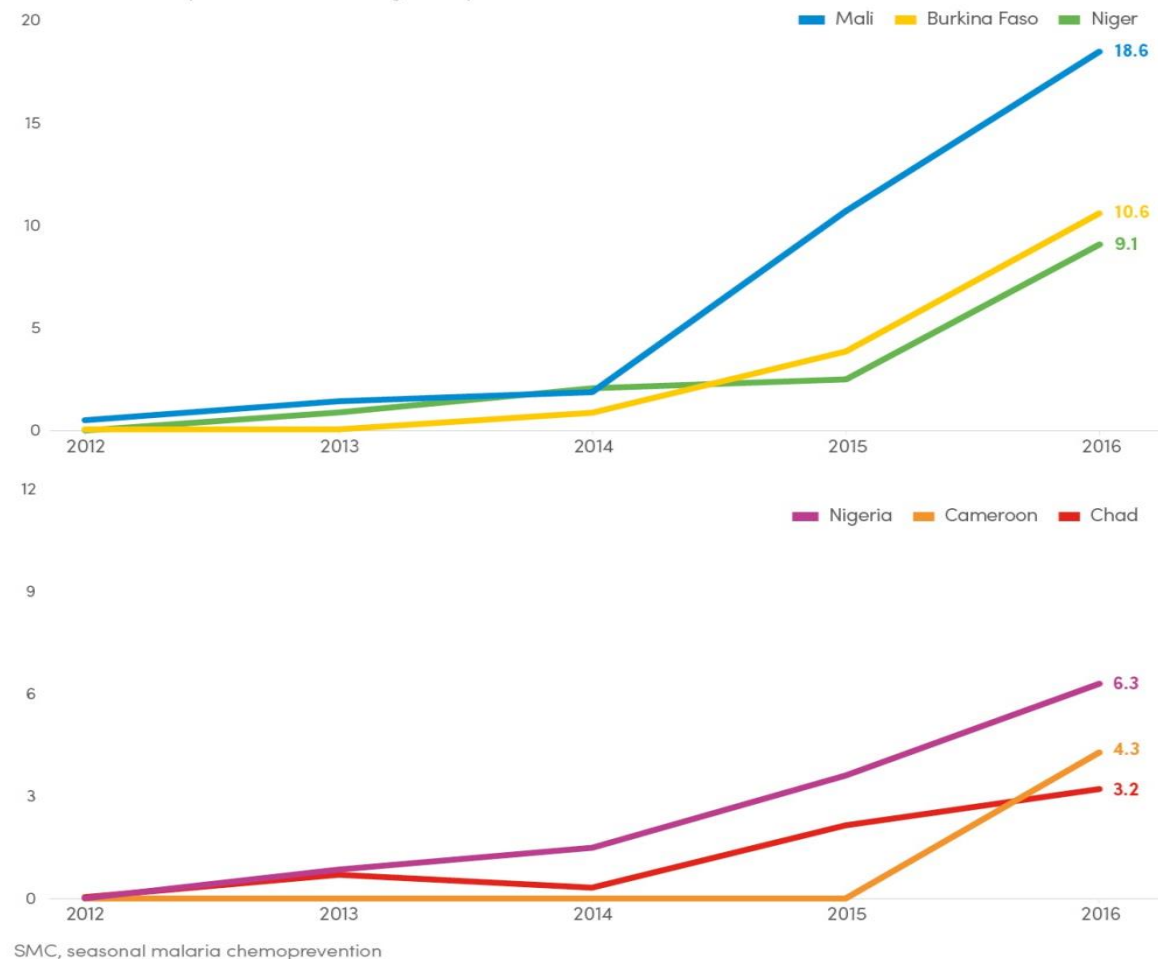


SMC coverage in Sahel subregion, 2012-2016



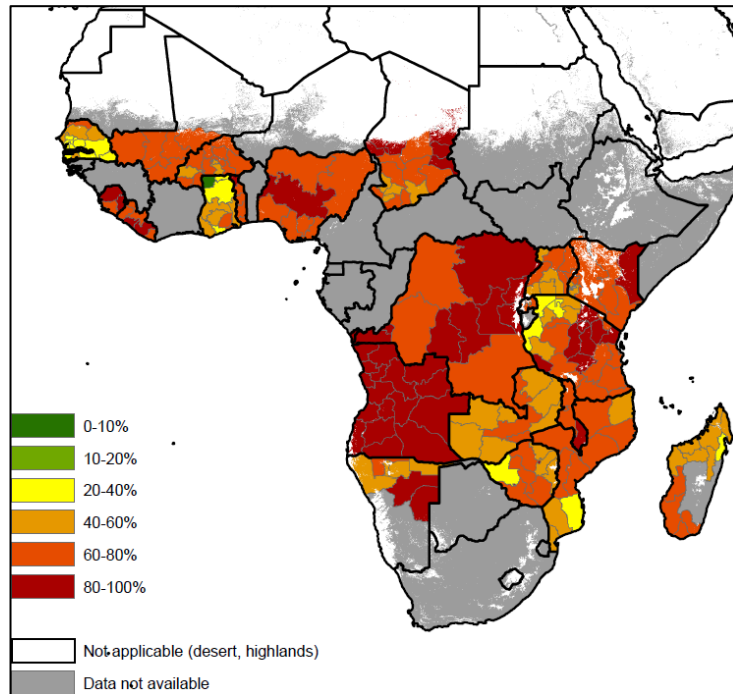
FIG. 3.9.

Number of SMC treatments administered in scale-up countries, 2012–2016 (in million) *Source: Seasonal Malaria Chemoprevention Working Group*



- In 2016, 15 million children in 12 countries protected by SMC leaving a coverage gap of 13 million children.
- The impact of SMC on mortality was assessed comparing HMIS data from August to November in 2015 and 2016. Reduction in malaria deaths was 44% in Burkina Faso, 68.2% in Cameroon and 57% in The Gambia.
