



Prioritizing Malaria Control in a Time of Foreign Aid Austerity

By Roger Bate and Kimberly Hess

With the entire US budget on the chopping block, small-ticket items such as the US global health budget—a total expenditure of around \$8.6 billion—will necessarily attract less attention than sequestration of the defense budget or cuts to Social Security. But while America’s global health budget consumes only a fraction of one percent of total government spending, these funds can mean life or death for thousands around the globe. In straightened financial times, budget cuts should be based on an assessment of which programs work best and an evaluation of how to strengthen the most successful interventions while trimming the fat from less effective ones. This Outlook assesses the impact and effectiveness of the President’s Malaria Initiative (PMI) and finds that PMI has been remarkably successful in its management and control practices, cutting malaria incidence and child mortality rates, compensating for failures in other global health programs, and keeping corruption levels low. Despite all these strengths, PMI faces nearly 5 percent budget cuts (or even termination by the end of 2013), while other multilateral programs that are widely acknowledged to be less effective are picking up new money. Without the help of PMI, many of the significant gains that have been made in malaria control could be reversed.

In 2005, the United States Agency for International Development (USAID) launched what was to become the best US-led global health effort: the President’s Malaria Initiative (PMI), a \$1.2 billion, five-year expansion of US governmental resources to halve malaria-related deaths in fifteen focus countries in Africa. PMI is implemented with the US Centers for Disease Control and Prevention (CDC) and is led by a US global malaria coordinator and an interagency steering group.

In 2008, the Tom Lantos and Henry J. Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act (Lantos-Hyde Act) authorized the expansion of the PMI program for 2009–2013.¹ The following year, President Obama folded PMI into the

Roger Bate (roger.bate@aei.org) is a resident scholar at AEI who researches international health policy, and Kimberly Hess (khess@fightingmalaria.org) is a researcher with Africa Fighting Malaria.

Key points in this Outlook:

- Since 2005, the US-led President’s Malaria Initiative (PMI)—a \$1.2 billion government effort to combat malaria-related deaths in Africa—has successfully cut malaria incidence and child mortality rates, compensated for failures in other global health programs, and kept corruption levels low.
- Despite its remarkable progress, PMI faces nearly 5 percent budget cuts in fiscal year 2013, though other multilateral programs with more corruption are receiving drastic budget increases.
- Without PMI, malaria systems are likely to become more corrupt, especially if funds are redirected via the Global Fund to Fight AIDS, Tuberculosis and Malaria to opaque United Nations agencies.

new US Global Health Initiative, of which PMI was to be a key component. As a result, PMI's aims expanded both in width and depth—the program now aims to reduce morbidity and mortality by 70 percent in the fifteen original PMI focus countries, and to halve malarial burdens in an additional nine countries over the six-year funding period (2009–2014).²

According to PMI's 2012 annual report, all-cause mortality rates for children under five years old have declined by between 16 and 50 percent in eleven of the original fifteen PMI focus countries (follow-up surveys have yet to be completed for the remaining four countries).³ Since malaria is a leading cause of child mortality, improved malaria control significantly lowers all-cause child mortality rates.

PMI now aims to reduce morbidity and mortality by 70 percent in the fifteen original PMI focus countries, and to halve malarial burdens in an additional nine countries over the six-year funding period.

USAID's Past Malaria Control Program

PMI's progress is truly remarkable given that it was conceived out of the unmonitored and generally woeful US malaria effort that existed during most of the 1990s and early 2000s. The USAID malaria control program that preceded PMI was fraught with problems. Antimalaria advocates prompted the US Congress to lead a series of investigations into the agency's malaria programs between 2004 and 2006, which revealed almost no performance monitoring and evaluation, no accountability for spending, and a promotion of poor public health practices.⁴ Measurement focused almost entirely on inputs (number of commodities distributed) rather than outcomes (change in malaria morbidity and mortality). While USAID claimed to support comprehensive malaria control programs, most of its budget was spent hiring primarily US-based contractors and consultants rather than procuring lifesaving malaria treatments and prevention tools.

