MALARIA TREATMENT POLICY:
TECHNICAL SUPPORT NEEDS ASSESSMENT

Malaria Action Coalition (MAC)
Senegal Mission Report, March 14–21, 2005

Andriamahefazafy Barrysson  World Health Organization/Regional Office for Africa
Syllah Jackson  World Health Organization/Intercountry Team
Lama Marcel  Management Sciences for Health/
Rational Pharmaceutical Management Plus Program

Printed August 2005

USAID Strategic Objective 5
This report was made possible in part through the support provided by the U.S. Agency for International Development, under the terms of cooperative agreement number HRN-A-00-00-00016-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

About RPM Plus

RPM Plus works in more than 20 developing countries to provide technical assistance to strengthen pharmaceutical and health commodity management systems. The program offers technical guidance and assists in strategy development and program implementation both in improving the availability of health commodities—medicines, vaccines, supplies, and basic medical equipment—of assured quality for maternal and child health, HIV/AIDS, infectious diseases, and family planning and in promoting the appropriate use of health commodities in the public and private sectors.

Suggested Citation

This report may be reproduced if credit is given to WHO and RPM Plus. Please use the following citation.

ACRONYMS

ACT artemisinin-based combination therapy
AIDS acquired immunodeficiency syndrome
AMM Autorisation de Mise sur le Marché
BCC behavior change communication
CCF Christian Children’s Fund
CCM Country Coordinating Mechanism
DMT Direction des Maladies Transmissibles (Directorate of Infectious Diseases)
DPL Direction de la Pharmacie et des Laboratoires (Directorate of Pharmacy and Laboratory)
DS Direction de la Santé (Directorate of Health)
DSP Departement de Santé Publique (Public Health Department)
GFATM Global Fund to Fight AIDS, Tuberculosis and Malaria
IEC information, education, and communication
ITN insecticide-treated net
LNCM Laboratoire National de Contrôle des Médicaments (National Laboratory for Drug Quality Control)
M&E monitoring and evaluation
MAC Malaria Action Coalition
MOH Ministry of Health
NMCP National Malaria Control Programme
PDIS Programme de Développement Intégré de la Santé (Health Sector Integrated Development Program)
PNA Pharmacie Nationale d’Approvisionnement (Central Medical Stores)
PNDS Plan National de Developpement Sanitaire (National Health Development Plan)
PRA Pharmacie Régionale d’Approvisionnement (Regional Pharmacies)
PSM procurement and supply management
RBM Roll Back Malaria
RDT rapid diagnostic test
RPM Plus Rational Pharmaceutical Management Plus (Program)
SP sulfadoxine/pyrimethamine
UNDP United Nations Development Programme
UNICEF United Nations Children’s Fund
USAID U.S. Agency for International Development
USD U.S. dollar
WHO World Health Organization
INTRODUCTION

African countries are undergoing a period of dramatic change in their national malaria treatment policies as more of these countries adopt artemisinin-based combination therapy (ACT). Successful implementation of the new ACT policies presents many challenges and most countries will require technical assistance from a variety of sources, both internal and external. The Malaria Action Coalition (MAC) partnership brings together three partners that have considerable expertise in many of the areas related to ACT implementation, which complements expertise brought by other Roll Back Malaria (RBM) partners. The U.S. Agency for International Development (USAID) has made a commitment to the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) to provide technical assistance through MAC. This mission was therefore designed to assess the progress of Senegal toward implementing the new ACT policy and to determine what, if any, additional technical support it may need to successfully complete the implementation. It is expected that the successful implementation of the ACT policy will contribute to the attainment of the RBM goals for the prevention, treatment, and control of malaria in sub-Saharan Africa through coordinated technical support.