- In 2016, the weighted average recurrent cost per U5 child for four SMC cycles was \$3.4 in 7 countries.

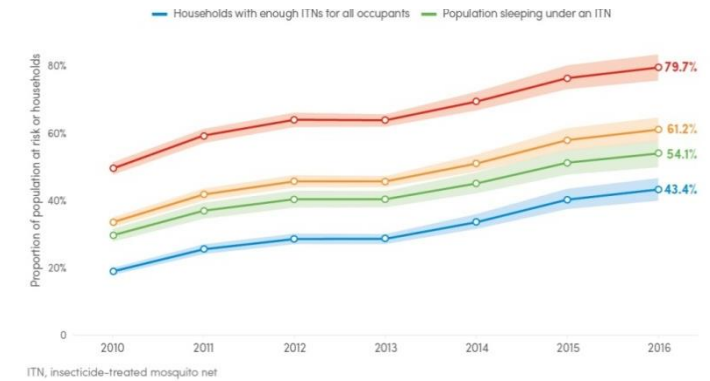
Coverage of malaria vector control (IRS & LLIN)



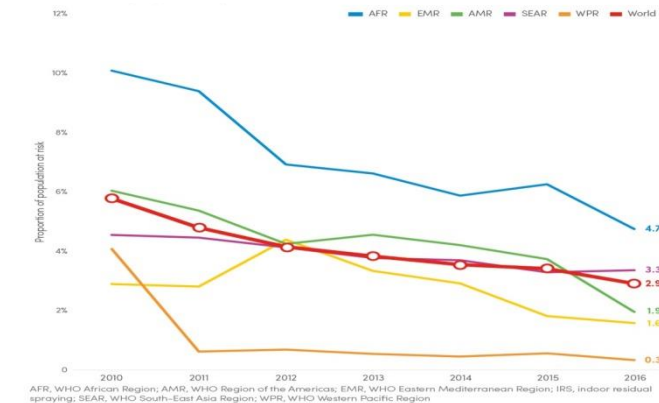
Percentage of the population not having access to an ITN and/or not living in a house protected by IRS (2013–2016)

Source: WHO calculation using Demographic and Health Surveys and Malaria Indicator Surveys, as of 15 March 2018. The indicator is defined as the percentage of the population with no access to an ITN in their household or not living in a household protected by IRS.

