

Senegal: Study of the ACT Information System Trip Report – October 16 – 27, 2006

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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.

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Acronyms

ACT	Artemisinin-Based Combination Therapies
DMIS	Drug Management Information System
GF	Global Fund
ITM	Insecticide-treated materials
ITP	Intermittent Treatment Prevention
LFA	Local Fund Agent
MOH	Ministry of Health
MSH	Management Sciences for Health
NGO	Non-Governmental Organization
PNLP	Malaria National Control Program
PR	Principal Récipients
RPM Plus	Rational Pharmaceutical Management Plus Program
SOW	Scope of work
USAID	United States Agency for International Development
TA	Technical Assistance
USG	U.S. Government
WHO-AFRO	World Health Organization-Africa Regional Office

Background

Senegal received US\$ 33.8 million for their malaria proposal submitted during Global Fund Round 4. The Principal Recipient (PR) is the Ministry of Health (MOH) and the Local Fund Agent (LFA) is The Swiss Tropical Institute. The goal of the program is to reduce malarial morbidity and mortality through 1) improving access to early and appropriate treatment of vulnerable populations, especially pregnant women and children under the age of five; 2) increasing access of vulnerable populations to insecticide-treated materials (ITM); and 3) providing intermittent preventive treatment (IPT) for pregnant women. The goal is to achieve 60% coverage in 2005 (Abuja Objective) and 80% in 2009 for vulnerable populations.

The new malaria policy replaced chloroquine with the artesunate-amodiaquine combination for the treatment of uncomplicated cases and by sulfadoxine pyrimethamine for the Intermittent Treatment Prevention (ITP) in pregnant women. Presently, health agents have been oriented on the new policy and Artemisinin-Based Combination Therapies (ACTs) have already been introduced, procured and distributed nationwide in public health facilities and through community interventions. The first order was placed by WHO based on information provided by the National Malaria Control Program (PNLP). However, because of quality of data used for projecting needs, the Global Fund Secretariat and Portfolio Manager have expressed concern that the quantity of ACTs ordered may have been overestimated with potential risk of expiration prior to utilization.

RPM Plus and WHO/AFRO are the designated technical assistance (TA) providers and have coordinated a country visit to jointly respond to the expressed needs in investigating the current ACT information system.

Purpose of Trip

Hare Ram Bhattarai and Michael Derosena traveled to Senegal from October 16 to October 27, 2006 to assess the information system supporting the implementation of ACT in health facilities following the changes in treatment policies for malaria. This visit was conducted jointly with WHO/AFRO which identified two consultants, Pr. Issa Sanou and Dr. Stephane Tohon, to work with the RPM Plus team. Dr. Tohon was replaced by Dr. Jackson Sillah after the first week of the mission.

The Scope of Work was as follows:

- To study the current performance of the ACT management information system in order to identify functional problems which will then be used for improving:
 - data recording & reporting
 - data analysis, presentation, and communications
 - the use of health data for decision-making and action
- Brief upon arrival and/or debrief prior departure USAID officials, as requested.

Activities

- **To study the current performance of the ACT management information system in order to identify functional problems;**

Upon arrival on the field, the team met with the local RPM Plus resources and WHO partners to discuss strategies for conducting the study. A preliminary meeting was held at the PNLP office to review documentation related to the ACT implementation in Senegal and the set of questionnaires (annex 5) prepared by RPM Plus for use at different levels to gather information. Each questionnaire was reviewed in details to make the users familiar with the content and approach in conducting the interview on the field. This step has impacted on the time set for interviewing key informants at the Ministry of health and collecting data from health facilities. With PNLP and WHO partners, two teams of three were formed and agreed on facilities to be covered by each team. Before conducting the site visits, two technical meetings were held respectively with the Chief of the National Health Information System (SNIS) and the Director of Health at the high level of the Ministry of Health. The context of the study was presented as well as the methodology of the study. Logistics for the study were shared between RPM Plus, WHO and PNLP. A detailed presentation of activities, findings and recommendations is shown in annex 6. Activities conducted were as follows:

1. A total of 24 sites were visited. The list is presented in Annex 6. During these visits followings were carried out:
 - a. Appropriate questionnaires were used to interview the staff at sites.
 - b. Verification was made on the actual recording of ACT movement.
 - c. Physical verification of ACT in stock was also done to asses if the records were updated appropriately.
 - d. Physical storage conditions of ACT were assessed
 - e. Availability of standard documents and job aids at the site was assessed
 - f. The mechanism of quantifying ACT at various levels was also assessed
 2. Both the visiting team of consultants met in Dakar and discussed the findings in the respective sites visited
 3. Extensive meeting and consultations were made with PNLP and WHO/Senegal staff and a set of recommendations were drawn
 4. A dissemination workshop was organized where the key findings of the assessment was presented. This event was also used to get feedback from the participants of the workshop.
- **Brief upon arrival and/or debrief prior departure USAID officials, as requested.**

A meeting was organized with the USAID/Mission upon arrival in the country to brief the mission about the activities. Pre-departure meeting was not held because of the time pressure and the fact the mission was represented in the dissemination workshop and valuable feedback was received.

Key Findings

- The “Malaria National Standard Treatment Guidelines” document was developed by the PNLP; however, no copy of this document was found in the visited institutions
- Prohibited antimalarials are still available in regional depots and district pharmacies (Amodiaquine, injectable Sulfadoxine Pyrimethamine)
- ACT supplies to districts and health facilities are made erratically and not according to a standard plan of procurement
- Limited storage capacity of all depots visited
- Absence of good storage and conservation practices for ACT and other essential medicines
- Drug management is ensured by various personnel including pharmacists, accountants, midwives, community health agent; most of them have long years of experience at post, but with limited training in drug management
- The first order of ACT products arrived at Senegal in March 2006 and the distribution was made to the health facilities in April; there were no stock outs at the national level. However, a number of regional pharmacies and peripheral institutions experienced problems in supply, requiring a revision of the internal system of supplying
- Lack/absence of ACT consumption data at health facilities
- Absence of policy regulating relations between MOH and the private sector; absence of policy for ACT delivered to the private sector
- Lack of information on ACT consumption by the private sector
- At institutional level, though the management tools exist, there is no formal system of stock control, which drives emergency orders repeatedly to the district depots, from the district depots to the PRA, and from the PRA to the Central Medical Stores
- Lack/absence of key information on patient registers and ACT treatment registers
- Rumors of side effects of ACT; not documented
- Accuracy of data collected on use of ACT is not verified; information available is not used for decision-making

Recommendations

Based on this analysis, the recommendations proposed to reinforce the existing mechanisms and address weaknesses are presented by level of intervention.

