

**Rational Pharmaceutical Management Plus  
Regional Training of Trainers Course in Antimalarial Quantification for  
West Africa, Accra, Ghana, August 8-12, 2005: Trip Report**

---

Gladys Tetteh  
Catherine Adegoke  
Francis Aboagye-Nyame  
Nicolette Regis

---

Rational Pharmaceutical Management Plus  
Center for Pharmaceutical Management  
Management Sciences for Health  
4301 N. Fairfax Drive, Suite 400  
Arlington, VA 22203  
Phone: 703-524-6575  
Fax: 703-524-7898  
E-mail: [rpmpplus@msh.org](mailto:rpmpplus@msh.org)

Supported by the U.S. Agency for  
International Development  
Strategic Objective 5

This report was made possible through 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 author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.

## **About RPM Plus**

The Rational Pharmaceutical Management Plus (RPM Plus) Program, funded by the U.S. Agency for International Development (cooperative agreement HRN-A-00-00-00016-00), works in more than 20 developing countries to provide technical assistance to strengthen drug 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—pharmaceuticals, 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.

This document does not necessarily represent the views or opinions of USAID. It may be reproduced if credit is given to RPM Plus.

## **Recommended Citation**

Tetteh, G., C. Adegoke, F. Aboagye-Nyame and N. Regis. 2005. *Regional Training of Trainers Course in Antimalarial Quantification for West Africa. August 8-12, Accra, Ghana: Trip Report*. Submitted to the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

## **Contents**

Acronyms .....	iv
Background .....	1
Purpose of Trip .....	2
Scope of Work .....	2
Activities .....	3
Collaborators and Partners .....	5
Adjustments to Planned Activities and/or Additional Activities .....	6
Next Steps .....	7
Immediate Follow-up Activities .....	7
Agreement or Understandings with Counterparts .....	7
Annex 1 – Agenda .....	8
Annex 2 – Plenary Recommendations of the Workshop .....	11
Annex 3 – Requests for TA provision by MSH .....	15

## **Acronyms**

ACT	artemisinin-based combination therapy
AFRO	Regional Office for Africa [World Health Organization]
AWARE-RH	Action for West Africa Region - Reproductive Health
CDC	U.S. Centers for Disease Control and Prevention
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV/AIDS	Human Immuno deficiency Virus / Acquired Immunodeficiency Syndrome
IPT	Intermittent preventive treatment
ITN	Insecticide Treated Net
MAC	Malaria Action Coalition
MSH	Management Sciences for Health
NMCP	National Malaria Control Program
SP	sulfadoxine-pyrimethamine
TOT	Training of Trainers
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
WARP	West Africa Regional Project
WHO	World Health Organization

## **Background**

Malaria is among the most important global health problems in Africa accounting for more than a million deaths each year. More than 90% of the clinical cases of malaria occur in Africa annually with much of the burden in children under five years of age. Strategies to address these challenges must be implemented in collaboration with programs aimed at integrated approaches to childhood illness and reproductive health.

Management Sciences for Health's (MSH) Rational Pharmaceutical Management Plus (RPM Plus) Program has received funds from USAID to develop strategies to implement malaria policies and to provide technical assistance in pharmaceutical management issues for malaria. RPM Plus is a key technical partner in the USAID Malaria Action Coalition (MAC), a partnership among four technical partners: The World Health Organization (WHO), working primarily through its Africa Regional Office (AFRO), the US Centers for Disease Control (CDC), the former Maternal and Neonatal Health Project (MNH) recently replaced by the ACCESS Program of JHPIEGO, and RPM Plus.

RPM Plus has been working to improve pharmaceutical management for malaria in countries in Africa by identifying and addressing the causes of poor access, ineffective supply, and inappropriate use of antimalarials. RPM Plus has developed and applied tools to assess pharmaceutical management for malaria and has worked to provide technical assistance to countries by working with policymakers, researchers, managers, and providers in the public and private sectors to implement new and proven interventions. Significant among these interventions are the early diagnosis and treatment of malaria using Artemisinin-based Combination Therapies (ACTs) and the provision of Intermittent Preventive Treatment (IPTp) to pregnant women which both require that antimalarials are available in the right quantities and used appropriately at the right time.