Percentage of the population protected by an ITN (2010–2016)



Percentage of the population protected by IRS (2010–2016)

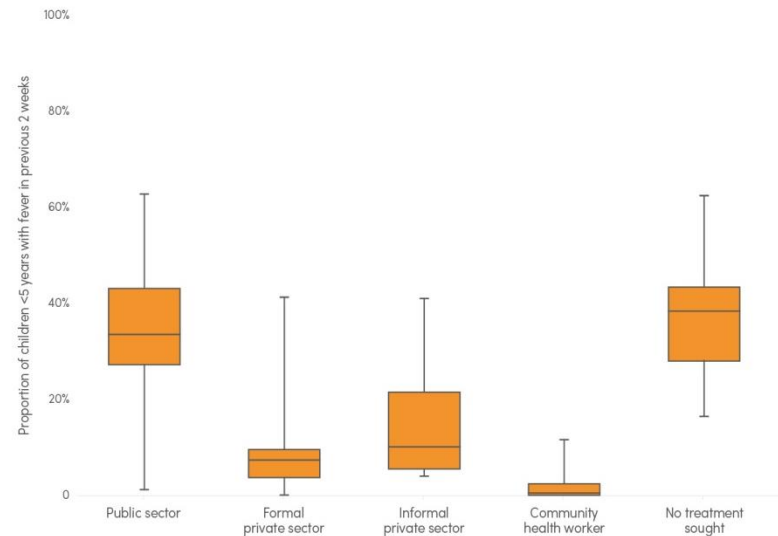


Source: WHO World Malaria Report 2017

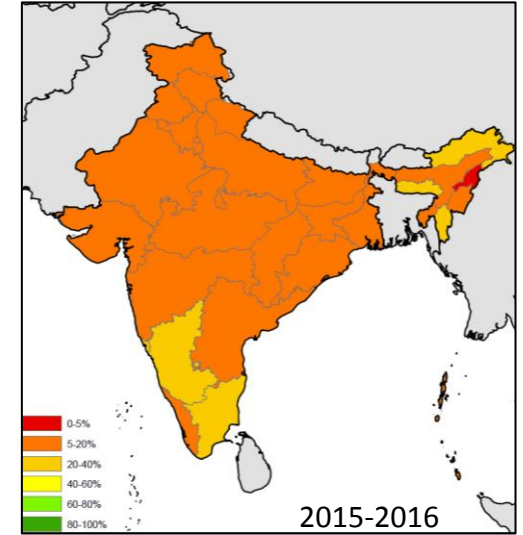
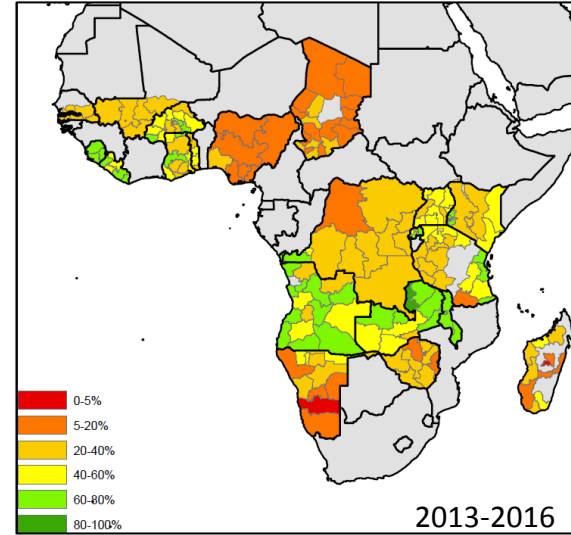
Coverage of malaria diagnosis and treatment



Proportion of children under five with fever for whom care was sought in sub-Saharan Africa, 2014-2016