PNLP

- Create a committee for the follow-up of proposed recommendations. This committee should include a representative of the CCM, a representative of the PNLP, a representative of the PNA; a representative of the private sector, a representative of the NGOs
- Establish an operational information transmission system on ACT consumption from the private sector to the PNA and the PNLP
- Conduct an ACT quantification exercise around March 2007
- Finalize and sign the draft-agreement between PNLP and the private sector
- Update, finalize, print and disseminate the STG for malaria in all the medical structures
- Implement the national plan of pharmacovigilance for the ACT
- Prepare and disseminate with the appropriate TA a standard operating procedures document for the management of ACT
- Train/refresh knowledge in drug management of all managers in region/district/institutional depots
- Identify drug management indicators to be used during supervisions

PNA

- Standardize practices for deliveries of the ACT to the PRA
- Establish a transmission system of information to the PNLP on ACT consumption
- Explore the possibility of expanding the storage capacity of the PNA and the PRA
- Reinforce communication mechanisms between PNA and PRA, between PRA together, and between PRA and the district depots
- Send formal instructions to the regional medical stores regarding the use of malarial products not recommended and still available at PRA

PRA

- Standardize practices for deliveries of the ACT to the districts
- Explore the possibility of expanding the storage capacity of the PRA in coordination with the PNA

- Reinforce communication mechanisms between all PRA, and between PRA and the district depots
- Make an inventory and destroy all non recommended anti-malarial products (Amodiaquine, injectable SP)

DISTRICT

- Integrate consumption reports and stock inventories in the monthly reports sent to the PNL
- Analyze data of the monthly reports at district level before transmitting them to the central level
- Standardize practices for deliveries of ACT to the health facilities
- Improve quality of malaria case management at facility level with a lab confirmation as recommended by the national norms
- Implement mechanisms for monitoring and reporting possible side effects of the ACT according to the national plan of pharmacovigilance
- Identify drug management indicators to be used during supervisions

COMMUNITY LEVEL

- Follow the instructions of the national plan of pharmacovigilance
- Explore with the chiefs of the health posts and local health committees the adequate ways to make available the drug management tools needed

Conclusion

The ACT program is relatively a new program in Senegal. The program is not fully implemented in the country in the sense that all the intended health facilities have not yet started dispensing ACT. Furthermore, as the drug is new and its acceptance and popularity has yet to be known, this scenario makes the quantification of ACT very unpredictable. It is, therefore, very important to do the quantification exercise, as recommended, based on the actual consumption and realistic projection of requirement. Unless this is done it can not be said, for sure, if the quantity of ACT supplied by GF will be enough or fall short to meet the requirement. This in turn might have serious impact in the next round of ACT quantification.

It is therefore important to take necessary action at the earliest to assess the current use and project future requirements as suggested in the recommendations section of this report.

Next Steps

- Take necessary steps as suggested to implement the recommendations
- Prioritize interventions and prepare a plan of implementation
- Identify appropriate resources for the implementation, including TA needs
- Evaluate results following the implementation of interventions

Annex 1. Presentation to National Authorities

STUDY OF THE INFORMATION SYSTEM FOR MANAGING ACTS IN THE DAKAR, KAOLACK, DIOURBEL, AND THIES REGIONS



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WHO/AFRO
Dr. Mamadou Ngom, WHO/Senegal
Dr. Lamine Diouf and Dr. Ibrahima Diallo, NMCP/Senegal*

October 26, 2006

MANAGEMENT SCIENCE IN HEALTH
2006 (10) 1: 1-10



GENERAL OBJECTIVE

- Improve the system for pharmaceutical management, in general, and artemisinin-based combination therapies (ACTs), in particular, at all levels

MANAGEMENT SCIENCE IN HEALTH
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SPECIFIC OBJECTIVES

- Understand the existing information management system for ACTs
- Identify the bottlenecks
- Suggest solutions for improving the efficiency of the system, taking into account the specific characteristics of ACTs

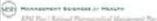


MANAGEMENT SCIENCE IN HEALTH
2006 (10) 1: 1-10



CONTEXT OF THE STUDY (1)

- Agreement on malaria prevention efforts in 2005 between the Global Fund to Fight Aids, Tuberculosis and Malaria (GFATM) and the government
- 3 million ACT treatments ordered for the country for a two-year period
- GFATM presumption of overestimated initial ACT order
- Need for a resupply plan over time, taking consumption data into account
- Need to maintain a logical management system to avoid shortages and losses caused by expiration
- Technical assistance required to improve the existing management system





CONTEXT OF THE STUDY (2)

- U.S. government interest in malaria control efforts
- U.S. government support in preparing National Malaria Control Program (NMCP) monitoring and evaluation plan
- Interest of World Health Organization (WHO), which assisted Senegal with the process of changing the malaria treatment policy
- Identification of WHO as the agency to place the first ACT order for Senegal
- Need to document implementation of the change in the country's malaria treatment policy and to share information with other countries





METHODOLOGY (1)

SITE SELECTION







STUDY SITES					
Region Level	Dakar	Thiès	Kaolack	Diourbel	Total
Central	NMCP, NHIS, and PNA	—	—	—	3
Regional	PRA Dakar	—	PRA Kaolack	PRA Diourbel	3
District	Guediawaye	Tivaouane	Kaolack	Diourbel	4
	↳ DMT warehouse	↳ DMT warehouse	↳ DMT warehouse	↳ DMT warehouse	4
	↳ Health center	↳ Health center	↳ Health center	↳ Health center	4
	↳ Rural clinic	↳ Rural clinic	↳ Rural clinic	↳ Rural clinic	5
	Hamo V	Médine, Chertif Lo	Kasnack Gandaye	Keur Serigne Mbaye Sarr	
Municipality	—	—	Gamboul dispensary	—	1
Total	8	5	6	5	24

NHIS = National Health Information System; PNA = National Supply Pharmacy; PRA = Regional Supply Pharmacy; DMT = District Management Team

MANAGEMENT SCIENCES OF HEALTH
2010-2012, Global Management of Malaria Risk

World Health Organization
Geneva, 2014

NMCP Senegal

METHODOLOGY (2)

- Selection of the sites based on the representation of each level
- Selection of the sites includes at least one health care facility of each type or category involved in malaria control efforts
- Selection takes ease of access into account because of the short time available for conducting the study

MANAGEMENT SCIENCES OF HEALTH
2010-2012, Global Management of Malaria Risk

World Health Organization
Geneva, 2014

NMCP Senegal

METHODOLOGY (3)

- Training of two teams, each including at least one manager from Management Sciences for Health (MSH), one manager from WHO, and one manager from the NMCP:

Team A	Team B
Hare Ram Bhattarai, MSH/Washington	Michael Ray Derosena, MSH/Washington
Dr. Stéphane Tohon, WHO/ICST Dr. Jackson Sillah, WHO/ICST	Serigne Diagne, MSH/Senegal
Dr. Mamadou Ngom, WHO/Senegal	Pr. Issa Sanou, WHO/AFRO
Dr. Ibrahima Diallo, NMCP/Senegal	Dr. Lamine Diouf, NMCP/Senegal

MANAGEMENT SCIENCES OF HEALTH
2010-2012, Global Management of Malaria Risk

World Health Organization
Geneva, 2014

NMCP Senegal

METHODOLOGY (4)