In order to develop capacity at the national and regional levels to quantify antimalarial requirements within the West Africa region, RPM Plus in partnership with the Ministry of Health of the Republic of Ghana and the MAC conducted a regional training of trainers course on antimalarial quantification from August 8-12, 2005 in Accra. The course was funded by the United States Agency for International Development's West Africa Regional Program (USAID/WARP) and implemented in collaboration with the Action for West Africa Region - Reproductive Health (AWARE-RH) project. The major expected outcome of the course was twenty-five trainers (malaria program managers and managers of essential medicines programs, pharmacy departments and central medical stores) taught how to conduct training on quantification of antimalarials in order to overcome the challenges to the quantification of antimalarials in the context of changing treatment policies as well as know the assumptions that need to be made in the practical execution of the quantification process.

## **Purpose of Trip**

Francis Aboagye-Nyame, Nicolette Regis and Gladys Tetteh of RPM Plus, and Ross Holland of CPM traveled to Accra, Ghana to facilitate the regional training of trainers in antimalarial quantification course. RPM Plus consultant, Catherine Adegoke, also traveled from Nigeria to Ghana to assist with this activity.

## **Scope of Work**

- The team to provide an arrival briefing and/or departure debriefing to USAID upon request
- Francis Aboagye-Nyame and Gladys Tetteh to provide technical assistance to the regional workshop participants in quantification for antimalarials.
- Ross Holland to provide technical assistance to the training of trainers component of the workshop.
- Catherine Adegoke to support both the quantification and training component of the workshop and facilitate workshop exercises.
- Nicolette Regis to coordinate logistics for the workshop.

## **Activities**

### **Provide an arrival briefing and/or departure debriefing to USAID upon request**

A meeting was held with Dr. Felix Awantang and Dr. Seydou Doumbia of USAID/WARP. At the meeting, RPM Plus representatives briefed USAID on the purpose and planned outcomes of the visit. The main objective of the visit was to facilitate the regional training of trainers course in antimalarial quantification which targeted 25 participants from Benin, Burkina Faso, Cameroon, Ghana, Guinea, Mali, Nigeria and Senegal. The planned outcome was twenty-five trainers (malaria program managers and managers of essential medicines programs, pharmacy departments and central medical stores) taught how to conduct training on quantification of antimalarials in order to overcome the challenges to the quantification of antimalarials in the context of changing treatment policies.

### **Facilitate a Regional Training of Trainers Course for Antimalarial Quantification**

The course was carried out from August 8-12, 2005 at the Labadi Beach Hotel in Accra, Ghana. Workshop participants attended from malaria programs, essential medicines programs, pharmacy departments, procurement departments and central medical stores in eight countries in the West Africa region, namely, Benin, Burkina Faso, Cameroon, Ghana, Guinea, Mali, Nigeria and Senegal. Additional organizations represented included the World Health Organization (WHO) Ghana country office and Inter-country Program (ICP) office; USAID and AWARE-RH.

The overall goal of the course was to increase the knowledge and awareness of quantification methods and practices and to train trainers to develop local capacity at the national and regional levels to appropriately quantify their antimalarial requirements.

The official opening ceremony held on the first day of the workshop involved opening remarks by Management Sciences for Health's RPM Plus program; USAID/WARP; Directorate of Public Health, Ghana Health Service; and the Procurement and Supply Directorate, Ministry of Health. The importance of such a workshop as an intervention aimed at ensuring an uninterrupted supply of effective antimalarials for rational use was stated. The timely occurrence of the workshop was commended as it came at a time when many countries in the West Africa are preparing to implement their first-line Artemisinin-based Combination Therapy (ACT) policies. The opportunity provided for countries to share experiences was seen as an added opportunity to the planned workshop deliberations on challenges of quantification for procurement, managing the process and the outcomes with respect to commodity availability.