In fact, "of the \$80 million Congress allocated to USAID to fight malaria in 2004, USAID used only

approximately \$4 million to purchase life saving interventions."⁵ Perhaps even more disturbing was USAID's lack of transparency, which made it virtually impossible to determine how the remaining funds were spent. In addition, what funding USAID did allocate to malaria control was spread too thinly among too many recipient countries: "Half its FY2005 budget was spread between 21 African country-level programs and three regional offices, over two-thirds of its FY2006 budget went to 17 African countries and one regional office."⁶

USAID's Transformation

USAID's reform of its malaria control program was extraordinary. It vowed to extinguish the many small programs it was funding and to instead focus on a select group of countries. It also promised to spend at least half of its budget on the purchase of lifesaving commodities.⁷

PMI is quite possibly the most transparent and accountable bilateral donor agency. It is committed to measuring its effectiveness in terms of lives saved and malaria cases averted instead of commodities procured and distributed. PMI's core actions have proven resilient—it employs all proven treatment and prevention methods, including artemisinin-based combination therapies (ACTs), insecticide-treated bed nets (ITNs), and indoor residual spraying (IRS); implements integrated malaria control systems; prevents mother-child transmission; and improves coordination between actors.⁸

Parasite resistance to artemisinin remains a serious threat to malaria treatment, and PMI works with its focus countries to improve diagnosis and to use medicines most effectively by training and supporting community health workers. These efforts help preserve the effectiveness of ACTs by ensuring they are used only for the treatment of malaria and not for nonmalarial fevers.

PMI also committed itself at its inception to fund IRS as a method of malaria prevention, and to buy and promote the use of DDT for IRS in countries requesting to use it. Before the existence of PMI, USAID would only promote the use of DDT as a "measure of last resort;" as a consequence, it was never promoted.⁹ Yet, DDT is the most effective insecticide ever used for malaria prevention. However, aggressive advocacy by environmentalist groups against the use of DDT (because of unsubstantiated claims that when used in malaria control, it is harmful to human health and the environment) led donor agencies to shy away from promoting its use.

In a stark break with the past, admiral Tim Ziemer, PMI coordinator, announced in 2006:

I anticipate that all 15 of the country programs of President Bush's \$1.2 billion commitment to cut malaria deaths in half will include substantial indoor residual spraying activities, including many that will use DDT. . . . Because it is relatively inexpensive and very effective, USAID supports the spraying of homes with insecticides as a part of a balanced, comprehensive malaria prevention and treatment program.¹⁰

PMI reincorporated IRS into the antimalaria toolkit, and has partly undone the many years of opposition this remarkably effective intervention has faced. PMI has supported IRS programs in all fifteen of its original focus countries, where it has protected over 28 million people by spraying over 7 million structures with insecticides in 2011 alone.¹¹

Malarial cases and deaths on the Tanzanian island of Zanzibar were reduced to near-zero levels after all available treatment and prevention interventions were employed. By 2007, Zanzibar had almost eliminated the disease.

Progress against Malaria

Thanks in large part to PMI's efforts, major progress has been made in the fight against malaria in the original fifteen African focus countries. For example, malarial cases and deaths on the Tanzanian island of Zanzibar were reduced to near-zero levels after all available treatment and prevention interventions were employed. By 2007, Zanzibar had almost eliminated the disease.¹²

In 2011, an external evaluation team was commissioned to review the first five years of PMI's activities. The team's overall assessment was immensely positive:

PMI is, by and large, a very successful, well-led component of the USG [US government] Global Health Initiative. Through its major contributions

to the global malaria response via its collaborations with multilateral and bilateral partners, [its] effective relationship with the Global Fund, and contributions to reinvigorating national malaria control programs, PMI has made substantial progress toward meeting its goal of reducing under-5 child mortality in most of the 15 focus countries . . . PMI, through its first five years of activities, has earned and deserves the task of sustaining and expanding the U.S. Government's response to global malaria control efforts and should be given the responsibility to steward additional USG financial and human resources to accomplish this task.¹³

PMI has also received accolades from leaders in the global health community. Dr. Kent Campbell of the international nonprofit organization PATH and Jonathon Simon of Boston University wrote in *The Hill* that "PMI is a shining example of the profound impact the U.S. is making in global health."¹⁴ Ambassador Mark Green, senior director at the US Global Leadership Coalition, wrote in *The Ripon Forum*: "Just as I saw firsthand the terrible costs of malaria, I have also seen for myself the tremendous progress that PMI has helped to create. . . . As an American, I am proud that my country has helped to lift so many lives through our global health programs like PMI."¹⁵

PMI: The Supplier of Last Resort

In addition to distributing medication through its own programs, PMI routinely monitors ACT availability and has become a supplier of last resort for countries experiencing delays in ACT procurements from other donor agencies, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund).