- Document review:
 - Plan for introducing ACTs into Senegal's health care system (Source: NMCP)
 - Monitoring and Evaluation Plan (Source: NMCP/MOH)
 - Plan for managing purchase and supply of ACTs (Source: NMCP/MOH)
 - National Guidelines on the Treatment of Malaria (Source: NMCP/MOH)
 - NMCP 2005 activities report (Source: NMCP/MOH)
 - National Pharmacovigilance Plan for ACTs (Source: NMCP/MOH)
 - Records of general consultations
 - Prenatal visit records
 - Various supervisory reports
 - Various pharmaceutical management forms

 MANAGEMENT SERVICES OF HEALTH
 2012 (No. 1) National Pharmaceutical Management Plan
  World Health Organization
 Geneva, 2012
  NMCP Senegal

METHODOLOGY (5)

- Technical discussions:
 - PNA
 - General Director and staff
 - NHIS
 - Head of the service
 - NMCP
 - Coordinator
 - Monitoring and evaluation (M&E) supervisor
 - Region
 - Regional head doctors
 - PRA pharmacists
 - District
 - Head doctors
 - Supervisor/district management team
 - Warehouse managers
 - Health Center
 - Agents managing the pharmacies
 - Rural Clinic
 - Head nurse of the clinic
 - Midwives
 - Dispensary
 - Community health agent (CHA)

 MANAGEMENT SERVICES OF HEALTH
 2012 (No. 1) National Pharmaceutical Management Plan
  World Health Organization
 Geneva, 2012
  NMCP Senegal

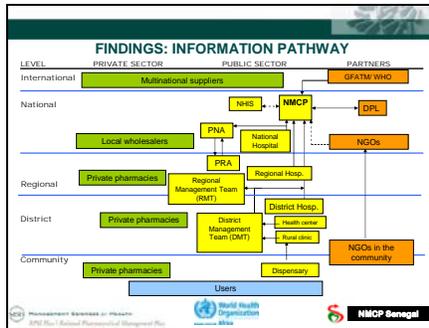
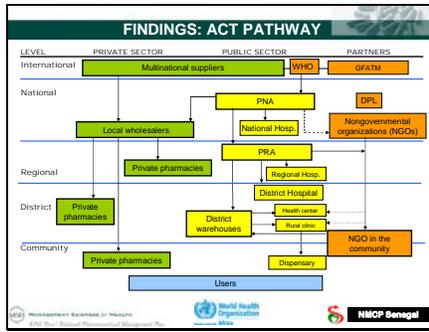
METHODOLOGY (6)

- Structured interviews
 - Use of a guide focusing on computerized management, human resources, supervision, inventory registration and ACT management practices, the reporting system, the information pathway, and the use of the information for quantification purposes
- Direct observation
 - Verification of the use of the management tools
 - Verification of the ACT storage and preservation method
 - Agreement of physical stock with theoretical stock balances

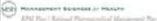
 MANAGEMENT SERVICES OF HEALTH
 2012 (No. 1) National Pharmaceutical Management Plan
  World Health Organization
 Geneva, 2012
  NMCP Senegal

STUDY LIMITATIONS

- Small sample size
- Quick study corresponding to a preliminary evaluation
- Results based on observations rather than on evaluation of indicators



PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Selection	National list of essential medications revised in July 2006 including the ACTs for treating malaria.	Existence of other antimalarials (amodiaquine and injectable SP).
Supply	Provided by WHO, ensuring quality and safety of ACTs. Functional decentralization of the PNA with the existence of the PRAs.	Districts and health care facilities are supplied as needed and not according to a standard program; supply often depends on the availability of funds.





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Supply (cont'd)		Practices used to calculate needs do not yet seem to conform to rigorous quantification principles; they often lead to unexpected orders placed to avoid shortages.





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
ACT storage	PNA has demonstrated good experience with ACT storage. One district warehouse demonstrated good ACT storage and management practices.	The PNA and PRAs have insufficient storage capacity; a stock of ACTs was placed in an army warehouse. One rural clinic also stores ACTs destined for dispensaries out in the open air.





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
ACT storage (cont'd)		<p>Noncompliance with storage standards:</p> <p>ACTs stored in different parts of the same warehouse or in different rooms of the same warehouse;</p> <p>ACTs stored in boxes right on the ground or scattered on pallets;</p> <p>Except in one health care facility, ACTs stored every which way on shelves or in cupboards.</p>



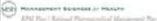
PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
ACT storage (cont'd)		<p>Some health care facilities have two completely independent dispensing points, managed by agents having no communication with each other with regard to ACT management.</p> <p>Two types of management exist, with separate management tools that are used differently for the same information.</p>



PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
ACT storage (cont'd)		<p>Warehouse temperature is not controlled.</p> <p>The products are kept at room temperature even if the warehouse has an air conditioner or fan.</p>



PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Delivery	A functional and efficient delivery network exists from the PNA to the PRAs; from the PRAs to the districts; and from the districts to the health care facilities.	Initially, insufficient quantities were delivered to the regions and district warehouses, which did not meet their actual needs. Unpredictable supply practices, with supply as needed, make deliveries difficult.





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Delivery (cont'd)		Lack/nonexistence of data concerning ACT consumption and the available supply make planning orders and deliveries difficult. Lack of information exists on deliveries made to the private sector. As yet, no clear policy exists for deliveries to the private sector.



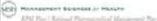


PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
ACT use	A reference table for dispensing ACTs exists. Instructions are generally followed by the service providers, who separate the patients into the categories of children, adolescents, adults, and pregnant women. A pharmacovigilance program is being developed with WHO assistance.	ACTs are administered with other products, often antibiotics—amoxicillin in particular. Inadequate information exists in the treatment records; except at one health care facility, only "ACT" is noted, without posology or other information.





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
ACT use (cont'd)	<p>Patient records are kept for hospitalizations.</p> <p>A quality control system exists for antimalarials.</p>	<p>Patient weights are not generally recorded.</p> <p>Side effects are not documented.</p>
Availability of equipment	<p>PNA, PRAs, and districts have computers.</p> <p>PNA and PRA use powerful management software.</p> <p>Districts use the Roll Back Malaria M&E (RBMME) software for malaria case management.</p>	<p>Some health care facilities have unused computers.</p> <p>Some users of the RBMME software use it only rarely.</p>





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Inventory management practices	<p>There were practically no shortages of ACT inventory except at one PRA.</p> <p>Most health care facilities demonstrated certain good management practices.</p>	<p>The health care facilities visited need improvement.</p> <p>Most staff have limited knowledge even of Stock Cards and inventory management.</p> <p>Information at the PRAs is kept on computers only; no backup in case of problems.</p>



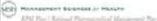


PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Inventory management practices (cont'd)		<p>No mechanism exists to reconcile consumption, the number of patients treated, and the available stock of ACTs.</p> <p>No standard management procedures manual exists.</p>
Human resources	<p>Quantitatively adequate.</p> <p>Most staff involved in the case management of malaria are available and willing.</p>	<p>Limited or no training in managing medicines, analyzing and interpreting data, quantifying needs.</p>





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Information system	<p>Basic training on the information and management system.</p> <p>Some health care facilities maintain a good information system in terms of completeness, reliability of data, and report preparation.</p> <p>Excellent personal initiative on the part of some agents in the area of information management.</p>	<p>Information and management system training was several years ago.</p> <p>Most health care facilities do not prepare inventory management reports; only financial reports are required.</p> <p>Few health care facilities use the available information to make decisions and quantify needs.</p>





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Information system (cont'd)	<p>Frameworks exist for regular consultation:</p> <ul style="list-style-type: none"> • Internal coordination meetings of the NMCP; • Quarterly NMCP reviews with the regions and districts; • Quarterly regional coordination meetings with DMTs; • Monthly coordination meetings at the district level with the head nurses of the clinics. 	