Objectives of the training course were to:

1. Discuss the context of changing antimalarial drug policy and current recommendations for antimalarial treatment and prevention
2. Discuss pharmaceutical management and the context and relevance of quantification with an emphasis on the quantification of antimalarial medicines and commodities

3. Describe the four methods for quantification and select an appropriate method depending on context
4. Describe how quantification of antimalarials is different and apply assumptions unique to antimalarials and ACTs
5. Calculate the estimated needs for antimalarial medicines and commodities and the costs for procuring these antimalarials, by applying the consumption and morbidity methods using data from their own countries
6. Describe which indicators are needed and how they may be used to monitor the effectiveness of quantification
7. Discuss the use of tools to assist in the quantification process
8. Describe the common barriers to learning and discuss teaching methods available to minimize these barriers
9. Review and critique examples of training methods used in the antimalarial quantification training course
10. Demonstrate the range of teaching and learning methods that are most appropriate for the antimalarial quantification course materials

The expected outcomes of the training course was to have:

1. Twenty-five trainers taught how to conduct training on quantification of antimalarials
2. Understanding of pharmaceutical management and the context and relevance of quantification with an emphasis on the quantification of antimalarial medicines and commodities
3. Description of the four methods for quantification and selection of an appropriate method depending on context
4. Description of how quantification of antimalarials is different and application of assumptions unique to antimalarials and ACTs
5. Calculation of the estimated needs for antimalarial medicines and commodities, and the costs for procuring these antimalarials, by applying the consumption and morbidity method using data from their own countries
6. Description of indicators and their use for the monitoring of the effectiveness of the quantification
7. Description of existing tools to assist in the quantification process

8. Description of the common barriers to learning and discussion of teaching methods available to minimize these barriers
9. Review of training methods used in the antimalarial quantification training course
10. Demonstration of the range of teaching and learning methods that are most appropriate for the antimalarial quantification course materials

The Regional Training of Trainers Course consisted of two integrated, yet distinct components - the Quantification of Antimalarials component (QAM) and the Training of Trainers (TOT) component. Days 1-3 of the Course therefore focused on training participants to quantify antimalarial needs for their programs and days 4-5 focused on training participants as trainers, a component designed to better prepare participants to provide training in antimalarial quantification.

The workshop sessions consisted of a combination of the following methods:

- Presentations
- Discussions
- Group Exercises

The workshop was conducted in English; however, for the benefit of participants from French speaking countries in the region, provision was made for simultaneous interpretation to French and vice versa during presentations, discussions and group exercises. Materials for the Training Course were developed by RPM Plus.

Evaluations of the regional workshop demonstrated a successful meeting, with huge potentials for effectiveness of investment across the participating countries. Huge challenges to the quantification of antimalarials remain: including structural, technical, managerial and budgetary limitations across malaria control and essential drug/procurement and supply programs in the region. They are however not undefeatable - the application of recommendations made at the workshop (*Annex 2*) and response to requests for technical assistance (*as shown in Annex 3*) in a strong collaborative setting with other RBM partners will be a major contribution to the successful implementation of ACT policies in the region.

## **Collaborators and Partners**

USAID/West Africa Regional Program (WARP)  
Action for West Africa Region - Reproductive Health (AWARE-RH)  
World Health Organization  
Ministry of Health, Ghana

## **Adjustments to Planned Activities and/or Additional Activities**

A one-day workshop on good formulation practices was held at the Kama Conference Centre in Accra, Ghana on Friday August 12, 2005. The workshop was organized by the Food and Drugs Board with funding provided by the USAID/Ghana mission through the Rational Pharmaceutical Plus program of Management Sciences for Health.

