

**Written Statement of Dr. Mark Dybul, Executive Director of the Global Fund
to the
House Foreign Affairs Subcommittee on Africa, Global Health, Global Human Rights, and
International Organizations**

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I would like to thank the Chair, the Honorable Chris Smith, the Ranking Member, the Honorable Karen Bass, and the entire Subcommittee for the honor of speaking to you today about U.S. and global funding in the fight against malaria, a disease that has been plaguing us for thousands of years, and continues, still, to impose a serious human and economic toll across the globe. In Africa alone, malaria takes the life of a child every minute.

I am here representing the Global Fund to Fight AIDS, Tuberculosis and Malaria and I would like to start by expressing my deep appreciation for the U.S. government's steadfast, bipartisan support for malaria and global health, in general, and for the U.S. Congress's support, in particular. This Subcommittee, Chairman Smith, and many Members in both parties in Congress have been deeply involved in and impassioned about saving lives through the President's Emergency Plan for AIDS Relief (PEPFAR), the President's Malaria Initiative (PMI) and the Global Fund – and the world has seen extraordinary progress from your investments. In malaria alone, the estimated annual number of global deaths has fallen by one-third over the last decade – from about 985,000 in 2000 to 660,000 in 2010 – even while the global population has grown. Thank you, truly, for saving these lives and for your continued leadership and support.

Now, I would like to turn to a discussion of U.S. investments in the Global Fund and what I see as the opportunities and challenges ahead of us in the continuing fight against malaria. The U.S. was the Global Fund's first donor and, today, remains its largest. Last year, and with thanks again to the Administration and the U.S. Congress, the U.S. provided more than a billion dollars to support Global Fund programs and partnerships around the world. With this and contributions from other countries, the

Global Fund provided about \$3.5 billion in 2012 to the fights against HIV/AIDS, tuberculosis and malaria – including almost a billion dollars specific to malaria prevention, diagnosis and treatment. Global Fund programs currently provide 20% of the world's funding for HIV/AIDS, 80% of the world's funding for tuberculosis and, importantly, for this hearing, at least half of the world's funding for malaria.

In fact, the Global Fund, alongside PMI is the world's leading donor to malaria. Since its creation in 2002, Global Fund-supported malaria programs have distributed 310 million insecticide-treated nets worldwide, treated 290 million cases of malaria and provided 46 million indoor residual spraying services. More details on this can be found in Appendix A of my testimony, which presents a table of Global Fund-supported anti-malarial interventions over the past five years. To date, the Global Fund has disbursed \$5.2 billion to support malaria control efforts in 97 countries.

The Global Fund and PMI work closely together to coordinate their efforts in-country and maximize their impact on the global malaria burden. PMI programs were conceived and designed, in fact, to build off of the in-country capacities supported by the Global Fund. Each entity has its own unique strengths, of course. Because the Global Fund does not have in-country technical staff, for example, it relies on PMI to coordinate and implement malaria activities and share information on the ground. Working hand-in-glove, alongside other partners, the Global Fund and PMI are making significant progress and shrinking the map on malaria.

When we talk about malaria, we should remember that malaria was once common right here in the U.S. In fact, at least eight U.S. Presidents are believed to have contracted malaria during their lifetimes, including, most recently, Theodore Roosevelt and John F. Kennedy. By the time of World War II, malaria had been eliminated in most places in the U.S. except for certain pockets in the southern part of the country. During the war, a number of military training bases were set up here – incidentally, an area infested with mosquitoes and rampant with malaria. To avoid spreading malaria to the civilian population, the U.S. government established the Malaria Control in War Areas initiative, which trained state and local health department officials in malaria control techniques and strategies. Borne out of this program, immediately after the war ended, was the precursor to today's Centers for Disease Control and

Prevention, then known as the Communicable Disease Center. Much of its early work was focused on control and elimination of malaria in the U.S. The CDC worked hand-in-hand with other government agencies and, together, the U.S. eliminated malaria inside its borders by 1951.

Today, as we focus our attention on other parts of the world still confronting this deadly disease, we should keep in mind this important piece of U.S. history. When this country faced malaria at home, the right blend of elements, including strong partnerships, political will, and aggressive public health interventions, among others, led to its defeat. Undoubtedly, the circumstances under which the U.S. eliminated malaria and the tools it used to do so are markedly different from the circumstances facing parts of the globe where malaria persists today, as are the efforts required in these areas to eliminate the disease. But, it is still possible to eliminate malaria in these parts; we just need to bring the appropriate pieces together, including robust funding, strong political leadership, and the right set of scientific and public health interventions. The world's fight against malaria has reached an historic inflection point. Scientific advances in anti-malarial treatment, prevention and diagnostics, coupled with current epidemiological data, and, importantly, the implementation knowledge gained by investments of the U.S. and other donors over the past 10 years have made it possible for us to stop malaria in its tracks.

