**PREPARED STATEMENT OF DR. DAVID BOWEN, CEO, MALARIA NO MORE**

**House Committee on Foreign Affairs, Subcommittee on Africa, Global Health, and Human Rights”**

**Monday, December 5, 2011, 3:00pm**

Mr. Chairman, Ranking Member Payne, and Members of the Subcommittee: Thank you for this opportunity to testify on the successful progress made possible by U.S. contributions and those of our partners in the fight against malaria as well as the challenges that lie ahead. Your committee has provided strong bipartisan support for global health, and the Members of this committee have been ardent champions in the fight against malaria. You should be proud that your work has saved the lives of millions of men, women and especially children around the world. Your continued bipartisan support is needed now more than ever to sustain the progress which has been made in the fight against malaria.

As President George W. Bush eloquently stated in 2007 proclaiming April 25th as World Malaria Day, “As a compassionate nation, we are called to spread awareness about malaria -- and we're called to act. That's what compassionate people do. When they see a problem, they act.” As President Obama stated before the Ghanian Parliament, “We are called to act by our conscience but also by our common interest, because when a child dies of a preventable disease in Accra, that diminishes us everywhere. And when disease goes unchecked in any corner of the world, we know that it can spread across oceans and continents.”

Mr. Chairman, since the founding of our great nation, Americans have fought this debilitating disease. George Washington, Abraham Lincoln and Teddy Roosevelt all suffered from malaria. In the 1930s, 30 percent of the American population in the area covered by the U.S. Tennessee Valley Authority was affected by malaria. In fact, the Centers for Disease Control was created, in 1946, with the sole mission of fighting malaria. Thankfully, due to a robust eradication effort under the National Malaria Eradication Program, malaria was eliminated from the United States in 1951. If we remain steadfast in our resolve, similar success can be achieved in Sub-Saharan Africa.

Mr. Chairman, I am the CEO of Malaria No More, an advocacy organization which was established five years ago at the White House Summit on Malaria with the goal of helping reach near zero malaria deaths in Africa by 2015. Malaria No More works to raise the profile of the disease among the public, policymakers, and businesses, while engaging the private sector to provide life-saving mosquito nets and other critical interventions to families in Africa. Thanks to contributions from the American public and private companies, Malaria No More has distributed 2.7 million long-lasting insecticide treated mosquito nets in the past five years -- enough to protect 5 million people at risk of malaria.

Over the past five years, there have been remarkable advances in the fight against malaria. According to the World Health Organization, the estimated number of global malaria deaths has fallen from approximately 1 million in 2000 to roughly 781,000 in 2009 due to the generosity of the American people and that of many other nations around the world. Our commitment has helped to ensure that in less than five years, malaria cases have been halved in over 40 countries, and childhood malaria deaths have dropped by 200,000. The ancillary public-health benefits resulting from these successes in the fight against malaria include reductions in co-morbidity from pneumonia and malnutrition, freeing-up health system resources and contributing to local country ownership and sustainability through capacity-building, thereby mobilizing local governments, the private sector and civil society to assume responsibility for health services. Simply put, our investments have paid off tremendously and enabled countries to engage in fighting the diseases themselves by increasing their own capacity to fight malaria.

Despite this progress, malaria remains one of the major global health challenges in the world, and specifically on the African continent, with approximately 80% of malaria deaths occurring in African children under five years of age. The human and economic toll of malaria in Africa is devastating. The mortality and health impact that the malaria burden imposes in sub-Saharan Africa, predominantly on pregnant women and children under the age of five, is well known. In addition, the malaria burden imposes a high cost on macroeconomic growth and household income (through absenteeism and expenditures on treatments); and negatively impacts childhood cognitive development. These factors pose serious impediments to poverty alleviation and overall development in Sub-Saharan Africa.

* **Malaria hurts macroeconomic growth in Africa**: Economists estimate that up to $12 billion is lost in economic productivity due to malaria in Africa annually.[[1]](#footnote-1)
* **Malaria is imposing costs on families that are already living on the very edge of survival**: Economic studies have shown that the total cost (direct and indirect) imposed by malaria can cost families up to 32% of household income in Malawi[[2]](#footnote-2).
* **Malaria imposes an enduring legacy of lost opportunity on the children it affects:** Malaria negatively impacts childhood cognitive development, which can lead to reduced educational attainment and earning potential in adulthood. A recent study in Uganda concluded that an episode of cerebral malaria was associated with a 3.7 fold risk of cognitive impairment compared to unaffected children.

