



Swiss TPH Winter Symposium December 8-9, 2016

#### OUTLINE

How did we get to where we are now?

What are the key challenges facing us?

How do we keep momentum and achieve success?

#### Key factors associated with progress

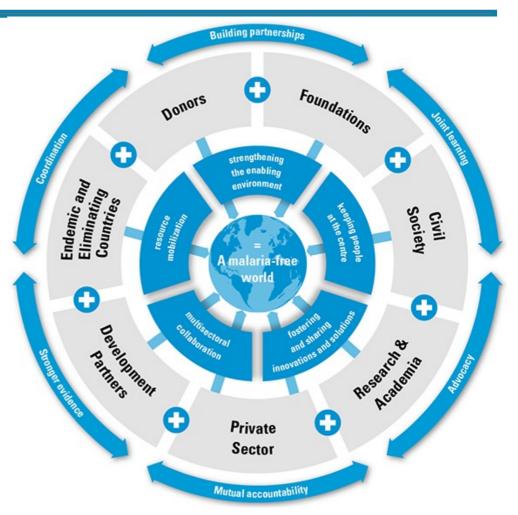
- Consensus that malaria is a major impediment for:
  - Better health
  - Health systems
  - Socioeconomic development
- Since 2000, a 20-fold increase in global funding for malaria control
  - Combatting malaria a high priority for a number of donor governments
  - Global Fund, US President's Malaria Initiative, UK DFID
  - Increase in domestic investments



Dr Gro Harlem Brundtland Director General, WHO, 1998-2003 ✓ Launched Roll Back Malaria, 1998

## Key factors associated with progress: Unleashing the potential of partnerships\*

No country, sector, stakeholder or group working alone can defeat malaria. Bringing diverse partners together creates advantageous synergies whereby the whole becomes far greater than the sum of the individual partners.



<sup>\*</sup> Action and Investment to Defeat Malaria, 2015, Roll Back Malaria

#### Key factors associated with progress: Implementation of Effective Interventions











### Key factors associated with progress: Unprecedented Global Progress Against Malaria

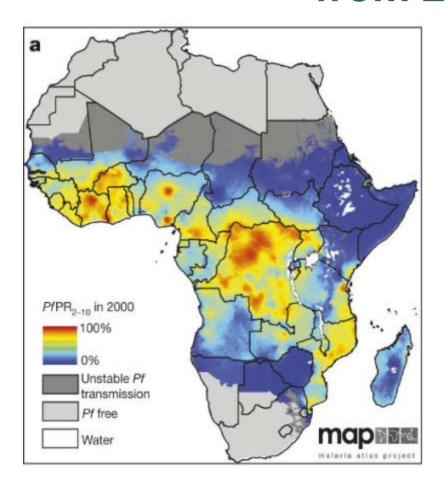
Between 2000 – 2015\*:

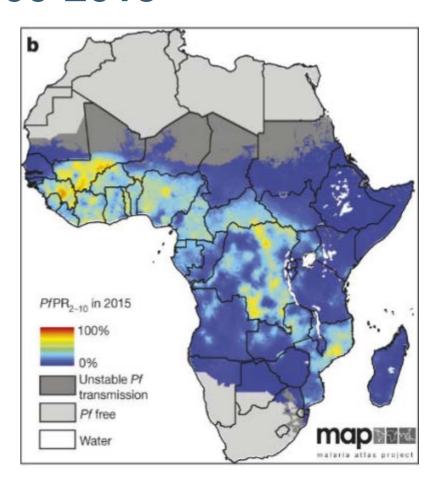
- 6.2 million malaria deaths averted5.9 million in children under five
- Dramatic reductions in estimated malaria mortality rates:
  - ↓ by 60% of all ages
  - ↓ by 65% of children under five years of age
- Gains against malaria account for **20%** of total progress in reducing preventable child and maternal deaths

Majority of progress has been observed since 2007

<sup>\*</sup> WHO and UNICEF report on "Achieving the malaria MDG target: reversing the incidence of malaria 2000-2015"