After consulting with its partners and preparing for the imminent visit of the GFATM Senegal portfolio manager, the National Malaria Control Programme (NMCP) requested that the MAC team help the program develop and finalize the main documents they were required to submit to GFATM the following week. With the understanding of the situation and the recent suspension of Senegal for the second phase of the Round 4 grant, the MAC team, in consultation with some RBM partners, agreed to work on these documents—

- The procurement and supply management (PSM) plan
- The monitoring and evaluation (M&E) plan

Upon completing the visit and the PSM and M&E plans, the MAC team realized that even the new policy document and the implementation plan for the new policy are not complete. NMCP also requested assistance to complete these necessary documents. The MAC team decided to continue the work online, with the RPM Plus Regional Technical Adviser serving as the focal point for the team in country.

Mission Objectives

The objectives of the mission were to work with Senegal’s RBM partnership to—

1. Define the technical support requirements for need-based malaria treatment policy implementation over the next three years

2. Develop priority lists of technical support requirements that MAC and other RBM partners could support within the next 12–18 months
3. Develop a MAC operational plan (activities, timeline, budget, and responsible MAC partner) for providing technical support in the next 12–18 months

4. Develop medium-term (three-year) need-based plan (activities, timeline, and budget) for technical support for resource mobilization

5. Identify available in-country expertise that could potentially be used to provide technical support to Senegal’s NMCP

**Mission Expected Outcomes**

The expected results of the mission were the following—

1. Medium-term (three-year) need-based technical support requirements of Senegal in scaling up adoption/implementation of appropriate treatment policies

2. Priority lists (derived from the medium-term plan) of technical support requirements that MAC and other partners will need to support over the next 12–18 months

3. MAC operational plan (activities, timeline, budget, and responsible MAC partner), based on priorities defined in the priority lists, for providing technical support to Senegal in the next 12–18 months

4. Medium-term (three-year) need-based plan (activities, timeline, and budget)—based on requirements defined in the medium-term plan for technical support to Senegal—that will be used for resource mobilization by USAID

5. List of in-country experts who could be used as consultants by partners

Annex 1 summarizes the technical assistance needs identified by the team in collaboration with in-country stakeholders and partners, as well as prioritization of these technical support needs.
BACKGROUND

Located in West Africa, Senegal (Figure 1) covers 196,722 square kilometers and is bordered by the Atlantic Ocean to the west, Mauritania to the north, Mali to the east, and Guinea and Guinea-Bissau to the south. The Gambia is almost entirely contained within Senegal. The climate is arid with two seasons: rainy from July to October and dry from November to June.

Figure 1. Senegal’s location and selected 2001 statistics

| Total population:  | 9,800,000 inhabitants |
| Urban population:  | 41% percent            |
| Population density: | 48 inhabitants per square kilometer |
| Population growth: | 2.8% per year          |
| Youth:             | 58% of population >20 years |
| Workforce:         | 42%                    |
| Population at school: | 55.7%                |

**Epidemiology of Malaria in Senegal**

Malaria is a major health and development problem and is the leading cause of morbidity and mortality in Senegal. The health information system shows that in 2003, malaria accounted for 35 percent of outpatient visits and 8,000 deaths registered at health facilities. Children under five
and pregnant women are at greatest risk of contracting the disease and suffering its consequences.

Malaria transmission in Senegal is stable in the countryside, where 7 million people live, with a slight increase during the rainy season from July through October, and an epidemic risk in some districts. In districts that have traditionally unstable malaria transmission, such as Matam in the north, the epidemiology is changing to a more stable transmission because of construction of hydroelectrical facilities.

Four parasites are responsible for malaria in the country: Plasmodium malariae, P. vivax, P. ovale, and P. falciparum. The latter being responsible for the vast majority of disease including most of the severe cases and malaria-related anemia that together account for 65 percent of malaria-related deaths. Resistance of the parasite to the most common and inexpensive drug to treat malaria, chloroquine, is increasing rapidly. The latest data on chloroquine efficacy show treatment failure rates of between 25 and 45 percent. In accordance with WHO’s recommendations regarding drug policy, NMCP changed the malaria drug policy in Senegal during a long process that involved all malaria partners in the country.