Mr. Chairman, over the past five years, the international community has come together to advocate, innovate, and deliver on key life-saving interventions. Critical innovative partnerships have been created between donor governments such as the United States’ President’s Malaria Initiative (PMI), developing country governments, the private sector, local communities, nongovernmental organizations, foundations, the scientific community, and the faith-based community. These stakeholders partnered over the past five years to tackle this preventable, but highly deadly disease, which disproportionately affects women and children globally, but particularly in sub-Saharan Africa. Through these efforts we have made real progress, and that is why with continued efforts and resources we have an opportunity to eliminate malaria as a public health threat within this decade.

**U.S. Leadership through the President’s Malaria Initiative**

Mr. Chairman, the President’s Malaria Initiative (PMI), launched in June 2005 by President Bush with strong bipartisan support from Congress, was established to help reduce the burden of malaria across Africa. PMI, a bipartisan initiative, is led by the U.S. Agency for International Development with the Department of Health and Human Services’ Centers for Disease Control and Prevention as its major partner. The Initiative was established with a vision of five years of funding between fiscal years 2006 through 2010 and represented a $1.265 billion expansion of U.S. government resources to reduce the malaria burden and help relieve poverty in Africa. President Obama, with the continued bipartisan support in Congress, has reaffirmed U.S. leadership in the fight against malaria and his support for PMI through the expansion to two additional countries, Nigeria and the Democratic Republic of Congo. The goal of PMI is to reduce malaria deaths by 50 percent in 15 focus countries in five years. In some cases, the goal has been to reduce deaths by as much as 70 percent. PMI has assisted the focus countries to increase access to four proven malaria prevention and treatment measures: insecticide-treated mosquito nets (ITNs); indoor residual spraying with insecticides (IRS); intermittent preventive treatment for pregnant women (IPTp); and improved laboratory diagnosis and appropriate treatment, including artemisinin-based combination therapies (ACTs).

Since its establishment, PMI alone has distributed over 30 million insecticide-treated mosquito nets; provided over 67 million lifesaving anti-malarial treatments, and protected more than 27 million people as a result of PMI-supported indoor residual spraying. PMI has provided support to countries to improve the management of anti-malarial drugs and other essential medical commodities which has resulted in significant improvements in supply chain systems in all 15 original PMI-focus countries.

In addition, malaria is one of President Obama’s six priority areas under the Global Health Initiative, which was announced in May 2009. In April 2010, USAID, the Department of Health and Human Services, and the Department of State released a joint “Lantos-Hyde United States Government Malaria Strategy.” The strategy outlines key targets for the U.S. malaria program from 2009 to 2014. Key goals and principles include the following:

* halving the burden of malaria (morbidity and mortality) in 70% of at-risk populations in sub-Saharan Africa;
* limiting the spread of anti-malarial multi-drug resistance in Southeast Asia and the Americas;
* assisting host countries to revise and update their National Malaria Control Strategies and Plans to reflect the declining burden of malaria; and
* linking U.S. malaria efforts with host country malaria plans.

**Success Stories**

Mr. Chairman, five years after PMI was launched, dramatic improvements in the coverage of malaria control measures are being documented in nationwide household surveys. During the past four years, nine PMI countries, **Ghana**, **Kenya**, **Malawi**, **Mali**, **Rwanda**, **Senegal**, **Tanzania**, **Uganda**, and **Zambia**, have reported increases in household ownership of one or more insecticide-treated bed nets from 33 to 85 percent in 2007–2010. At the same time, usage of a bed net more than doubled from an average of 21 to 50 percent for children under five years and about the same amount for pregnant women. Over the same time period, the proportion of pregnant women who received interventions for the prevention of malaria increased from an average of 24 to 43 percent.

