



REPORT

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Malaria Landscape

December 2010

Executive summary

I. Background

The year 2010 represents a turning point in the global fight against malaria. The deadline for universal coverage is a key milestone in the implementation of the Global Malaria Action Plan (GMAP), and an important juncture in global efforts to achieve the Millennium Development Goals (MDG) by 2015.

When world leaders took stock of progress made so far towards the goals of the Millennium at the September MDG Summit in New York, the malaria community had concrete results to show for a decade of concerted control efforts.

Ten years ago, malaria was the first cause of child mortality in Africa. Today it ranks as the third-leading cause of child deaths. While much more needs to be done to end malaria deaths, the disease's grip on the African continent has undoubtedly been weakened over the past few years.

Data compiled, disseminated and highlighted throughout the year, in part through the RBM Progress and Impact (P&I) Series, showed that donor funding for malaria is being used efficiently, is leading to better access to malaria control interventions in countries and is saving lives.

Five RBM P&I reports have been released so far, each shedding particular light on the impact of international funding on coverage levels, disease burden reduction and lives saved. While they all demonstrate the value of the partnership-wide scale-up effort, they also point out that insufficient and unstable funding continues to be one of the key risks to making further advances.

The next few years will be an important test for RBM, as it seeks to accelerate and sustain progress in endemic countries in the context of a fragile economic environment, where a growing number of global priorities compete for diminishing donor resources.

The Global Malaria Landscape in 2010 focuses on results achieved through increased investments in malaria control and intensified scale-up of malaria control activities at country level. It is based primarily on the updated country roadmaps for 45 African countries and 2 territories, which were developed last year as tools for tracking progress against development of milestones. The maps presented in this report provide a snapshot of progress towards the 2010 targets, highlight the challenges faced in 2010, and show the perspectives for 2011. In addition, the Executive Director (EXD) report makes use of data published in the five major RBM P&I publications in 2010, contributions from RBM mechanisms, and reports released by the World Health Organization (WHO), the Global Fund to fight AIDS, Tuberculosis, and Malaria, the President's Malaria Initiative (PMI), and other partner organizations in 2010. It does not take into account figures from WHO's *World Malaria Report 2010*, which will be launched in mid-December and presented separately on Day 1 of the Board meeting.

The RBM EXD report will also examine target by target, and mechanism by mechanism, the progress on activities and deliverables that RBM Mechanisms have achieved during the first half of the RBM Biennial Workplan (2010/2011) and concludes with a summary financial report on 2010 Partnership activities. The full financial report will be presented in detail on Day 2 of the Board Meeting.

Key developments in 2010

Funding for malaria

- International financing for malaria is estimated at approximately US\$ 2 billion in 2010, up from \$US 1.6 billion in 2009. The major sources of financing for malaria are the Global Fund to fight AIDS, Tuberculosis and Malaria, the President's Malaria Initiative, the World Bank, UNITAID, the Gates Foundation, with increasing support from bilaterals such as the UK and France.
- In the run-up to the 2010 deadline, the Global Fund, assisted by the RBM mechanisms and partners, has accelerated the process of signing and disbursing grants, so as to enable countries to scale up coverage with bed nets. Since the end of 2009, more than USD 750 million has been disbursed in over 31 countries in sub-Saharan Africa to fast-track the purchase of ITNs .
- The comprehensive support that the RBM Harmonization Working Group provided to malaria-endemic countries applying for Global Fund Round 10 grants helped achieve a 79% success rate (compared to 54.8% in Round 9).
- However, important gaps between country needs and donor commitments to the Global Fund for 2011-2013 signify that even countries with successful applications may not be granted funding.
- Additional, predictable and sustainable sources of financing must therefore be secured. Advocacy efforts for Global Fund, World Bank, and PMI replenishment

will need to be intensified, and new donors and alternative sources of financing must be rapidly identified and mobilized.

- African countries are being continuously encouraged to fulfill their commitment to allocate 15% of their government budget to health. Despite progress achieved in 2010, more must be done in this area.

Roadmaps to universal coverage: focus on Africa

- The 2009 country roadmaps have brought great value to the global fight against malaria. Developed by the countries with the support of the RBM sub-regional networks (SRNs), the roadmaps take stock of progress and challenges against the target of universal coverage. The Africa-wide figures in this report represent aggregate 2010 country data.

Long Lasting Insecticidal Nets (LLIN)

- According to the World Health Organization, the projected number for delivered bednets for 2010 is 140 million; 88 million nets were delivered in 2009, and nearly 140 million LLINs were delivered to high-burden countries in the African Region between 2006 and 2008.
- Net deliveries will continue into the early part of 2011, at which time universal coverage with LLINs will be achieved in many countries in sub-Saharan Africa.
- According to the roadmaps, 264 million nets were acquired or distributed between 2008 and 2010, enough to cover 67% of the population at risk. 44% of the nets were acquired or distributed in 2010 in the 4 most populated countries, namely the Democratic Republic of the Congo, Ethiopia, Nigeria, and the mainland of the United Republic of Tanzania.
- With universal coverage defined as 1 net for 2 people, 25 countries will have achieved universal coverage with LLINs by the end of 2010 (meaning the coverage rate is between 80% and 100%).
- 5 countries with average performance (greater than 60% and below 80%) are likely to achieve universal coverage in 2011.
- The 9 countries that performed below a 60% coverage rate faced various challenges ranging from the availability of resources to procure the commodities, to capacity and implementation challenges.
- WHO's Global Malaria Programme are working on policy guidance on the management of insecticide resistance and monitoring LLIN durability. The Roll Back Malaria Vector Control Working Group (VCWG) is developing best practice documents on these topics, as well as on continuous LLIN delivery and distribution.
- Roll Back Malaria Partners, such as the International Federation of the Red Cross and National Red Cross and Red Crescent Societies, UNICEF, Population Services International, the Global Fund, and PMI, have been helping to finance, procure, distribute, and promote the utilization of nets. These and other partners

have been working together through the Alliance for Malaria Prevention, a workstream of the (HWG), to technically support in-country LLIN campaigns for distribution and use.

- With the excellent progress that has been achieved, the challenge now is to maintain coverage through different mechanisms and processes--such as the renewal of nets, LLIN distribution through routine health services, and new mass campaigns-- and ensuring high levels of utilization.
- Countries will need to redouble their efforts to maintain universal coverage next year, as the RBM Partnership now defines universal coverage as 1 net for 1.8 people.

Indoor Residual Spraying (IRS)

- Globally, more than 168 million people were protected against mosquitoes by IRS in 2009, 73 million of them in 27 African countries, up from 59 million people in 2008 .
- In 2010, 4 countries in sub-Saharan Africa dependent on IRS, and 7 others using it as a mixed strategy with LLINs, succeeded in covering more than 80% of their target populations.
- By the end of 2010, when accounting for the ITN delivery and the application of indoor residual spraying in certain areas, projections indicate that spraying and sufficient numbers of nets will have been delivered to 90 percent of the target population to achieve universal coverage.
- The Global Fund and PMI are the leading partners that fund IRS programmes.
- In 2010, WHO produced an operations manual for IRS. The VCWG's work on insecticide resistance will inform programmatic action on IRS.
- Resistance to commonly used insecticides is emerging as a major threat to IRS. The development of new, safe and long lasting insecticides is key to the mitigation of insecticide resistance; as will be the implementation of WHO's Strategy on Management of Insecticide Resistance in Malaria Vectors.

Intermittent Preventive Treatment for pregnant women and infants (IPT)

- For the 22 African countries with consistent data, the median percentage of women attending antenatal care who received a second dose of intermittent preventive treatment was 55% in 2009, up from 20% in 2007-2008.
- In 2010, 34 African countries implemented a policy for IPTp. 73% of these countries were able to procure adequate quantities of SP for their programmes.
- In March 2010, WHO recommended Intermittent Preventive Treatment for infants (IPTi) as a new intervention against malaria. The recommendation is based on results from studies indicating that this intervention, delivered through routine

Expanded Programmes on Immunization, provides significant overall protection against malaria in the first year of life.

- Several challenges impede the scale-up of Malaria in Pregnancy (MIP) interventions, among which are the availability of MIP interventions, weak health systems, and the regular and timely attendance of pregnant women at remote antenatal clinics..

Artemisinin Based Combination Treatments (ACT)

- ACT procurement has been increasing. In 2010, 229.2 million ACTs were procured, up from 157.2 million ACTs in 2009.
- By the end of 2009, 14 African countries were providing sufficient courses of artemisinin-based combination therapies to cover more than 100% of malaria cases seen in the public sector; a further 10 African countries delivered sufficient courses to treat 50% to 100% of cases. These figures are an increase from the five countries that were providing sufficient courses of artemisinin-based combination therapy to cover more than 50% of public-sector patients in 2005.
- In 2010, WHO published the *Global report on antimalarial drug efficacy and drug resistance; new Malaria treatment guidelines; and Good procurement practices for ACTs*. The *Global Plan for Artemisinin Resistance Containment* will be published in January 2011. RBM's Case Management Working Group and other partners contributed to this guidance.
- Since 2008, the RBM Procurement and Supply Management Working Group has been forecasting global demand for RDTs and ACTs. In 2010, actual global procurement demonstrated that RBM's method for forecasting was more accurate than any other. As a result, the Global Fund, UNITAID and other RBM partners agreed to use this methodology for quarterly forecasting of ACT global demand until 2013.
- By 2010, the Affordable Medicines Facility for malaria (AMFm), an innovative financing mechanism for ACT scale-up, has shown encouraging early results. Phase 1 of AMFm is now operational in eight countries. Disbursements to finance interventions have already started. Roughly 100 first-line buyers have signed undertakings with the Global Fund.

Diagnosis and Rapid Diagnostic Tests (RDT)

- In 2009, about 35% of suspected cases of malaria in Africa were confirmed by a diagnostic test. In 2008, in 18 high-burden WHO African Region countries for which data were available, 22% of the reported suspected malaria cases were confirmed with a diagnostic test.
- In 2010, WHO released the 2nd edition of its official treatment guidelines, strengthening its 2009 recommendation for confirmatory testing by microscopy or RDT of all people with suspected malaria before prescribing treatment.

- Of the 47 sub-Saharan countries or territories that have adopted the RDT policy recommended by WHO, 20 of them, or 42%, have been able to reach the 80% target in the public sector. When planning or implementing RDT scale-up, countries should take into account malaria endemicity, test reliability, the availability of personnel that have been trained to use the tests, the availability of microscopy, and country capacity to manage the 'cool chain', as RDTs need to be stored in a cool place.
- In an effort to enlarge countries' choice of reliable tests, WHO approved 16 additional Rapid Diagnostic Tests this year, bringing the total number of RDTs meeting minimum performance criteria to 37.
- The RBM Case Management Working Group substantially contributed to *Good procurement practices for malaria Rapid Diagnostic Tests*, to be published by WHO; the *Multi agency operational manual for malaria RDT policy implementation at national level*, coordinated by FIND; and the *Inter-agency operations manual to universal access to malaria diagnostics*, coordinated by WHO's Global Malaria Programme. All of these manuals will be published in 2011.

Measuring Impact

- In March 2010, the Roll Back Malaria Partnership launched the Roll Back Malaria Progress & Impact Series, a collection of reports benchmarking progress towards the RBM 2010 goals. The reports provide concrete evidence on programmatic successes and lessons learned, and describe tools for measuring impact. The Series is aimed at informing strategic action, driving future investments, and accelerating progress towards the goals set out in the GMAP.
- In African countries with a high burden of malaria that have achieved high coverage of vector control and treatment programmes, recorded cases and deaths due to malaria have fallen by 50% or more in 2010 .
- A recent analysis of malaria prevention impact in 35 African countries estimated that 736 000 lives were saved between 2000 and 2010, nearly three quarters of them since 2006. Overall, about 40% of the 108 malarious countries in 2009 documented reductions in confirmed malaria cases of more than 50% compared to 2000, although the number of cases fell least in countries with the highest burden.

Intensified global advocacy and resource mobilization

- In the countdown to the 2010 deadline, RBM partners have stepped up their advocacy activities to strengthen commitment to global malaria control efforts.
- The African Leaders Malaria Alliance of African Heads of State (ALMA) has mobilised high-level continent-wide action to accelerate net procurement, improve net use, help remove taxes and tariffs on malaria commodities and alerted governments to adopt regulatory measures to stop the marketing of oral artemisinin monotherapies.
- The UN Special Envoy for Malaria, Mr Ray Chambers, continued to work closely with endemic country leadership and donors, engaging in strategic dialogue with

African Heads of State and working through ALMA, the African Union and key UN fora, such as the 63rd World Health Assembly to influence policy, funding decisions and political commitment to malaria.

- RBM's Special Representative, Princess Astrid of Belgium and RBM's two Goodwill Ambassadors, singers Yvonne Chaka Chaka and Youssou N'Door, continued to ardently champion the malaria cause, drawing decision makers' attention of to the importance of sustaining progress, including through investing a larger percentage of endemic countries' Gross National Product in health. Screenings around the world of Chaka Chaka's recent movie, "The Motherland Tour - a journey of African women," have been used to call upon donor countries to replenish the Global Fund and continue contributing to malaria control.
- Throughout the year, global malaria spokespeople have strategically used major international and national fora to emphasize the positive impact of recent malaria control activities on maternal and child health, as well as other MDGs. The successes and needs of the malaria community were highlighted at the MDG Summit in New York in September, the 15th AU Summit in Kampala and the African Parliamentarian Forum in Bamako in July, the World Health Assembly in Geneva and the World Economic Forum in Tanzania in May, the Canadian Parliament in advance of the G8 Summit in Muskoka, the 14th AU Summit in Addis Ababa in January and many other key international regional and national events.
- The "United Against Malaria" (UAM) campaign, a public-private partnership between national football teams, corporate partners, and the RBM Partnership, reaped much success this year. UAM seized the opportunity provided by this year's FIFA World Cup to shine a global spotlight on malaria, spread life-saving messages across endemic countries and build powerful football partnerships against the disease across Africa.
- Faith-based organisations and faith leaders have also joined RBM partners to accelerate access to interventions and improve use. In Nigeria and DRC, leaders of Muslim and Christian faiths have rallied to the cause of promoting correct use of protective nets, strengthening community involvement and compliance.