The workshop was aimed at equipping local manufacturers in Ghana with the requisite skills for formulation of ACTs. Target groups within the invited manufacturing firms included Quality Control and Production Managers. Manufacturing companies represented at the workshop included:

- Amponsah Efah Pharmaceuticals
- Ayrton Drug
- Danadams Pharmaceuticals Ltd.
- Dannex Lt.
- Ernest Chemists Ltd.
- Golden Tower
- Kinapharma Ltd.
- LETAP
- M&G Pharmaceuticals
- Olla Medical Products Ltd.
- Phyto-riker (Gihoc) Pharmaceutical Co. Ltd.
- Starwin Products

Other stakeholders present at the meeting were the WHO/Ghana country office Essential Drugs & Medicines department, the National Malaria Control Program and MSH/RPM Plus.

The workshop is a follow-on intervention to an assessment of the quality of antimalarials in Ghana which identified problems with dissolution parameters of locally manufactured antimalarials sampled from the Ghanaian market. The workshop is expected to encourage manufacturers to:

1. Ensure that local ACTs are produced according to Good Formulation Practices
2. Produce good quality and efficacious drugs
3. Be responsible for the quality of their products in the distribution chain

The Agenda for the workshop was as follows:

<b>Topic</b>	<b>Presenter</b>
ACT policy in Ghana	NMCP
Malaria Policy change & the quality control of medicines	MSH. Dr. Gladys Tetteh
Specifications for production	FDB. Mr. Botwe
Requirements for registration	FDB. Mrs. Deles Darko
Quality monitoring report	FDB. Mr. Botwe

Formulation Practices of Act dosage forms	Mr. James Binka
Dissolution Testing	Mr. Eric K. Boateng
Use of starch, other disintegrants and binding agents	Dr. Gaizer

## **Next Steps**

### **Immediate Follow-up Activities**

- Finalization of the report of the Regional Training of Trainers Course in Antimalarial Quantification by second week in September 2005.
- Development of a plan for liaison with countries in the WARP region and the provision of technical assistance as required from RPM Plus by countries for effective and efficient quantification of antimalarials.
- Discussions with RPM Plus management on next steps regarding the use of Quantimed by Malaria programs

### **Agreement or Understandings with Counterparts**

Development of the RPM Plus country follow-up plan will be done in collaboration with AWARE-RH and will add to the development of commodity security plans for the WARP region.

## **Annex 1. Agenda**

---

### **Regional Training of Trainers Course in Antimalarial Quantification Accra, Ghana • August 8–12, 2005**

---

**Sunday, August 7, 2005**

***Arrival and Registration***

**Monday, August 8, 2005**

---

<b>Time</b>	<b>Activity</b>
9:00–9:15 am	Official opening and welcome
9:15–9:30 am	Purpose of workshop
9:30–10:00 am	Overview of workshop objectives
10:00–10:15 am	Tea break
10:15–11:00 am	Session 1. Global and Regional Malaria Context
11:00–11:30 am	Session 2. Introduction to Quantification
11:30 am–12:15 pm	Activity
12:15–1:15 pm	Lunch
1:15–2:15 pm	Session 3. Methods for Estimation of Needs of Antimalarials
2:15–3:15 pm	Activity
3:15–3:30 pm	Tea break
3:30–4:30 pm	Session 4. Data Needed for Quantification
4:30–5:00 pm	Activity

---

**Tuesday, August 9, 2005**

---

<b>Time</b>	<b>Activity</b>
9:00–9:30 am	Recap of previous day's work
9:30–10:30 am	Session 5. Quantifying for Antimalarials and Assumptions
10:30–10:45 am	Tea break
10:45–11:45 am	Session 6. Practical Applications of Quantification: Calculating Need
11:30 am–1:00 pm	Activity
1:00–2:00 pm	Lunch
2:00–2:30 pm	Plenary discussion
2:30–3:30 pm	Session 7. Estimating Costs of Procurement
3:30–3:45 pm	Tea break
3:45–4:30 pm	Activity
4:30–5:00 pm	Plenary discussion