PMI has paid for several emergency shipments for countries facing severe shortages of ACTs. Such procurements are typically more expensive than planned shipments. In 2008, the Global Fund required Kenya to purchase a portion of its annual ACT order through an international open tender, leading to countrywide stock-outs in which the lowest bidder was unable to fulfill the order on time and in full.¹⁶ Emergency orders were placed with PMI, which was able to supply the country with close to 1.3 million doses of the leading ACT, Coartem.

The Affordable Medicines Facility—malaria (AMFm) is a global subsidy hosted by the Global Fund and aimed

at increasing access to ACTs by directly subsidizing shipments to private medicine sellers.¹⁷ The AMFm has yet to garner US government funding, as PMI has not been convinced that there is sufficient evidence of its success to support its implementation. PMI has also been the only donor agency to voice the very obvious concerns about the implementation of the AMFm.¹⁸ Several countries participating in the AMFm have called on USAID/PMI to supply emergency shipments of ACTs since the launch of the AMFm pilot phase in April 2009. According to PMI:

PMI has tracked central level availability of ACTs in cooperation with the Ministry of Health in the following AMFm countries: Nigeria (selected states), Ghana, Kenya, Tanzania, and Uganda. All of these countries have experienced challenges with availability of ACTs through the public sector over the life of PMI and more recently through 2010 and 2011.¹⁹

PMI has provided at least 19 million treatments of emergency ACT supplies to the public sector in Tanzania, Kenya, and Uganda, while Nigeria and Madagascar have also requested emergency drug shipments.²⁰

To deal with these shortages, PMI recently established a Central Emergency Procurement Fund, through which it has spent nearly \$9 million in procurement of malaria commodities, including ITNs and ACTs.²¹

Dealing with Corruption

When PMI encountered challenges with corruption, it took a tough line, minimizing its losses and maintaining strict standards for program participation. For example, in Angola in 2008, over \$642,000 was lost in diverted USAID-funded antimalarial medicines as a result of several thefts occurring while the medicines were under the control of the Angolan Ministry of Health.²² A US Department of Health and Human Services Office of Inspector General audit report cited the failure of USAID in Angola to “ensure a quick and proper delivery of the drug from the airports” and its reliance on “a distribution system with significant control weaknesses managed by the Government of Angola” as reasons for the loss of funds.²³

PMI’s intolerance of corruption is evident in its decision to cease using the Angolan government’s warehouse as a result of the thefts and to begin using only private warehouses and contractors. The publication of audit

reports such as this one is proof of the initiative’s commitment to transparency.

While PMI’s actions may seem to represent a sensible reaction to corrupt practices, it is worth pointing out that other agencies—favored in the latest budget announcements by the Obama administration—do not hold such a robust policy. Agencies such as the Global Fund and the United Nations Development Program claim not to condone corruption, yet have repeatedly used failing and corrupt drug distributors; moreover, the latter program remains impervious to demands to increase transparency.²⁴

PMI has provided at least 19 million treatments of emergency ACT supplies to the public sector in Tanzania, Kenya, and Uganda.

PMI’s Future

PMI’s future is uncertain. In February 2012, the White House announced its proposed global health budget for fiscal year 2013. The budget for PMI is to be cut by 4.8 percent.²⁵ Cutting PMI’s budget would be a significant hit to malaria control worldwide since PMI is not only the largest bilateral malaria control and treatment program, it is also by far the best performing and the singular agency with robust enough monitoring mechanisms to publicly criticize its own suspect interventions.

This cut is not a deserved reward considering that other agencies—notably those that are more tolerant of corruption such as the Global Fund—are to receive a considerable budget increase, as much as 57 percent for the Global Fund. The desire to support fairly successful multilateral initiatives such as the Global Fund is understandable, but cutting better US programs is nonsensical, especially in straightened financial times. Even more worrisome is the discussion across the public health community that USAID funds are being reallocated from disease-specific programs to less transparent health system strengthening programs.