Elimination efforts

- Worldwide, 18 countries are in the stage of pre-elimination or elimination of malaria. A further seven countries have interrupted transmission and are preventing reintroduction of malaria. In 2010, two countries (Morocco and Turkmenistan) were certified by the Director-General as free of malaria. All malaria-affected countries in the WHO European Region are somewhere along the elimination continuum; the goal is to have eliminated malaria from all of Europe by 2015. These trends confirm that significant reductions in malaria transmission are possible in various epidemiological situations, including high-transmission areas where previously the focus was only on reducing morbidity and mortality.
- With 25 countries currently focusing on elimination and many others getting close to their disease reduction goals, the need for solid information on the risks and benefits of elimination efforts has been growing. RBM partners such as WHO, the Malaria Elimination Group (MEG), the USCF Global Health Group (GHG), the

Elimination 8, a Southern African elimination initiative, and the Asia Pacific Elimination Network have been building the evidence base for malaria elimination as well as supporting country and regional malaria elimination efforts.

Progress in research

- Research activities have seen a rapid expansion this year. Advanced trials of the Malaria Vaccine Initiative's (MVI) and GlaxoSmithKline's RTS,S vaccine against falciparum malaria are under way in seven African countries (Tanzania, Burkina Faso, Gabon, Ghana, Kenya, Malawi and Mozambique). The Medicines for Malaria Venture (MMV) partnered with Guilin Pharmaceutical Co. Ltd to develop intravenous (IV) Artesunate, which has recently been added to WHO's prequalified list. MMV also has two new ACTs under submission to the European Medicines Agency. The Innovative Vector Control Consortium (IVCC) has developed long-lasting formulations of insecticides for IRS, now in the regulatory phase, and has completed the development of the Malaria Decision Support System. The Foundation for Innovative New Diagnostics (FIND) is evaluating a diagnostic tool that can measure the malaria parasite in elimination settings, and is developing new tools for evaluating RDTs.
- The Malaria Eradication Research Agenda (malERA) completed its consultation process in March 2010. At the malERA stakeholders "Zenith Week" in Washington D.C., a comprehensive R&D agenda for malaria eradication was produced, which was based on the technical consultations of the Consultative Group meetings held earlier throughout the year. This resulted in an increasing number of research consortia placing malaria eradication squarely on their research agenda.
- Operational and policy research activities are being conducted and the results are informing scale-up efforts for malaria control.

Strategic challenges

- In May this year, the 18th Board meeting discussed many of the key strategic issues that this Partnership will need to tackle over the next years. Challenges related to financing, implementation, commodity use, drug and insecticide resistance and elimination have been taken up by different RBM mechanisms and an update on progress will be provided during this meeting as part of the review of the RBM's Work Plan (2010/2011). Further suggestions and solutions will be proposed and discussed in the context of reviewing and approving the second RBM biennial Work Plan (2012/2013).

Part I: Global Malaria Landscape 2010

1.1 Funding for malaria control

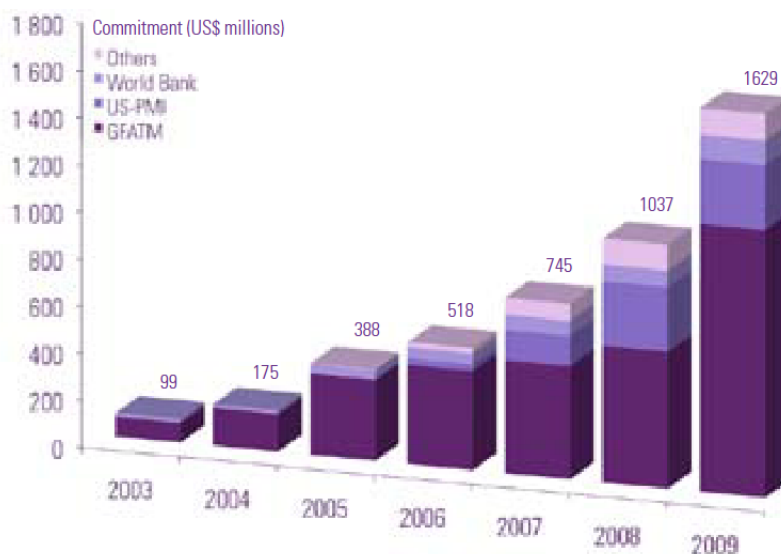
Significant global investment in malaria control since 2003 has allowed a growing number of African countries to improve access to interventions and reduce malaria cases and deaths. Evidence presented in the P&I Report Series confirms that international aid invested so far has been spent efficiently, leading to improved access to key interventions, especially protective nets and IRS across Africa, and to dramatic reductions in disease burden and child deaths.

The first report of the RBM P&I Series, authored by UNICEF, WHO and PATH notes the steep increases in global malaria financing that have occurred since 2003, with funding levels for malaria peaking at US\$ 1.6 billion per year in 2009. (See Fig. 1). This year, in light of the donor reports that were submitted to inform this document, international expenditure on malaria can be estimated at approximately US\$ 2 billion.

Fig. 1

Annual funding commitments of the Global Fund, World Bank, US-PMI, and countries and multilaterals participating in the Development Assistance Community (DAC).

Malaria-control funding commitments have increased steadily each year from 2003 (~\$100 million) through 2009 (~\$1.6 billion).



Seventy percent of donor funding in 2009 was channeled through the Global Fund. The remaining portion of donor aid was distributed among USAID-PMI (15%), the World Bank (8%) and other donors (7%).

An analysis of data for 12 African countries revealed that donor financing has so far been spent appropriately, mainly on malaria prevention, diagnosis and treatment, and health systems strengthening.

However, it was found that Programme planning and implementation of activities was negatively affected by a high year-to-year variability of donor commitments and disbursements. As annual disbursements of donor funding differed significantly between countries and between years within countries in the period of 2003-2009, progress in countries did not take place at a steady pace.

The Global Fund to Fight AIDS, Tuberculosis and Malaria

The United States and France are the Global Fund's two main donors. As of 2009, Global Fund-approved malaria grants included an estimated lifetime funding of US\$8.1 billion until approximately 2015. Since its creation, the Global Fund has disbursed approximately US\$3 billion for malaria programmes. This funding has been used by endemic countries to purchase insecticide nets, deploy IRS operations and supply effective antimalarial medicines and RDTs.

At a time when most endemic countries in Africa are mounting large-scale malaria control efforts to reach and sustain universal coverage, it is critically important to ensure that committed funding is disbursed rapidly and used efficiently. In an effort to help countries reach the 2010 targets, the Global Fund, aided by RBM partners and mechanisms, has redoubled its efforts to accelerate the process of grant signature and disbursement of malaria grants.

Country applications to the Global Fund for malaria grants in Round 10 achieved a very high success rate (79%), compared to 54.8% in Round 9. However, this success may be partially offset by a lack of sufficient funding, as the Global Fund was not fully replenished this year. In October 2010, the Global Fund raised US\$11.7 billion in donor pledges to fight HIV/AIDS, TB and malaria. Even though this amount represents the largest-ever financial commitment to fighting the three pandemics, it falls short of the US\$20 billion required to meet the demand of endemic countries. The Global Fund is currently putting in place prioritisation strategies that will favour high-burden, high-achieving countries.

As of November 2010, all Round 8 malaria grants except for one (Haiti) have been signed representing 27 out of 28 countries, and 46 out of 47 grants, for a total committed funding of US\$ 1,330,741,440 for Phase 1 and US\$ 792,604,229 disbursed. The Haiti grant is expected to be signed in January 2011. These Round 8 grants, especially those in sub-Saharan Africa, have contributed hugely to the accelerated scale-up of prevention and treatment interventions for malaria.

In Round 9, 31 malaria grants were approved for 19 countries, totaling US\$ 512,970,705. Of these, 21 grants for 13 countries (68 %) have been signed as of November 2010, representing more than US\$ 129,028,881 committed funds for Phase 1 and US\$ 33,187,579 disbursed. As of 8 November 2010, the following grants have been signed: Burundi, Eritrea, Togo, The Gambia, Madagascar, Guinea Bissau, Chad, Cameroon, Bangladesh, Cambodia, China, Myanmar and Nicaragua.

The RBM Partnership mechanisms including the SRNs, the Harmonization Working Group and Procurement and the Supply Management Working Group have supported a number of countries for the Round 8 and Round 9 grant signature process. These efforts have helped to accelerate the delivery of lifesaving malaria control interventions in many malaria-endemic countries.

President's Malaria Initiative (PMI)

Launched in 2005 as a 5-year US\$1.2 billion expansion of US contributions to malaria control in Africa, PMI was extended through 2013 through the 2008 Lantos-Hyde Act. Today PMI is a key component of the US Government's Global Health Initiative, announced by President Obama in 2009. With increased funding for malaria under this initiative, the US government has the opportunity to enlarge its prevention and treatment activities across Africa.

In 2010, USAID contributed a total of US\$585 million for malaria activities worldwide. Of this amount, \$500 million supported the 15 PMI countries (Angola, Tanzania, Uganda, Malawi, Mozambique, Rwanda, Senegal, Benin, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Mali, Zambia) and US\$85 million was spent in other countries in Africa (Burkina Faso, Burundi, the Democratic Republic of the Congo, Nigeria, Sao Tome, Sudan) and on activities in the Mekong Region of Southeast Asia and the Amazon Region of South America.

In November 2010, the Democratic Republic of Congo (DRC) became the 16th focus country of the President's Malaria Initiative (PMI). Nearly 95 percent of DRC's population – some 69 million people – live in malaria-endemic areas and suffer nearly 30 million cases of this treatable and preventable disease. Malaria accounts for nearly half of the deaths of the 620,000 children in DRC who die before their fifth birthday. In 2011, Nigeria will be added as a PMI focus country, bringing the current total to 17.

PMI's funding has so far supported IRS activities in countries, procurement and distribution of ITNs, ACTs and IPTp, training of health workers in ACT and IPTp use and malaria diagnosis, as well as operational research projects and data collection and reporting through routine surveys. Resources have been allocated to pharmaceutical management activities in countries, aimed at helping Ministries of Health of National Malaria Control Programmes improve forecasting, procurement, quality control, storage and distribution of drugs and train and supervise medical store staff to ensure correct use of medicines.

The World Bank

The World Bank Booster Program, launched in 2005, helps countries and regions to employ effective malaria-control interventions—such as long lasting insecticide-treated bednets (LLINs), malaria drugs (Artemisinin-based combination therapy - ACTs), and indoor residual spraying (IRS)—and treatment strategies; and to close gaps in their health systems.

The World Bank has set up Malaria Booster projects in 18 countries in Africa-- namely Benin, Burkina faso, Eritrea, Ethiopia, DRC, Ghana, Guinea, Kenya, Malawi, Mali, Mozambique, Mauritania, Nigeria, Niger, Sudan, Senegal, Tanzania, and Zambia.

These projects have financed the purchase of over 45 million bed nets in highly endemic countries such as Zambia, Benin, Nigeria, Ethiopia, and the Democratic Republic of Congo, and eight million doses of drugs to treat the disease.

Thanks to US\$200 million announced by the Bank in April 2010, seven of them—the Democratic Republic of Congo, Ethiopia, Kenya, Mozambique, Nigeria, Sierra Leone, and

Zambia—are on track to receive additional financing to help reach the universal coverage target for bed nets.

Total commitments under Phases I (2005-2008) and II (2008–2011) of the Booster Program (active and in the pipeline) now stand at US \$762.8 million.

UNITAID

Since its creation in 2006, UNITAID has committed more than US\$ 315 million to malaria projects in 27 countries—four in Asia (Bangladesh, Cambodia, China, and Indonesia) and 23 in sub-Saharan Africa (Angola, Burundi, Central African Republic, Congo, Democratic Republic of Congo, Côte d'Ivoire, Djibouti, Eritrea, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Madagascar, Mali, Mauritania, Mozambique, Namibia, Nigeria, Somalia, Sudan, Zambia and Zimbabwe).

UNITAID is acting to increase the availability of quality ACT medicines so as to expand the market, thereby putting downward pressure on prices by promoting economies of scale and increased competition from new suppliers. Through its partners, UNICEF (United Nations Children's Fund) and the Global Fund to Fight Aids, TB and Malaria, UNITAID has committed about US\$ 70 million to provide 54.5 million malaria treatments through mid-2011 and by early 2010 it had delivered about 19 million ACT treatments to 21 countries in Africa and Asia.

UNITAID is also tackling the high cost of ACTs directly. It is providing a crucial funding commitment of up to US\$130 million for the Affordable Medicines Facility for malaria (AMFm), a new initiative launched in 2009 and hosted by the Global Fund.

The Assured Artemisinin Supply Services (A2S2) supported by UNITAID with US\$9.3 million, provides a revolving credit fund to artemisinin extractors to ensure predictable supplies of quality artemisinin. In 2010 alone, loan agreements for the production 16 Metric Tonnes of artemisinin was concluded with artemisinin extractors based in China and Madagascar.

UNITAID promotes quality assurance of malaria medicines and diagnostics by providing overall financial support to the WHO Medicines Prequalification Program for quality assured medicines for HIV, TB and malaria and to the WHO Diagnostics and Laboratory Technology for quality assured diagnostics for HIV and malaria.

UNITAID has provided US\$ 109 million to UNICEF to purchase 20 million LLINs for eight malaria-endemic sub-Saharan African countries in 2009 and 2010.

The Bill & Melinda Gates Foundation

In 2010, the Gates Foundation included five main initiatives in its malaria strategy. These were focused on vaccines; drugs and diagnostics; vector control; integrated interventions and modeling; and advocacy.

Over the course of this year, the Gates Foundation disbursed approximately US\$173 million for both new and existing malaria grants. Included in this funding was core support for the RBM Partnership, as well as advocacy initiatives such as the United Against Malaria campaign. The Gates Foundation research portfolio is significant and includes support to

the Malaria Eradication Research Agenda (MALERA) in its efforts to identify current knowledge gaps and develop new tools needed for malaria eradication. It also provides funding to WHO's Global Malaria Program to develop a Global Plan for Artemisinin Resistance Containment, which will be launched in 2011. Continued support is provided to PATH's MVI for the phase 3 trials of the RTS,S vaccine and new investments are being made into the development of pre-erythrocytic and transmission blocking vaccines, an additional tool to interrupt transmission.

The Gates Foundation recently made a second five-year US\$50 million grant to the Innovative Vector Control Consortium to develop novel pesticides and formulations to overcome resistance and enhance the impact of ITNs and IRS.

UK Department for International Development (DFID)

At the September 2010 United Nations Millennium Development Goal Review Summit, the UK Secretary of State for International Development announced that the UK would work with partners in at least ten high-burden countries to reduce malaria deaths by at least 50% by 2015, backed up by increasing British spending on malaria by up to £500 million per annum by 2014.