---

**Wednesday, August 10, 2005**

---

<b>Time</b>	<b>Activity</b>
9:00–10:00 am	Session 8. Monitoring and Evaluation
10:00–10:15 am	Tea break
10:15–11:00 am	Session 9. Quantimed and Other Quantification Tools
11:00 am–1:00 pm	Quantimed demonstration
1:00–2:00 pm	Lunch
2:00–4:00 pm	Plenary discussion

---

**Thursday, August 11, 2005**

---

<b>Time</b>	<b>Activity</b>
9:00–9:15 am	TOT Session 1. Introduction to the Training of Trainers
9:15–10:30 am	TOT Session 2. Adult Learning
10:30–10:45 am	Tea break
10:45–11:30 am	TOT Session 3. Teaching and Learning Methods
11:30 am–12:00 pm	TOT Session 4. Role of the Teacher
12:00–1:00 pm	Lunch
1:00–1:30 pm	TOT Session 5. Preliminary Course Preparation
1:30–2:45 pm	TOT Session 6. Presentation Techniques
2:45–3:00 pm	Tea break
3:00–4:15 pm	TOT Session 7. Workshop Facilitation: Tips for Trainers
4:15–5:00 pm	TOT Session 8. Preparation for Workshop Facilitation Activities

---

**Friday, August 12, 2005**

---

<b>Time</b>	<b>Activity</b>
9:00–10:30 am	TOT Session 9. Workshop Facilitation Practice Sessions
10:30–10:45 am	Tea break
10:45 am–12:15 pm	Workshop Facilitation Activity ( <i>Session 9, continued</i> )
12:15–1:15 pm	Lunch
1:15–2:45 pm	Workshop Facilitation Activity ( <i>Session 9, continued</i> )
2:45–3:00 pm	Tea break
3:00–3:45 pm	TOT Session 10. Plenary Session: TOT Summary
3:45–4:15 pm	Closing Session

---

## **Annex 2. Plenary Recommendations of the Workshop**

The following recommendations made by participants attending the Regional Training of Trainers Course in Antimalarial Quantification have been grouped according to the some major issues namely:

### **Advocacy**

- The new policy on antimalarial treatment with Artemisinin-based Combination Therapies still requires a lot of resources and efforts to gain consensus amongst different relevant stakeholders. High level and focused advocacy is an important key activity within the ACT policy implementation framework and is recommended to malaria control program managers.
- Participants attending the workshop are strategically placed to influence issues related to antimalarial quantification, and as such it is recommended that upon return from the workshop, participants should commence immediately on the sensitization of relevant country authorities on issues related to ACT. The advocacy efforts should also emphasize the formation and revitalization of health structures that can be a basis for coordination and the use of technical know how to produce the intended results.
- Some workshop participants recommend examination and revision of the Drug Supply Management Cycle as described by MSH. Emphasizing the quantification process as a distinct component within the cycle would allow for advocacy with regard to its importance within drug management activities.

### **Regional Forum**

- Many cross cutting issues in the health care delivery in the countries in the region were identified by participants such as the bureaucratic challenges that programme managers face constantly. It is recommended that a forum should be formed to address these issues with a view to maximize outcomes.
- It is also recommended that a committee/commission should be charged with the task of making recommendations on sub-regional concerns on matters related to or influencing antimalarial quantification.

### **Funding**

- Limitations in budgetary allocations and releases describe the situation of most participant countries. Therefore, there should be strategic plans made at country level, including advocacy and adoption of better management styles to ensure the continuation of planned programmes. These strategic plans should be shared with country partners including USAID for partner buy-in.

## **Training on Quantification Techniques**

There was consensus reached by participants that the quantification process is one that is complex and requires a lot of technical expertise. At the present, it is doubtful that any of the participating countries could fully meet the requisite demands of accurate and effective quantification.