Health systems are integral to any healthy population, and in emerging markets, establishing them is extremely important. But this is an exceptionally difficult practice for donors to engage in. Measuring success is almost

impossible without long-term costly investments in measurement mechanisms.²⁶ Without accountability, programs are more likely to be inattentive to performance. The risks of corrupt practices are always higher if performance measurement is difficult.

Lastly, as a result of the Global Health Initiative, the global malaria coordinator has, and will likely continue to have, less control over US malaria funds. This is in violation of Section 304 of the Lantos-Hyde Act, which states: "The Malaria Coordinator has primary responsibility for the oversight and coordination of all resources and international activities of the United States Government relating to efforts to combat malaria." For PMI to continue to operate effectively, the coordinator's capacity must remain as such.

Section 303 of the Lantos-Hyde Act contains language regarding the US objective of achieving malaria eradication, stating: "Providing assistance for the prevention, control, treatment, and the ultimate eradication of malaria is a major objective of the foreign assistance program of the United States."²⁷ However, if funding for PMI is cut or terminated, this objective would clearly not be achieved by the United States. It remains to be seen whether this is enough to keep the funds flowing.

The future of IRS is also uncertain. Although Global Fund resources have been used for IRS programs and even for the purchase of DDT, Global Fund support for malaria control is overwhelmingly directed to ITNs, not to IRS. Without PMI's support for IRS, the availability of this life-saving intervention may be in serious jeopardy, as will the many lives at risk of malaria in endemic countries.

Without PMI, many of the gains that have been made in malaria could be reversed as the majority of the malaria effort would then fall to the Global Fund. Malaria remains a major public health problem, and sustaining and building on its successes will be a challenge in the face drug and insecticide resistance as well as uncertainties in donor funding for malaria control.

Notes

1. Tom Lantos and Henry J. Hyde *United States Global Leadership Against HIV/AIDS, Tuberculosis, and Malaria Reauthorization Act of 2008*, HR 5501, 110th Cong., 2d sess. (January 3, 2008).

2. USAID, *Lantos-Hyde United States Government Malaria Strategy: 2009–2014* (Washington, DC, April 25, 2010), www.pmi.gov/resources/reports/usg_strategy2009-2014.pdf (accessed September 25, 2012).

3. USAID, *The President's Malaria Initiative: Sixth Annual Report to Congress* (Washington, DC, April 2012), www.fightingmalaria.gov/resources/reports/pmi_annual_report12.pdf (accessed September 25, 2012).

4. Roger Bate, "USAID's Health Challenge: Improving US Foreign Assistance," *Journal of the Royal Society of Medicine* 100, no. 1, (2007): 29–33, <http://jrsm.rsmjournals.com/content/100/1/29.full> (accessed September 25, 2012).

5. Roger Bate and Benjamin Schwab, "The Blind Hydra: USAID Policy Fails to Control Malaria," (working paper, AEI, May 24, 2005).

6. Bate, "USAID's Health Challenge . . ." 29–33.

7. USAID, "USAID Reforms Agency Malaria Programs for Greater Effectiveness—Updated," December 23, 2005, <http://reliefweb.int/report/angola/usaaid-reforms-agency-malaria-programs-greater-effectiveness-updated> (accessed September 25, 2012).

8. Henry J. Kaiser Family Foundation, "The President's Malaria Initiative: Fact Sheet," March 2011, www.kff.org/globalhealth/7922.cfm (accessed September 25, 2012).

9. Donald R. Roberts, Richard Tren, and Roger Bate, *The Excellent Powder* (Indianapolis: Dog Ear Publishing, 2010).

10. World Health Organization, "WHO Gives Indoor Use of DDT a Clean Bill of Health for Controlling Malaria," September 15, 2006, www.who.int/mediacentre/news/releases/2006/pr50/en/ (accessed September 25, 2012).

11. President's Malaria Initiative, "Indoor Residual Spraying," www.fightingmalaria.gov/technical/irs/index.html (accessed September 25, 2012); and USAID, *The President's Malaria Initiative* . . .

12. President's Malaria Initiative, "Zanzibar: Beyond Malaria Control," www.pmi.gov/countries/profiles/zanzibar.html (accessed September 25, 2012).