The UK has further prioritised malaria and is currently preparing a Framework for Action on Malaria. Through a broad consultation process and review of its bilateral and multilateral aid programmes, it plans to identify scope for greater malaria impact and value for money. The UK aims to publish this framework by the end of the year.

It is not yet possible to calculate the UK's total expenditure on malaria for the 2010 calendar year, but estimates that in the 2009/10 financial year, the UK spent approximately £180 million on malaria through all funding channels, including research, of which approximately 70% was through bilateral channels.

The UK supports a range of research initiatives including WHO's Special Programme for Research and Training on Tropical Diseases (TDR), 2008-13 to accelerate the development of new diagnostics for malaria and the Foundation for Innovative New Diagnostics (£5 million 2009-14) to develop new diagnostic tests for a number of diseases of poverty. The UK also supports the Medicines for Malaria Venture and Drugs for Neglected Tropical Diseases Initiative to develop and deliver new affordable anti-malarial drugs and facilitate access to these medicines in malaria endemic countries.

In calendar year 2010, the UK provided £165 million to the Global Fund, which accounted for about 5.3% of the Fund's resources. The UK also provided £45 million to UNITAID which is likely to represent approximately 20% of UNITAID's resources for the year. Malaria accounts for about 27% of both UNITAID'S and the Global Fund's portfolio.

The UK also contributes to the Affordable Medicines Facility for Malaria (AMFm) through its contributions to UNITAID's US\$130 million donation, as well as a direct contribution of £40 million, £30 million of which was given in 2010.

Government of France

In September 2010, France committed €1.080 billion (US\$1.4 billion) to The Global Fund to Fight AIDS, Tuberculosis and Malaria for 2011-2013. France is the largest donor to The Global Fund after the United States.

France is also UNITAID's largest donor, with France's contributions representing 60% of UNITAID's financing sources. France will guarantee a minimum of €110 million to UNITAID for 2010, 2011 and 2012.

France provides the WHO's Regional Office in Africa with technical support to build country capacity for malaria control, amounting to €300 000 per annum.

France financially supports research consortia like DNDi/ Sanofi-Aventis, or Sanofi-Aventis /Institut Pasteur, and contributes to malaria-related research and training efforts of a number of French partners including l'Institut de Recherche et de Développement, the Pasteur Institute, and French universities. France also contributes to European financing initiatives for malaria research and training.

At the G8 Summit in Muskoka, France announced an additional commitment of €500 million between 2011 and 2015 to contribute towards MDGs 4 and 5.

Challenges

Despite unprecedented increases in donor commitments to the fight against malaria this year, there remains a critical funding shortfall. Additional, sustainable and predictable sources of funding must be secured to preserve hard won gains, and to achieve the goals of the Global Malaria Action Plan.

Advocacy efforts for Global Fund, World Bank, and PMI replenishment will need to be intensified, and new donors and alternative sources of financing must be rapidly identified and mobilized.

A study published in the Lancet this year has shown that while a few African countries have increased their spending on health, international health aid may not be adding as much as expected to their health budgets. Indeed, the aid appears to be in part replacing domestic health spending instead of fully supplementing it. Countries in sub-Saharan Africa must be continuously encouraged to optimize their spending on health.

1.2 Roadmaps to universal coverage: focus on Africa

Reports of dramatic increases in coverage with malaria control interventions this year have been confirmed by data collected through the ongoing monitoring of country roadmaps, elaborated by malaria-endemic countries with the support of the Roll Back Malaria sub-Regional networks (SRN) and the RBM Harmonization Working Group (HWG).

The 2009 country roadmaps have added value to the Partnership's task of tracking country progress by alerting the malaria community to the challenges of meeting the 2010 deadline. New initiatives were launched in 2010 to expedite GFATM grant signing, improve

logistical support, and pool procurement, with a view to accelerating progress to the 2010 goals. These efforts will be described in greater detail in the sections below.

The Africa-wide figures published in this report represent aggregate information from the country roadmaps. They highlight coverage data for a single malaria control intervention, and show commodity gaps against the 2010 targets. This section of the report focuses on Africa, although significant malaria control and elimination efforts are ongoing outside the continent. The World Malaria Report 2010, to be launched in December this year, will provide a global picture of malaria control efforts.

1.2.1 Long Lasting Insecticide Treated Nets - LLINs:

Progress on LLIN coverage has been encouraging. According to the World Health Organization, nearly 140 million LLINs were delivered to high-burden countries in the African Region between 2006 and 2008; 88 million nets were delivered in 2009, and the projected number for delivered bednets for 2010 is 140 million.

Countries with large at-risk populations that have recently gained access to adequate funding are beginning to make progress in coverage. The single largest scale-up effort in the history of malaria control is taking place in Nigeria, where 25 million ITNs had been delivered by mid 2010 and another 64 million nets will be delivered by the beginning of 2011.

While virtually all nets needed for universal coverage are already financed, external factors have extended the duration of the distribution phase, and net deliveries will continue into the early part of 2011, at which time many countries in sub-Saharan Africa will have achieved universal coverage.

However, an estimated 100 million nets will still be needed every year to sustain universal coverage and replace worn out nets. In addition, net utilization still lags behind use and more investments are needed in behaviour change communication to improve net use.

LLIN roadmaps in 2010

Since 2008, approximately 264 million nets were acquired or distributed throughout sub-Saharan Africa, enough to cover 67 % of the population at risk. 44% of the nets acquired and distributed were in the 4 most populated countries, namely Nigeria, the Democratic Republic of the Congo, Ethiopia and the mainland of the United Republic of Tanzania.

In 2008, when the goal of universal coverage with LLINs was proposed, the technical guidance provided by the Partnership was one net for two people.

On the basis of this definition, 25 countries out of 39 will achieve an LLIN coverage rate of over 80% by the end of 2010.

The 5 countries with average performance (greater than 60% and below 80%) have a likely chance to achieve universal coverage in 2011 except Ghana, which programmatically will only achieve it in 2012 or beyond.

The 9 countries that performed below the Abuja target of 60% faced various issues ranging from availability of resources to procure the commodities, to capacity and implementation challenges.

Figure 2: LLIN coverage in sub-Saharan Africa by end-2010 (roadmaps)

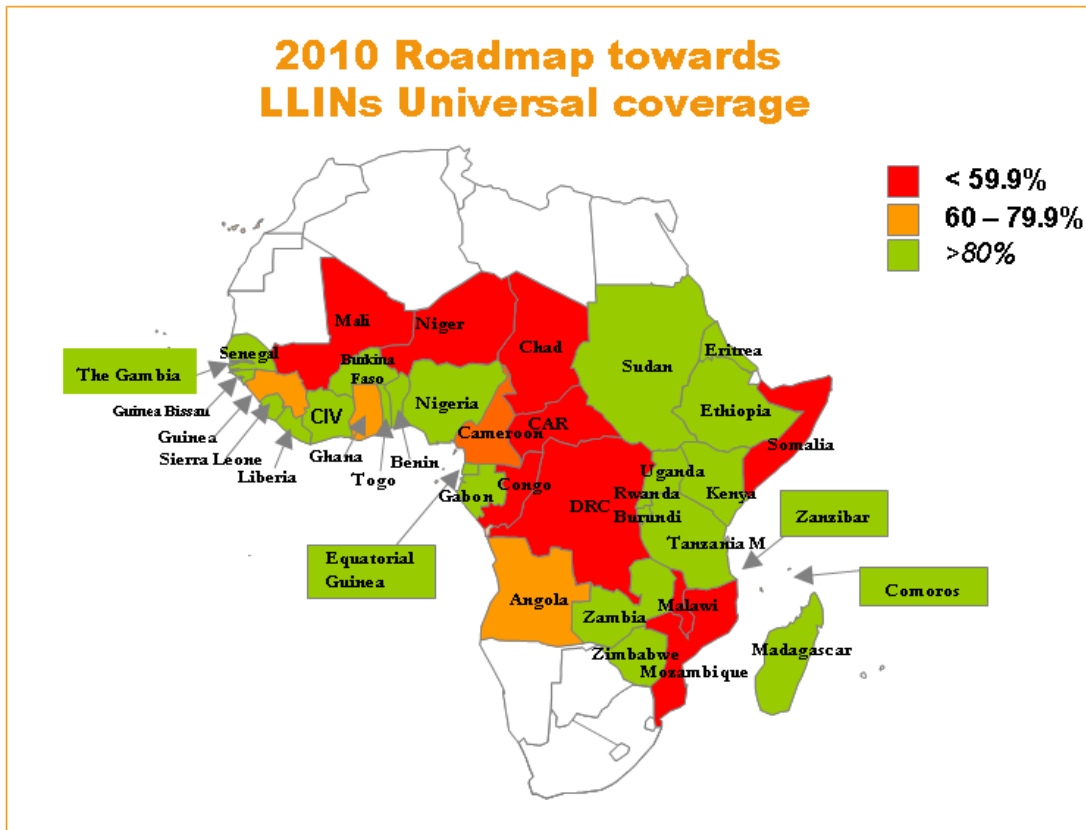


Table 1: Reasons for poor performance in LLIN coverage, per country

Countries	Performance towards universal Coverage	Reasons for poor performance
Central African Republic	59 %	Late disbursement of required resources from the Round 8
Congo	57 %	Late disbursement of funds
Malawi	50 %	Lack of adequate resources
Somalia	47 %	Implementation challenges
DR Congo	36 %	Adequate resources but implementation challenges for delivery and distribution of LLINs
Mozambique	25%	Lack of appropriate resources.
Chad	21 %	Lateness in grant signing translating to late orders of commodities following disbursement of funds
Niger	20 %	Lack of adequate sources, dependent on GF Round 10
Mali	12 %	Lack of adequate resources dependent of GF Round 10

The sections below describe the major developments that occurred in 2010 with regard to the following 2 thematic areas: LLIN scale-up efforts and the promotion of net use; and LLIN-related policy guidance and operational research. Each section describes the efforts of the RBM Partnership mechanisms, and subsequently highlights the efforts of individual partners. It concludes with a section that describes the results of special initiatives aimed at facilitating the use of resources and thereby at accelerating the achievement of the 2010 goals.

LLIN scale-up and promotion of net use

The Alliance for Malaria Prevention (AMP), a workstream of the HWG, is the RBM Partnership mechanism focused on supporting countries for LLIN scale-up to reach the RBM 2010 targets. Comprised of over 30 partners, including government agencies, private sector businesses, public sector organizations, faith-based organizations, and humanitarian organizations, the AMP provides countries with technical and logistical support for LLIN delivery campaigns in countries.

In 2010, AMP provided support to 15 countries for the planning, distribution, usage and monitoring of LLINs. AMP trained a total of 121 participants from 33 countries on Monitoring & Evaluation and Behaviour Change Communication activities around LLINs. By Nov 12th 2010, AMP had supported the mass distribution of 37,276,513 LLINs in 10 countries.

In addition to working together to support net delivery campaigns through the AMP mechanism, RBM partners help countries to finance, procure and distribute nets. This list of partners includes, but is not limited to, the International Federation of the Red Cross and Red Cross and Red Crescent National Societies, the Global Fund, the World Bank, PMI, UNITAID, UNICEF, Populations Services International (PSI), Nothing but Nets, and Malaria No More, whose efforts are highlighted in the financial section, or below.

As the biggest funder of malaria intervention programs in the world, the Global Fund has hugely supported countries' efforts to achieve 2010 targets for universal coverage. In particular, in 2010, there was a significantly higher demand for ITN funding. As of mid-2010, the cumulative number of ITNs and LLINs distributed globally was 121 million, with 85 million in sub-Saharan Africa. In 2010, the World Bank committed \$200 million to provide people in sub Saharan Africa with bed nets.

The number of nets procured by UNICEF—the largest global net procurer—has been steadily increasing since in 2000. In the last five years, UNICEF has procured over 100 million mosquito nets. To date in 2010, UNICEF has procured 17.4 M nets, over half of which have been distributed through UNICEF's country programmes. It is expected that by the end of 2010, 28 million nets will have been procured through UNICEF.

Over 30 countries have been supported by UNICEF to undertake bed net distributions. Most nets are distributed through integrated maternal and child health services, but UNICEF contributes significant logistical and operational support to ensure countries achieve high mosquito net coverage and significant reductions in malaria illness and deaths.

UNICEF is also undertaking innovative net distribution, such as in the Democratic Republic of the Congo and Mozambique where they are tallying the exact number of nets that need to be distributed per household to achieve universal coverage. UNICEF provided support either directly through country level support or procurement services to over 20 countries in Africa. In addition they have supported campaign planning and implementation in key countries such as DRC, Nigeria, Kenya, and Ethiopia.

By the end of 2010, PSI will reach the landmark of distributing its 100 millionth ITN. This year alone PSI has supported Ministries of Health in eight countries, including Côte d'Ivoire, DRC, Madagascar and Uganda, to deliver over 22 million LLINs through mass campaigns. An additional 5 million nets will have been delivered through routine systems. In Kenya, PSI is contracted by the Division of Malaria Control to distribute ITNs free of charge to pregnant women and children through over 3,000 antenatal clinics, while continuing to support a robust subsidized distribution program through Kenya's thriving commercial sector. This programme, now eight years old, will deliver around 2.3 million LLINs in 2010 alone. PSI is also a procurement agent for Voluntary Pooled Procurement.

The Nothing but Nets campaign of the UN foundation provides funding for the purchase and distribution of LLINs to protect the most vulnerable populations in Africa. In 2010 the campaign has helped fill critical gaps in the Central African Republic and Sierra Leone. To date, Nothing But Nets has delivered 3,506,673 nets in over 22 African countries since 2006.

Malaria No More (MNM) is working to end malaria-related deaths by 2015. MNM helped to distribute more than 2 million nets to Angola, Nigeria and the Democratic Republic of Congo, in partnership with UNICEF, and UNITAID. MNM also helped two districts in Senegal to achieve universal coverage with bednets.

MNM has created behaviour change communications and social mobilization programmes to promote the appropriate use of nets and worked with all sectors of society in Senegal and Tanzania—entertainment, sports, government and faith—to effectively reach the populations at risk.

LLIN-related policy guidance and operational research

WHO's Global Malaria Programme is leading the development of policy guidance for the implementation and management of malaria vector control interventions, while the Vector Control Working Group focuses on compiling best practices and lessons learned in this area.

Chaired by WHO and USAID, the Vector Control Working Group (VCWG) is the RBM Partnership mechanism that aligns partners on strategy and best practices. The VCWG includes representatives from academic institutions and the commercial sector; foundations; NGOs; government agencies, research and training institutions; and national malaria program staff.