We now know that when a country attains 80 percent coverage for key malaria interventions in at-risk populations there are significant health returns. Tanzania is a good example of a country that has had a dramatic scale-up of key malaria control interventions. Since 2008, it has seen a 47 percent reduction in malaria cases detected and a significant increase in insecticide-treated net coverage, with 91 percent of households in the country now owning at least one net. The scale-up of malaria control interventions has led, in part, to a 45 percent reduction in all-cause mortality among children under five between 2000 and 2010. So when a country has a well-resourced and implemented malaria control program, it can achieve astounding results.

Through the concerted efforts of the countries, supported by the Global Fund, PMI and other partners, scale-up of such malaria control efforts has occurred across the globe. Preventative interventions like insecticide-treated nets and indoor residual spraying have been implemented worldwide. [Please see

Appendix B: Insecticide-treated Net Coverage in Sub-Saharan Africa, 2002-2011] There have also been vast improvements in diagnostics, including the advent of rapid diagnostic tests, which now allow health workers to test and treat patients quickly and identify parasite-negative patients for whom another diagnosis must be sought and treated accordingly. First-line anti malarial mono-therapies have been replaced with highly effective combination therapies, which has helped to stomp the serious and ongoing threat of drug resistance. Moreover, key interventions have decreased in unit costs by 30 to 40 percent. Altogether, the recent increase in delivery of key interventions, like insecticide-treated nets, means we are reaching levels in coverage that should lead to significantly reduced mortality and morbidity rates from malaria.

But recent history shows us that if we take our foot off the pedal, malaria incidence has the potential to rebound. We have seen this first-hand in Zambia. From 2006 to 2008, Zambia made remarkable progress in scaling up coverage of malaria interventions, including roll-outs of insecticide-treated nets to several provinces, primarily through antenatal care clinics and mass distributions. There followed a visible reduction in the burden of malaria. Between 2008 and 2010, however, the country experienced a resurgence of malaria in some areas, most notably in the Eastern, Luapala and Northern provinces. The likely explanation for the resurgence is that an intended, large influx of new insecticide-treated nets did not occur because of reduced funding and delays in procurement and implementation support. Meanwhile, the provinces in Zambia that did receive the majority of nets experienced decreases in levels of malaria. In 2011, the Global Fund used an emergency procurement mechanism to address the coverage gaps and sent nearly 2.3 million insecticide-treated nets to the Eastern, Luapala, and Northern provinces in Zambia. The situation in these areas has started to improve. The Zambia example highlights the very real danger in taking our foot off the gas pedal and the need to continuously maintain robust funding to sustain the gains that have already been made.

Net replacement is one specific example of a concrete financial need to maintain malaria coverage. The World Health Organization estimates that 150 million insecticide-treated nets are needed to protect all populations at risk of malaria in sub-Saharan Africa each year. These nets have an average

useful life of two to three years under field conditions. Though this coverage level was essentially met between 2004 and 2010, in 2011, only 92 million nets were delivered by manufacturers, largely due to funding constraints. Similarly, in 2012, only 66 million nets were procured. Thus, in February of this year, the Global Fund, the World Health Organization and other partners estimated that approximately 77 million nets will be needed to maintain coverage for communities that the Global Fund had previously protected, requiring approximately \$450 million in funding in 2013 and early 2014. Without these replacements, entire populations and especially their children would be in jeopardy of dramatic malaria resurgences and death.

Accordingly, the Global Fund is in the midst of a big push to replace insecticide-treated nets in its new and interim funding grant streams, along with bolstering diagnostic and treatment needs. I am also pleased to report that there has, over time, been increased domestic spending on malaria control by recipient countries. The World Health Organization reported that in 2011 total domestic spending for malaria in the Americas and Africa had increased to an estimated \$ 625 million, and there continues to be an up-tick. Zambia, for example, put \$24 million of domestic funding in its 2013 budget for malaria drugs, an increase from the level reported by the WHO in 2011.

The global community has more work to do, however. Malaria partners have recently determined that the overall 2013-2015 funding gap in getting to near-zero deaths from malaria – including needs for commodities, management, communications, and monitoring and evaluation -- is approximately \$3.5 billion, with an almost-\$400 million dollar gap in providing essential commodities, like long-lasting insecticide-treated nets, artemisinin combination therapy drugs, and rapid diagnostic tests. Additional resources from the U.S., from increases in domestic resources and from other sources are necessary to maintain the remarkable results achieved so far and make full use of the new science and proven interventions.

The world currently faces an important choice: accelerate progress made or lose momentum, which means increased rates of malaria and not yielding the full return on investments of the past decade.