**Organization and Funding of Health Services**

Based on situational analysis of the previous strategic plan (2001–2005), Senegal developed a new strategic plan to reduce malaria morbidity and malaria-related mortality by 50 percent by 2010. The strategic plan was developed in accordance with the National Health Development Plan (PNDS) (Plan National de Developpement Sanitaire) and will be implemented through the Health Sector Integrated Development Program (PDIS) (Programme de Développement Intégré de la Santé). The objectives are in line with the RBM objectives, to which Senegal subscribed.

In 1995, Senegal developed a national malaria control program to reduce morbidity and mortality due to malaria; its strategies and activities were integrated into the PDIS. The objectives of that earlier plan were as follows—

- Improve access to prompt, affordable, and effective treatment for the most vulnerable groups: pregnant women and children under five years of age
- Improve access to insecticide-treated nets (ITNs) for the most vulnerable groups
- Ensure intermittent preventive treatment of malaria for pregnant women

The new strategic plan focuses on—

- Prompt and rapid case management at health facilities and in the community
- Prevention, including chemoprophylaxis for pregnant women and use of insecticide-treated materials, especially bednets
- Community interventions
- Epidemiologic surveillance and control of epidemics
- Strengthened support systems, including capacity building, supervision, and management of commodities

The budget estimate for the new five-year plan is about 37,389,680 U.S. dollars (USD). The national budget contributes 53 percent, partners 30 percent, communities 11 percent, and local organizations 6 percent. Because of the recent change in the national malaria drug policy, however, the strategic plan budget will almost double, reaching USD 66 million. GFATM grants will contribute nearly half of this amount.

The Senegalese health system was set up in three levels according to the primary health system with a strong decentralized hierarchy. The national level, including NMCP, provides strategic guidance on policy, develops guidelines, and mobilizes resources for the health sector. The regional level provides technical support to the peripheral level, which is responsible for implementation.

Currently, NMCP is part of the Division of Transmissible Diseases (DMT) (Direction des Maladies Transmissibles), which reports to the Direction of Health. NMCP seems to have easy access to the Ministry of Health (MOH) cabinet despite its low level in the hierarchy, however. Although NMCP works sporadically with all relevant departments of MOH, including the Department of Reproductive Health, the Central Medical Stores (PNA) (Pharmacie Nationale d’Approvisionnement), the Directorate of Pharmacy and Laboratories (DPL) (Direction de la Pharmacie et des Laboratoires), and research institutions at the University of Dakar, coordination among these departments is not effective. NMCP provides direct technical and financial support to all the provincial health offices for the planning and implementation of malaria prevention and control programs. The provincial health offices are also involved in the NMCP annual planning and review meeting. Decentralization of resources remains a challenge and continues to undermine implementation of activities at the peripheral level.

To achieve the set objectives, the MOH put in place a coalition with all partners involved in the fight against malaria. The World Bank provides assistance to fight epidemic diseases including malaria. The World Health Organization (WHO) provides technical and financial assistance for the implementation of the strategic plan. The United Nations Children’s Fund (UNICEF) assists in developing M&E activities in the context of the Bamako Initiative, implementation of community interventions, and promotion of ITN use. The United Nations Development Programme (UNDP), in the context of the Poverty Reduction Strategy Paper, intervenes in some districts such as Kedougou and Bambey. USAID, assists in numerous areas of the malaria strategic plan through its implementing agencies that include Basic Support for Institutionalizing Child Survival (BASICS), Management Sciences for Health (MSH), ADEMAS, NetMARK, Christian Children’s Fund (CCF)/CANAH, AFRICARE, among others. Some specific areas of interventions include training, promotion of ITN use, and operational research. USAID also provides financial assistance through other multilateral agencies such as WHO and GFATM.
Other partners include the African Development Bank, the European Union, Belgium, the Japanese cooperation agency, and the private sector (for provision of commodities, drugs, and ITNs). Communities participate in the process through their committees and various community associations. Nongovernmental organizations are among the most active partners, including World Vision, Organisations Non Gouvernementales Education Santé, Plan International, the Lutheran Church, and CCF.