In 2010, WHO's Global Malaria Programme and the WHO Pesticide Evaluation Scheme (WHOPES) developed a set of draft guidelines for monitoring LLIN durability, which are now under peer-review prior to finalization. Until recently, distribution strategies assumed implicitly that every net lasts exactly three years; there is now accumulating evidence that net lifespan is much more variable than this. This VCWG work stream on LLIN durability has supported WHOPES and GMP to develop and disseminate these guidelines.

Similarly, WHO's Global Malaria Programme (GMP) is currently preparing a WHO Strategy on Management of Insecticide Resistance in Malaria Vectors. The VCWG is developing a set of basic best-practices for entomological and insecticide resistance monitoring, short-term insecticide selection procedures and longer-term resistance management strategies. In 2010, the VCWG worked on the development of a number of best practices and tools to support implementation of continuous LLIN delivery and LLIN distribution through routine health services such as antenatal care and child immunisation.

In addition to funding scale-up of malaria control interventions, PMI supports operations research projects that are designed to improve program implementation. PMI has prioritized research questions in collaboration with national malaria control programs and, to avoid overlap, has coordinated with other organizations funding research (e.g., CDC, NIH, Bill and Melinda Gates Foundation, and The Global Fund to Fight AIDS, Tuberculosis and Malaria). Examples of ongoing PMI-supported studies include: evaluating the longevity of commercially available ITNs, studying the combined use of different insecticide types to prevent the development of resistance, and measuring the combined use of both IRS and ITNs in different transmission settings.

Special initiatives to accelerate implementation

Spurred by the awareness that the current pace of malaria-control efforts would impede the achievement of universal coverage by 2010, a number of RBM partners started working with the Global Fund to help countries accelerate LLIN scale-up.

- In sub-Saharan Africa, the Global Fund stepped up efforts in 2010 to achieve universal coverage for insecticide-treated nets, in collaboration with the UN Secretary-General's Special Envoy for Malaria, the RBM Partnership Secretariat, and the World Bank. Within the Global Fund Secretariat, a task force was set up at the Africa Unit to fast track the funds allocated to ITNs for the massive distribution campaigns targeted for 2010.

In 2010, a total of 127 million ITNs were fast-tracked for 31 African countries and a multi-country program for a value of US\$ 751 million. Various Global Fund channels and flexibilities were used to accelerate processes in the Africa region. For example, in Nigeria, a mini-grant was arranged to purchase 30 million nets; in Kenya and Ghana, two grants were reprogrammed to add 3 million nets each; in Uganda, the Phase 2 grant was accelerated to provide 10 million nets; and in Burundi, Round 9 signing was accelerated (3 months before the initial schedule).

- In 2010, the Global Fund's Voluntary Pooled Procurement (VPP) initiative continued to facilitate countries' timely access to medicines and other health products such as LLINs. VPP aggregates order volumes in order to obtain best pricing and delivery outcomes from suppliers of healthcare commodities. Various needs of the Principal Recipients can be met through the VPP such as low procurement volumes and the inability to obtain competitive pricing.
- Malaria No More (MNM) also launched NetGuarantee, an innovative finance mechanism aimed at accelerating LLIN Procurement. NetGuarantee advances the procurement process by providing financial guarantees to net manufacturers that ensure on-time, in-full order payments. With NetGuarantee, the net manufacturing process, which usually occurs only after funding for grants has occurred, can instead run parallel to the Global Fund grant signature process. In October 2010, NetGuarantee released its first Invitation to Bid to start the early tendering of 250,000 bed nets prior to Mozambique's receipt of Global Fund funding.

Challenges

With the excellent progress that has been achieved, the focus must now be on maintaining coverage, including through the timely replacement of worn-out bednets, and ensuring high levels of utilization. Countries will need to redouble their efforts to maintain universal coverage next year, as universal coverage is now defined as 1 net for 1.8 people.

1.2.2 Indoor Residual Spraying - IRS:

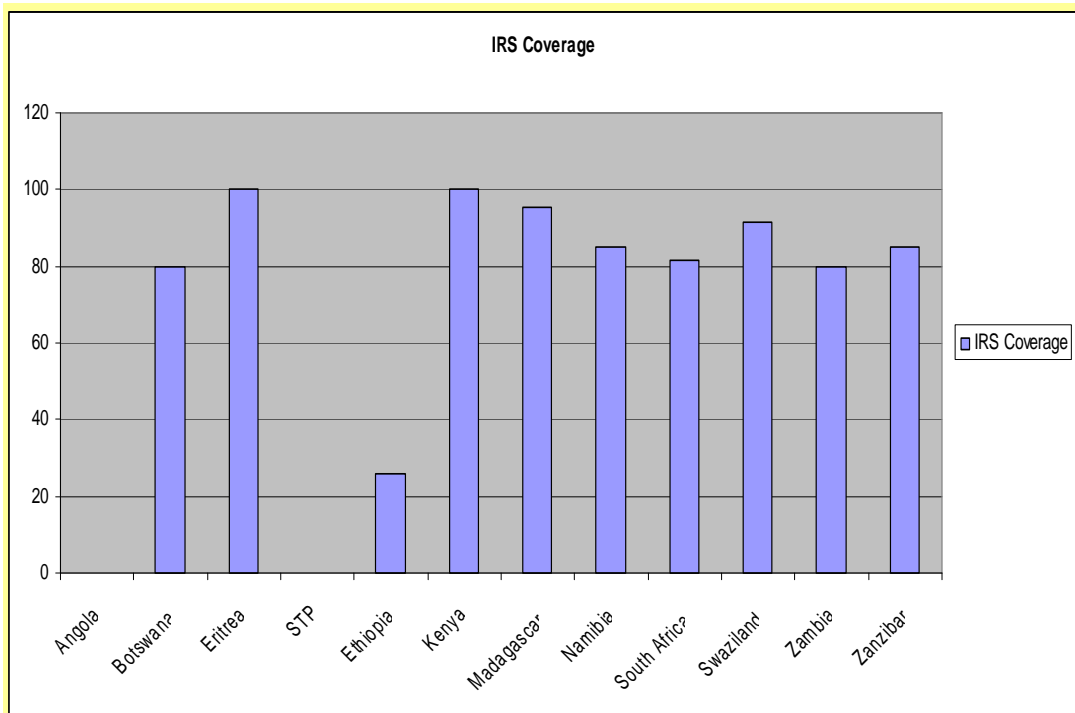
IRS is increasingly being employed across Africa and other endemic regions. IRS provides wide, community-level protection by killing mosquitoes before transmission can occur. This intervention reduces malaria-related morbidity and mortality when at least 80% of houses in a target area are sprayed, usually once or twice a year, depending on the length of the transmission season and the effectiveness of the insecticide.

WHO reports that more than 168 million persons were protected against mosquitoes by indoor residual spraying in 2009, 73 million of them in 20 African countries. In 2008, 59 in sub-Saharan Africa were protected from malaria with IRS.

Although the coverage of IRS has been increasing dramatically every year since 2006, the gap to universal access is significant. The Global Malaria Action Plan states that approximately 172 million households globally need to be covered with IRS every year, representing approximately 860 million people.

When accounting for the application of indoor residual spraying in certain areas, projections indicate that enough nets and/or spraying will have been delivered to 90 percent of the target population .

IRS scale-up



In 2010, countries dependent on IRS (Botswana, Namibia, South Africa, Swaziland) and others using it as a mixed strategy with LLINs (Angola, Ethiopia, Eritrea, Kenya, Madagascar, Sao Tome and Principe, Zambia and Zanzibar) succeeded in covering more than 80% of their target populations, with the exception of Ethiopia. All other countries doing IRS in limited zones. At the time of reporting, data from Angola and Sao Tome and Principe were not available.

The Global Fund and the President's Malaria Initiative are the leading RBM partners that fund IRS activities.

Global Fund resources have enabled the spraying of a cumulative 27,401,700 dwellings sprayed as of mid-2010. The Southern African region invested a relatively higher share in IRS compared to other regions.

In 2009, more than 26 million people in 15 African countries were protected through PMI-supported IRS operations. On average, 22 million residents have been protected each year for the past 3 years across 15 African countries. To conduct these IRS operations, PMI supported the training of more than 21,000 spray personnel, who sprayed more than 6.6 million houses.

IRS-related policy guidance and operational research

This year, the World Health Organization produced an *Operations manual for Indoor Residual Spraying*, a meeting report from the WHO technical consultation on combining indoor residual spraying and LLINs; and a draft meeting report entitled *The technical basis for coordinated action against insecticide resistance*.

In addition, the Vector Control Working Group's work on insecticide resistance, optimal choice of vector control methods, and integrated vector management will inform countries' programmatic action on IRS. VSWG conducts specific capacity-building activities for IRS.

Challenges

Resistance to commonly-used insecticides is emerging as a major threat to IRS, of particular concern in West African countries, including Benin and Ghana and in the East African countries of Ethiopia and Uganda. The development of new, safe and long lasting insecticides is key to the mitigation of insecticide resistance. As described above, RBM partners, including WHO, PMI, and others, have been preparing a comprehensive global plan for the prevention and management of insecticide resistance, and building capacity for entomological monitoring.

Box 1 Challenges to implementing IRS: resistance to DDT in Ethiopia

Ethiopia has a long history of DDT use for IRS. Widespread resistance to a range of insecticides was revealed through susceptibility testing of mosquitoes. Following these findings, the government of Ethiopia, in collaboration with WHO and PMI, expanded insecticide resistance monitoring to the remainder of the country, confirming initial findings. As a result, the class of insecticide used for IRS has been changed for the entire country. Promoting judicious use of insecticides and building local capacity for the optimal use of insecticides are, therefore, key factors in ensuring the long-term success of IRS operations and the longevity of newly-introduced insecticide products.

1.2.3 Intermittent Preventive Treatment for pregnant women (IPT)

Because pregnant women are 4 times more likely to become infected with malaria than other adults, the administration of preventive treatments to pregnant women is considered a mainstay of malaria control. In 2010, WHO has led efforts to develop policy guidance on preventive therapies for infants and children.

In tandem with regular use of ITNs, intermittent preventive treatment (IPTp) is critical for preventing malaria among pregnant women in endemic areas. In high-transmission settings, all pregnant women should receive at least two doses of sulfadoxine-pyrimethamine (SP) as IPTp during the second and third trimesters of their pregnancy.

The Global Malaria Action Plan estimated that between 2008 and 2010, a total of 25 million treatment courses of IPTp would be required to cover all pregnant women at risk of malaria in Africa.

IPTp scale-up

For the 22 African countries with consistent data, the median percentage of women attending antenatal care who received a second dose of intermittent preventive treatment was 55% in 2009, up from 20% in 2007-2008.

By 2010, 35 African countries have adopted and are implementing a policy for IPTp. 73% of these countries are able to procure adequate quantities of SP for their programs.

However, Malaria in Pregnancy (MIP) is still a major public health problem in Asia and Africa. Though there has been a declining trend in the last decade, malaria in pregnancy continues to contribute to a significant burden of communicable diseases in Asia and sub-Saharan Africa.

IPT- related policy guidance and operational research

The Malaria in Pregnancy Working Group (MPWG) is the RBM Partnership mechanism that provides strategic advice on best practices for scaling up interventions for the prevention and control of malaria during pregnancy.

In 2010, the 12th MPWG meeting was held. MPWG participants identified good practices and suggested promising strategies for scaling up MIP interventions; they formulated recommendations on technical challenges and research priorities, and reiterated the importance of strengthening collaboration between the RBM Partnership and malaria and maternal and child health programmes.

PMI is supporting the evaluation of the effectiveness of current national strategies using IPTp in the context of decreasing malaria transmission and increasing SP resistance. To date, more than 35 studies have been approved for support from PMI.

- **Intermittent preventive treatment in infancy (IPTi)**

Intermittent preventive treatment in infancy (IPTi) is the administration of a full course of an effective antimalarial treatment to all infants at risk of malaria, at defined intervals corresponding to routine vaccination schedules.

Recommended by WHO in March 2010, this intervention, delivered through routine Expanded Programmes on Immunization, provides significant overall protection in the first year of life against malaria.

IPTi is inexpensive (each dose costs between \$US0.13 - 0.23) and cost-effective. If expanded further in Africa, it is estimated that 6 million cases of malaria could be prevented each year in infants, who are most vulnerable to the disease.

WHO is currently evaluating the evidence to develop policy guidance on intermittent preventive treatment in children and developing the Implementation manual for intermittent preventive treatment in infants (IPTi),

Challenges

Several challenges impede the scale-up of Malaria in Pregnancy (MIP) interventions, among which are the availability of MIP interventions, weak health systems, and the regular and timely attendance of pregnant women at antenatal clinics that are often difficult to reach.

1.2.4 Diagnosis Rapid Diagnostic Testing - RDTs:

Microscopy or rapid diagnostic tests are recommended to confirm malaria cases before treatment is started. Accurate malaria diagnosis facilitates the prompt management of malarial and non-malarial illness, encourages the rational use of drugs, and reduces the risk of drug resistance. Confirming cases of malaria also will provide countries with more accurate information on malaria burden by which to monitor the success of their control programs.

RDT scale-up

Of the 47 countries or territories that have adopted the RDT policy recommended by WHO, 20 among them, or 42%, have been able to reach a target of 80%. When planning or implementing RDT scale-up, countries should take into account malaria endemicity, test reliability, the availability of personnel that have been trained to use the tests, the availability of microscopy, and country capacity to manage the "cool chain", as RDTs need to be stored in a cool place.

The Global Fund has been and is likely to remain the main source of funding for the scale-up of RDTs. From Round 4 to Round 9 the Global Fund approved \$446 million for RDTs, 82 percent in Rounds 7 through 9. More than 80 % of funded malaria grants in Round 9 included a malaria RDT component.

In addition to supporting communities directly through distributions and training of appropriate case management, UNICEF provides procurement services on behalf of countries to access effective anti-malarial medications. In 2010, UNICEF also procured over 4 million RDTs in at least 19 countries.

Box: 1 RDT Scale-up: the case of Senegal

The reach of community health workers is being expanded all over Africa, and can reduce the need for access to treatment through the informal private sector. Recent experience in Senegal has shown the feasibility of country-wide implementation of RDTs for malaria, including expansion at the community level. The rapid scale-up of RDT implementation at all levels of the healthcare system in Senegal—from 90,000 RDTs in 2007, the first year of the programme, to 500,000 in 2009—generated a dramatic drop in reported malaria cases. ACT consumption decreased, from 1.6 million courses in 2006 to 174,000 in 2009. Taking 2006 as a baseline, 3.2 million courses of ACTs were “saved” from 2007 through 2009. Assuming an average of US\$1 per ACT treatment course, this translates to a savings of \$3.2 million.

