

The RBM Partnership's Global Response: A Programmatic Strategy 2004-2008

June 2004

1. The Roll Back Malaria Strategy

- ◆ Strengthen case management of malaria illness seeking high coverage with prompt and efficacious treatment through existing health delivery systems and expansion of systems to reach communities and households.
- ◆ Rapidly expand coverage for preventive interventions using all appropriate delivery systems to reach and exceed Abuja targets, the Roll Back Malaria global goal, and UN Millennium Development Goals (MDGs).

The Strategy is based on following **guiding principles***:

- ◆ Contribute to reaching the MDGs and in particular the poverty reduction goal using a pro-poor approach;
- ◆ Use a combination approach with both prevention and care;
- ◆ Do business differently and accelerate our efforts to rapidly achieve sustained high coverage with an integrated package for every household;
- ◆ Take advantage of opportunities of contact with the health system (public and private) and transform those opportunities into quality events for malaria control;
- ◆ Contribute to strengthening health systems, including capacity for surveillance, management, monitoring & evaluation (M&E);
- ◆ Use partnerships with the private sector and with other health programmes to foster synergy;
- ◆ Create sustainable demand for ITNs and efficacious antimalarials in order to contribute to sustainable malaria control;
- ◆ Ensure strong M&E and continuous mutual learning.

2. Key Interventions

- ◆ Vector control:
 - ◆ Insecticide-treated nets (ITNs)
 - ◆ indoor residual spraying (IRS)
- ◆ Intermittent preventive treatment during pregnancy (IPT)
- ◆ Prompt and effective case management, in particular with artemisinin-based combination therapy (ACT).

* See "Scaling-up for Sustained Impact: Roll Back Malaria Strategic Orientation 2004-2008" (Draft 2) *Updated version including all comments on Draft 1 from 2003 consultation as reviewed by 5th RBM Partnership Board Meeting*

**Togo:
ITNs + Measles
Campaign**

Following the success of two pilot schemes in Ghana in 2002 and Zambia in 2003, RBM partners are supporting an integrated campaign that will distribute insecticide-treated mosquito nets to 730,000 households in Togo in conjunction with a mass measles vaccination campaign in December 2004.

This integrated approach is highly cost-effective and allows partners to achieve a broader health impact, reaching poorer and more isolated communities who are often not reached by conventional net distributions.

The Togolese Red Cross will play an important role in the campaign, which has received support from the Norwegian and Canadian Red Cross Societies, the government development agencies of both countries, Rotarians against Malaria and the International Federation Foundation Board.

The Togo campaign will be the biggest health intervention of its kind to date as it aims to cover the entire country.

Vector Control: Insecticide-treated nets (ITNs)

ITNs can reduce the number of under-five deaths from all causes by about 20% and clinical episodes of malaria by about half.

Current ITNs need to be re-treated after 3 washes or at least once a year. Long-lasting insecticidal nets (LLINs) will probably not need to be re-treated over their life span of three to five years, thus avoiding the major challenge of re-treatment.

LLINs are less expensive per year of protection, when one takes into account both the initial cost of an ITN and the cost of periodic re-treatment (insecticide + operational costs).

LLIN production is being scaled-up, but is still low; demand is likely to far outstrip supply over the next three to five years.

Malaria-endemic countries in complex emergencies should have first call on the limited supply of LLINs given the added complexities of net re-treatment in such settings.

Periodic re-treatment must be ensured for existing nets and, because of the shortage of LLINs, for the majority of nets which will be distributed in the next few years.

Indoor residual spraying (IRS)

IRS, through its house-to-house, publicly funded and managed approach can achieve very high coverage and thus major impact on malaria disease burden.

IRS programmes are probably better suited for areas of focal endemicity and epidemic prone areas, and possibly in urban settings.

IRS programmes require a strong, well-organized public sector delivery mechanism.

IRS programmes are of limited application in most rural areas with stable malaria endemicity, especially those where there has been no tradition of managing programmes of such logistic complexity.