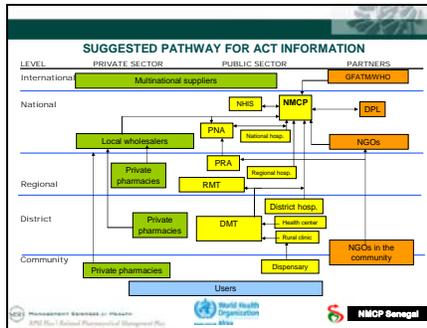
PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Information system (cont'd)	<p>Clinic head nurses have monthly coordination meetings with the CHAs from the dispensaries.</p>	





PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Training supervision	<ul style="list-style-type: none"> Existence of NMCP practices for supervising the districts, of regional practices for supervising the districts, of district practices for supervising the health centers and rural clinics with production of supervisory reports, of rural clinics for supervising the dispensaries. 	<ul style="list-style-type: none"> The accuracy of the data collected is not verified. In general, no discussions of malaria trends takes place. After supervisory visits, the NMCP's instructions are not followed.

PRELIMINARY OBSERVATIONS		
Area	Strengths	Weaknesses
Policy and work environment	<ul style="list-style-type: none"> Political will exists to support the implementation of ACTs. Recent update of the National List of Essential Medicines incorporates ACTs. Existence of a National Guidelines on the Treatment of Malaria. Preparation of a NMCP/private sector cooperative agreement for using ACTs. 	<ul style="list-style-type: none"> The national guidelines document is not present in the field. Formal contraindication for use of ACTs in pregnant women(?)



RECOMMENDATIONS FOR THE NMCP

- ✓ Set up a committee to follow up on the recommendations, consisting of...
 - one representative of the CCM
 - one representative of the NMCP
 - one representative of the PNA
 - one representative of the private sector
 - one NGO representative
- ✓ Establish a mechanism for transmitting information about ACT consumption from the private sector to the PNA and NMCP
- ✓ Conduct an exercise in quantifying ACTs in about March 2007
- ✓ Finalize and sign the memorandum of understanding between NMCP and the private sector
- ✓ Update, finalize, print, and distribute the National Guidelines on the Treatment of Malaria to all health care facilities
- ✓ Implement the national pharmacovigilance plan for ACTs
- ✓ With the necessary technical assistance, develop and disseminate a standard management procedures manual for ACTs
- ✓ Train/retrain warehouse managers in inventory management
- ✓ Identify inventory management indicators for the supervisory visits





RECOMMENDATIONS FOR THE PNA

- ✓ Standardize ACT delivery practices
- ✓ Establish a mechanism for transmitting information on ACT consumption to the NMCP
- ✓ Explore the possibility of increasing the storage capacity of the PNA and PRAs
- ✓ Improve communication between the PNA and the PRAs, among the PRAs, and between the PRAs and the district warehouses
- ✓ Issue firm directives from the PNA concerning the nonrecommended antimalarials available in the PRAs





RECOMMENDATIONS FOR THE PRAs

- ✓ Standardize practices for delivering ACTs to the districts
- ✓ Explore the possibility of increasing the PRAs' storage capacity, coordinating with the PNA
- ✓ Improve communication among the PRAs, and between the PRAs and the district warehouses
- ✓ Take inventory and destroy stocks of nonrecommended antimalarials (amodiaquine, injectable SP)





RECOMMENDATIONS FOR THE DISTRICTS

- ✓ Incorporate the consumption reports and inventories into the monthly reports sent to the NMCP
- ✓ Analyze the monthly report data at the district level before transmitting them to the central level
- ✓ Standardize practices for delivering ACTs to the health care facilities
- ✓ Improve the quality of case case management at the dispensary level by laboratory confirmation
- ✓ Implement the mechanisms for surveillance and reporting of any side effects of the ACTs in accordance with the national pharmacovigilance plan
- ✓ Identify inventory management indicators for the supervisory visits



RECOMMENDATIONS FOR THE COMMUNITY LEVEL

- ✓ Ensure that the national pharmacovigilance plan is enforced
- ✓ With the clinic head nurses and health committees, explore adequate means of making management tools available



NEXT STEPS

- Proceed with the setup of the recommended monitoring committee
- Prioritize the interventions and prepare an implementation plan
- Identify the resources for implementation, including the need for technical assistance
- Evaluate the results for the system after implementation of the interventions



Annex 2. CCM Briefing - List of Participants

Name	Organization	Contact
Diallo Gorgui Sane	AFRICARE	(221) 864 7401 gdiallo@africare.org
Dr. Aissatou Conte	CNP	(221) 889 6565 conteaisho@yahoo.fr
Pr. Doudou Bâ	CCM	
Laurence Bequet	Coopération Française	bequetlaurence@yahoo.fr
Ramatoulaye Dioume	USAID/Sénégal	rdioume@usaid.gov
Dr. Bacary Sambou	OMS/Sénégal	samboub@sn.afro.who.int
Dr. Khoudio Sow	OMS/Sénégal	(221) 869 5938 sownk@sn.afro.who.int
Pr. Issa Sanou	OMS/AFRO	+242 588 9940 sanoui@afro.who.int
Dr. Jackson Sillah	OMS/AFRO	sillahj@bf.afro.who.int
Michael R Derosena	MSH/RPM Plus	mderosena@msh.org
Hare Ram Bhattarai	MSH/RPM Plus	hbhattarai@msh.org

Annex 3. Meetings at Central Level and Field Visits: List of Persons Contacted

Teams A et B

- Dr Moussa DIAKHATE, chef de service SNIS
- Papa Moussa THIOR, Coordinateur PNL
- Mame Birame DIOUF, Responsable M& E au PNL
- Pr. Oumar Kata FAYE, Directeur Direction de la Santé, Ministère de la Santé

