

PRESIDENT'S MALARIA INITIATIVE

Strategic Plan

Prepared by a USAID-CDC Interagency Working Group

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EXECUTIVE SUMMARY

Recognizing the urgent need to rapidly scale up malaria control efforts in Africa, the United States Government has launched a significant new international initiative to accelerate delivery of a package of proven preventive and curative interventions in 15 high-burden African countries with a total population of more than 175 million. By the end of five years, the program is expected to achieve 85% coverage of prevention, treatment, and malaria in pregnancy interventions, and result in an overall 50% reduction of malaria-related deaths.

Current funding for malaria prevention and treatment programs from all donors, including the Global Fund to Fight AIDS, Tuberculosis and Malaria, is approximately \$600 million per year. At the 2005 G-8 meetings in Scotland, President George W. Bush announced a new U.S. Government malaria initiative of \$1.2 billion over the next five years, beginning in FY 2006, in addition to current bilateral programs and multilateral contributions. The United States' contribution will begin with \$30 million in bilateral funding in FY06, increasing to \$135 million additional funding in FY07 and \$300 million additional in FY08 and FY09, peaking at \$500 million in FY10.

President Bush also challenged other donors to contribute an additional \$1.2 billion per year, covering 420 million people in up to 20 countries. With this additional contribution, the entire initiative would target up to 35 high-burden African countries with a total population of 600 million, representing the vast majority of malaria transmission and deaths on the continent.

The President's Malaria Initiative will support national malaria control strategies in each targeted country. Implementation of the Initiative will be closely coordinated with the efforts of host government and national and international partners, including the non-governmental and private sectors. It will include new mechanisms and enhance existing mechanisms to ensure effectiveness, provide commodities (including antimalarial drugs, insecticide-treated bed nets, and appropriate insecticides for residual spraying), support innovation, and foster private sector participation, together with a rigorous monitoring and evaluation component to demonstrate clear results.

For the first year of this Initiative, the United States will focus on three countries---Tanzania, Uganda, and Angola---with a combined population of approximately 75 million people. Selection of these three countries was based on their malaria burden, the existence of comprehensive and technically sound national malaria control policies, willingness to partner with the United States, the existence of a Global Fund malaria grant, and existing U.S. Government in-country presence.

BACKGROUND

Although malaria is a preventable and treatable disease, it is estimated to cause between 300 and 500 million illnesses and 1.2 million deaths annually world-wide. More than 85% of these illnesses and deaths occur in sub-Saharan Africa, where one African child dies of malaria every 30 seconds. Malaria affects the health and wealth of individuals and nations alike and is a major constraint to economic development, particularly in Africa. It is both a disease of poverty and a disease that causes poverty. It has been estimated that malaria retards economic growth in Africa by 1.3% when compared to non-malarious areas---a total of \$12 billion/year for the continent.

During the past several years, the landscape of worldwide malaria control has changed dramatically. In April 2000, African Heads of State meeting in Abuja, Nigeria made a commitment to reduce the burden of malaria in their countries. The international community has responded by increasing its funding for malaria control in sub-Saharan Africa through the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) and other mechanisms. Recognizing the urgent need for an intensification of the international effort against malaria, President Bush announced a United States proposal to launch a new international initiative to assist African countries to rapidly scale up a package of proven preventive and curative interventions as part of their national malaria control strategies.

The goal of the President's Malaria Initiative (PMI) is to scale up malaria prevention and treatment interventions in 15 countries in sub-Saharan Africa, eventually covering more than 175 million residents at the end of the five-year program. The U.S. Government contribution to this Initiative will begin with \$30 million in FY06, increase to \$135 million in FY07, and reach \$500 million in FY10. The total USG contribution will be \$1.2 billion over 5 years.

In each of the targeted countries, the USG will work closely with the host government and national and international partners, including the GFATM, Roll Back Malaria, the World Bank Malaria Booster Program, and the non-governmental and private sectors.