Box: 2 RDT Scale-up: the case of Cambodia

Even before Global Fund financing became available, in 2003, Cambodia began to provide subsidized RDTs and co-packaged ACTs through the public and private sectors, including village malaria workers. The initiative, which has expanded every year, was developed in response to the growing problems of multidrug resistance, inappropriate prescription practices in the private sector, the proliferation of fake antimalarial drugs, and over-treatment of presumed malaria. Subsidized ACTs (Malarine - \$0.63/blister pack for adults and \$0.30/blister for children [2009 prices]) have been distributed in 17 endemic provinces in Cambodia. RDTs (Malacheck - \$0.25/test) have now also been distributed widely. In 2009, the ratio of RDTs to ACTs sold was 2:1. The program is the longest-running of its type, and has been successful in establishing the practice of using RDTs for malaria diagnosis.

RDT-related policy guidance and operational research

In 2010, WHO released the 2nd edition of its official treatment guidelines, strengthening its 2009 recommendation for confirmatory testing by microscopy or RDT of all people with suspected malaria before prescribing treatment.

The change in WHO’s official guidelines has been prompted by recent evidence indicating that an increasing percentage of people with fever do not have malaria. This observation has been confirmed through studies from individual sites in Africa, where it was found that between 20 % and 98% of malaria diagnoses are established in patients who are blood slide-or RDT-negative for malaria parasites (Reyburn et al., 2006, Mwanziva et al., 2008).

In April 2010 WHO published the results of the second round of its Product Testing of Malaria Rapid Diagnostic Tests, adding 16 more malaria diagnostic tests to its approved list, expanding to 38 endemic countries’ choice of quality RDT tests. Quality assurance guidelines for microscopy have also been developed by WHO.

The RBM Case Management Working Group substantially contributed to Good procurement practices for Malaria Rapid Diagnostic Tests, to be published by WHO; the

Multi agency operational Manual for malaria RDT policy implementation at national level, coordinated by FIND; and the Inter-agency operations manual to universal access to malaria diagnostics, coordinated by WHO's Global Malaria Programme. All of these manuals will be published by WHO in 2011.

Through a collaboration between FIND, WHO, Zambia, the Malaria Consortium, and others, several years of field research have culminated in an evidence-based training module and instructions for RDT use at community level. This module has demonstrated high retention of good practice after training based on these materials. A Training of Trainers programme is being developed by WHO, TDR and FIND to assist programmes in rolling this out as part of community case management training for health workers.

Furthermore, a joint programme with Uganda MoH has demonstrated timely reporting of ACT stocks, malaria diagnostic results and malaria prevalence, at relatively low cost through SMS use. Electronic reporting holds the potential to overcome many of the current bottlenecks in data flow that are restricting disease monitoring, and the problems of local stock-outs of health commodities such as antimalarial drugs and RDTs.

Challenges

When planning or implementing RDT scale-up, countries should take into account malaria endemicity, test reliability, the availability of personnel that have been trained to use the tests, the availability of microscopy, and country capacity to manage the "cool chain", as RDTs need to be stored in a cool place.

Some of the current challenges for scaling up RDT use relate to creating incentives, both for governments to encourage RDT use, and for practitioners and patients to seek testing before treatment. Providing solid evidence of RDT's potential to realise important cost-savings on ACT procurement is likely to encourage more governments to implement WHO's recommendations on malaria diagnosis.

1.2.5 Artemisinin-based Combination Therapy - ACTs:

Artemisinin-based combination therapy is highly effective for treating malaria, and has been adopted as the first-line treatment in all African countries where falciparum malaria is endemic.

With nearly all malaria-endemic countries promoting ACTs as a key component of their national drug policy, ACT procurement levels have grown from less than one million courses in 2001, to 157.2 million courses of ACTs in 2009, and 229.2 million courses in 2010.

WHO reports that by the end of 2009, 14 African countries were providing sufficient courses of artemisinin-based combination therapies to cover more than 100% of malaria cases seen in the public sector; a further 10 African countries delivered sufficient courses to treat 50% to 100% of cases. These figures are an increase from the five countries that were providing sufficient courses of artemisinin-based combination therapy to cover more than 50% of public-sector patients in 2005 (WHO).

ACT scale-up

Thirty three countries out of 47 countries or territories (70%) using ACTs are respecting the targets they have defined themselves for ACT and RDT scale-up, with a roadmap implementation performance above 80%.

A number of Roll Back Malaria Partnership mechanisms and partners are supporting countries to scale up ACTs. Their efforts are focused on helping countries to finance ACT scale-up; manage the procurement and supply of ACTs and raw materials; prevent ACT stockouts; lower the price of these lifesaving drugs; promote pediatric ACTs; and drive out oral monotherapies.

- **Financing ACTs**

A number of RBM partners such as UNICEF, UNITAID, the World Bank and the Global Fund are financing ACT procurement. For example, at mid-2010, a cumulative 140 million malaria cases were treated through Global Fund-supported programs—an increase of approximately 40 million compared to end 2009. The procurement and use of ACTs as first-line treatment in countries also increased significantly.

- **Procurement and Supply Management**

The Procurement & Supply Chain Management Working Group (PSMWG) supports countries to resolve all challenges in the procurement and supply chains of malaria commodities and the raw materials they require for their production. PSMWG also disseminates tools and best practices to help build country capacity in this area. In 2010, the PSMWG can identify a number of significant achievements.

In 2010, actual global procurement demonstrated that RBM's method for global ACT forecasting was more accurate than any other. As a result, RBM, the GF and UNITAID agreed to adopt the forecasting methodology developed by the PSMWG for global ACT forecasts until 2013. The PSMWG has been requested to validate all quarterly forecasts, to be recognized by all RBM partners as the one RBM global ACT forecast.

In 2010, PSMWG and WHO jointly organized the 5th international conference on artemisinin, in Madagascar. This conference brought together over 150 artemisinin extractors, ACT manufacturers, academics and government officials. More than in previous years, artemisinin extractors and API and ACT producers shared key information they had previously considered confidential, thereby helping to increase artemisinin market intelligence and ACT market stability. As a result of this meeting, an additional 40 million additional treatments will be produced.

PSMWG efforts to build capacity are also significant. More than 80 participants from 20 African countries met in Accra for a joint Global Fund/RBM workshop on implementation bottlenecks. Ministers of Health, National Malaria Control Programme Managers, pharmacists and procurement officers met in peer-review groups to share experiences and lessons learned on procurement and supply management processes. The country-to-country peer-review format proved to be effective: participants left the workshop having acquired critical knowledge that will help them improve the impact and reach of their national malaria control programmes.

- **Preventing ACT stock-outs**

The SMS for Life pilot project uses mobile phone text messages to prevent the stockout of anti-malarials and quinine injectables. Led by a public-private partnership between Novartis, Vodaphone, IBM and the Republic of Tanzania, and nurtured under the RBM umbrella, the SMS for Life pilot project was implemented in three districts of Tanzania. In 2010, the project demonstrated remarkable success.

At the beginning of the pilot project, all three districts had high stock-out rates of one or more of the five malaria medicines. During the pilot, malaria medicine availability improved significantly in all three districts, and stock-out rates were significantly reduced at the end of 21 weeks. Recommendations presented to the MOH in Tanzania are being followed through this year when a full national rollout of SMS for Life is expected. The methodology is also being adopted in West Africa, and other countries are considering its deployment.

- **Affordable Medicines Facility for Malaria**

The Affordable Medicines Facility for Malaria, or AMFm, is now hosted and managed by the Global Fund. The initiative's goal is to ensure access to affordable ACTs and help displace oral artemisinin monotherapies and counterfeit drugs from the market by slashing the price of ACTs at retail outlets across Africa through subsidies provided by international donors. The Global Fund expects the retail price of ACTs to plummet to between US\$ 0.20 to US\$ 0.50 per treatment, from current prices ranging from US\$ 6 to US\$ 10 per treatment.

Since its launch, the AMFm has negotiated a decrease in ACT sales prices for private sector buyers to place them on par with agreed price levels for public sector buyers.

A Master Supply Agreement was signed between the Global Fund and eligible manufacturers of quality-assured ACTs. As of late September 2010, more than 100 first-line buyers have signed the First-Line Buyer Undertaking and the Global Fund Secretariat has received 47 co-payment requests for 13 million treatments. Several orders have been processed and the first co-paid ACTs have been delivered by importers to outlets in Ghana and Kenya.

Phase 1 of this innovative financing mechanism is now operational and includes eight countries (Cambodia, Ghana, Kenya, Madagascar, Niger, Nigeria, United Republic of Tanzania and Uganda). Global Fund grant amendments for incorporating AMFm activities have been completed for most AMFm Phase 1 countries. Disbursements to finance interventions have already started. The RBM Partnership continues to coordinate the provision of technical support to countries, mainly through its Harmonisation Working Group workstream on AMFm.

The AMFm is showing encouraging early results and its effectiveness will be thoroughly examined through an independent evaluation and a decision on its future will be made in 2012 by the Global Fund's Board.

In Ghana, anecdotal information shows that AMFm ACTs have been purchased for as low as US\$0.69 and in Kenya, for as low as US\$0.60. However, a current priority is for countries to develop and implement systematic ways of capturing price/ availability data, so that countries can move beyond anecdotal reporting.

- **Pediatric ACTs**

Over 40 million treatments of Coartem Dispersible, a child friendly formulation of artemether-lumefantrine, developed by Novartis in collaboration with MMV, has been distributed to children across 32 countries, primarily in Africa, since May 2009.

In addition, a WHO initiative, called the Better Medicines for Children project, supported by MMV and other RBM partners engages in-country policy makers in discussions of the specific therapeutic needs of children.

Policy guidance and operational research

Emerging resistance to antimalarial medicines is a major threat to malaria control. WHO, working with partners, has developed a global plan for artemisinin resistance containment (due to be issued early in 2011), which aims to protect artemisinin-based combination therapies as an effective treatment for falciparum malaria. RBM's Case Management Working Group and other partners contributed to this guidance.

The first evidence of *P. falciparum* resistance to artemisinin in western Cambodia was published in 2008. A WHO project to contain the spread of artemisinin resistant strains was implemented on the Thai-Cambodia border in January 2009. Early 2010 results from the population screening programme in 20 high-risk villages indicate that the artemisinin resistant strain of *P. falciparum* malaria has almost disappeared. Cambodia national surveillance data has also confirmed that the number of cases of *P. falciparum* malaria in the target areas has fallen dramatically.

WHO's policy guidance in 2010 includes: The Global Report on Antimalarial Drug Efficacy and Drug Resistance (2000-2010); Malaria Treatment Guidelines (2nd edition); (which included a new WHO policy on universal parasitological confirmation of malaria); Good Procurement Practices for Artemisinin-based Combination Therapies.

To help countries implement policy guidance on oral monotherapies, WHO compiles data on both manufacturers' compliance and regulatory action taken by countries in which malaria is endemic, and have urged manufacturers to halt the provision and distribution of oral artemisinin-based monotherapies. Most large companies have stopped production of these medicines, but many small companies, mostly in Asia, have ignored the Health Assembly's call. Weak regulation of pharmaceutical markets remains a major issue. By September 2010, 27 countries, most of them in Africa, still allow marketing of these products, and 39 pharmaceutical companies were manufacturing them.

In addition, considerable advocacy is being undertaken with Heads of State to remove monotherapies from the market place (although the most systematic effort is through the implementation of the AMFm). At a special session of African Ministers held during the 18th RBM Board in May 2010, Ministers of Health committed to eliminate, with the help of their partners, oral artemisinin-based malaria monotherapies and substandard ACTs from the market through tangible policies, strategies and regulatory measures within the subsequent 12 months.

WHO's Special Programme for Research and Training in Tropical Diseases (TDR) co-leads a partnership that works to test and provide evidence for community case management (CCM) of malaria, pneumonia and diarrhoea. TDR is also evaluating the impact on

childhood mortality of large-scale home management of malaria programmes being implemented by PSI in three sub-Saharan African countries.

Challenges

Despite increases in ACT procurement and distribution, ACT uptake by febrile children remains low. This is due to lack of availability of ACTs at health facilities, high prices in the private sector, and limited access to health services, including through community care programmes. Access to malaria diagnostics at the community level also remains limited in many countries, especially in remote rural communities.

Efforts must continue to contain drug resistant strains of malaria, to implement strategies for the mitigation of artemisinin resistance, and to develop new drugs.

Artemisinin monotherapies are considered to be a major factor in the development of parasite resistance. Despite WHO's call to halt the use of these medicines (Resolution WHA60.18, endorsed by all WHO Member States in May 2007), their production and marketing continues. Greater assistance to national drug regulatory authorities is required to phase out oral artemisinin-based medicines.

1.2.6 Measuring impact

In March 2010, the Roll Back Malaria Partnership launched the Roll Back Malaria Progress & Impact Series, a collection of reports benchmarking progress towards the RBM 2010 goals. Providing concrete evidence on programmatic successes and lessons learned, the reports will help to inform strategic action, drive future investments, and accelerate progress towards the goals set out in the GMAP.

The Progress and Impact Series reports show that increasing financial investments systematically improves intervention coverage and reduces the burden of malaria. The Series also describes tools and strategies, and focuses on country experiences. In 2010, RBM published the following five P&I reports: Country Funding and Resource Utilization; World Malaria Day 2010: Africa Update; Saving Lives with Malaria Control: Counting Down to the Millennium Development Goals; Focus on Senegal; and Mathematical Modeling to Support Malaria Control and Elimination.