Of the nine PMI focus countries (**Ethiopia, Ghana, Kenya, Madagascar, Malawi, Rwanda, Senegal, Tanzania, and Zambia**) where baseline and follow-up health surveys have been conducted, all-cause mortality among children under five has dropped by 16 to 50 percent. While several factors could account for these reductions in under-five mortality, according to PMI, the timing of these reductions, in close association with the massive scale-up of malaria prevention and treatment measures, strongly suggests that reductions in malaria prevalence and death are playing a major role in the improvement.[[3]](#footnote-3)

In **Tanzania**, all-cause, under-five mortality fell by 28 percent between 2005 and 2010. Over the same time period, household ownership of at least one insecticide-treated bed net increased from 23 to 64 percent and usage among children under the age of 5 and pregnant women increased from 16 percent (both groups) to 64 percent and 57 percent, respectively. Nationwide prevalence of severe anemia in children six months to five years of age also fell by 50 percent between 2005 and 2010. Malaria control has also been extremely successful on the island of Zanzibar where less than 2 percent of patients at the 90 health facility surveillance sites have blood smears that have tested positive for malaria parasites.[[4]](#footnote-4)

In **Senegal**, a 40 percent reduction in all-cause mortality in children under five was documented between 2005 and 2010. This dramatic reduction is due, in part, to rapid increases in the coverage of malaria interventions. Household ownership of one or more ITNs increased from 36 percent in 2006 to 60 percent in 2008. After the 2009 national ITN distribution to children under the age of five, a post-campaign survey found household ITN ownership had increased to 82 percent. The proportion of pregnant women who received two or more doses of IPTp rose from 12 to 52 percent between 2005 and 2008. In late 2007, Senegal introduced rapid diagnostic tests (RDTs) for malaria in all of its health facilities, and in 2008, 73 percent of all suspected malaria cases were tested. The U.S. Government has supported malaria control in Senegal since 1999, including $2.2 million in FY2006. For the period FY2007-2010, PMI provided $75 million in funding.[[5]](#footnote-5)

In **Ghana**, in 2010, under the leadership of the National Malaria Control Program (NMCP), PMI partnered with Malaria No More UK; Comic Relief; UNICEF; the World Health Organization (WHO); Nets for Life; ADDRO, a local nongovernmental organization; and others to launch the first in a series of long-lasting ITN distribution campaigns designed to reach all the regions in the country by the end of 2011. In May 2010, more than 10,000 volunteers walked door to door in every community in the Northern Region, distributing and hanging 560,000 long-lasting ITNs to cover children under the age of five and pregnant women. In 2010, PMI contributed 955,000 long-lasting ITNs, logistics support, training, technical assistance, and post-campaign evaluations to the Ghanaian ITN program.[[6]](#footnote-6)

**Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund)**

In addition to bilateral assistance for malaria, the U.S. provides multilateral assistance to the Global Fund. Under the leadership of President George W. Bush and with bipartisan support in Congress, the U.S. pledged the founding donation to the Global Fund in 2001 and we continue to be the largest single donor to the Global Fund. However, the U.S. shares the burden with donors worldwide by capping its contributions at 33% of the total contribution, which effectively leverages $2 from other international donors for every $1 invested by the U.S. taxpayers. The Global Fund is an independent international financing institution, which pools funding from donors to provide grants to low-and middle-income countries to combat malaria (as well as HIV and TB). The Global Fund has committed $22.6 billion in 150 countries, and has distributed 230 million bed nets and treated 230 million cases of malaria.

**PMI and the Global Fund Collaboration**

All 17 PMI countries have received significant financing from the Global Fund for malaria prevention, treatment and control programs. In its 2010 annual report, PMI stated “coordinating PMI investments with local initiatives financed by the Global Fund is critical to the success of both the Global Fund and PMI.” As PMI Coordinator, Admiral Tim Ziemer put it, “The incredible progress we have made against malaria is due in large part to effective partnerships with host governments and the Global Fund to Fight AIDS, Tuberculosis and Malaria…” In addition the Global Fund provides an additional mechanism for U.S. malaria support through PMI by financing programs developed by recipient countries and by reaching many countries beyond the PMI focus and non-focus countries.