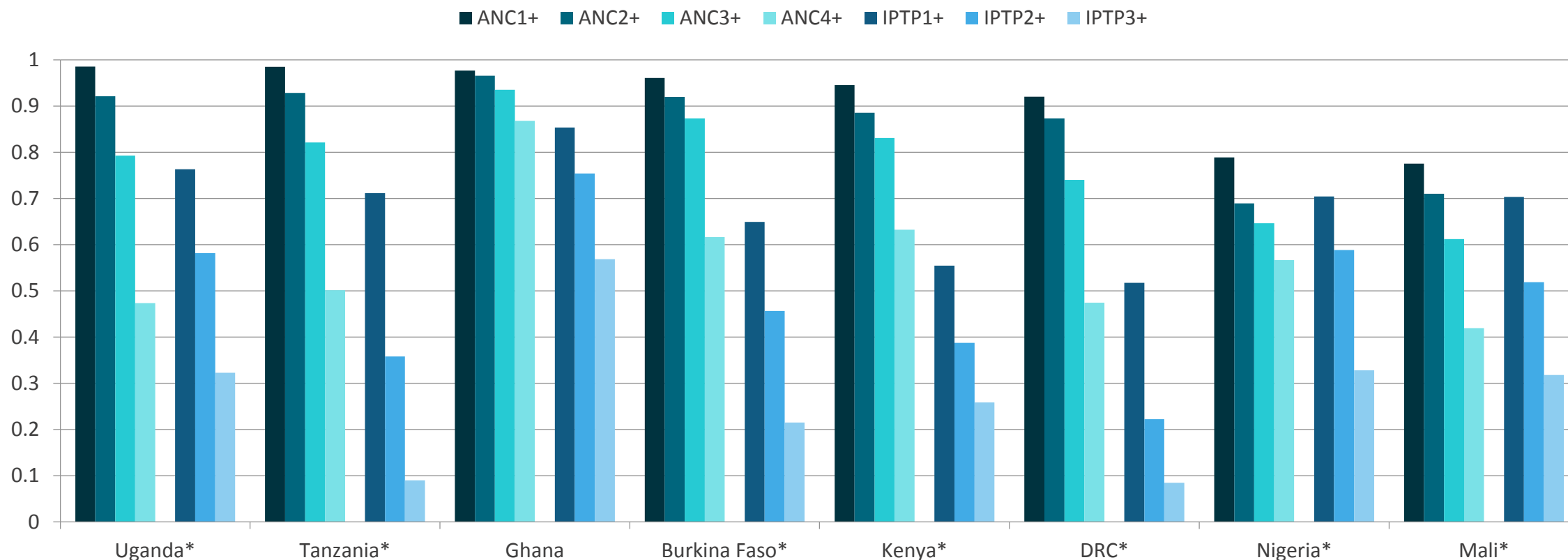
Source: WHO World Malaria Report 2017



Proportion of febrile children under 5 seeking care and receiving a diagnostic test

Source: WHO calculation using Demographic and Health Surveys and Malaria Indicator Surveys as of 16 January 2018. The indicator is defined as the percentage of children under 5 who had blood taken from a finger or heel for testing among those who had fever in the two weeks preceding the survey and for whom care was sought.

ANC and IPTp coverage in 8 high-burden countries



Source: Nationally representative household survey data from DHS and MIS (as of January 16, 2018) as well as WHO estimates.