- It is recommended that being cognizant of the need for building up skills, additional workshops in quantification need to be held at national level.
- The needed resources required for the trainings at central and peripheral levels are hardly available, and as such it is recommended that all the possible options should be explored.
- A recommendation was made for training material to be provided in French to French speaking participants.

## **Health Management Information Systems**

- Participants recognized the need for an adequate database for each country, from peripheral to central level for quantification processes to be effective, accurate and reliable. It is recommended that all countries should develop such a database at the national level.
- Advocacy, strategy development and technical assistance must be initiated to achieve robust health management information systems. All relevant stakeholders must be brought on board to assist in the planning for, collection, collation, publication, and use of data at country and regional level.
- The establishment of centralized data banks in countries should be realized. There is the need for increased staffing and training at all levels of health care in the countries for data collection and collation.
- The development of tools for and training of relevant personnel needed for monitoring and evaluation is recommended to both malaria control and essential drugs programs as a key component of assuring greater quality in programme management.

## **Quantimed**

The demonstration of Quantimed led to a request by participants for immediate access to the Quantimed tool.

- Participants cautioned against unnecessary delay of the entrance of the tool into the health care systems. Among the recommendations related to the use of Quantimed are the following:
  - Specific chapters on Malaria, such as done for HIV, should be incorporated into the Quantimed manuals
  - The Quantimed tool, manual and any other CDS, in both English and French should be made available to all the Malaria Control Programmes in countries in the region
  - There is need for intensive training on the use of Quantimed. This should be in the form of both a regional workshop, specifically for the tool alone, as well as follow up in-country training especially for the identified users of the Quantimed tool at country level
  - As the Quantimed tool calls for a reliable database, requires skilled personnel and performing structures, advocacy and necessary interventions have to commence immediately to pave way for its effective utilization

## **Team Building**

- A recommendation is made for the intensification of team-building efforts from central level to the peripheral levels, if the processes for quantification should be feasible or successful.
- Other partners working to strengthen pharmaceutical management within health systems should be pulled into training activities such as the quantification workshop in order for rapid building of capacity.

## **Availability of ACTs**

Although the objectives of the workshop did not extend to issues of supply by manufacturers of ACTs, participants linked uncertain and long lead times with resultant poor supply and canceling out the hard efforts of good quantification. The short-term unavailability of ACTs due to the manufacturing cycle of *Artemisia annua* was seen as a disturbing issue that countries in West Africa and the region must find an immediate way of redressing.

- Participants recommended that there should be a forum for re-engineering the supply processes for ACTs, to prevent country/regional shortages even after quantification has been achieved and orders have been placed.

## **Sensitization**

- Participants recommended that sensitization of the populace who would use the ACTs is a very important component of quantification, as forecasts, quantification and procurement are based on the assumption that those vulnerable to malaria are aware of and willing to use the drugs. If sensitization is not achieved, the quantification-procurement-supply-distribution-use chain will be compromised.

## **Challenges of Sustainability**

- The crucial concept of quantification, and workshops such as just conducted, should not be a one-time occurrence.
- Country and regional partnerships need to be sensitized on the issue of sustainability in order to ensure the continuity, strengthening, adoption and sustainability of quantification pre-requisites across the countries of the region. It is recommended that the TOT component of the workshop be adopted in all future trainings as a valuable aid to replication of technical know how and sustainability of the systems.
- Participating countries were urged to move forward on the lessons learnt from the workshop. It is recommended that self-assessments be done three months after the workshop to see what they have achieved as a result of the workshop.

## **Technical Assistance**

- Participant countries expressed their specific needs for technical assistance on various issues and recommended increased TA provision by MSH. These have been collated by country and documented in *Annex 3* of the report.