**Procurement**

The Central Medical Stores (PNA), which is a public service, is responsible for procurement of drugs, health commodities and equipment, and other non–health goods. Thus, it procures antimalarial drugs, ITNs, laboratory products, and treatment kits. PNA has sufficient resources for procurement and can guarantee the quality of products procured. For years, PNA developed a distribution system that covered the whole country from the central level to health posts in the most remote areas through the regional pharmacies (PRA) (Pharmacie Régionale d’Approvisionnement) and district warehouses (Figure 2). The procedures at PNA are set up to be transparent, respect competition, and conform to national and international standards under the supervision of MOH, which is responsible for coordination. Selection of manufacturers and vendors is made through international bidding, as much as possible, based on a list provided by WHO.

PNA fully manages the resources provided to the health system for procurement of goods, including resources allocated to health facilities. At the health facility level, drugs and other commodities are managed under the cost recovery scheme, allowing households to participate in the financing of the health system by paying up to 90 percent of the total expenditures for drugs. Through the cost recovery scheme, NMCP proposes to provide ACTs to end-users at the same subsidized cost as the sulfadoxine/pyrimethamine(SP)-amodiaquine combination. PNA procures only medicines and other health commodities from the national essential medicines list.
Figure 2. Flow of medicines and other health commodities through the health system

DPL provides quality assurance and, in collaboration with PNA and the National Laboratory for Drug Quality Control (LNCM) (Laboratoire National de Contrôle des Médicaments), is responsible for setting regulations and establishing the Autorisation de Mise sur le Marche (AMM), or the right to market a drug. The national visa (drug approval) and pharmacovigilance committees are based within DPL.
RESULTS

Planning and Coordination

Senegal began the malaria drug policy change process in June 2003. The following were steps representing partner agreement along the process—

- Use one-year transitory combination therapy with SP-amodiaquine for uncomplicated malaria cases
- Use an intermittent preventive treatment with SP for pregnant women to replace chloroquine chemoprophylaxis
- Obtain a consensus on November 9, 2004, to introduce ACT in 2005, provided sufficient resources are available

Soon after achieving consensus, NMCP started training health workers on the new malaria drug policy despite the fact that the drugs were not yet available and were not expected to be available in the near future. In addition, planning and coordination of the transition process was assigned to NMCP as a whole. No group, committee, or task force was established or assigned specific tasks to proceed with the transition. This approach slowed down the process considerably.

Although NMCP staffing has been scaled up, it is still inefficient and other partner involvement is limited because of weak coordination capacity.

Financing and Resource Mobilization

In 2004, NMCP, with the sponsorship of the First Lady, Mrs. Viviane Wade, organized a Marathon to Fight Malaria and raised more than USD 1.5 million. Funds were used to procure ITNs and SP to be distributed countrywide. In early 2005, partners in Senegal, including Sumitomo Chemical and the United Nations Foundation, organized the “Africa Live, Roll Back Malaria” concert with more than 20 high-profile African singers to raise awareness of malaria and collect funds for the fight against it. As a sensitization effort, malaria partners were invited to set up booths to teach citizens about malaria. Thousands of ITNs were distributed and some partners made promises for more nets in the months to come. Another similar concert took place one month later.

The national budget contributes more than half of the NMCP budget, while partners, communities, and local organizations make up the balance. Because of the recent change in the national malaria policy, however, the estimated budget for the 2005–2009 strategic plan is USD 66,004,604. GFATM is providing USD 30,506,987 including USD 18,993,404 for 2005, but weak management and capacity for monitoring and evaluation are undermining the expected results of these efforts. The government of Senegal is active in mobilizing resources from other donors and development partners, as well as local resources.
Sustainability remains a challenge in malaria interventions, however, because of Senegal’s weak economy. NMCP is applying for a GFATM Round 5 grant to scale up ACT, ITN, and malaria in pregnancy interventions.