PMI works in many countries with the Global Fund, and the programs build upon and complement each other. For example, in **Liberia**, the combined efforts of PMI, the Global Fund, and UNICEF supported the procurement and distribution of malaria drugs throughout the country. PMI and the Global Fund also supported the development of a supply chain national master plan for the Ministry of Health in Liberia. In **Madagascar**, PMI collaborated with the Global Fund, the National Malaria Control Program, and other partners to distribute more than 5.6 million long-lasting ITNs (PMI provided 2.5 million of these nets) in 71 districts in the country in 2010. The Global Fund and PMI also both fund the National ITN Coordination Committee to carry out training and net distribution. In **Benin**, PMI and other partners including the Global Fund contributed to the success of Benin’s ITN campaign. In the **Democratic Republic of Congo**, in collaboration with the World Bank, Global Fund, DfID, PSI, and UNICEF, PMI is contributing to substantial progress toward achieving long-lasting insecticide-treated nets universal coverage. In **Malawi**, PMI successfully piloted IRS in the central region of the country for the past three years, and as a result, the Government of Malawi scaled up the program to seven districts with assistance from the Global Fund. Finally, in **Uganda**, PMI, the Global Fund, and the World Bank were able to negotiate an agreement to address a delay in the procurement of 7.2 million ITNs for a mass campaign targeting children under the age of five. The agreement allowed the campaign to move forward on time.

**U.S. Leadership in Malaria Research & Development**

Mr. Chairman, of critical importance, is the research and development that is being done by the U.S. government, academic and research institutions, philanthropic organizations, and the private sector to develop our current and future tools to end malaria deaths. A remarkable example, the RTS,S vaccine, has proven that additional protection against malaria is possible with the creation of new tools through U.S. leadership in research and development (R&D). The Walter Reed Army Institute of Research, in continuing the malaria-fighting work of its namesake, U.S. Army physician, Walter Reed, began development of the vaccine in collaboration with GlaxoSmithKline and PATH’s Malaria Vaccine Initiative (PATH MVI) in 1987. This new malaria vaccine candidate offers hope that not only will millions of lives be saved and stability brought to countries fighting malaria; it will also increase our ability to protect our troops serving overseas in malaria-endemic regions.

U.S. government agencies have been leaders in malaria R&D, with the National Institutes of Health, Department of Defense, and USAID representing more than a quarter of global malaria R&D funding in 2009. And the private sector’s collaboration with Walter Reed is not unique. Many other private sector, academic, non-governmental, and philanthropic organizations, such as the Bill and Melinda Gates Foundation, have contributed significantly to this long-term effort.

Although global funding for malaria R&D has increased over the past two decades, sustained investment is needed given the challenges of drug and insecticide resistance. This resistance means that our best drugs and insecticides are likely to be ineffective eventually, and here again, the U.S. is rising to the challenge. The National Institute of Allergy and Infectious Diseases, the Walter Reed Army Institute of Research, and many academic and private organizations around the U.S. conduct research to develop innovative new drugs and insecticides that will last longer and save more lives.

Of course, given the recent increase in treatment candidates for malaria, clinical and field-based studies are critical in evaluating the effectiveness of these new interventions. USAID plays a critical role in providing U.S.-based agencies, as well as private companies, with developing world knowledge, and PMI supports operations research into malaria interventions. In **Tanzania**, a PMI study looked into whether indoor residual spraying can be withdrawn in areas with high ITN ownership without a rebound in transmission. And PMI’s partner, the Center for Disease Control and Prevention, helped to lead the RTS,S vaccine candidate trial at one site in **Kenya**.

**Key Challenges**

Despite the successes in the fight against malaria, several key issues present challenges to achieving the goal of near zero deaths by 2015. First and foremost, continued progress is in jeopardy without sustaining funding on a bilateral and multilateral basis for malaria prevention, treatment and control. In addition, the emerging problem of poor quality and counterfeit drugs is putting lives at risk and contributing to incidence of drug-resistant strains of malaria. The good news is that hearings such as today’s help us to shine light on the challenges, and allows us to explore solutions to become even more effective in eliminating malaria.