IRS and ITN programmes have similar cost-effectiveness and, at this time, they both require annual "re-treatment".

Insecticides including DDT are used for indoor residual spraying. WHO's position statement on the use of DDT is indicated as Resource 1.

<http://mosquito.who.int/docs/WHOpositiononDDT.pdf>

Intermittent preventive treatment

Intermittent Preventive Treatment (IPT) involves the administration of full curative treatment doses of an effective antimalarial, SP, preferably single-dose, at predefined intervals during pregnancy, beginning in the second trimester after quickening (when the movements of the foetus are first felt).

In areas with stable malaria endemicity, IPT has been shown to be highly effective in reducing the malaria parasite load, thus reducing severe anaemia in the mother as well as the proportion of babies who are born with low birth weight, which contributes to higher infant mortality and impaired child development.

At present, there is no consensus on which antimalarial medicine should be used in IPT in situations of high resistance to SP for clinical case management.

Prompt and effective case management

i) Disease recognition and diagnosis

Presently, malaria is often self-diagnosed and treated; many episodes of fever not caused by malaria are therefore self-treated with antimalarials.

Access to good diagnostic testing will be essential in the long run to protect valuable medicines from the increased risk of resistance through inappropriate and excessive use.

Clinical and symptom-based diagnosis for malaria will remain the usual for case management in most areas of high transmission and infection prevalence, except in those health facilities and settings where laboratory resources permit malaria parasite diagnosis.

In settings where multiple species of malaria are prevalent or where infection prevalence is low, rapid diagnostics and standard microscopy should be deployed to enhance the specificity and accuracy of malaria case management.

ii) Antimalarial therapy

Global malaria control is being threatened on an unprecedented scale by rapidly growing resistance of *Plasmodium falciparum* to conventional monotherapies such as chloroquine, sulfadoxine-pyrimethamine (SP) and amodiaquine.

Medicines used in combination are highly effective and make the development of resistance to antimalarials much less likely.

In revising their malaria treatment policies, countries should opt for a combination treatment, preferably an Artemisinin-based Combination Therapy (ACT).

The WHO recommended combination therapies with potential for deployment on the basis of the available safety and efficacy data, in prioritized order, are:

- (i) artemether/lumefantrine
- (ii) artesunate + amodiaquine
- (iii) artesunate + sulfadoxine-pyrimethamine
(in areas where SP efficacy remains high)
- (iv) amodiaquine + SP
(in areas where efficacy of both drugs remains high, mainly limited to West Africa).

Malawi: Protecting the Most Vulnerable

In Malawi, where malaria is the leading cause of illness and death, up to 40% of women pregnant for the first or second time have placental malaria at the time of delivery, resulting in an increased incidence of low birth weight and higher mortality rates for newborns and infants.

With support from Roll Back malaria partners including UNICEF, USAID, WHO and Population Services International, Malawi is scaling up the use of intermittent preventive treatment for pregnant women in their second and third trimesters. The country is also expanding the use of insecticide-treated nets by pregnant women and young children through distribution of subsidized nets at antenatal and maternal/child health clinics.

A recent household survey in the town of Blantyre showed a 33% reduction in placental malaria, a 50% reduction in the number of low birth weight babies, and a 35% reduction in anaemia among mothers.

Zambia:

Right Drugs, Right Place, Right Time

Malaria is endemic throughout Zambia, killing at least 50,000 people each year and accounting for nearly 40% of deaths among children under five.

Faced with growing resistance of the malaria parasite to chloroquine, the widely used antimalarial, the Government of Zambia became one of the first countries in Africa to adopt the artemisinin-based combination therapy in its national treatment protocols.

Roll Back Malaria partners including the MSF, the WHO and the GFATM, are providing support to Zambia to implement to national scale the use of ACTs in all formal health sector facilities with the aim of enabling 75% of the population access ACTs.

In addition, artesunate + mefloquine is an option in areas of low to moderate transmission.

These combinations are more expensive than previous monotherapies: current prices for co-formulated, WHO pre-qualified ACTs are around \$2 per treatment for adults and \$1 for children.