**Essential Medicines List and Standard Treatment Guidelines**

Senegal revised its essential drugs list in 2004 and included the ACTs. SP was already on the list. ITNs were agreed upon based on the WHO Pesticide Evaluation System recommendations. The standard treatment guidelines were also revised, and NMCP has already started training health workers. Regarding diagnosis, NMCP adopted WHO recommendations to use fever to diagnose and treat malaria in children under the age of five years, but to use microscopy or rapid diagnostic tests (RDT) for children over five and adults. The functionality of laboratories and availability of RDT in the rural areas, where a majority of the vulnerable groups live, is limited, however. RDT is included NMCP’s proposal for Round 5 of GFATM.

**Behavior Change Communication**

NMCP has a small unit in charge of communication. This unit collaborates with partners providing support to the program. It organizes and oversees the organization of all malaria-related events in the country, including the marathon, the “Africa Live” and the “Ebony Festival” concerts, and sensitization campaigns. It developed and provided to other levels of the health system information, education, and communication (IEC) tools, including pamphlets, TV and radio spots, and posters, on the new malaria drug policy. The unit can also order IEC tools from partners for special events such as Africa Malaria Day.

Because of a lack of decentralization, the unit often goes in the field for activities that should be done by districts staff or partners in the field.

**Pharmaceutical Management**

**Pharmaceutical Regulation and Control**

DPL is responsible for drug regulation and delivering the AMM. DPL works in collaboration with PNA and LNCM. LNCM is responsible for drug quality control. DPL hosts the Drug Visa Committee and Commission for Pharmacovigilance. All ACTs recommended by WHO are registered in Senegal.

**Quantification and Procurement**

NMCP is responsible for quantification of malaria commodities and coordination of procurement for malaria activities, but procurement and follow-up are done through PNA, PRA, and health facilities. Forecasting of needs and budgeting are usually based on cases registered at health facilities and in the communities. The estimates for 2003/2004 were 4,099,602 adult treatment
doses and 3,011,952 treatment doses for under children under five. This method of forecasting, as a result, can underestimate needs because of the low utilization of health facilities in the country.

**Distribution**

The Central Medical Stores (PNA) is responsible for the distribution of malaria commodities. The PNA has trucks that deliver the commodities to the nine Regional Medical Stores (PRA) and district warehouses. Districts come to collect their commodities at the regional stores based on the needs of health facilities in the districts. Health facilities, including community health posts and health huts, collect their orders at the district level. Various means are used at health facility and community levels to collect the products. Commodities management is computerized at the central and regional levels. Distribution functions under a cost recovery scheme. Each level pays cash to the higher levels for the commodities that were ordered and collected.

**Phasing out of Old Medicines**

There was no clear plan for phasing out ineffective drugs such as chloroquine. When assessment team members visited a district health facility, the “vendor” pointed out a significant quantity of chloroquine on the shelves and explained that they do not know what to do with these medicines because of a lack of guidance from the NMCP. At the national level, the PNA has stopped importing chloroquine.

**Pharmacovigilance**

No system is in place for reporting to higher levels on undesirable side effects of drugs, especially ACTs. During the MAC team’s field visit to a local health facility, health workers indicated that they advise patients either to stop or continue the treatment regimen on a case-by-case basis, but none of this information is formally collected and reported.

**Pharmaceutical Management Information System**

PNA set up a pharmaceutical management information system with forms and guidelines. The pharmaceutical management information system is separate from the health information system since the health information system does not provide the necessary information needed to manage medicines and other health commodities. A plan is in place for supervision and distribution follow-up activities countrywide, but PNA regularly supervises the distribution system only to the regional medical stores level. At the district and health facility levels, however, information is not flowing as it should. NMCP does not have the capacity to monitor the distribution system.