13. President's Malaria Initiative, "External Evaluation of the President's Malaria Initiative," http://pmi.gov/news/pressreleases/pmi_audit.html (accessed September 25, 2012).

14. Kent Campbell and Jonathon Simon, "Winning the Battle against Malaria," *The Hill's Congress Blog*, August 7, 2012, <http://thehill.com/blogs/congress-blog/healthcare/242509-winning-the-battle-against-malaria> (accessed September 25, 2012).

15. Mark Green, "The President's Malaria Initiative: A Great (GOP) Success Story," *The Ripon Forum* 46, no.2, (Spring 2012), www.riponsociety.org/forum122mg.htm (accessed September 25, 2012).

16. Richard Tren, Kimberly Hess, and Roger Bate, "Drug Procurement, the Global Fund and Misguided Competition Policies," *Malaria Journal* 8, no. 305 (2009), www.malariajournal.com/content/8/1/305 (accessed September 25, 2012). Not only

did stock-outs require more expensive outlays on antimalarials, they were also deadly—enough so to cause a rise in Kenya's all-cause child mortality rate, reinforcing the earlier point that malaria plays a disproportionately large role in child mortality levels. The PMI played an extremely important role in bridging the gap caused by other aid programs' poor planning, and in mitigating the disaster. See Mary J. Hamel et al., "A Reversal in Reductions of Child Mortality in Western Kenya, 2003–2009," *American Journal of Tropical Medicine and Hygiene* 85, no. 4 (2011): 597–605, www.ajtmh.org/content/85/4/597 (accessed September 25, 2012).

17. For further information on the Global Fund's AMFm program, see Africa Fighting Malaria, "The Global Fund's Malaria Medicine Subsidy: A Nice Idea with Nasty Implications," (policy paper, Washington, DC, April 2012), www.fightingmalaria.org/pdfs/amfmpolicypaper.pdf (accessed September 25, 2012); Roger Bate, Julissa Milligan, Lorraine Mooney, "The AMFm and Medicine Diversion: Good Intent Enabling Corrupt Practices," *Malaria World Journal* 3, no. 2 (2012), www.malariaworld.org/content/research-amfm-and-medicine-diversion-good-intent-enabling-corrupt-practices; Roger Bate et al., "Subsidizing Artemisinin-Based Combination Therapies: A Preliminary Investigation of the Affordable Medicines Facility—Malaria," *Dove Press Journal: Research and Reports in Tropical Medicine* 3 (July 17, 2012): 63–68, www.dovepress.com/articles.php?article_id=10449 (accessed September 25, 2012); Donald G. McNeil Jr., "Subsidy Plan Seeks to Cut Malaria Drug Cost," *New York Times*, April 17, 2009.

18. McNeil Jr., "Subsidy Plan Seeks to . . ."

19. For the official statement to Africa Fighting Malaria, see Africa Fighting Malaria, "PMI Response to Request for Official Comment," www.fightingmalaria.org/pdfs/PMIResponseToRequestForOfficialComment.pdf (accessed September 25, 2012).

20. Ibid.

21. USAID, *The President's Malaria Initiative* . . .

22. Roger Bate, Kimberly Hess, and Lorraine Mooney, "Antimalarial Medicine Diversion: Stock-Outs and Other Public Health Problems," *Dove Press Journal: Research and Reports in Tropical Medicine* 1 (2010): 19–24, www.dovepress.com/antimalarial-medicine-diversion-stock-outs-and-other-public-health-pro-peer-reviewed-article-RRTM-recommendation1 (accessed September 25, 2012).

23. USAID Office of Inspector General, "Audit of USAID/Angola's Procurement and Distribution of Commodities under the President's Malaria Initiative," December 21, 2009, <http://transition.usaid.gov/oig/public/fy10rpts/4-654-10-001-p.pdf> (accessed September 25, 2012).

24. Roger Bate, "Theft and Corruption at the Global Fund," AEI, April 6, 2011.

25. Roger Bate, "Bad Cuts in Obama's Global Health Budget," AEIdeas, February 21, 2012.

26. Ruth Levine, *What's Worked: Accounting for Success in Global Health*, (Washington, DC: Center for Global Development, 2004), www.who.int/tpc/meetings/First_chapter_and_overview.pdf (accessed September 25, 2012).

27. Tom Lantos and Henry J. Hyde . . . "