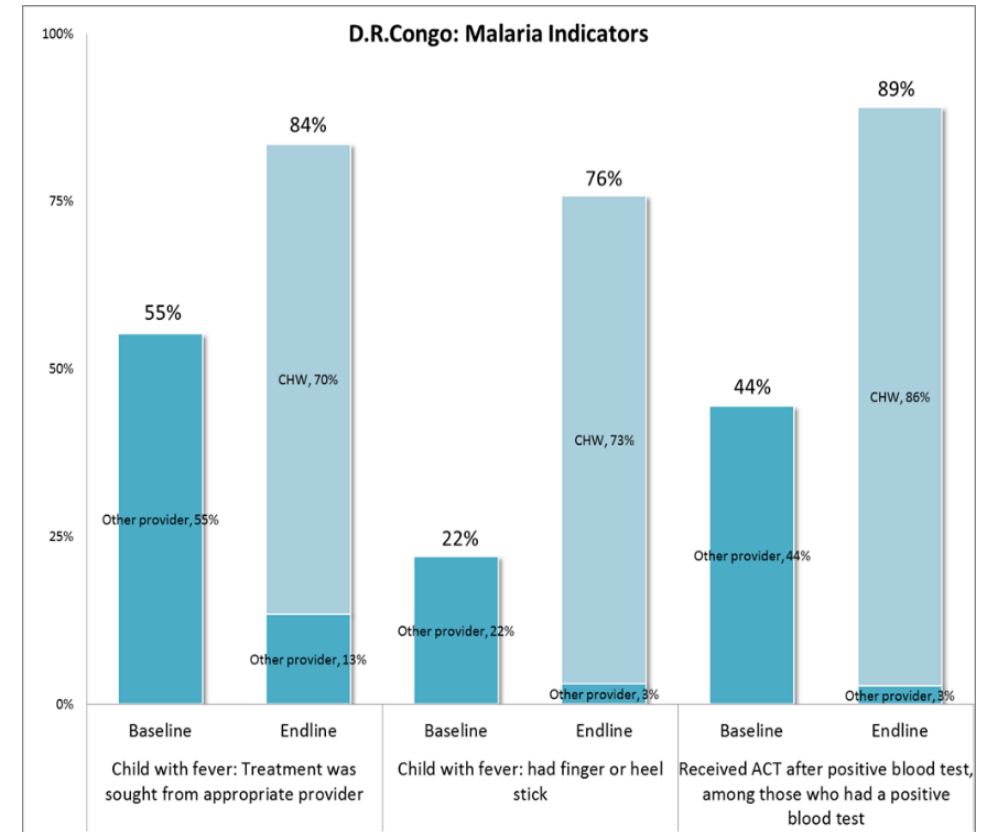
*The proportions presented are estimates for 2016 for all countries with the exception of Ghana, where an MIS survey was conducted in 2016.

3. More collaboration between malaria and other programmes will improve synergies, optimize the use of resources, and strengthen health services (e.g., maternal and child health, laboratory services, vaccination, supply management, surveillance, etc.). Malaria service delivery can pave the way for the delivery of other programme interventions and integration with these programmes, and strengthen overall national health services.

Observations from MPRs in high burden countries:

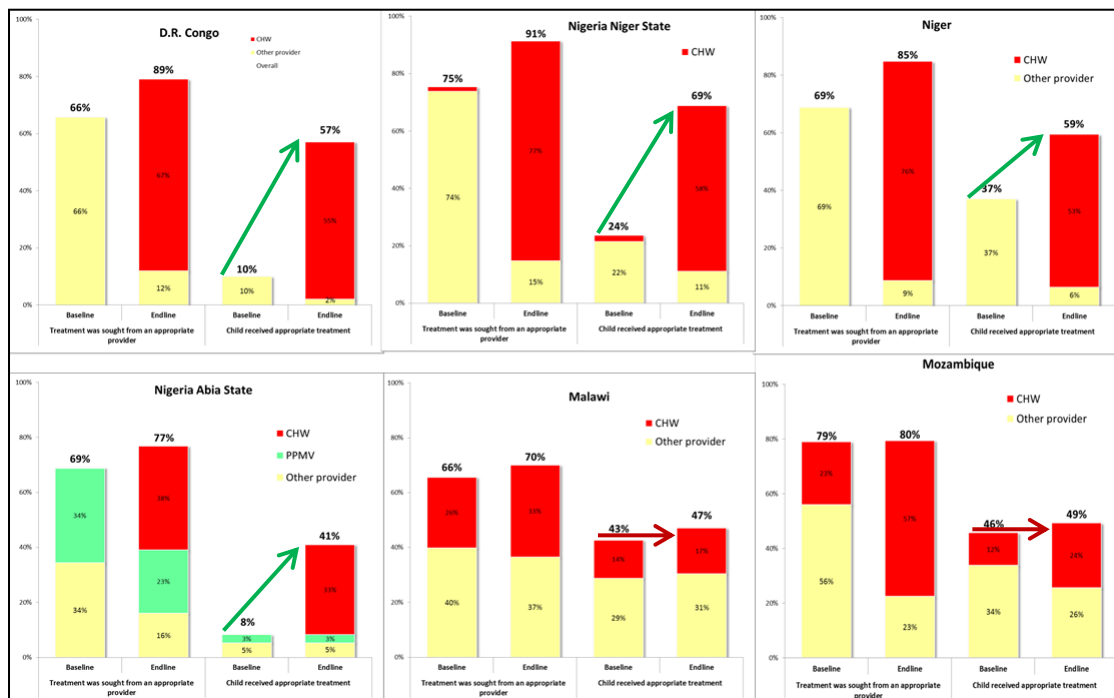
- All countries increased access to core interventions, but almost all missed the targets of national strategic plans.
- Except India, NMCPs are mainly externally funded.
- Lack of skilled human resources is persistent, especially at subnational and community levels.
- Continuous community information and engagement of community leaders is crucial to successful malaria control.
- Advocacy, communication, social mobilization are weak.
- Procurement and supply management improved but remains vulnerable.
- Surveillance, monitoring and evaluation improved, but data quality and management at district and peripheral levels remain weak.
- The private are not being engaged in malaria control.
- Non-health sectors, local authorities and political leaders are not mobilized in most countries.

4. Access to care needs to be brought closer to the patient in order to reduce mortality. Community health workers providing integrated community case management of malaria, pneumonia and diarrhoea for children under 5 can be an effective health workforce, extending the reach of health services to remote rural areas. Malaria programmes should support the role of community health workers as an extension of primary health care services.



- In addition to increase in treatment coverage, there was a 15% reduction in under-5 mortality
- The strength of the intervention lies in the availability of a trained, supplied, supervised CHW in the village when a child falls ill.

Impact of iCCM: results from RAcE in 5 countries



RAcE endline survey results on appropriate care seeking (left) and correct treatment (right) for malaria, pneumonia and diarrhoea in 6 sites

RAcE Sites	U5MR (per 1,000 live births) 2013 to 2016	% change	Lives saved through increase in intervention coverage	Estimated lives saved by CHW- provided treatment	% lives saved by CHW treatment
DRC	121 to 103	18%	2 182	1 728	79%
Malawi	124 to 118	5%	4 181	216	5%
Mozambique	94 to 94	0%	2 811	0	0%
Niger	137 to 120	14%	2 290	965	38%
Nigeria Abia	131 to 115	14%	1 815	967	53%
Nigeria Niger	100 to 86	17%	1 649	1 062	64%
			Total	4 938	

LiST analysis of estimated lives saved by iCCM in RAcE programme

5. The private sector plays an important role in delivering malaria care in many high-burden countries, both in urban areas and in remote rural areas underserved by formal health care facilities. Guidance on effective strategies for engaging the private sector in delivering quality malaria care needs to be documented, shared and promoted.



Needed at global level,

- investment cases on with social and economic benefits of reducing malaria to mobilize domestic resources;
- mobilize resources from non-traditional sources.

Needed at country level,

- convincing case to mobilize domestic resources in the context of decreasing burden and competing priorities;
- seek efficiencies and co-operation with other health programs to ensure synergies and reinforce impact.

6. Political leadership and support at global, regional, national and local levels is vital to reduce the burden of malaria and reverse the current stagnation in progress. Political commitment to regulatory change is needed to provide an enabling environment for access to core interventions. More investments are needed in economic analysis, comparative cost-effectiveness, adaptation of intervention-mix to local situations, and development of decision support tools for policy makers at national and local levels.

Many thanks for your attention