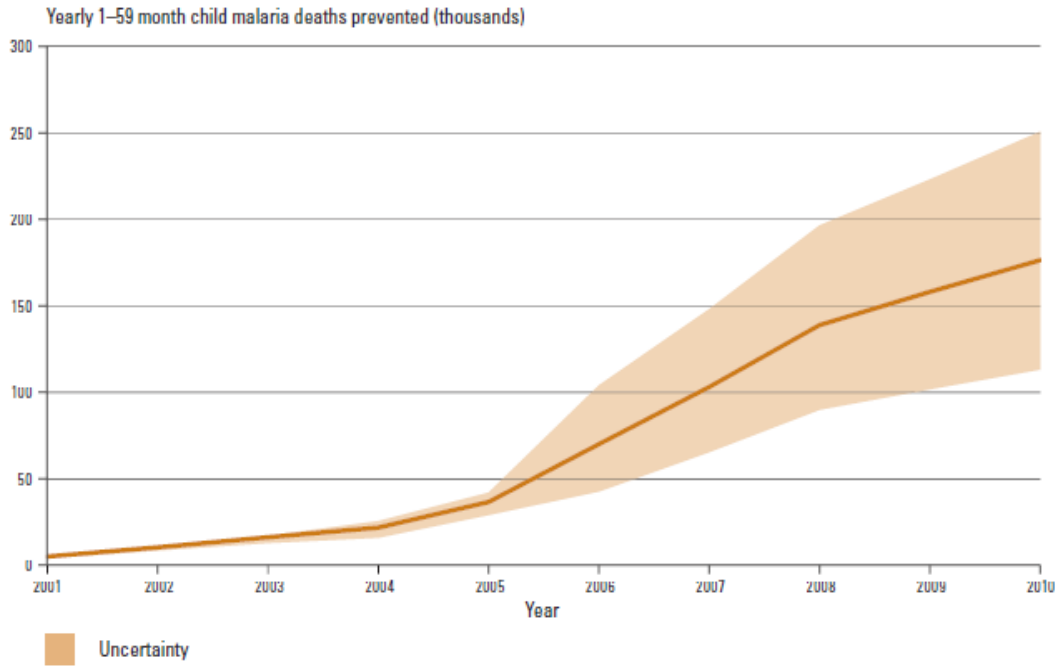
The reports show that countries are using external financing for intervention scale-up efficiently and appropriately. Nearly a million lives have been saved since 2000, the vast majority since 2006, when Africa's scale-up efforts began in force. Two reports describe mathematical tools for assessing impact, and one country report, Focus on Senegal, shows how Senegal achieved a spectacular drop in its malaria burden in just five years.

The Monitoring and Evaluation Reference Group (MERG) guides the subject choice and leads the authorship of the Reports while PATH/MACEPA and the RBM Secretariat are responsible for the production, with the MAWG leading messaging and facilitating report launches. Overall oversight is provided by the 2010 RBM Reporting Committee.

Fig.3

Children's lives saved by malaria prevention scale-up from 2001–2010

The LiST model estimates that malaria prevention scale-up (IPTp, ITN, IRS) over the past decade, when compared with rates in the year 2000, has saved the lives of 736 700 children (uncertainty bound 483 600–1 021 800) in 34 African countries. There was minimal progress in the first five years of the decade when few resources were available. The biggest impact will be seen this year, with a projected 18% decrease in malaria child deaths from 2000 levels.



Box 3: Deploying a high- impact strategy: the case of: Senegal

A financial injection of US\$ 130 million over five years, provided mainly by the US President's Malaria Initiative and the Global Fund, enabled the scale-up of malaria control interventions in Senegal and contributed to a remarkable impact on disease burden. The number of malaria cases went down by 41% in a single year, from nearly 300,000 in 2008 to 175,000 in 2009. In addition, an estimated 26,800 children's lives have been saved since 2001, thanks to insecticide- treated nets and the intermittent preventive treatment during pregnancy.

Between 2006 and 2009, 4.7 million ITNs were purchased and distributed in Senegal by Senegal's Ministry of Health and Prevention and its international and national partners. More than half of the nets were distributed in 2009 through large-scale distribution campaigns. Net distribution campaigns have been conducted throughout 2010. Six million ITNs are expected to be delivered by the end of the year, with universal coverage nets being estimated at around 8 million ITNs.

The distribution campaigns were rolled out district by district in the entire country. This staggered approach helped achieve high rates of ITN coverage and use, especially in rural and disadvantaged areas. Senegal has also achieved a high level of equity in the coverage of rural and urban areas with other malaria control interventions. Under the home-based care programme, known as PECADOM, trained volunteers from the community have been offering patients from remote areas free rapid diagnostic tests and appropriate treatment. In 2009, 97% of patients seen by a home-based care provider and diagnosed with malaria were treated within their community (i.e. without having to be referred to the next level of the health care system), with a 100% recovery rate.

In addition, numerous awareness-raising strategies are being implemented in Senegal to draw attention to the malaria issue and educate the general public. Some of them involve national celebrities and footballers, religious leaders, the private sector and nongovernment and community organizations.

Source: P&I report series: Focus on Senegal

Many RBM partners are supporting countries' efforts measure progress and impact of malaria control. This year, the MERG held an experts Consultation on Measuring Malaria-Specific Mortality, to reach agreement among experts on methods for reporting for RBM 2010 Goals and Millennium Development Goals. MERG also held various workshops to build country capacity to monitor and evaluate the impact of malaria programmes.

UNICEF has carried out significant malaria monitoring and evaluation activities throughout 2010. UNICEF has supported Multiple Indicator Cluster Surveys; and o monitor the coverage of key malaria control interventions. These data are made available in a series of public-access databases and are updated regularly on this website. UNICEF tracks over 100 indicators related to child survival and health, including malaria prevention and treatment. UNICEF collaborated with RBM and PATH on the Progress Impact Series.

1.3 Elimination efforts

Elimination, officially defined as reducing to zero the incidence of locally acquired malaria infection in a specific geographic area through deliberate efforts, is one of the major goals set out in the Global Malaria Action Plan. The RBM Partnership endorses elimination efforts in countries where it is feasible with current preventive and curative interventions, and where reintroduction from neighbouring countries can be prevented or managed.

A number of Roll Back Malaria partners have been providing countries with technical guidance to eliminate malaria and building the evidence base for malaria elimination. These partners include the World Health Organization; the Global Health Group's Malaria Elimination Initiative (GHG); the Malaria Elimination Group (MEG), convened by the GHG, the Asia Pacific Malaria Elimination Network (APMEN), and The Elimination 8, a Southern African regional initiative for malaria elimination

Technical support for elimination

WHO technically supports endemic countries in their efforts to control and eliminate malaria. Through its global and regional offices, WHO advises countries considering malaria elimination to undertake a rigorous scenario planning exercise that considers the epidemiological and entomological situation, programmatic capacity, financial resources, political commitment, and potential threats to success such as war and mass migration.

The different WHO Regional Offices provide strategic guidance and support monitoring and evaluation, as well as surveillance efforts to all malaria endemic countries in their regions. In 2010, Morocco and Turkmenistan were certified free of malaria by the WHO Director General. Certification procedures are ongoing for Armenia.

Other RBM partners support elimination efforts. The GHG continued to provide in-country practical support to elimination efforts in its seven target countries in Asia Pacific (China, the Solomon Islands, and Vanuatu) and southern Africa (Botswana, Namibia, South Africa, and Swaziland). The GHG's work in southern Africa is led by the Southern Africa Malaria Elimination Support Team (SAMEST), an ongoing collaboration between the GHG and the Clinton Health Access Initiative (CHAI) GHG participated in the second Elimination 8 (E8) meeting, and committed to providing continued support to the E8.

Building the evidence base on elimination

The MEG is a group of 48 international experts that elaborate on the scientific, technical, operational, economic and programmatic issues that countries need to consider when pursuing malaria elimination. It is convened by the GHG's Malaria Elimination Initiative, based at the University of California at San Francisco, which provides intellectual and practical support to 32 countries around the world that are embarked upon, or considering embarking upon, a path to malaria elimination.

The GHG and MEG have been building evidence to support country and regional malaria elimination efforts. This year, the GHG and MEG partnered with The Lancet to produce The Lancet Series on Malaria Elimination, which examines the technical, operational, and financial challenges that confront malaria-eliminating countries today.

In collaboration with WHO, the Clinton Health Access Initiative (CHAI), the University of Florida and others, the GHG is developing an Elimination Scenario Planning Tool (ESP) to help countries gauge their prospects, costs and timelines to achieve elimination under different levels of intervention and investment.

The GHG is also preparing case studies on Mauritius and Sri Lanka, highlighting the prevention of reintroduction in Mauritius, and the sustained decline in transmission during a major civil conflict in Sri Lanka. In collaboration with the Chinese CDC and the Jiangsu Institute of Parasite Diseases, the GHG is developing a review of Jiangsu's experience with mass primaquine administration.

In 2010, APMEN launched the Vivax and Vector Control Working Groups, a Fellows Program, and a Research Grants Program.

Regional initiatives for elimination

APMEN is composed of ten Asia Pacific countries that are pursuing malaria elimination, as well leaders and experts from key multilateral and academic agencies. The second APMEN annual meeting was held in Sri Lanka in February 2010 where new governance structure and 2010 workplan were adopted. APMEN also focuses on closing knowledge gaps through joint research efforts, and considers cross border control activities and community engagement as key to ensuring sustainable malaria elimination interventions. The GHG and APMEN supported Bhutan in developing a Global Fund proposal for elimination, including cross-border activities with India.

In March 2009, the Ministers of Health of eight countries in Southern Africa – the Elimination 8 - met in Windhoek, Namibia to deliberate on and launch a sub-regional collaboration to eliminate malaria from 4 front-line, low-transmission SADC countries and to scale up malaria control and eventually eliminate the disease in 4 second-line, high transmission countries. In August 2010, the E8 Ministers met in Maputo to continue to drive forward the elimination agenda since Windhoek 2009. In November They reviewed country and regional progress on the E8 commitments made in 2009, identified key technical and policy issues to achieve their goals, drafted a financial gap analysis, and finalized a costed action plan to guide progress towards achieving their commitments.

Country initiatives for elimination

In May 2010, 12 government sectors including the Ministry of Health and the Ministry of Finance etc, jointly issued The Malaria Elimination Action Plan in China (2010-2020)", which sets the two following main targets: 1) by 2015, all of China has no locally infected malaria cases except the border areas in Yunnan Province; 2) by 2020, malaria will be eliminated within China. In 2010, the Central Government allocated more than US\$6 million to 24 malaria endemic provinces, for the purpose of case detection and management, training, etc.

Challenges

Multiple major challenges continue to obstruct progress in the 25 countries in the world that are currently eliminating malaria. These include weak interventions for Plasmodium vivax, the dominant parasite in malaria-eliminating countries; looming insecticide and drug resistance; limited available funding; and cross-border movement of people.

1.4 Research for malaria control and elimination: new tools

New tools are needed to control and eliminate malaria. For malaria control, tools are needed which will increase ease of use and compliance; delay the emergence of resistance; remove cost barriers; and provide consistently accurate diagnosis. For elimination, tools are needed which interrupt transmission, sustain transmission interruption, and address asymptomatic reservoirs.

Path's Malaria Vaccine Initiative (MVI), the Medicines for Malaria Venture (MMV), the Innovative Vector Control Consortium (IVCC), and the Foundation for Innovative New Diagnostics (FIND), are Product Development Partnerships that are working to develop and deliver new vaccines, drugs, insecticides, and diagnostics for malaria control and elimination.

As a result of consultations completed this year by the Malaria Eradication Research Agenda (malERA), global research efforts for malaria are placing an increasing emphasis on the development of new tools for malaria eradication. Many malaria research consortia are now pursuing the development of tools that will interrupt transmission, which represents a paradigm shift in malaria research.

New tools for malaria control

- **Vaccines**

The PATH Malaria Vaccine Initiative (MVI) is a vaccine development program of PATH, a global health nonprofit organization. MVI's mission is to accelerate the development of malaria vaccines and to ensure their availability and accessibility in the developing world. MVI's vision is a world free from malaria.

RTS,S is in the final stages of development, giving the world the potential to save the lives of hundreds of thousands of African children who may otherwise die from malaria. Even a partially effective malaria vaccine would have the potential to save hundreds of thousands of lives and to protect the health of millions more, and thus take the world one step closer to achieving the long-term goal of eradication. A WHO policy recommendation on RTS,S is likely to be made in 2015 once the complete results of ongoing clinical trials are known.

MVI's project portfolio currently consists of more than two dozen projects, including 1 vaccine candidate, 3 translational research and development (R&D) projects, and more than 20 feasibility studies. In 2010, three MVI-supported vaccine projects were in clinical development, including GlaxoSmithKline Biologicals' (GSK Bio). A fourth project is expected to enter the clinical phase in early 2011. Progress in developing and refining evaluation technologies that allow malaria vaccine researchers to assess vaccine approaches in vitro.

In addition, in collaboration with WHO and the RBM Partnership, MVI worked with the health ministries of several African countries to develop a tool that will facilitate timely and informed decisions about malaria vaccine introduction into health systems in Africa. Known as the Malaria Vaccine Decision-Making Framework (DMF), this tool represents the kind of collaboration and preparation that will help countries avoid the delays seen in introducing lifesaving interventions in Africa. By end of 2010, more than 30 African countries will have

endorsed a framework that will pave the way for informed decision-making to use, or not, a malaria vaccine.

Other antimalarial vaccines are being explored by the US National Institutes of Health, the Africa Malaria Network Trust, and the Institut Pasteur.

- **Vector Control**

The mission of the Innovative Vector Control Consortium (IVCC) is to eliminate transmission of insect-borne pathogens through improved insect vector control with innovative products. The IVCC facilitates the development of improved public health pesticides and formulations, provides information tools to enable the more effective use of existing and new disease control measures, and works with the disease endemic country stakeholders and industry to establish target product profiles for new vector control products and paradigms.

In order to achieve this, IVCC has engaged the agrochemical industry in an effort to deliver new vector control products. IVCC now has projects with 8 major commodity chemical or formulation companies representing all the major players in the field of public health insecticide R & D.

In 2010 several of the projects initiated by IVCC in the previous 4 years successfully completed their development phase. In collaboration with IVCCs industrial partners Bayer and Syngenta, new long lasting formulations for Indoor Residual Spraying of insecticides have been developed. Field trials of these products have been successfully completed and they have now entered the regulatory phase. These products will enable insecticides to be sprayed only once in each transmission season dramatically reducing application cost and increasing acceptability to the inhabitants.

Information systems and tools form a critical part of successful control of insect vectors of disease. In 2010, IVCC completed development of the Malaria Decision Support System.

- **Diagnostics**

FIND is a Product Development and Implementation Partnership (PDIP) devoted to developing and implementing diagnostic tools for poverty related diseases. FIND is working to assure and improve the quality of RDTs.

Prototype positive control wells, designed for quality control of RDTs in a laboratory setting, have shown high temperature stability, sufficient for deployment in the field. Initial field trials are in design. This new product will address the quality control gap in ensuring performance of RDTs in the field after prolonged storage, and therefore bring increased assurance of accuracy of malaria diagnosis.