**Funding:**

Mr. Chairman, significant strides have been made in the fight against malaria over the last ten years, as noted above. Those strides could be reversed. The current economic environment clearly presents significant budgetary constraints that require immediate attention -- but as Congress faces difficult decisions in its negotiations over federal spending levels, we urge Congress to continue to provide an appropriate level of funding to ensure that the world is able to capitalize on the gains made in recent years.. We are making major progress toward the day in which the world can say that malaria, like smallpox, is a disease of the past. The promise of eliminating malaria, however, cannot be fulfilled if bilateral and multilateral funding is flatlined or substantially reduced.

As a result of strong bipartisan support over the past five years, congressional appropriations for malaria have consistently increased since FY2004, which has driven the recent successes. Congress is in the midst of critical negotiations on the FY2012 appropriations, deciding the fates of both domestic and international programs. As that debate continues, millions of lives are being saved by the less than 1% of the U.S. budget that is spent on development assistance and global health programs. Global health and other development assistance programs are on the chopping block as they are misperceived as being wasteful and contrary to U.S. national interest. That is simply not the case. Through an investment of less than 1% of the U.S. budget, the U.S. saves and improves millions of lives, reflecting America’s fundamental humanitarian values. Funding for malaria is also quantifiable, meaning we can measure inputs, outputs, and the impact that our tax dollars are providing, which is critically important in ensuring we are making efficient and effective use of our resources. In addition, these programs are critical in advancing our national security and economic interests. Our country benefits from global stability — but stability is difficult in nations and regions weakened by malaria, AIDS, and starvation. As you know, Mr. Chairman, these nations are not only fragile but have the potential of becoming failed states creating a vacuum for extremism and violence, which is also why our military community has a strong interest in malaria beyond force protection.

Moreover, history has shown us that investing in today’s aid recipients will help convert them to tomorrow’s consumers of American exports. [Eleven of the 15 largest importers](http://www.interaction.org/sites/default/files/4857/ChooseToInvest_booklet_Complete.pdf) of American goods and services are former recipients of U.S. foreign aid — including South Korea, Taiwan and Brazil. The U.S. Department of Commerce estimates that for every $1 billion in goods the U.S. exports, 6,000 manufacturing jobs are supported here at home. And 95% of the world’s consumers live outside the United States. Research released in October by the African Development Bank shows that Africa’s income is expected to triple in the next 50 years, and that most African countries “will attain upper middle income status” by then. These potential markets can only be successful if their consumers are healthy and productive.

Funding malaria control and other global health programs has demonstrated real progress, saving hundreds of thousands of lives, particularly the lives of children and pregnant women. As I noted earlier, supporting PMI and the Global Fund has yielded real results and cutting funding will have a significant impact on people’s lives. The math is as grim as it is inescapable – for every $50 million cut to global health funding from FY2011, approximately 1 million fewer bed nets will be provided and 2.5 million fewer people will receive ACT treatment for malaria through PMI.

**Drug Quality:**

An increasing problem throughout much of the developing world is the sale of counterfeit, adulterated, and poor-quality drugs. These drugs do not deliver the appropriate treatment for malaria patients, thus putting their lives at risk, and contributing to the emergence of drug-resistant strains of malaria. We fully appreciate the threat that sub-standard and counterfeit drugs represent to the progress being made to reach near zero deaths from malaria by 2015. We are encouraged, however, by the efforts of the U.S. government, the Global Fund, and African leaders to address these challenges, and we strongly urge them to continue to investigate these issues to shed light on individuals seeking to profit on the lives of those in dire need of lifesaving assistance.

PMI Efforts to Address Sub-Standard Quality Drugs

PMI is taking concrete steps to assist countries in addressing these challenges. It is providing support to strengthen the capacity for malaria case management, including ensuring a steady supply of high-quality, essential drugs and supplies, and providing support to train and supervise health workers in management of patients with fever. PMI also ensures that all medical commodities that are procured with U.S. taxpayer dollars undergo rigorous quality assurance/quality control testing prior to delivery. In addition, only those ACTs that have been approved by a stringent regulatory authority or the WHO prequalification program are procured with PMI funding.