At present, our current tools remain remarkably effective in most settings, but resistance to artemisinins – the key compounds in artemisinin-based combination therapies – has been detected in four countries of South-East Asia and mosquito resistance to insecticides has been found in 64 countries around the world. Even though such resistance has not yet led to operational failure of malaria control programs, urgent and intensified efforts are required to prevent a future public health disaster. And if it gets to that point, we may not have the resources or the science to control it. The reality is “invest now, or pay forever.”

The Global Fund, working with PMI and other partners, is better positioned than ever to help accelerate progress on malaria and target those areas most impacted by this disease. Over a year ago, the Global Fund launched a series of U.S.-driven reforms that focused on making the Global Fund a stronger, more efficient health financing institution. A product of the reforms, the new funding model that was recently launched is designed to direct resources to areas of the world most affected by the three diseases. In doing so, the Global Fund can leverage proven interventions and current epidemiological data to achieve greater impact; it can also achieve maximum value for money from the U.S. and other donors at a time when global economies and budgets remain significantly constrained.

Within the initial transition of the new funding model, the Global Fund will commit over \$500 million of the \$1.9 billion in available funding to malaria control efforts. There is a major emphasis on insecticide-treated nets, but as we well know, malaria control encompasses much more than sustained net replacement. Consistent with this, Global Fund resources will be directed to all the key interventions, including indoor residual spraying and improved malaria case management, including diagnostic testing and treatment with artemisinin combination therapy. The Global Fund will also target resources at intermittent preventative treatment of malaria for pregnant women and seasonal malaria chemoprevention, as well as supportive interventions like monitoring and evaluation, program management, and behavior change and communication. The Global Fund estimates that \$14 billion is needed in total resources between 2014 and 2016 to support global malaria control efforts. If fully resourced, the world can avert 196,000 additional deaths each year between 2014 and 2016 through these

investments. Without these investments, however, we risk a malaria resurgence similar to what we saw in Zambia.

To achieve greater results in a tight budget environment, the Global Fund, through the new funding model, is also engaging more proactively in how it directs its resources: it is identifying problems and/or opportunities for high-impact and tackling them head on. This is entirely consistent with the two malaria-focused regional initiatives it is currently undertaking: one in Mesoamerica and Hispaniola that is focused on malaria elimination and one in the Greater Mekong sub-region that is aimed at artemisinin resistance.

The regional initiative in Mesoamerica and Hispaniola has obvious implications for the U.S. because of the close proximity in which the 10 countries this region comprises lie geographically. As a world health community, we must recognize that malaria is a global emergency that knows no borders. Therefore, eliminating malaria in these 10 countries not only helps this region achieve an important milestone, but it also helps to protect the health and safety of people in the U.S.

This regional initiative, and its focus on elimination, is also particularly well-timed because malaria rates have fallen in nearly every country in this region – often dramatically. Much of the region has already met the Millennium Development Goal for 2015 of reducing the number of diagnosed cases by 75 percent, and three countries have officially entered the pre-elimination phase. Of course, in some areas there is still a long way to go. But for many countries in this region, malaria elimination is entirely within reach.

To build on this momentum, the Global Fund is dedicating \$10 million to this new regional initiative, with the hope of helping countries close to malaria elimination achieve that goal once and for all. In 2011, the Pan American Health Organization, together with donors, technical experts and other stakeholders, laid out a multiyear plan for malaria control in the Americas. At the same time, a regional plan in Mesoamerica and Hispaniola was in development, as were country-level plans to fight the disease. The Global Fund led regional malaria initiative will, therefore, leverage activities already taking place at

the country level, as well as regionally, and act as a catalyst, building upon progress already made and scaling up the efforts significantly.

In June, all 10 countries in this region will gather to craft the concept note for the initiative. This document will lay out the roadmap for malaria elimination between 2020 and 2025. It will look at what is needed to achieve this goal from a political, technical and country-coordination perspective before it is submitted to the Global Fund to review, approve of and disperse a potential \$10 million grant.

The Global Fund is also trying to tackle the serious threat of malaria drug resistance through the new funding model. The Regional Artemisinin Resistance Initiative in the greater Mekong sub-region aims to help catalyze a coordinated response among partners to a major global threat to malaria control and to the Global Fund's investments over the last decade. The Global Fund has committed \$100 million to this multi-country, multi-partner effort and will work with PMI, which already has a strong presence in this region.

As the Executive Director of the Global Fund, I am firmly committed to overseeing the continued implementation of these regional malaria initiatives under the new funding model, as well as other reforms that are allowing the organization to shift from an emergency response to one of long-term sustainability. Armed with these changes, the Global Fund, along with PMI and other partners, have a historic opportunity to stop malaria and save millions of lives from this devastating disease.

I will need the continued support of the U.S. government and other donors to fully realize this goal. Because, while malaria is treatable, preventable and curable, millions of people still die each year from this disease, principally children under the age of five in sub-Saharan Africa. I think we can all agree that no child should die for lack of a \$1 insecticide-treated net, a \$1 rapid diagnostic test kit, or a \$7 drug treatment regimen.