Computerization of the pharmaceutical management system down to the district level is planned.
Private Sector Implementation of ACT

The private sector, although limited to the capital city of Dakar, is well developed and organized. ACTs are already available in the private sector in Senegal. Under the new policy, however, priority is given to the public sector. For the first year, NMCP is planning to focus on introducing ACTs, at a subsidized cost, only in public sector health facilities and through pilot interventions in selected communities, where some partners are present and active.

Monitoring and Evaluation

M&E is a weak component of the Senegalese malaria control program. The issues lie more in a lack of commitment to monitor, evaluate, and show results because local capacity exists within the country through research institutions and other partners. Even if capacity is developed within NMCP, the lack of commitment to M&E activities will undermine the contributions of M&E to the achievement of the RBM targets in Senegal.

The health information system was shut down recently as a result of years of silent strike within the health system—targeting specifically the information system. MOH will soon revitalize the information system; therefore, reliable data on health issues are scarce.

Constraints, Challenges, and Lessons Learned

Coordination at NMCP

Although NMCP was scaled up with additional staff and is expecting the further addition of staff trained in drug management, it needs reinforcement in program coordination and partnership development. During the 18 months after NMCP succeeded in obtaining GFATM funding, Country Coordinating Mechanism (CCM) activities were suspended and the Principal Recipient alone was managing the resources.

Capacity for Monitoring and Evaluation

Although local capacity for M&E exists, the lack of commitment to monitor and evaluate and then report on results is a greater issue.

Centralized Management of Resources

All resources coming into the malaria program, especially GFATM grant monies, are managed through NMCP coordination. The weak coordination capacity, low staffing levels, and lack of follow-up translate into poor absorption of resources.
**High Cost and Limited Availability of ACT**

The risk of shortage of the only pre-qualified ACT (Coartem) and pressure put on NMCP to select the pre-qualified ACT represent a big challenge in Senegal and could jeopardize the expected outcomes if the program is not able to order an ACT that is available and affordable. In addition, NMCP is forecasting and quantifying based on malaria cases registered at health facilities even though utilization of facilities is as low as 30 percent.

**Commodity Management**

NMCP is not closely involved in malaria commodity management, except those provided directly to the program. All responsibilities lie with PNA, which orders commodities mostly on the basis of the functioning of PNA rather than on the basis of the need to achieve the program objectives. PNA still has a great capacity for distribution, however.

**Recommendations**

The following should be implemented to facilitate and enhance the rollout of ACTs in Senegal—

1. **Organization of health services**
   - NMCP should have a drug management staff to assist and follow up with PNA procurement and distribution.

2. **Policy change and implementation**
   - The new policy should be disseminated to field staff as soon as possible.
   - WHO/AFRO should analyze issues that more and more countries are being unable to make decision regarding the “one” medicine they have to choose as policy
   - WHO’s African Regional Office should examine why many countries are unable to make a decision regarding first-line policy since there are a limited number of prequalified medicines.

3. **Financing and resource mobilization**
   - The structure and functioning of the CCM should be reviewed and M&E should be reinforced to guarantee future funding from partners and GFATM.

4. **Planning and coordination**
   - The structure of the CCM and the Principal Recipient should be reviewed to avoid conflict of interest.
• Collaboration with partners, including revitalization of the CCM and its functionality, should be reinforced.

• Strong leadership from NMCP is needed and expected from all partners, but is lacking and needs reinforcement.

5. Pharmaceutical management

• Until it acquires enough experience in the management of ACTs, NMCP should use morbidity data, not malaria cases registered at health facilities, to quantify needs for the new antimalarial medicines policy.

• The information systems, HMIS and DMIS, should be improved for better follow-up of the flow of commodities, especially for ACTs.

• Commodity distribution from district level to health facility and community levels should be improved.

• Given that each province determines its own medicine requirements, the capacity for pharmaceutical management at national, provincial, and most important, district levels should be built up.