The growing interest in ACTs, the increasingly large orders, funding from the Global Fund and the development of the Malaria Medicines Supplies Service are likely to contribute to increased supply and reduced prices of ACTs over the coming years.

iii) Referral for severe and complicated disease

Plasmodium falciparum infection can progress to a severe, life-threatening illness requiring complex medical management and therapy.

The management of potential malaria infections characterized by sustained high fever, inability to be treated with oral malaria medications, and compromise of consciousness and/or respiration must be initiated within 12 hours. Quinine remains the first line treatment for severe malaria.

Close-to-home administration of artesunate suppository should be an integral component of the home management of malaria, as it has been demonstrated to significantly reduce the risk of death in patients that have early signs of severe malaria.

3. Implementation

Prevention

The minimum standard package for prevention should include:

i) Partnership with maternal and child health services: Linking malaria prevention (ITN & IPT) to antenatal care (ANC) and expanded programme of immunization (EPI)

Malaria programmes should ensure that funding for malaria interventions includes not only the commodities themselves but also operational and health system support costs. In this way, maternal and child health programmes will see their resource base grow, and malaria programmes will be seen as contributing to strengthening national health systems.

ii) Time-limited health days once a year for community-based re-treatment of mosquito nets

In order to maintain their full efficacy, nets will need to be re-treated with insecticide at least once a year for the coming three to five years, until a transition has been made to long-lasting insecticidal nets (LLINs).

Evidence suggests that in order to achieve high re-treatment rates, re-treatment should be provided free of charge and be carried out as mass treatments through a community or household based approach.

iii) ITNs through Measles Outreach and other catch-up programmes

These health days provide a unique opportunity to reach the Abuja targets for under-five children through a one-time distribution of free or highly subsidized ITNs (or vouchers to access them).

This one-time distribution of ITNs or vouchers would contribute to create demand and to prime the market.

iv) An intensified social mobilization, social marketing and behaviour change effort involving other sectors and civil society as a whole

Social mobilization can foster a societal movement for the adoption of the use of treated net as a universal behaviour in malaria-endemic areas.

Over time, this should lead to a gradual transition from subsidized time limited interventions towards the development of a commercial market, contributing to sustained disease burden reductions and the sustainability of malaria control programmes.

Social mobilization opportunities include:

- ◆ ITNs should be made available and promoted in health facilities
- ◆ Schools should encourage their students to sleep under ITNs
- ◆ Employers should be encouraged to promote the use of ITNs by employees and their families
- ◆ Agricultural sector has well developed outreach extension services and the insecticide distribution networks could provide opportunities which may not have been optimally exploited up to now.
- ◆ NGOs, religious groups, municipalities and other parts of civil society should be co-opted as national RBM partners in this social mobilization effort.
- ◆ The media can play a role in social marketing, commercial advertising, and radio shows discussing malaria prevention, in particular the use of ITNs.

v) Subsidies and support for commercial access strategies

- ◆ "Mitigating inequities with focus on vulnerable groups, in particular, pregnant women, children under-five and people affected with HIV/AIDS".
- ◆ Ensuring that programme strategies contribute to prime the market to move over time from subsidized time-limited interventions towards sustainable and affordable access to local commercial sources of ITNs.
- ◆ Creating demand and behaviour change through nationwide social mobilization, information, education and communication for behaviour change.
- ◆ Creating an "enabling environment" for consensus development on national approaches to target the vulnerable.

vi) Partnerships with HIV/AIDS and TB programmes

Links to HIV programmes should ensure that HIV+ individuals are provided with highly subsidized or free ITNs and are made aware of the importance of managing episodes of fever properly, with access to timely diagnosis and treatment for malaria.

Links with prevention of mother to child transmission (PMTCT) programmes are particularly important.

To the extent possible a joint/synergistic approach to strengthening health systems should be carried out with HIV/AIDS and tuberculosis programmes.