Team A

- Dr. Debe NDIAYE, Médecin chef de région de Kaolack
- Dr Fama BA, Pharmacienne responsable de la PRA de Kaolack
- Abdou Aziz SOW, Comptable à la PRA de Kaolack
- Dr M. C. FAYE, Médecin chef du district de Kaolack
- Papa Ngouye BEYE, Dépositaire au district de Kaolack
- Lamine BEYE, Superviseur SSP au Centre de santé de Kaolack
- Mr Moussa NDIAYE, Infirmier chef du Poste de santé de Gandiaye
- Mr Ndiouga MAR, Dépositaire au poste de santé de Gandiaye
- Mme Codou Youm DIOUF, Sage-femme au Poste de santé de Gandiaye
- Ndeye SARR, Agent de santé communautaire, Case de santé de Kasnak
- Dr Masserigne NDIAYE, Médecin chef de la région de Diourbel
- Dr Soukeyna THIAM, Pharmacienne responsable de la PRA de Diourbel
- Dr Ndeye Maguette NDIAYE, Médecin Chef du District de Diourbel
- Dr Aliou SENE, Médecin Adjoint du district de Diourbel
- Mr Abdou Rahim SARR, Dépositaire au district de Diourbel
- Mme BA Ndeye NDAW, Major au centre de santé de Diourbel
- Souleymane FALL, Dépositaire au centre de santé de Diourbel
- Kotane FAYE, Infirmier chef du Poste de santé Keur Serigne Mbaye Sarr
- Soda DIENG, Dépositaire au Poste de santé Keur Serigne Mbaye Sarr

Team B

- Dr Pape Birama NDIAYE, Directeur de la PNA
- Dr Oumou Kalsoum NDIAYE, Responsable service commercial et marketing
- Dr Mamadou NDIAYE, Responsable magasin central.
- Dr Ndeye Fatou Ndiaye, Pharmacien Chef à la PRA de Dakar
- Dr El Hadji Yancoba DIAL, Médecin chef du district sanitaire de Tivaouane
- Mr Elimane DIAW, EPS district de Tivaouane
- Mme Sy Ndeye Syr NDIAYE, Major au Centre de santé de Tivaouane
- Mme Fatou NDOUR, Dépositaire au centre de santé de Tivaouane
- Mme Anta Diop Diallo, Infirmière Chef du Poste de santé de Médine (district de Tivaouane)
- Cécile ALIHONOU, Infirmière Chef du Poste de santé Shérif LO (district de Tivaouane)
- Dr Elhadji NDIAYE, Médecin chef Adjoint du district sanitaire de Guédiawaye
- Mr Mamadou DIALLO, Superviseur soins de santé primaires au district de Guédiawaye

- Mme Fall Rokhya Seydi DIALLO, Pharmacien du district de Guédiawaye
- Mr Madické WADE, Dépositaire au district de Guédiawaye
- Mr Mbaye DIA, Major du district de Guédiawaye.
- Mme Marona Diop CAMARA, Infirmière chef du Poste de santé Hamo 5 (district de Guédiawaye)

Annex 4. List of Documents

- Plan d'introduction des ACT dans le système de Santé au Sénégal (Source: PNLP)
- Plan de Suivi et Evaluation (Source: PNLP/MSPM)
- Plan de gestion des achats et de l'approvisionnement des ACT (Source: PNLP/MSPM)
- Directives Nationales de Traitement du Paludisme (Source: PNLP/MSPM)
- Rapport d'activités du PNLP 2005 (Source: PNLP/MSPM)
- Plan National de Pharmacovigilance pour les ACT (Source: PNLP/MSPM)
- Registres de consultations générales
- Registre de consultations prénatales
- Différents rapports de supervision
- Différents formulaires de gestion de médicaments

Annex 5. Questionnaires

1) Central Level

A. INTRODUCTION AND PURPOSE OF ASSESSMENT

First, **thank you for receiving us today**. I would like to introduce to you the members of our team.
(present team members)

The Ministry of Health and Education is trying to **simplify and improve its health information system**. One of the first steps of this process is to **conduct a rapid assessment** of the existing system.

We are visiting selected District health offices on behalf of the Ministry of Health & Education in order to **look at how information is collected, processed and used**. Our goal is to better understand your information needs and concerns about the current health information system and to improve the usefulness of information for managing your health services. After this assessment, the results will be used to make changes to the types of information collected and how this information is processed and used for planning and managing your health services, both at your level and at higher levels.

In order to conduct this assessment, **we would like to talk to all members of your staff who are involved in recording and reporting on information** in your district office and also look at some of your records, reports, and analyses done (either manually or by computer). We estimate that it **will take between 2 and 3 hours** to conduct the assessment. It will be conducted in **two parts: an interview with your staff and observations** of your records and reports. We want to stress that we do not want you to go to any inconvenience or expense because of our visit. Our schedule is unfortunately very busy and we will be leaving you right after completing the assessment.

Lastly, please be assured that **this is not a visit to evaluate you personally or to evaluate the performance of your District. This information will be used only to evaluate the functioning of the existing health information system**. We very much appreciate your help in trying to improve the health information system in Senegal.

B. IDENTIFICATION			
1. Name of National Center			
2. Date of visit		3. Interviewer	
4. Number of district to be serviced		5. Number of sub-district to be serviced	
C. COMPUTERIZATION STATUS AND COMMUNICATION			
6. Has electricity <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
7. If the electricity is not dependable do you have standby generator <input type="checkbox"/> Yes <input type="checkbox"/> No			
8. Has telephone <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
9. If yes what kind? <input type="checkbox"/> Satellite <input type="checkbox"/> VHF <input type="checkbox"/> Wired			
10. Does your center have <input type="checkbox"/> Computers <input type="checkbox"/> Printer <input type="checkbox"/> UPS <input type="checkbox"/> Internet <input type="checkbox"/> E-mail only			
11. If yes please provide the following information			
Equipment	Qty	Type (e.g. Pentium III, HP LaserJet, APC 600v)	
Computers and Windows version			
Printers			
UPS			
12. Is your stock management system computerized? <input type="checkbox"/> Yes <input type="checkbox"/> No			
13. If yes, what is the name of the software you are using? _____			
14. Is this software linked to the district/regional centers? <input type="checkbox"/> Yes <input type="checkbox"/> No			
15. If your computer breaks down can it be repaired locally? <input type="checkbox"/> Yes <input type="checkbox"/> No			
16. Are Internet services available in your city/village? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
17. Does your center have access to Internet <input type="checkbox"/> Yes <input type="checkbox"/> No			
18. If yes, what kind of services are available <input type="checkbox"/> E-mail only <input type="checkbox"/> Full Internet			
19. What max speed you connect to the Internet: <input type="checkbox"/> 12K <input type="checkbox"/> 24K <input type="checkbox"/> 33.6K <input type="checkbox"/> 56K <input type="checkbox"/> >56K			
20. How much you pay for the Internet per month? _____			
21. How many of your can use MS Word? ____ MS Excel ____ MS Access ____ Internet ____			
D. MIS HUMAN RESOURCES AND SKILL DEVELOPMENT STATUS			
22. Who are the people here at the district/regional center involved in recording information and preparing reports			
Title or Post	How long at post?	Have they received any special training in the recording, processing or reporting of health information? If Yes, Year and Subjects covered?	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
23. In your office, which persons are responsible for the following activities:			