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EXPECTED IMPACT

Building on the Abuja targets, the PMI plans to achieve 85% coverage of the most vulnerable groups---children under five years of age, pregnant women, and people living with HIV/AIDS---with key preventive and therapeutic measures (Table 1). This is expected to result in a 50% reduction in malaria-related deaths after three years of full implementation in each country (i.e., FY10 for the first three countries). The U.S. contribution holds the potential to save 140,000 lives/year by 2010. These targets exceed the Roll Back Malaria

objectives in advance of the 2010 target date, and are at least five years in advance of the corresponding 2015 Millennium Development Goal on malaria.

STRATEGIC APPROACH

In implementing the USG component of this Initiative, the US is committed to working closely with host governments and within existing national malaria control plans. Close coordination will be sought with other national and international partners to ensure that investments are complementary. Control measures will target those groups that suffer the major burden of malaria in Africa---children under five, pregnant women, and people living with HIV/AIDS.

To achieve its goal of 50% reduction in malaria-related deaths, the PMI will focus on five proven and effective approaches:

- rapid diagnosis and prompt, effective treatment with an antimalarial drug, ideally an artemisinin-based combination therapy (ACT);
- prevention of malaria infections through appropriate use of insecticide-treated bednets (ITNs) and indoor residual spraying (IRS);
- intermittent preventive treatment (IPTp) to protect pregnant women and their children from the adverse consequences of malaria;
- early detection and rapid response to malaria epidemics; and
- targeted studies and evaluations to improve program effectiveness.

Although individual control measures may produce a significant impact on malaria morbidity and mortality in the short term, the U.S. believes that lasting reductions in malaria incidence, particularly with the high levels of transmission in Africa, will depend on the use of a combination of control measures that are tailored to the local epidemiology of the disease. Consequently, the U.S. strategy for implementing the PMI will emphasize a comprehensive and integrated approach to malaria control that takes into account the local setting in which the disease occurs.

The USG will procure key commodities, such as antimalarial drugs, long-lasting insecticide-treated bednets, insecticides, and equipment for indoor residual spraying, as well as to provide technical and programmatic support to strengthen and increase national capabilities and support for system issues that facilitate scaled up implementation, and promote long-term sustainability.

The PMI will be guided by the following additional principles in planning, conducting, and evaluating activities supported by the Initiative:

- strengthen the capacity of national institutions and staff to address the challenges of malaria control in their countries;
- engage non-governmental organizations (NGOs), including faith-based organizations (FBOs) and community-based organizations (CBOs), to expand services to high-risk rural communities, where most of the malaria-related deaths occur;
- work with the private sector for the delivery of key malaria interventions and coordinate malaria control investments with broader health systems;

- strengthen surveillance, monitoring, and evaluation to improve program effectiveness and cost-effectiveness, and document and rapidly disseminate best practices to other countries; and
- report on progress using internationally-accepted indicators.

MANAGEMENT

The PMI will place a premium on accountability and being able to track in detail how the resources of the Initiative are used; transparency in the way priorities are set and decisions made at the country level; involving other stakeholders; and in achieving and documenting results. Each country program will develop a multi-year strategy that lays out expected inputs, planned accomplishments, an overall budget, and a monitoring and evaluation plan, as well as detailed annual implementation plans describing planned activities, expected results, and required budget. In addition, each country program will be expected to submit an annual operational and financial report describing actions taken and progress to-date, together with an accounting of Initiative inputs and outputs.

MONITORING AND EVALUATION

Monitoring and evaluation to measure progress against project goals and targets, to identify problems in program implementation and allow modifications to be made, and to confirm that those modifications are having their desired effect will be a critical component of the PMI. The PMI monitoring and evaluation plan will be coordinated with the NMCP, the GFATM, the World Bank, and other partners to standardize data collection and reporting to the greatest extent possible.

The PMI will evaluate three major aspects of malaria control operations within country:

1. coverage rates for the four key interventions, ACTs, ITNs, IPTp, and IRS;
2. impact on malaria mortality; and
3. associated factors that may affect the interpretation of the data collected above.