### **Annex 3. Requests for TA Provision by MSH**

#### **COUNTRY SPECIFIC TECHNICAL ASSISTANCE REQUESTS FOR ANTIMALARIAL QUANTIFICATION & RELATED ISSUES**

<b>COUNTRY 1: BENIN</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1.	Creating a good supply pipeline through good quantification in order to avoid stock outs	Training facility managers at all levels	November 2005
2.	Involvement of all stakeholders in antimalarial medicine policy change	Advocacy support	October 2005
3.	Monitor the consumption of medicines in health facilities	Institution of monitoring tools	October to November 2005
4.	Pharmacovigilance for ACTs	Institution of pharmacovigilance	October to November 2005
5.	Scaling up of ACT distribution and use	Site evaluations Scaled up quantification	October to November 2005
6.	Ensuring continuous availability of ACTs	Advocacy for resource mobilization Sensitization of the donor community	October to November 2005

<b>COUNTRY 2: BURKINA FASO</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1.	Data Collection	Improvement of data collection and flow	January 2006
2.	Use of Quantimed	In country training on Quantimed	January 2006

<b>COUNTRY 3: CAMEROON</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1	Antimalarial quantification specific to Cameroon	Technical assistance needed to adjust methods given the present practices in the country	January 2006
2.	Use of Quantimed for quantification	In-country training in Quantimed use	As soon as Quantimed is released for use
3.	Monitoring and Evaluation	Elaboration of morbidity and consumption indicator data	December 2005
4.	Funding	Funding for in-country training of trainers for quantification	January 2006

<b>COUNTRY 4: GHANA</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1	Phasing out of chloroquine use	Facilitation of the smooth phasing out of chloroquine	September 2005
2.	Inventory management	<p>Review medicine inventory system to improve management of ACTs in peripheral health facilities</p> <p>Development of strategies to prevent leakage to private sector</p> <p>Develop/review distribution systems to remove expired stock</p> <p>Develop/review systems to monitor the efficiency of distribution systems and redistribution mechanisms</p>	September 2005
3.	To ensure the success of the new antimalarial medicine policy in the private sector	Support to ensure adherence to the new policy especially in the private health sector	September 2005

<b>COUNTRY 5: GUINEA</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1	Creation of a database	Technical and Financial	15 <sup>th</sup> to 30 <sup>th</sup> September 2005
2.	Training on quantification	Technical and Financial	1 <sup>st</sup> to 15 <sup>th</sup> October 2005
3.	Equipment for data collection and quantification	Financial	January 2006
4.	Setting up Evaluation Systems	Technical	January to December 2006
5.	Financial resources for : Sensitization Advocacy Procurement of drugs	Financial	January 2006

<b>COUNTRY 6: MALI</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1	Rational prescription of antimalarials		On-going
2.	*Accurate supply of data on consumption of antimalarials	Assistance for training of trainers at the central level	2 <sup>nd</sup> Quarter 2006
3.	*Accurate estimates of the needs of the country in antimalarials	Technical assistance for training in the use of Quantimed	2 <sup>nd</sup> Quarter 2006
** These activities will be planned for in the National Action Plan of the Ministry of Health for 2006 for sourcing of finance			

<b>COUNTRY 7: NIGERIA</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1	Capacity building for quantification at national and regional level in the country	Facilitation Tools	October/November 2005
2.	Establishment of a data bank	Technical assistance	October 2005

<b>COUNTRY 8: SENEGAL</b>			
	<b><i>CHALLENGES</i></b>	<b><i>TECHNICAL ASSISTANCE REQUIRED</i></b>	<b><i>EXPECTED TIME OF COMMENCEMENT</i></b>
1	Acquiring software and training tools		1 <sup>st</sup> Quarter 2006
2.	Installing the software within the country structures	Technical assistance	1 <sup>st</sup> Quarter 2006
3.	Training of stakeholders on Quantimed software		1 <sup>st</sup> Quarter 2006
4.	Monitoring and Evaluation of data collection with software	Technical Assistance	3 <sup>rd</sup> Quarter 2006