## Reduction in Parasitemia Prevalence from 2000-2015



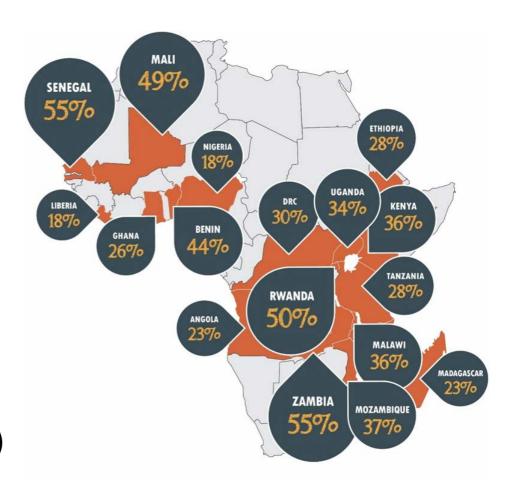


Community *Plasmodium falciparum* parasite rate in children 2–10 years

## Reduction is malaria transmission contributes to Saving Children's Lives

 All-cause mortality rates of children under the age of five have declined in 17
 PMI focus countries

 Declines range from 18% (in Liberia and Nigeria) to 55% (in Senegal and Zambia)



## The future ain't what it used to be. --Yogi Berra



#### **Key Challenges Ahead**

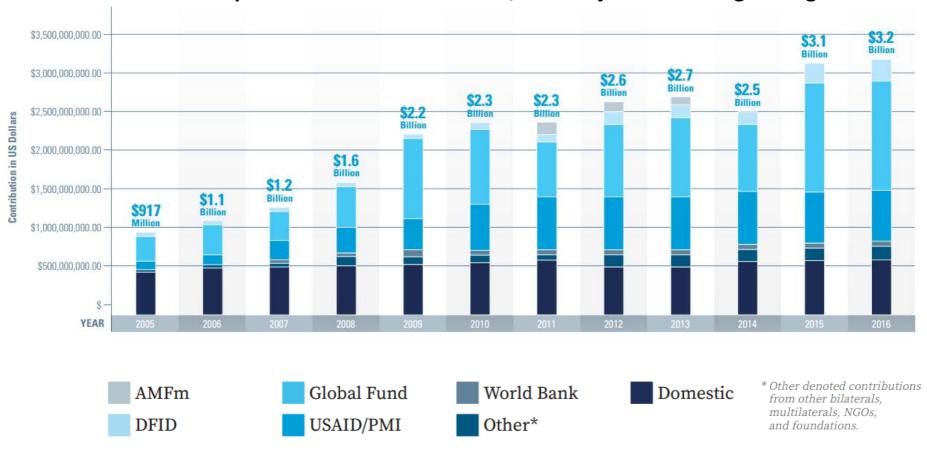


## Maintaining Momentum Robust pipeline of new tools and approaches

- More sensitive diagnostic tests
  - Highly-sensitive rapid diagnostic tests
- New malaria treatments
  - Novel drug classes
  - Drugs to prevent transmission from human to mosquito
- Vector control
  - New LLINs; new insecticides for IRS
  - Other vector control tools
- Vaccines
- New preventive approaches
  - Seasonal Malaria Chemoprevention
- Approaches to achieve elimination
- Better surveillance and health information systems

#### **International Funding for Malaria Control**

Sources of Funds Spend on Malaria Since 2005, and Projected Funding through 2016



Source: Action and Investment to Defeat Malaria, 2015, RBM

## Maintaining Momentum: Guiding Global Malaria Strategic Documents



Roll Back Malaria Partnership's

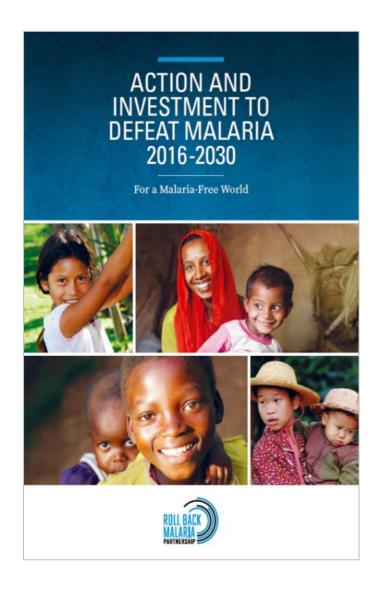
Action and Investment to

Defeat Malaria (AIM)

WHO
Global Technical Strategy For
Malaria (GTS)



2016 – 2030 Sustainable Development Goals



- Positions malaria in the post-2015
   SDG agenda
- Promotes multisectoral and intercountry responses to malaria
- Makes the case for investing in malaria and quantifies returns
- Expands on the importance of enabling environment (strong health systems, quality data, coherent policies across all sectors)