As you know, the Global Fund is in the midst of a big international push on its Fourth Replenishment. We are profoundly grateful that the U.S. contributed \$4 billion to the Global Fund during the last replenishment cycle from 2011 to 2013, including \$1.65 billion in the Fiscal Year 2013 continuing resolution. We thank Congress for its support for the Global Fund and we are encouraged by

the Administration's recent request of \$1.65 billion for Fiscal Year 2014. However, we are mindful that funding requests from the U.S. beyond Fiscal Year 2014 will depend largely on other donors stepping up to match the U.S. investment at least 2/3 to 1/3 over the course of the 2014 to 2016 replenishment; increased domestic investments by implementing countries during this same period; and the Global Fund's continuing implementation of its ambitious reform agenda.

We have reached a critical moment in history where we can see the end of malaria deaths. By investing now, the U.S. can help lead the world in shrinking the map on malaria by accelerating scientific progress and directing resources to people most impacted by this disease; however, if we lose momentum now, it will require even more costly investments to get back on track.

I would like to thank Chairman Smith, Ranking Member Bass, and the entire Subcommittee, again, for the honor of speaking with you today. I am now happy to answer any questions you may have.

APPENDIX A

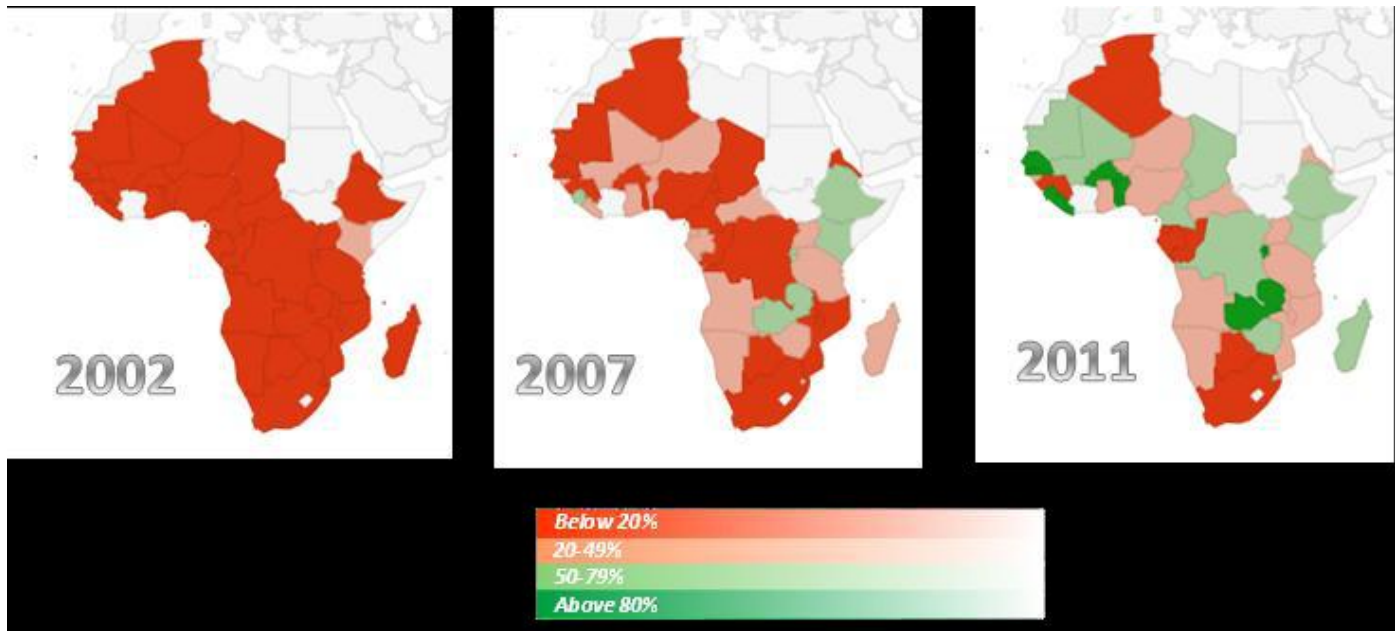
The table below shows the growth of results due to key interventions for malaria for Global Fund-supported programs through 2012.

Malaria Intervention	End of 2012	One year ago (end of 2011)	Five years ago (end of 2007)
Insecticide-treated nets distributed	310 million	230 million	46 million
Malaria cases treated	234 million	187 million	44 million
Indoor Residual Spray	46 million	43 million	6 million

Source: The Global Fund, 2012

APPENDIX B

Insecticide-treated Net Coverage in Sub-Saharan Africa, 2002-2011



Source: The World Health Organization, 2012