• The pharmaceutical management information system should be strengthened through systems training and regular supervision of drug management agents.

• A pharmacovigilance system should be put in place with a well organized reporting system, at least through sentinel sites.

6. Monitoring and evaluation

• The GFATM Principal Recipient should put a strong emphasis on monitoring and evaluation for NMCP activities and specifically for the next grant from GFATM, if any.

• A strong M&E system, with a focus on implementation, procurement, and distribution activities and outputs, should be developed and reinforced.

• Partnership with local and international research institutions for drug efficacy studies, medicine quality, and impact of the medicine policy on the health system should be encouraged.
## ANNEX 1. ACTION PLAN FOR TECHNICAL SUPPORT NEEDS FOR SENEGAL

<table>
<thead>
<tr>
<th>Program Component</th>
<th>Description of Technical Assistance required</th>
<th>Timeline</th>
<th>Priority</th>
<th>Who will provide required TA?****</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Policy change and implementation</td>
<td>Develop/finalize the policy document.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>WHO</td>
</tr>
<tr>
<td></td>
<td>Develop a consensus on the new policy document, including producers.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>NMCP</td>
</tr>
<tr>
<td></td>
<td>Disseminate the policy document to all levels of the health system.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>NMCP</td>
</tr>
<tr>
<td></td>
<td>Put in place working groups and develop terms of reference.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>NMCP</td>
</tr>
<tr>
<td></td>
<td>Plan an official launch of the policy document.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>MOH</td>
</tr>
<tr>
<td></td>
<td>Review the functioning of the CCM.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>GFATM/WHO</td>
</tr>
<tr>
<td>2. Financing and resource mobility</td>
<td>Develop a plan for resources mobilization.</td>
<td>12 mos.</td>
<td>A 1 1</td>
<td>WHO</td>
</tr>
<tr>
<td></td>
<td>Review and adjust the cost recovery scheme for the new medicines.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>MHO</td>
</tr>
<tr>
<td>3. Planning and coordination</td>
<td>Reinforce partnership at all levels.</td>
<td>12 mos.</td>
<td>A 1 1</td>
<td>MHO</td>
</tr>
<tr>
<td></td>
<td>Reinforce NMCP leadership among partners and within the health system.</td>
<td>12 mos.</td>
<td>A 1 1</td>
<td>MHO/NMCP</td>
</tr>
<tr>
<td></td>
<td>Reinforce coordination capacity.</td>
<td>12 mos.</td>
<td>A 1 1</td>
<td>WHO</td>
</tr>
<tr>
<td></td>
<td>Develop and disseminate clear guidelines for malaria implementation, including diagnosis scheme.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>WHO</td>
</tr>
<tr>
<td></td>
<td>Develop and disseminate clear guidelines for community level interventions.</td>
<td>12 mos.</td>
<td>A 1 1</td>
<td>MOH</td>
</tr>
<tr>
<td></td>
<td>Review/adapt trainings tools, including Integrated Management of Childhood Illness.</td>
<td>6 mos.</td>
<td>A 1 1</td>
<td>WHO</td>
</tr>
<tr>
<td>4. Revision of drug regulation</td>
<td>Evaluate and disseminate information regarding the drug regulation system.</td>
<td>12 mos.</td>
<td>A 1 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td>Program Component</td>
<td>Description of Technical Assistance required</td>
<td>Timeline</td>
<td>Priority</td>
<td>Who will provide required TA?****</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>5. Essential medicines list</td>
<td>Review the list of essential medicines.</td>