## Maintaining Momentum: Shared vision, goals, milestones and targets

 AIM and the Global Technical Strategy for Malaria share a joint vision, goals, milestones, and targets

Vision: A world free of malaria				
Goals		Milestones		Targets
		2020	2025	2030
1.	Reduce malaria mortality rates globally compared with 2015	At least 40%	At least 75%	At least 90%
2.	Reduce malaria case incidence globally compared with 2015	At least 40%	At least 75%	At least 90%
3.	Eliminate malaria from countries in which malaria was transmitted in 2015	At least 10 countries	At least 20 countries	At least 35 countries
4.	Prevent resurgence of malaria in all countries that are malaria-free	Resurgence prevented	Resurgence prevented	Resurgence prevented



#### EXAMPLES OF POSITIVE SYNERGIES BETWEEN ADVANCES IN MALARIA AND PROGRESS TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS

FIGURE 2 SHOWS THE POSITIVE TWO-WAY BENEFITS THAT WILL BE GENERATED BY PROGRESS TOWARDS THE SDGS AND THE 2030 MALARIA GOALS. MORE INFORMATION ON HOW FAILURE TO REDUCE AND ELIMINATE MALARIA WILL IMPEDE THE ACHIEVEMENT OF THE SDGS IS GIVEN IN APPENDIX B

17 🛞

Goal 17: Partnership for the Goals.
The many multisectoral partnerships in
place to reduce and eliminate malaria have
a positive collateral effect, and also bring
progress to other domains of development.<sup>25</sup>



Goal 1: No Poverty. Sustained investment in health and malaria unlocks the potential of human capital to generate growth. A 10% reduction in malaria has been associated with a 0.3% rise in annual GDP. At household level, reducing malaria protects household income from lost earnings and the costs of seeking care.

10 16

Goals 10, 16: Reduce inequality. Promote Peace and Justice. A targeted response to malaria actively improves the health of the poorest, enabling vulnerable families to break the vicious cycle of disease and poverty, and helping to make sure that no one is left behind. Investing in malaria reduction contributes to the creation of more cohesive, inclusive societies. Stable countries are more likely to attract international investment and overseas development aid.

**13** 

Goal 13: Climate Action. Given that climate change is predicted to increase the range and intensity of malaria transmission, plans to mitigate the effects of climate change are likely to include an increased commitment to controlling and eliminating malaria, and vice versa. <sup>24</sup>





Goal 2: Zero Hunger. Sustainable agricultural

resulting in better harvests and improved food

are better able to fight malaria.9

practices help reduce malaria. People who suffer less

from malaria can work their fields more consistently,

security.8 Well-nourished people, especially children,

Goal 4: Quality Education.
Reducing malaria enables children to attend school regularly and learn more effectively. This significantly improves their school performance, and later wage-earning capacity. As a mother's or caregiver's level of education increases, so do the chances that their children will access malaria prevention and treatment services, and survive childhood.

6 📮

Goal 6: Clean Water and Sanitation. Drainage of standing water leads to decreased mosquito breeding and a reduction in the rate of malaria transmission. It also improves water quality, generating further health benefits. \*415.56 3 -₩

Goal 3: Good Health and Well-being. The scale-up of malaria interventions averted at least 670 million bouts of malaria illness and 4.3 million malaria deaths between 2001 and 2013. Preventing malaria in pregnancy reduces maternal mortality and gives newborns a far healthier start in life. Lowering the burden of malaria makes a substantial contribution to improvements in child health, and thus often to a decline in fertility rates, and an associated increase in the investment that parents can make in their children.<sup>10</sup>



Goal 5: Gender Equality. Freeing women and school-age girls from the burden of caring for family members when they fall sick with malaria increases their likelihood of completing school, entering and remaining in the workforce, and participating in public decision-making.<sup>12,13</sup>



Goal 7: Affordable and Clean Energy.