In **Ethiopia**, PMI helped the Drug Administration and Control Authority establish a drug quality monitoring program. In addition, PMI supported similar post-marketing anti-malarial drug quality control programs and assessments in **Benin, Ghana, Madagascar, Senegal,** and **Uganda**. Finally, PMI also implements end-use verification programs whereby PMI funds quarterly surveys of commodity stocks in a sample of health facilities in PMI focus countries to verify that malaria commodities are available in health facilities and are reaching their intended beneficiaries. PMI has carried out surveys in 12 PMI countries and are seeing encouraging results such as in **Kenya** where, during 2010, 80 percent of 174 public health facilities visited had adequate stocks of ACTs on the day of the survey.[[7]](#footnote-7)

Combating Substandard and Counterfeit Drugs: Actions by the Global Fund

The Global Fund is dedicated to preventing procurement and/or introduction of counterfeit or substandard medicines in its grant portfolio. The Global Fund employs a coordinated approach, including multiple and reinforced quality control measures throughout the supply chain, careful review of pre- and post-shipment quality, and strengthened collaboration with technical partners to manage and prevent quality failures.

In order to ensure that donor dollars are used as effectively as possible in aiding needy recipients and combating the three diseases, the Global Fund takes an uncompromising stance toward counterfeit or substandard medicines. It employs a range of comprehensive strategies to prevent quality failures and constantly strives to update its safeguards.

Nonetheless, those who seek to profit from counterfeit medicines show unrelenting resolve in their efforts, and the global community must be equally determined to defeat them. African governments, PMI, the Global Fund, and other donors must continue efforts to mitigate all cases of malfeasance. These efforts are critically important to the international community’s mission to save lives and promote good governance.

**African Leaders Malaria Alliance (ALMA)**

The African Leaders Malaria Alliance (ALMA) was launched during the UN General Assembly in September 2009 to provide African leaders with a high-level forum to promote universal coverage with effective malaria interventions. ALMA is a coalition of 41 African heads of state and government as well as the African Union, who are working to maintain momentum in Africa to end malaria deaths by facilitating the sharing of effective malaria control practices. Under the leadership of President Kikwete of Tanzania, who has served as chair for the past two years and will hand over the reins to President Ellen Johnson-Sirleaf of Liberia later this month, ALMA’s member states are holding themselves accountable by scoring their progress on country-led efforts and sharing best practices to increase effectiveness in the fight to end deaths from malaria.

ALMA is partnering with stakeholders to address key challenges to universal coverage; has called on all African countries to waive taxes and tariffs on all malaria drugs and commodities; is working to prevent stock outs of rapid diagnostic tests (RDT) and ACTs; and is promoting the ban by its member-states of the production, importation, and use of mono-therapies. ALMA is taking concrete steps by ensuring regulatory measures are implemented to stop marketing oral artemisinin-based montherapies and to promote broad access to artemisinin-based combination therapies. To date, 31 ALMA member-states have banned the use of monotherapies. The ALMA Secretariat is run from Africa by Executive Secretary Johannah-Joy Phumpahi, a former Minister of Health and Member of Parliament from Botswana. She was also an Assistant Director General to the World Health Organization and Vice President to the World Bank before taking up her role as ALMA Secretariat.

**Conclusion**

Across Africa, individual families, mothers, and children are winning the fight against malaria.  As a result, countless inspiring stories are being written across the African continent where there used to be stories of heartbreak. The statistical success has been evident across Africa. Nations across Africa have demonstrated remarkable results.  But what can be lost in the recitation of statistical success is the very real difference these interventions are making in the lives of individual people.

Children are surviving to see their fifth birthday and spending more time at school instead of being sick.  Family members do not have to spend as much time caring for the sick and workers can spend more time producing at their respective professions because they are not spending multiple days per year fighting this deadly disease.

These stories serve as a reminder to the rest of the world that funding levels must continue and increase, and the miniscule amount of the U.S. budget apportioned for these programs not only saves lives, but builds futures.

1. The Malaria Burden and Africa; Ebrahim Samba; WHO January 2001 [↑](#footnote-ref-1)
2. Ettling, et. al. Economic Impact of Malaria in Malawian households, 1994 [↑](#footnote-ref-2)
3. The President’s Malaria Initiative, Fifth Annual Report to Congress, April 2011 [↑](#footnote-ref-3)
4. Id [↑](#footnote-ref-4)
5. Id [↑](#footnote-ref-5)
6. Id [↑](#footnote-ref-6)
7. Id [↑](#footnote-ref-7)