The RBM ITN Working Group Consensus Statements on IRS and ITN, and on ITN Use in Pregnancy are indicated as Resources 2 and 3, respectively. The WHO/UNICEF Joint Statement on Malaria Control and Immunization is indicated as Resource 4.

http://www.rbm.who.int/partnership/wg/wg_itn/docs/RBMWINStatementVector.pdf

http://www.rbm.who.int/partnership/wg/wg_itn/docs/RBMWINStatementMPWG.pdf

<http://www.rbm.who.int/docs/RBM-EPI-EN.pdf>

Case management

i) Enhancing quality of malaria treatment

In most of the Africa region, and in many settings in the Americas, Asia and the eastern Pacific, the majority of malaria therapy takes place in the commercial sector, with malaria medicines procured by patients and caregivers through local shops and pharmacies.

The quality of malaria medicines available in these settings has been demonstrated to be highly variable, and there is generally inadequate patient information available to assure that a fully therapeutic regimen of an efficacious treatment is provided.

National policy makers and regulatory bodies must be actively engaged in the discussions and actions that will result in assuring that a consensus limited group of malaria medicines is distributed through commercial outlets.

Policy should support that the lead WHO-recommended ACT malaria therapy provided through the public sector is also provided through all commercial outlets at an affordable cost with adequate patient instructions for use.

Programmes focusing on the Integrated Management of Childhood Illnesses (IMCI), child survival and safe motherhood have high potential to ensure equitable and timely access to case management.

ii) Reducing the financial barriers to access to ACTs: the need for subsidized prices in both the public and the private sectors*

To maintain a pro-poor strategic approach, the price of ACTs should not be a financial barrier to access, in particular for the rural and urban poor in Africa, south of the Sahara.

* See also "Saving Lives, Buying Time: Economics of Malaria Drugs in an Age of Resistance", Institute of Medicine (2004), <http://www.nap.edu/books/0309092183/html/>

Since over 70% of the care for malaria is provided in the private sector, subsidizing only the public sector would, under present conditions, have limited impact on disease burden. The price of ACTs should thus be subsidized through all current delivery mechanisms, both public and private.

The case for subsidy through all delivery channels is further strengthened as ACTs have been shown to reduce infection transmission, thus having a population impact. As such, they can be considered “public goods”.

While national subsidy mechanisms could importantly improve equitable and universal ACT access, there are important risks of re-exportation, of sub-optimal formulations or even counterfeits, at least in the coming years, until national regulatory authorities and processes are sufficiently strengthened.

Global subsidy would have the advantages of simplicity and speed, the purchasing power of global procurement and its effect on quality and price, (especially during this scale-up phase), and a much reduced risk of counterfeits or re-exportation.

Global subsidy could also ensure that all artemisinin-based medicines in circulation worldwide would be combination medicines, not artemisinin monotherapies.

The RBM Case Management Working Group Consensus Statement (March 2004) is indicated as Resource 5. The Final Report of the Institute of Medicine is indicated as a new resource.

www.rbm.who.int/partnership/wg/wg_management/docs/RBMConsensusStatement_ACT.pdf
<http://www.nap.edu/books/0309092183/html/>

Consensus Resources:

1. WHO Position on DDT Use in Disease Vector Control under the Stockholm Convention on Persistent Organic Pollutants
<http://mosquito.who.int/docs/WHOpositiononDDT.pdf>
2. RBM ITN Working Group Consensus Statement on IRS/ITN Use, March 2004
http://www.rbm.who.int/partnership/wg/wg_itn/docs/RBMWINStatementVector.pdf
3. RBM ITN Working Group Consensus Statement on ITN Use in Pregnancy, March 2004
http://www.rbm.who.int/partnership/wg/wg_itn/docs/RBMWINStatementMPWG.pdf
4. WHO/UNICEF Joint Statement on Malaria Control and Immunization, 2004
<http://www.rbm.who.int/docs/RBM-EPI-EN.pdf>
5. RBM Case Management Working Group Consensus Statement, March 2004
http://www.rbm.who.int/partnership/wg/wg_management/docs/RBMConsensusStatement_ACT.pdf