In resource-constrained malaria endemic regions, access to sustainable energy will stimulate prosperity and increase the adoption of more sophisticated personal protection measures. It will also mean greater access to electric lighting and cooling, enabling people to increase time spent indoors, where vectors are more easily controlled through insecticides, bet nets and temperature. These developments are likely to result in a reduced burden of malaria. 1744.19



Goals 9, 11, 15: Infrastructure, Sustainable Cities and Life on Land. By ensuring that major construction and development projects do not introduce or increase malaria transmission, the benefits of progress can be reaped, while also protecting human health and ecosystems. Well-planned infrastructure and improved housing help reduce exposure to mosquitoes, and facilitate greater access to health and malaria services. <sup>2,23</sup>



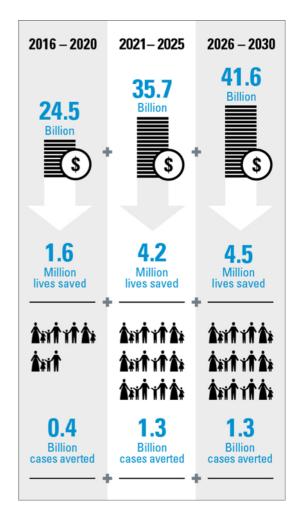
Goals 8, 12: Decent Work, Economic Growth and Responsible Production. Reducing malaria creates healthier, more productive workforces which can help to attract trade and commerce. When combined with pro-poor policies, these factors drive job creation, inclusive growth and shared prosperity. Enterprises that invest in their workers reduce the costs of doing business, increase their competitiveness and enhance their reputation. <sup>20, 22</sup>

Figure 2

Note: SDG 14 is not included in the diagram, because it is not relevant to malaria

## Costs and benefits of investing to achieve the milestones & malaria goals

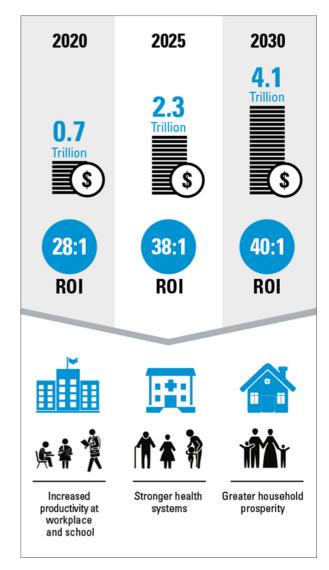
- Meeting the 2030 malaria goals will require an investment of just over US\$100 billion
- In addition, a further US\$10 billion will be needed to fund malaria research and innovation
- ▶ This means by 2020 we need to be mobilizing US\$6.4 billion per year
- While the costs are high, the benefits are far greater. Meeting the 2030 goals will avert close to 3 billion malaria cases and save over 10 million lives worldwide



# Maintaining Momentum: Malaria Control and Elimination "A Best Buy in Global Health"

#### Meeting the 2030 malaria goals will:

- generate over US\$4 trillion in additional economic output
- give an unprecedented global return on investment of 40:1
- ▶ ROI in SS Africa is estimated to be 60:1
- reduce poverty and help unlock inclusive growth
- investing in malaria equates to unparalleled investment in economic productivity and people-centered development



#### Mobilizing resources for the malaria fight

- Achieving the 2030 malaria goals will depend on the mobilization of higher levels of predictable and sustained funding
- The need for resource mobilization strategies at all levels has never been greater
- Increasing the investment in malaria requires coordinated action at global, national and local levels



#### Political Challenges: The Research-to-Policy Gap



## Momentum and Political Will for Malaria

"We are on track to end the scourge of HIV/AIDS — that's within our grasp. And we have the chance to accomplish the same thing with malaria. That's something I'll be pushing this Congress to fund this year."

President Barack Obama, State of the Union Address, 2016

"The global campaign against malaria has shown what is possible when the international community joins forces on multiple fronts to tackle a disease that takes its heaviest toll on poor and underprivileged populations...The advances of recent years show that the battle against malaria can be won."

UN Secretary General Ban Ki-Moon, 2014

"So the next time you hear skeptics charging that foreign aid doesn't work, point to malaria. Foreign assistance has not chased away local resources. On the contrary, it's encouraged African nations to step up their own health efforts. And the results have been nothing short of remarkable."

Bill Gates, October 2016

#### Summary: Key elements to maintaining momentum

- WHO GTS and RBM AIM provide shared vision and ambitious goals
- Substantial funding base— crucial need triple funding quickly to meet these goals
  - Effective tools and experience with scale-up
  - Robust research and development pipeline
- Need for strong, effective partnership including at all levels
  - Multi-sectoral engagement
  - Inter-country cooperation
- Improve surveillance and M&E systems
- Maintain high level political commitment at global, regional and national levels