Recording of information	
Manual data entry	
Manual data analysis	
Preparation of reports	
Feedback to the districts	
Cross-checking or verifying information	
24. If computers are used, then who is responsible for	
Computerized data entry	
Computerized data analysis	
25. How do you check that the information you collect and report on is accurate?	
E. USE OF INFORMATION	
26. What is the information you collect used for? <i>(Please do not prompt for answers. Check all that apply)</i>	<input type="checkbox"/> to prepare reports <input type="checkbox"/> to monitor the distribution of ACT drugs <input type="checkbox"/> to monitor the consumption of ACT drugs <input type="checkbox"/> to estimate and order ACT drugs <input type="checkbox"/> to share information <input type="checkbox"/> Others(specify_____)
27. Could you please give an example of how you have used the ACT drug related report to make a decision or take action regarding health services in your district?	
F. REQUISITION, DISTRIBUTION AND TRACKING ACT DRUGS	
28. Where do you get the supply of ACT drugs from?	
<input type="checkbox"/> Import yourself <input type="checkbox"/> Buy from local suppliers <input type="checkbox"/> From other Govt agencies (specify_____) <input type="checkbox"/> Directly from donor (specify:_____)	
29. How do you decide how much to order	
<input type="checkbox"/> International donors just send <input type="checkbox"/> Calculated based on the consumption only <input type="checkbox"/> Calculated based on the projection and consumption <input type="checkbox"/> Decide by the budget <input type="checkbox"/> Others (specify_____)	
30. How do you decide how much to distribute to the districts / regions	
<input type="checkbox"/> Based on equal share <input type="checkbox"/> Calculated based on the consumption only	

<input type="checkbox"/> Calculate based on the projection and consumption <input type="checkbox"/> Decide by the budget <input type="checkbox"/> Others (specify _____)	
31. Is the order tracking system is in place? <input type="checkbox"/> Yes <input type="checkbox"/> No	
32. Is the distribution tracking system is in place? <input type="checkbox"/> Yes <input type="checkbox"/> No	
33. In the event of a facility asking for emergency supply of drugs what procedure you follow?	
G. STOCK RELATED DATA ORGANIZATION	
34. Did the quantities recorded equal to the quantities on shelves ? <input type="checkbox"/> Yes <input type="checkbox"/> No	
35. If not what is/are the reason(s)? <i>(check all that apply)</i> <input type="checkbox"/> No records are kept <input type="checkbox"/> Records are not up-to-date <input type="checkbox"/> Others (specify)_____	
36. How many stock outs were there in the last 6 months? _____	
37. If one or more stock outs what was/were the reasons? <i>(check all that apply)</i> <input type="checkbox"/> Stock cards are not properly maintained <input type="checkbox"/> Quantity asked was low <input type="checkbox"/> Asked quantity not supplied <input type="checkbox"/> Stock does not arrive on time <input type="checkbox"/> Short dated (expiring within 6 months) stocks are received <input type="checkbox"/> Others (specify)_____	
38. How many drugs expired during the last 6 months? _____	
39. If one or more drugs expired what was/were the reasons? <i>(check all that apply)</i> <input type="checkbox"/> No system to track expiring drugs <input type="checkbox"/> First expiring drugs are not dispensed first <input type="checkbox"/> Short dated (expiring within 6 months) stocks are received <input type="checkbox"/> Others (specify)_____	
40. Are ACT drugs always kept at recommended temperature <input type="checkbox"/> Yes <input type="checkbox"/> No	
41. If No, what are the reasons? <i>(check all that apply)</i> <input type="checkbox"/> There is no cooling facility (e.g. fridge etc.) <input type="checkbox"/> No system of monitoring the temperature the cooling room <input type="checkbox"/> Drugs are not kept in properly shelves <input type="checkbox"/> Others (specify)_____	
H. UNDERSTANDING OF LOCAL CHANGES IN MALARIA STATUS OVER A PERIOD OF TIME	
42. Can you describe any changes in the number of malarial cases that you have noted during the last six months?	<input type="checkbox"/> Yes <input type="checkbox"/> No
43. If yes, complete the following table by placing a check in the appropriate column and noting the explanation if the trend was variable or seasonal. <i>(Complete the "Was trend accurate?" column later, after verifying the data from the observation module)</i>	

	Trend	Increasing	Decreasing	Variable or Seasonal (explain below)	Was trend accurate? <input type="checkbox"/> Yes <input type="checkbox"/> No
Problem					
Malaria cases					<input type="checkbox"/> Yes <input type="checkbox"/> No
44. If you noticed that any of these trends were increasing, what actions would you take?					
I. SUPERVISION AND INFORMATION SHARING					
45. How many supervisory visits did you plan to do to your districts / regions in 2006 <i>(according to the provisions in your Annual Plan)</i>					
46. How many do you estimate that you actually completed in 2006? If you weren't able to complete all the visits, what were the reasons?					
47. During these supervisory visits, do you consider information collection or report preparation activities?					<input type="checkbox"/> Yes <input type="checkbox"/> No
48. If Yes, what do you do? <i>(Do not prompt for responses. Check all that applies)</i>					
<input type="checkbox"/> Verify recording and reporting formats? <input type="checkbox"/> Discuss malaria service utilization trends? <input type="checkbox"/> Discuss missing reports/ errors <input type="checkbox"/> Discuss problems with ACT drug information <input type="checkbox"/> Others,(specify _____)					
49. If you discover errors in reports that are sent to you from facilities, what do you do? <i>(Do not prompt for responses. Check all that applies)</i>					
<input type="checkbox"/> Visit facility to check the data <input type="checkbox"/> Advise them by telephone (if possible) <input type="checkbox"/> Send written comments <input type="checkbox"/> Nothing if it is a small error <input type="checkbox"/> Other, please specify _____					
50. Do you provide comments or feedback reports to your districts? <i>(If interviewee says yes, please verify by asking to see the reports)</i>					<input type="checkbox"/> Yes <input type="checkbox"/> No
Please list examples of comments/reports seen:			Frequency of these comments/reports.		
a.			<input type="checkbox"/> Regular <input type="checkbox"/> Ad hoc		
b.			<input type="checkbox"/> Regular <input type="checkbox"/> Ad hoc		
c.			<input type="checkbox"/> Regular <input type="checkbox"/> Ad hoc		
51. Are ACT drug related information discussed among the staff in the district office?			<input type="checkbox"/> Regularly <input type="checkbox"/> Ad hoc <input type="checkbox"/> Never		
52. If yes, what topics do you remember discussing? Could you please describe or show me some examples of how and when you discuss information among yourselves?					
J. UNDERSTANDING OF HOW INFORMATION IS COLLECTED, PROCESSED, TRANSMITTED AND WHAT PROCEDURES TO USE					