Nationwide coverage of the four major interventions will be assessed during the first year of the PMI in each country, at the midpoint to ensure that scaling up is going as expected, and after September 2010. The following information will be collected:

1. Proportion of pregnant women who have received two or more doses of SP (or other recommended drug) for IPTp during their pregnancy;
2. Proportion households with at least one ITN;
3. Proportion of children under five who slept under an ITN the previous night;
4. Proportion of pregnant women who slept under an ITN the previous night;
5. Proportion of houses in areas targeted for IRS that have been sprayed;
6. Proportion of pregnant women and children under five protected by either IRS or ITNs; and
7. Proportion of children under five with suspected malaria who have received treatment with an antimalarial drug in accordance with national malaria treatment policies within 24 hours of the onset of their symptoms.

Information on nationwide coverage with ITNs, IPTp, and ACTs will be collected through large-scale, population-based household surveys, such as a Demographic and Health Survey (DHS), Multiple Indicator Cluster Survey (MICS), or the stand-alone Malaria Indicator Survey (MIS), which is based on the malaria module of the DHS and MICS survey instruments. These surveys will be conducted during or immediately following the rainy season to ensure that they cover the major malaria transmission season and that the information is comparable from one year to another. Information on the number of houses targeted for IRS in each country will depend on a detailed mapping of those areas where IRS is considered an appropriate intervention during Years 1 and 2 of the PMI. Once that is known, the proportion of targeted houses that were sprayed can be calculated from IRS field records.

All-cause mortality in children under five years old will be measured as part of the DHS/MICS surveys. In addition, where possible, malaria-attributed mortality will be estimated using postmortem interviews (verbal autopsies) with the mothers or close family members of deceased children to assign a principal cause of death. In some surveys, the prevalence of parasitemia and/or anemia in children 6–59 months old and pregnant women will also be measured to complement the above information.

Information on additional factors that could affect the PMI's success, such as drug and insecticide resistance, drug quality and safety, and the quality of care delivered by health workers, can only be obtained through specialized monitoring activities. Given the relatively weak national health information systems and the unreliable quality of malaria surveillance data in most African countries, special surveys, targeted operational studies, and record reviews will be required to monitor progress in malaria prevention and control activities in each PMI country during the periods between the larger DHS/MICS/MIS surveys.

SELECTION OF COUNTRIES

The USG component of this Initiative will target 15 countries through the end of 2010. To ensure that the PMI will have maximum impact on malaria morbidity and mortality, the selection of countries will be based on the following criteria:

- a significant burden of malaria;
- national policies and practices for the prevention and treatment of malaria consistent with those recommended by the World Health Organization, and capacity to implement those policies;
- demonstrated political will by national leadership for control of malaria – and willingness on the part of the country leadership to partner with the USG;
- existing USG in-country presence;
- high potential for impact on malaria mortality;
- geographic balance in countries across Africa;
- Global Fund grant for malaria, and grant performance; and
- other donor involvement.

Based on these criteria the following countries were recommended for implementation of the Initiative in FY06: Tanzania, Uganda, and Angola. No decisions have been made about countries for later years of this Initiative.

Table 1**Targets for President's Malaria Initiative Countries by the End of the Initiative**

Targets	End of Initiative
Proportion of households with a pregnant woman and/or child under five which own one or more ITNs	>90%
Proportion of children under five (in areas not targeted for IRS) sleeping under an ITN the previous night	85%
Proportion of pregnant women (in areas not targeted for IRS) sleeping under an ITN the previous night	85%
Proportion of houses in geographic areas targeted for IRS (in areas not covered by ITN distribution) sprayed	85%
Proportion of pregnant women and children under five will have slept under an ITN the previous night <u>or</u> in a house that has been protected by IRS	85%
Proportion of women (in areas determined to be appropriate for IPTp use) completing a pregnancy in the last two years who have received two or more doses of SP for IPTp during that pregnancy	85%
Proportion of government health facilities that have ACTs available for the treatment of uncomplicated malaria	85%
Proportion of children under five with suspected malaria who have received treatment with an ACT in accordance with national malaria treatment policies within 24 hours of the onset of their symptoms	85%