In a parallel development programme, lower-cost methods for product testing and lot-testing of RDTs will be developed. These methods are intended to bring greater sustainability to the WHO malaria RDT product testing programmes on which much global procurement is now based.

- **Drugs**

IV Artesunate, manufactured by Guilin Pharmaceutical Co. Ltd in China, has been added to WHO's prequalified list. Intravenous artesunate is an important option for patients with severe malaria, as they are often unconscious or likely to vomit an orally administered medication.

MMV partnered on this project with Guilin, to improve to GMP standards its manufacturing processes for this product. As a prequalified drug, this important medicine for the treatment of severe, life-threatening malaria will now be accessible to all countries using donor funds to procure antimalarials, for example from the Global Fund.

The new drug applications for two new artemisinin combination therapies (ACT), currently in development with MMV and pharmaceutical partners, have been submitted to the European Medicines Agency, the European agency for the evaluation of medicinal products:

- Eurartesim™ (dihydroartemisinin-piperaquine) has been submitted to the EMA. This fixed-dose combination is currently in the WHO standard treatment guidelines for the treatment of malaria.
- Pyramax® (artesunate/pyronaridine) has also been submitted. Upon approval it will be the first ACT with both P.falciparum and blood stage P.vivax indications in its label.

New tools for malaria eradication

MalERA is a consultative initiative aimed at identifying current knowledge gaps and new tools needed for malaria eradication. MalERA is a natural continuation of the Global Malaria Action Plan launched in September 2008 by the Roll Back Malaria Partnership, from which it has received endorsement and support.

The general expert opinion is that with currently available tools, global eradication will not be possible. Coverage with available tools can be improved and many more lives saved, but even local elimination will not be achievable, let alone eradication. The long-term goal of malaria eradication and the day-to-day urgency of malaria control, are not incompatible goals, and must be pursued in parallel.

At the malERA stakeholders "Zenith Week" in Washington D.C. on 22-26 March, a comprehensive R&D agenda for malaria eradication was produced, which was based on the technical consultations of the Consultative Group meetings held earlier throughout the year.

- **Vaccines**

Taking on the challenge of malaria elimination and eradication, MVI unveiled in late 2009 a new research and development (R&D) strategy targeting these two long-term goals. The MVI strategy represents a multi-pronged approach to developing the next generation of malaria vaccines, one component of which is to build on the success-to-date of the RTS,S malaria vaccine candidate.

In June 2010, MVI brought together dozens of experts from around the world to discuss the challenges of developing, testing, and putting into use a transmission-blocking vaccine.

MVI is also investing in vaccine approaches that would block the transmission of malaria from mosquitoes to humans. Transmission-blocking vaccines attempt to interrupt the life cycle of the parasite by inducing antibodies that prevent the parasite from maturing in the mosquito after it bites a vaccinated person.

Other elements of MVI's strategy address the need to develop vaccines against *P. vivax*, the less deadly but more widespread malaria parasite affecting humans and to develop evaluation technologies critical to timely go / no go decisions.

- **Vector control**

The IVCC Product Development Partnership has a leading role in optimising and stabilising the role of mosquito control within the elimination agenda. It works with industry to stimulate the development of new public health pesticides, replacing those lost to resistance and the increasingly stringent regulatory environment, and to define and validate new paradigms for mosquito control, moving beyond sprays and bed nets.

- **Diagnostics**

A Malaria Loop attenuated isothermal amplification (LAMP) is now in evaluation, having demonstrated very high sensitivity at low parasite densities in a laboratory setting, well below the detection threshold of microscopy and RDTs. LAMP will provide the ability to screen for very low parasite densities in a field setting, enabling wide-scale screening for case detection and management in low-transmission and elimination settings.

- **Drugs**

MMV's pipeline now comprises over 50 projects to cure *P.falciparum* and *P.vivax* malaria. The scope of the projects has expanded to facilitate the malaria eradication agenda. This includes objectives to develop agents; to address the emerging resistance to artemisinin, to block transmission of the disease, and to eliminate the presence of asymptomatic and relapsing infections both of which are reservoirs for the disease. In all cases the mandate is to provide affordable medicines and a paediatric formulation where appropriate.

Screening work on the compound libraries of the 'big five' pharma companies (GSK, sanofi-aventis, Novartis, Pfizer and AstraZeneca) is complete; 25,000 promising compounds were identified and placed in the public domain.

On June 25, 2010 APMEN launched a Research Grant Program which aims to assist in the development of new tools and measures to eliminate malaria in the Asia Pacific Region. In this inaugural funding round, grants will focus on the malaria parasite *Plasmodium vivax*, whose persistent liver stage makes it less vulnerable to elimination efforts.

Challenges

One critical need for both the effort to develop life-saving tools and the work of implementation is money. Long-term and consistent funding is key to ensure that R&D can move forward and that the fruits of the development process can make it into use. Strong partnerships come in a close second.

Strong links need to be built between national immunization programmes, malaria control programmes and national regulatory agencies in order to facilitate integration, vaccine pharmacovigilance and monitoring of effectiveness.

1.5 Global Advocacy

In the countdown to the 2010 deadline, RBM partners stepped up their advocacy activities to strengthen commitment to malaria control and sustain the gains made to date. These included heightened efforts by the African Leaders Malaria Alliance of African Heads of State (ALMA), Youssou Ndour, the Secretary General's Special Envoy for malaria, RBM Goodwill Ambassador Yvonne Chaka Chaka, RBM Special Representative Princess Astrid, the RBM Executive Director and Board Members and an extensive range of partners in the RBM mechanisms of the MAWG and the MERG, as well as partners in new campaign initiatives such as United Against Malaria (UAM).

A specific joint advocacy strategy was developed and supported widely throughout the year in preparation for the MDG Summit in New York. Developed in May for a joint ministerial meeting which ran parallel to the RBM Board, this strategy aligned messaging in support of disease control's contribution towards improving maternal and child health; malaria control was highlighted as a cornerstone for the attainment of all MDGs, particularly MDGs 4, 5, and 6. Carried forward by strong body of partners at the African Union Summit in July, in keeping with the AU theme of Maternal, Infant and Child Health, this strategy was adopted broadly by RBM advocacy partners and underpinned much of the messaging whilst also generating broader support from other key global health partnerships. These joint efforts, led by RBM partners, have influenced the advocacy landscape and stimulated more partners to join forces and advocate more strongly for health in the face of shifting development priorities and funding challenges.

Malaria Community and Heads of State informed

- **RBM Progress & Impact Report Series**

Targeted advocacy punctuated the last twelve months built on the platforms provided by the launches of the RBM Progress & Impact Series. PATH played a central role in conceptualizing and securing funding for the Progress & Impact report series which was developed to promote sustained or increased commitment to malaria control by donor countries, international health organizations, and endemic/epidemic country governments by measuring progress towards 2010 targets and disseminating findings.

MACEPA has been a lead partner in strategic planning, partner coordination, and authoring for the Progress & Impact reports, working in close collaboration with the RBM Partnership Secretariat, the Progress & Impact Report Oversight Committee, the MERG, the MAWG, and others.

The first five reports featured updates on malaria financing, intervention coverage, estimating lives saved, modeling, as well as the first focused country report. Extensive multi-RBM partner events in London, Paris, Brussels, Geneva, New York, Washington D.C., Atlanta, Dakar, Yaounde, Nairobi, all supported by a dedicated MAWG work-stream created opportunities for briefings with decision makers at the highest level of government in donor and endemic countries; US Congressional briefings, engagement with the French

Government, advocacy for essential Global Fund replenishment and continued financing for malaria as key to the attainment of the MDGs, featured in the headlines of high profile English and French media in the US, Europe and Africa continuously throughout the year.

An unprecedented number of partners were involved in joint media events and roundtables including Friends Europe, the French Ministry of Foreign and European Affairs, Malaria No More UK, the Malaria Consortium, PATH, Malaria Vaccine Initiative, The World Health Organization, Sumitomo Chemical, JHUCCP/Voices, Global Health Initiative, PMI, The World Bank, The American Society of Tropical Medicine and Hygiene, Friends of the Fund Africa, the Cameroon Coalition Against Malaria, KENAAM, Vestergard, Friends of the Global Fund Africa, UNICEF, and many more.

Mobilizing political commitment of donor and endemic countries

- **RBM Ambassadors**

RBM Goodwill Ambassadors and Special Representative also intensified their engagement in 2010 with strategic international visits and national campaigns.

Yvonne Chaka Chaka, Goodwill Ambassador for UNICEF and the RBM Partnership as well as MDG Envoy for Africa and President of the Princess of Africa Foundation took her newly completed documentary, *The Motherland Tour: A Journey of African Women*, on a four month tour of Europe, Africa and North America. The overarching MDG message - emphasizing the role disease control can play in improving maternal and child health in Africa - was delivered by Yvonne and a host of RBM partners at screenings in London, Paris, Brussels, Geneva, New York, Washington DC, Los Angeles, Ottawa, Chicago, Nairobi, Addis Ababa, Accra, Johannesburg, and Lagos.

These high profile events reached thousands of decision makers, secured extensive prime time TV and radio coverage (including BBC TV World Service News, BBC World Service Radio in Swahili, Hausa, Portuguese and French, France 24, and TV5 ...) and helped to secure meetings with the Kenyan Head of State as well as interesting Mrs. Ban Ki Moon, spouse of the UN Secretary General in supporting the RBM cause. These screenings will continue well into 2011 when partner-wide distribution of the film will also take place honoring requests from USAID, DFID, OECD, Red Cross, European Union, Congressional Black Caucus, Canadian Parliament, French Senate and African Union Ambassadors, among others.

Youssou Ndour, internationally acclaimed artist, Goodwill Ambassador for UNICEF and the RBM Partnership, and more recently Board member of Malaria No More US, launched a nationwide information and education campaign in Senegal which was documented in the first P&I Series country report, "Focus on Senegal". Called "Xeex Sibburu" - Let's Beat malaria! - NDour mobilized football stars, religious leaders, and local musicians to support nationwide net distribution campaigns with essential prevention messages. Post-launch campaign surveys showed that 7.8 million people - 64% of the population had seen at least one of the campaign's communications.

Princess Astrid of Belgium honored partners with her presence and support at 2010 World Malaria Day commemorations in Canada, Belgium and the USA, as well as UAM events and Motherland Tour screenings in Brussels.

- **World Malaria Day 2010 (WMD)**

Multiple commemorations took place across the globe. In Canada, RBM Special Representative Princess Astrid joined the RBM Executive Director and Director of the Global Malaria Program WHO at an event hosted by the Canadian Parliament and together with the UN Secretary General Ban Ki Moon, opened a prestigious photo exhibition “Blood Sweat and Tears” hosted by RBM partners, Malaria Consortium and Vestergaard Frandsen at the UN in New York. The malaria images produced by photographer Adam Nadel attracted thousands of visitors and received prominent acclaim in the media and a special feature in the New York Times. The exhibition is currently being toured throughout the US by members of the malaria community and offers a striking and effective visual tool for continued advocacy.

Princess Astrid also supported the launch of the 2nd report in the Progress & Impact series, “World Malaria Day 2010: Africa Update” at a malaria roundtable of US partners hosted by UNICEF in New York and in presence the UN Deputy Secretary General, presided over a visit to the Stock Exchange to highlight the need for continued malaria funding.

In Washington, the RBM EXD and Special Representative met with the President of the World Bank and other events organized by the UN Foundation and other partners as well as a visit to Congress organized by Malaria No More for the United Against Malaria campaign.

European RBM partners (including Red Cross EU Office and IFRC, MVI, UNICEF, ACP Secretariat and The Global Fund) commemorated WMD with a one day work shop at the European Parliament to maintain awareness of malaria control and its vital role in the achievement of the MDGs.

Princess Astrid joined Dr Matthias Schmale, the IFRC under Secretary General, who presented the Red Cross Red Crescent malaria programmes and the 2nd edition of the IFRC report “the winning formula to beat malaria”. Friends Europe focussed their efforts on mobilising GF replenishment and in addition reached out to the French Football Championship and engaged professional football associations and 18 football clubs in games to mark WMD under the banner “Unis contre le Paludisme” (United against Malaria).

More than 27 national malaria control programmes in Africa collaborated with country partners in organizing commemorations for World Malaria Day with United Against Malaria mobilizing footballers and celebrities in many countries. In the Republic of Tanzania the Head of State, President Jakaya Mrisho Kikwete led an international event supported by Malaria no More, JHUCCP /Voices, RBM Secretariat with football and action replays of the nationally broadcast music event Zinduka! Malaria Haikubaliki (“Wake Up! Malaria is Unacceptable”) topping the bill to an audience of 10,000 in Tanzania.

- **African Leaders Malaria Alliance – ALMA**

ALMA continued to monitor progress of malaria control through monthly reports and the convening of high level meetings at the African Union Summit, MDG Summit and at country level. During the AU Summit in Kampala, ALMA formally adopted tax and tariff removal as one of the alliance's four policy commitments to create an enabling environment for malaria control and joined forces with the Malaria Taxes and Tariffs Advocacy Project (M-TAP) to encourage African Heads of State to follow through on their Abuja commitments. This advocacy priority was taken forward at three other major events in 2010: the World Economic Forum (WEF) regional meeting in Dar es Salaam, Tanzania; the World Health Assembly meeting in Geneva, Switzerland; the Millennium Development Goals (MDG) Summit in New York, USA.

At the MDG Summit, the Heads of state and designated representatives of Liberia, Rwanda, Sierra Leone, and Zimbabwe renewed their countries' commitment to remove all taxes and tariffs on anti-malaria commodities. In addition, the UK and the Republic of Tanzania hosted a high level event with ALMA (Bridging the Malaria Gap: Saving Children – Supporting Women) at which the UK announced two significant new malaria programmes: to save 5,500 lives of children in Zambia by increasing access to a comprehensive range of commodities for prevention, diagnostics, and treatment; and in Ghana, finance 2.5 million new long lasting insecticide treated nets (LLINS), which could save 13,000 lives a year. In August, the UK announced support to Sierra Leone to help prevent 4,400 children's deaths every year, through the provision of one million LLINS.

- **UN Special Envoy for Malaria (UNSE)**

The UN Special Envoy for Malaria, Mr Ray Chambers, continued to work with endemic country leadership and donors through his office and the various organs of the United Nations and the World Bank. He conducted numerous meetings with Heads of State working through ALMA, the African Union and at key UN fora, such as the 63rd World Health Assembly in May where he gave an optimistic address on malaria and net coverage expectations for 2010; he also went on official visits to a number of African countries, including Nigeria, DRC, Rwanda and Zambia.