53. Please tell me how you receive the reports from the districts/regions <input type="checkbox"/> By post <input type="checkbox"/> By fax <input type="checkbox"/> Hand carried <input type="checkbox"/> Via e-mail <input type="checkbox"/> Others (specify:- _____)				
54. How often you get reports from the health facilities <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Half-yearly <input type="checkbox"/> Yearly				
55. Please tell me if you receive the report in time from <i>(please verify this by examining the records)</i> <input type="checkbox"/> All most of the districts (>80%) <input type="checkbox"/> Majority of the districts (>50% and <80%) <input type="checkbox"/> Some districts (>25% and <50%) <input type="checkbox"/> Few districts (<25%) <input type="checkbox"/> None (0%)				
56. If you receive reports in time only from <80% facilities what are the probable causes <input type="checkbox"/> Transportation <input type="checkbox"/> Districts do not take it seriously <input type="checkbox"/> Districts do not have enough human resources <input type="checkbox"/> Districts do not know how to prepare reports <input type="checkbox"/> Districts do not know when to send <input type="checkbox"/> Others (specify: _____)				
57. Please tell me where and when you send the following district level consolidated reports:				
Reports	# of Copies	Where do you send the reports?	How often?	Standard reporting date
58. Please rank the following reports according to time spent <i>(4 most time spent, 1 least time spent)</i>				
Reports	Time spent <i>(Rank 1 to 4)</i>	How is the report prepared?	Any difficulties?	
a. ACT Drug reports		<input type="checkbox"/> Manual <input type="checkbox"/> Computer, specify software:		
59. Do you ever find that some districts do not report in time for you to include their information in your summary report?			<input type="checkbox"/> Yes <input type="checkbox"/> No	
60. If this happens, What do you do? <i>(Do not prompt for responses. Please check one answer only)</i> <input type="checkbox"/> Remind the districts of delay and wait before reporting <input type="checkbox"/> Send report without the missing information <input type="checkbox"/> Send report without the missing information and include information in quarterly or annually report an updated report later <input type="checkbox"/> Other, please specify:				

61. Do you regularly use any information from these reports to determine the relative performance of your facilities?	<input type="checkbox"/> Yes <input type="checkbox"/> No
K. COMMENTS/SUGGESTIONS	
62. In your view, what are the main problems with the current ACT Information System?	
63. Do you have suggestions for how the current ACT drug information system can be improved?	

THANK YOU FOR YOUR HELP

2) District/regional level

L. INTRODUCTION AND PURPOSE OF ASSESSMENT

First, **thank you for receiving us today**. I would like to introduce to you the members of our team.
(present team members)

The Ministry of Health and Education is trying to **simplify and improve its health information system**. One of the first steps of this process is to **conduct a rapid assessment** of the existing system.

We are visiting selected District health offices on behalf of the Ministry of Health & Education in order to **look at how information is collected, processed and used**. Our goal is to better understand your information needs and concerns about the current health information system and to improve the usefulness of information for managing your health services. After this assessment, the results will be used to make changes to the types of information collected and how this information is processed and used for planning and managing your health services, both at your level and at higher levels.

In order to conduct this assessment, **we would like to talk to all members of your staff who are involved in recording and reporting on information** in your district office and also look at some of your records, reports, and analyses done (either manually or by computer). We estimate that it **will take between 2 and 3 hours** to conduct the assessment. It will be conducted in **two parts: an interview with your staff and observations** of your records and reports. We want to stress that we do not want you to go to any inconvenience or expense because of our visit. Our schedule is unfortunately very busy and we will be leaving you right after completing the assessment.

Lastly, please be assured that **this is not a visit to evaluate you personally or to evaluate the performance of your District**. This information will be used **only to evaluate the functioning of the existing health information system**. We very much appreciate your help in trying to improve the health information system in Senegal.

M. IDENTIFICATION			
1. Name of District/Regional Center			
2. Date of visit		3. Interviewer	
4. Number of centers to be serviced		5. Number of sub-centers to be serviced	
N. COMPUTERIZATION STATUS AND COMMUNICATION			
6. Has electricity <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
7. If the electricity is not dependable do you have standby generator <input type="checkbox"/> Yes <input type="checkbox"/> No			
8. Has telephone <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
9. If yes what kind? <input type="checkbox"/> Satellite <input type="checkbox"/> VHF <input type="checkbox"/> Wired			
10. Does your center have <input type="checkbox"/> Computers <input type="checkbox"/> Printer <input type="checkbox"/> UPS <input type="checkbox"/> Internet <input type="checkbox"/> E-mail only			
11. If yes please provide the following information			
Equipment	Qty	Type (e.g. Pentium III, HP LaserJet, APC 600v)	
Computers and Windows version			
Printers			
UPS			
12. Is your stock management system computerized? <input type="checkbox"/> Yes <input type="checkbox"/> No			
13. If yes, what is the name of the software you are using? _____			
14. Is this software linked to the national center? <input type="checkbox"/> Yes <input type="checkbox"/> No			
15. If your computer breaks down can it be repaired locally? <input type="checkbox"/> Yes <input type="checkbox"/> No			
16. Are Internet services available in your city/village? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
17. Does your center have access to Internet <input type="checkbox"/> Yes <input type="checkbox"/> No			
18. If yes, what kind of services are available <input type="checkbox"/> E-mail only <input type="checkbox"/> Full Internet			
19. What max speed you connect to the Internet: <input type="checkbox"/> 12K <input type="checkbox"/> 24K <input type="checkbox"/> 33.6K <input type="checkbox"/> 56K <input type="checkbox"/> >56K			
20. How much you pay for the Internet per month? _____			
21. How many of your can use MS Word? ____ MS Excel ____ MS Access ____ Internet ____			
O. MIS HUMAN RESOURCES AND SKILL DEVELOPMENT STATUS			
22. Who are the people here at the district/regional center involved in recording information and preparing reports			
Title or Post	How long at post?	Have they received any special training in the recording, processing or reporting of health information? If Yes, Year and Subjects covered?	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
		<input type="checkbox"/> yes <input type="checkbox"/> no	
23. In your office, which persons are responsible for the following activities:			
Recording of information			

Manual data entry	
Manual data analysis	
Preparation of reports	
Feedback to the facilities	
Cross-checking or verifying information	
24. If computers are used, then who is responsible for	
Computerized data entry	
Computerized data analysis	
25. How do you check that the information you collect and report on is accurate?	
P. USE OF INFORMATION	
26. What is the information you collect used for? <i>(Please do not prompt for answers. Check all that apply)</i>	<input type="checkbox"/> to prepare reports <input type="checkbox"/> to monitor the distribution of ACT drugs <input type="checkbox"/> to monitor the consumption of ACT drugs <input type="checkbox"/> to estimate and order ACT drugs <input type="checkbox"/> to share information <input type="checkbox"/> Others (specify _____)
27. Could you please give an example of how you have used the ACT drug related report to make a decision or take action regarding health services in your district?	
Q. REQUISITION, DISTRIBUTION AND TRACKING ACT DRUGS	
28. Where do you get the supply of ACT drugs from?	
<input type="checkbox"/> From the Govt national center (specify _____) <input type="checkbox"/> Directly from donor (specify: _____)	
29. How do you decide how much to order	
<input type="checkbox"/> Center just sends it <input type="checkbox"/> Calculated based on the consumption only <input type="checkbox"/> Calculate based on the projection and consumption <input type="checkbox"/> Decide by the budget <input type="checkbox"/> Others (specify _____)	
30. How do you decide how much to distribute to the health facilities	
<input type="checkbox"/> Based on equal share <input type="checkbox"/> Calculated based on the consumption only	