<td>From B To 1</td>
<td>Step 1: By Date TA Required * 1</td>
<td>MOH</td>
</tr>
<tr>
<td></td>
<td>Review the curricula of initial trainings.</td>
<td>From B To 1</td>
<td>Step 2: By Strategic Importance to Scale Up ** 2</td>
<td>WHO/USAID</td>
</tr>
<tr>
<td></td>
<td>Develop capacity in rational pharmaceutical management.</td>
<td>From 12 mos. To A</td>
<td>Step 3: Priority Ranking *** 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td>6. Communication</td>
<td>Reinforce communication with partners on the new policy.</td>
<td>From 6 mos. To A</td>
<td>Step 1: By Date TA Required * 1</td>
<td>MOH</td>
</tr>
<tr>
<td></td>
<td>Strengthen communication between NMCP, PNA, and DPL.</td>
<td>From 12 mos. To A</td>
<td>Step 2: By Strategic Importance to Scale Up ** 1</td>
<td>MOH</td>
</tr>
<tr>
<td>7. Phasing out old drugs</td>
<td>Quantify old medicines at all levels of the health system and private sector.</td>
<td>From 6 mos. To A</td>
<td>Step 3: Priority Ranking *** 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td>8. Phasing in new drugs</td>
<td>Develop a plan for the introduction of the new medicine.</td>
<td>From 6 mos. To A</td>
<td>Step 1: By Date TA Required * 1</td>
<td>WHO/RPM Plus</td>
</tr>
<tr>
<td>9. Quantifying and forecasting</td>
<td>Quantify new medicines needs.</td>
<td>From 6 mos. To A</td>
<td>Step 2: By Strategic Importance to Scale Up ** 1</td>
<td>WHO/RPM Plus</td>
</tr>
<tr>
<td>10. Procurement</td>
<td>Develop/finalize the Procurement and Supply Plan, including diagnostic test, if any.</td>
<td>From 6 mos. To A</td>
<td>Step 3: Priority Ranking *** 1</td>
<td>WHO/RPM Plus</td>
</tr>
<tr>
<td></td>
<td>Review and reinforce the procurement system.</td>
<td>From 6 mos. To A</td>
<td>Step 1: By Date TA Required * 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td></td>
<td>Develop an M&amp;E plan to follow up medicine providers.</td>
<td>From 12 mos. To A</td>
<td>Step 2: By Strategic Importance to Scale Up ** 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td>11. Distribution</td>
<td>Review and reinforce the distribution system.</td>
<td>From 12 mos. To A</td>
<td>Step 3: Priority Ranking *** 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td></td>
<td>Develop an M&amp;E plan to follow up distribution.</td>
<td>From 6 mos. To A</td>
<td>Step 1: By Date TA Required * 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td></td>
<td>Develop pharmaceutical distribution management capacity.</td>
<td>From 6 mos. To A</td>
<td>Step 2: By Strategic Importance to Scale Up ** 1</td>
<td>RPM Plus</td>
</tr>
<tr>
<td>12. Inventory management</td>
<td>Review and reinforce pharmaceutical management tools.</td>
<td>From 12 mos. To A</td>
<td>Step 3: Priority Ranking *** 1</td>
<td>RPM Plus</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Component</th>
<th>Description of Technical Assistance required</th>
<th>Timeline</th>
<th>Priority</th>
<th>Who will provide required TA?****</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Quality assurance</td>
<td>Reinforce capacity at DPL and PNA. Reinforce systems of— • Quality assurance • Monitoring adverse drug reactions</td>
<td>12 mos.</td>
<td>Step 1: By Date TA Required * A 1 1 RPM Plus **</td>
<td>1 1 WHO/RPM Plus</td>
</tr>
<tr>
<td>14. Monitoring and evaluation</td>
<td>Review and reinforce the supervision system. Develop/finalize an M&amp;E plan. Reinforce the M&amp;E system.</td>
<td>6 mos.</td>
<td>Step 2: By Strategic Importance to Scale Up ** A 1 1 WHO</td>
<td>1 1 WHO</td>
</tr>
<tr>
<td>15. Others</td>
<td></td>
<td></td>
<td>Step 3: Priority Ranking *** A 1 1</td>
<td>1 1 WHO</td>
</tr>
</tbody>
</table>