The growth of the use of social media – by individuals, partners, campaigns and initiatives is helping to magnify awareness of malaria control and the life saving gains made to date with cost effective interventions. This year the UN Special Envoy's Office launched a campaign featuring social media envoys - celebrities such as Larry King - who committed to convey monthly messages on malaria throughout the year. The UN Special Envoy joins UAM, MNM, and others who are using new media for fundraising and awareness, particularly in the US . Malaria No More's successful Twitter campaign with actor Ashton Kuchner raised enough funds to equip two districts in Senegal with 89,724 insecticide treated nets.

Mobilizing resources and political support to fund the GMAP

Partners in the European Union, USA, and Africa continued to work to create the necessary political support and an enabling environment to increase global funds for malaria. Targeting the US Congress, the EU Commission and Parliamentarians from North and South, as well as the private sector worldwide, these initiatives drew increased commitments evidenced by some examples below.

In October 2010 the United States Government announced that it would commit four billion dollars over the next three years to the Global Fund to Fight AIDS, Tuberculosis, and Malaria - the first multi-year pledge the United States has made to the Fund, and a 35 percent increase. This represents the largest increase in support for the Fund by any country for the next three years. The UN Resolution of the General Assembly, the Decade to Roll back Malaria, which now promotes the urgent need to fund and implement the GMAP, was updated with new language to include current partnership priorities. Led by Tanzania with the support of RBM and WHO the amended resolution was promoted to diplomats and media in the presence of the Deputy Secretary of the United Nations and EXD UNICEF.

To build southern partners' capacity on EU malaria policies and funding opportunities, the Red Cross/ EU Office and VOICES in Mali organized an inter-parliamentary forum for West and Central African parliamentarians opened by the Prime Minister of Mali and in presence of the RBM EXD. The purpose of the forum was to highlight their role in scaling-up and aligning national priorities on health in accordance with the GMAP (Global Malaria Action Plan) and Abuja targets, emphasizing good governance, accountability and transparent practices. This initiative is being replicated in Nairobi for Parliamentarians from Eastern and Southern Africa.

Strong coordinated efforts by European partners contributed to the increase in funding from the EC to the Global Fund replenishment (+US\$30m in 2011).

Friends of the Fund Africa initiated the 'Gift from Africa' campaign which harnesses the power of the African private sector and has raised US\$ 5 million to support the Global Fund since its inception in mid 2010. The campaign represents "a new willingness in the African businesses to invest in health" and at the September 21st Global Fund event in New York, it announced its initial US\$ 3 million contribution from the African private sector. Those recognised for their donations were Access Bank Plc, Anglo American South Africa, Cirrus Oil of Ghana, MTN Group, Old Mutual of South Africa and United Against Malaria (Nando's, MTN and Standard Bank). Multichoice Africa and Xstrata have since joined the cause.

At a Private Sector Summit in Rwanda, a further US\$ 2 million was pledged to the 'Gift from Africa' – of which US\$ 1.2 million came from Rwandan businesses. This summit was attended by His Excellency Paul Kagame and Her Excellency Madame Jeannette Kagame and inspired by the strong contributions, the Rwandan government pledged US\$1 million to support the Global Fund.

The United Against Malaria (UAM) campaign stepped up its activities to leverage the influence of celebrities, footballers, businesses and political leaders and secure greater attention to malaria in the lead up to the FIFA World Cup final in June 2010. Funded through BMGF grants, additional support from UK's DFID, as well as new resources from the African private sector, the campaign generated significant momentum in endemic African countries, including messaging, political advocacy and new partnerships to promote use of malaria commodities and culminated in exciting football events throughout Africa, as well as the UK and USA. From 23,000 signatures delivered to Congress on World Malaria Day to its inclusion at the closing World Cup concert "Celebrate Africa" at the Coca-Cola Dome in Johannesburg, UAM became a recognizable brand.

One of UAM's greatest documented success has been in mobilizing new stakeholders for malaria in Africa, particularly from the private sector. These include Nando's, MTN, DSG, Exclusive Books, Nikon, Africa Fashion International, Standard Bank, Naando Africa Geographic Magazine, Sasol, &Beyond, Wildcam and Premier Medical Corporation Limited.

In addition, South African corporate partners were able to raise more than US\$200 000 for the fight against malaria in Africa. Media giants like SuperSport, M-Net and Endemol South Africa used their enormous reach to film and air compelling public service announcements and TV shows dedicated to raising awareness of the impact of malaria in Africa. Endemol used its Big Brother Africa platform in both 2009 and 2010 – one of the most popular TV shows – to spread malaria messages and raise awareness on malaria protection and prevention.

The United Against Malaria bracelet – based on the design of the UAM logo- is a fundraising idea to raise resources for malaria projects in Africa. Launched in June 2010 they are still being sold through Nando's , and other outlets,with a third of all proceeds going to the Global Fund to Fight AIDS, Tuberculosis and Malaria for malaria projects, and the remaining two thirds to Khayelitsha township in Cape Town, where unemployment stands at over 50 percent. The ambition is to raise US\$1 million for malaria projects in Africa and pump US\$2 million into the local Township's economy. To date more than 100,000 bracelets have been sold raising US\$300,000.

The campaign has the support of FIFA and the national teams of Angola, Burundi, Djibouti, Eritrea, Ethiopia, Ghana, Kenya, Malawi, Mali, Rwanda, Somalia, Sudan, Tanzania, Uganda, Zambia and Zanzibar , as well as the Republic of Ireland and the US.

The RBM Board and UAM hosted a joint Ministerial Dinner in Geneva on 14 May to celebrate the success of the UAM campaign across Africa and explore its sustainability beyond the World Cup. Ministers of Health from 17 African nations joined the dinner and watched highlights of the campaign, including public service announcements (PSAs) by well-known footballers. In total over 57 PSAs were produced in 16 languages, broadcast more than 2000 times on three continents, with at least 50 million viewers.

The campaign demonstrated what could be achieved at country level through a unique working relationship between ministries of health, the private sector, national football federations, malaria control programmes and development partners.

Faith Based Organizations

The Center for Inter-faith Action on global poverty (CIFA) has mobilised leaders of Nigeria's Muslim and Christian faiths in support of government efforts to deliver 63 million LLINs to 30 million households by the end of 2010. Similarly, a partnership among major faith-based organisations in DRC and UNICEF is promoting appropriate use of protective nets in an effort to reduce the heavy malaria burden in the country. In August CIFA launched its Faith Based Communication Tool entitled "Stopping a Killer: Preventing Malaria in our Communities". This is a malaria sermon guide to help Muslim and Christian religious leaders significantly affect and improve the health of their individual communities. As respected and trusted local educators and mentors, religious leaders have the ability to influence behaviour and the malaria sermon guide equips them with the tools necessary to

disseminate malaria-specific messages needed to make a lasting impact. Biblical and Qur'anic scripture supports the evidence-based messages on malaria prevention.

Media coverage

Media coverage of the efforts of the RBM Partnership demonstrate an evident growth trend with higher general coverage throughout the year influenced by the continuous media presence provided by launches of the RBM P&I Report Series , United Against Malaria and other sustained malaria advocacy activities. The unprecedented coverage obtained by the launch of the Global Malaria Action Plan (GMAP) in September 2008 has yet to be surpassed, but partner media activities around the UNGA (MDG Summit) in September are strengthening and increasing media coverage, building a second significant media peak during the year.

RBM Top Media coverage

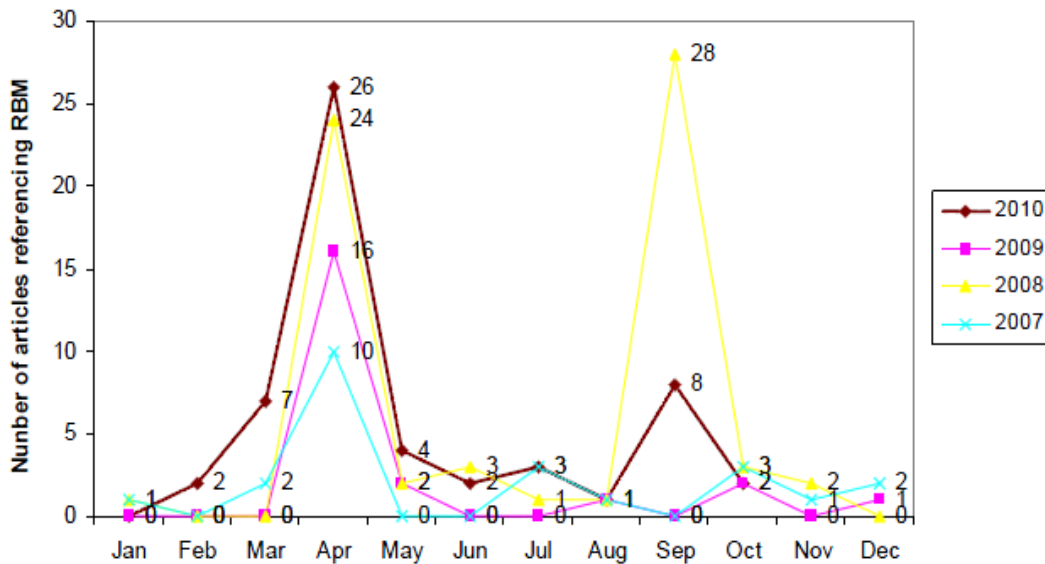
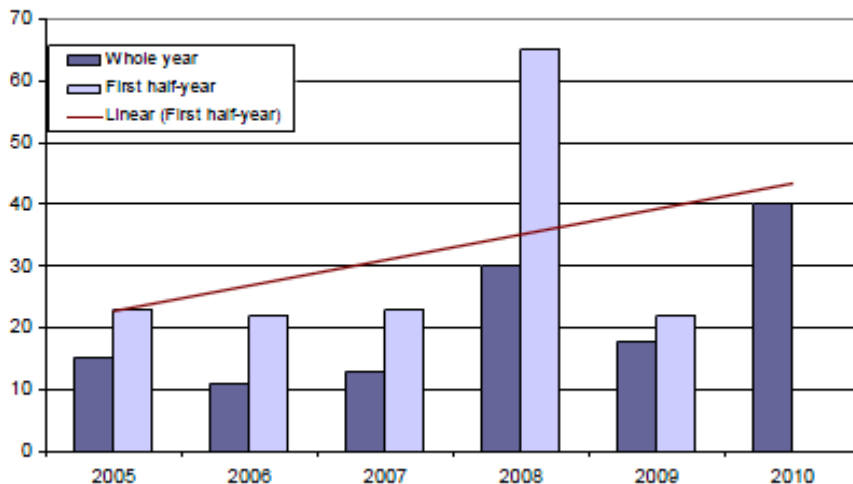
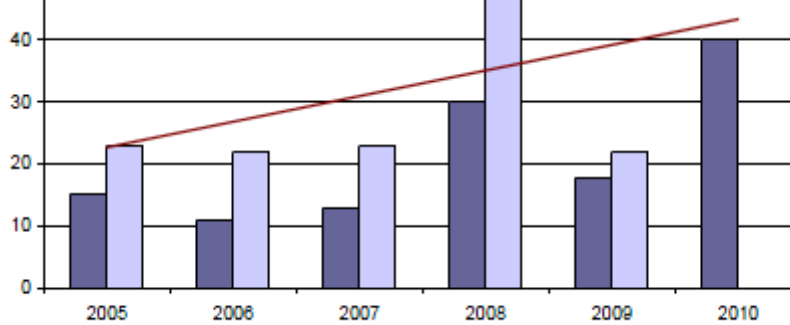


Figure 2. RBM Top Media coverage 2005-2010 First Half year vs Whole Year





1.6 Solutions to Key Challenges

In order to sustain the tremendous advances that have been recently achieved in malaria control, the Roll Back Malaria Partnership will need to address a number of challenges related to overall global financing for malaria, implementation bottlenecks, commodity use, and resistance of drugs and insecticides. Each of these challenges will be discussed in greater detail below.

Today's fragile economic environment threatens the gains achieved in the global malaria response. The gap between donor pledges at this year's Global Fund Replenishment Conference and country needs is worrisome, and highlights the urgency for the RBM Partnership to identify new donors and secure alternative sources of funding for malaria control. Allowing malaria control efforts to wane just as progress is being achieved will lead to malaria resurgence on a potentially disastrous scale, as it can be expected that populations' immunity to malaria decreases as the coverage levels of malaria control interventions increase.

Funds for malaria control must be adequate, predictable, and sustainable. A bridge fund might be considered to compensate for episodic gaps in international funding, as was witnessed at the Global Fund Replenishment conference this year. It is expected that the Roll Back Malaria Partnership Resource Mobilization Working Group, which was established this year through a decision of the 18th RBM Board, will take these considerations forward in 2011.

In addition, we must make the money work effectively to attract more money. Accountability, good governance, transparent reporting must be encouraged for continued investments.

Many low-achieving countries in central Africa require much more than coordination to make the money work. The RBM business model, based on coordinating in-country partners and aligning them to National Strategies, has no utility in central Africa where RBM partners are virtually absent. The RBM Partnership must encourage greater partner presence in these countries to build capacity and spur progress.

While the procurement and distribution of malaria control commodities have increased dramatically this year, use is not catching up. Efforts must be intensified to promote commodity use and carry out behaviour change communication campaigns.

Drug and insecticide resistance remain a very real threat to progress. A number of research consortia made steady advances on the development of new drugs, insecticides and vaccines. This year, the World Health Organization played its leadership role, developing global strategies to mitigate drug and insecticide resistance. We will need continued vigilance, tougher negotiations and initiatives to remove monotherapies, as well as increased investment into new tools.

This year, it is vital that we build on the intensified and highly coordinated advocacy initiatives that have added new voices, kept malaria high on the development agenda, and brought new resources to the table. New opportunities are presenting themselves: we can work with new African private-sector partners who have proven their commitment to

malaria; develop new proposals which advocate for malaria's integral role in improving maternal and child health and achieving the MDGs; and build on the messages delivered by popular figures in sports, music, and through the faith community – which have galvanised new momentum and even excitement around malaria control.

Since the UN Secretary General called for universal coverage in 2008, excellent progress has been achieved. It would be strategic to take advantage of these advances to spotlight the far-reaching benefits of malaria control, and to ensure that the fight against this ancient disease is seen as central to the Millennium Development Goals and the promotion of child and maternal health. Now is not the time to let the momentum wane. We must redouble our efforts, and save many more lives.