<input type="checkbox"/> Calculate based on the projection and consumption <input type="checkbox"/> Decide by the budget <input type="checkbox"/> Others (specify _____)	
31. Is the order tracking system is in place? <input type="checkbox"/> Yes <input type="checkbox"/> No	
32. Is the distribution tracking system is in place? <input type="checkbox"/> Yes <input type="checkbox"/> No	
33. In the event of a facility asking for emergency supply of drugs what procedure you follow?	
R. STOCK RELATED DATA ORGANIZATION	
34. Did the quantities recorded equal to the quantities on shelves ? <input type="checkbox"/> Yes <input type="checkbox"/> No	
35. If not what is/are the reason(s)? <i>(check all that apply)</i> <ul style="list-style-type: none"> <input type="checkbox"/> No records are kept <input type="checkbox"/> Records are not up-to-date <input type="checkbox"/> Others (specify)_____ 	
36. How many stock outs were there in the last 6 months? _____	
37. If one or more stock outs what was/were the reasons? <i>(check all that apply)</i> <ul style="list-style-type: none"> <input type="checkbox"/> Stock cards are not properly maintained <input type="checkbox"/> Quantity asked was low <input type="checkbox"/> Asked quantity not supplied <input type="checkbox"/> Stock does not arrive on time <input type="checkbox"/> Short dated (expiring within 6 months) stocks are received <input type="checkbox"/> Others (specify)_____ 	
38. How many drugs expired during the last 6 months? _____	
39. If one or more drugs expired what was/were the reasons? <i>(check all that apply)</i> <ul style="list-style-type: none"> <input type="checkbox"/> No system to track expiring drugs <input type="checkbox"/> First expiring drugs are not dispensed first <input type="checkbox"/> Short dated (expiring within 6 months) stocks are received <input type="checkbox"/> Others (specify)_____ 	
40. Are ACT drugs always kept at recommended temperature <input type="checkbox"/> Yes <input type="checkbox"/> No	
41. If No, what are the reasons? <i>(check all that apply)</i> <ul style="list-style-type: none"> <input type="checkbox"/> There is no cooling facility (e.g. fridge etc.) <input type="checkbox"/> No system of monitoring the temperature the cooling room <input type="checkbox"/> Drugs are not kept in properly shelves <input type="checkbox"/> Others (specify)_____ 	
S. UNDERSTANDING OF LOCAL CHANGES IN MALARIA STATUS OVER A PERIOD OF TIME	
42. Can you describe any changes in the number of malarial cases that you have noted during the last six months?	<input type="checkbox"/> Yes <input type="checkbox"/> No
43. If yes, complete the following table by placing a check in the appropriate column and noting the explanation if the trend was variable or seasonal. <i>(Complete the "Was trend accurate?" column later, after verifying the data from the observation module)</i>	

	Problem	Trend	Increasing	Decreasing	Variable or Seasonal (explain below)	Was trend accurate? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Malaria cases					
44. If you noticed that any of these trends were increasing, what actions would you take?						
T. SUPERVISION AND INFORMATION SHARING						
45. How many supervisory visits did you plan to do to your facilities in 2006 <i>(according to the provisions in your Annual Plan)</i>						
46. How many do you estimate that you actually completed in 2006? If you weren't able to complete all the visits, what were the reasons?						
47. During these supervisory visits, do you consider information collection or report preparation activities?						<input type="checkbox"/> Yes <input type="checkbox"/> No
48. If Yes, what do you do? <i>(Do not prompt for responses. Check all that applies)</i>						
<input type="checkbox"/> Verify recording and reporting formats? <input type="checkbox"/> Discuss malaria service utilization trends? <input type="checkbox"/> Discuss missing reports/ errors <input type="checkbox"/> Discuss problems with ACT drug information <input type="checkbox"/> Others,(specify _____)						
49. If you discover errors in reports that are sent to you from facilities, what do you do? <i>(Do not prompt for responses. Check all that applies)</i>						
<input type="checkbox"/> Visit facility to check the data <input type="checkbox"/> Advise them by telephone (if possible) <input type="checkbox"/> Send written comments <input type="checkbox"/> Nothing if it is a small error <input type="checkbox"/> Other, please specify _____						
50. Do you provide comments or feedback reports to your facility? <i>(If interviewee says yes, please verify by asking to see the reports)</i>						<input type="checkbox"/> Yes <input type="checkbox"/> No
Please list examples of comments/reports seen:					Frequency of these comments/reports.	
a.					<input type="checkbox"/> Regular	<input type="checkbox"/> Ad hoc
b.					<input type="checkbox"/> Regular	<input type="checkbox"/> Ad hoc
c.					<input type="checkbox"/> Regular	<input type="checkbox"/> Ad hoc
51. Are ACT drug related information discussed among the staff in the district office?					<input type="checkbox"/> Regularly <input type="checkbox"/> Ad hoc <input type="checkbox"/> Never	
52. If yes, what topics do you remember discussing? Could you please describe or show me some examples of how and when you discuss information among yourselves?						
U. UNDERSTANDING OF HOW INFORMATION IS COLLECTED, PROCESSED, TRANSMITTED AND WHAT PROCEDURES TO USE						

53. Please tell me how you receive the reports from the health facilities				
<input type="checkbox"/> By post <input type="checkbox"/> By fax <input type="checkbox"/> Hand carried <input type="checkbox"/> Via e-mail <input type="checkbox"/> Others (specify:- _____)				
54. How often you get reports from the health facilities				
<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Half-yearly <input type="checkbox"/> Yearly				
55. Please tell me if you receive the report in time from <i>(please verify this by examining the records)</i>				
<input type="checkbox"/> All most of the facilities (>80%) <input type="checkbox"/> Majority of the facilities (>50% and <80%) <input type="checkbox"/> Some facilities (>25% and <50%) <input type="checkbox"/> Few facilities (<25%) <input type="checkbox"/> None (0%)				
56. If you receive reports in time only from <80% facilities what are the probable causes				
<input type="checkbox"/> Transportation <input type="checkbox"/> Centers do not take it seriously <input type="checkbox"/> Centers do not have enough human resources <input type="checkbox"/> Centers do not know how to prepare reports <input type="checkbox"/> Centers do not know when to send <input type="checkbox"/> Others (specify: _____)				
57. Please tell me where and when you send the following district level consolidated reports:				
Reports	# of Copies	Where do you send the reports?	How often?	Standard reporting date
58. Please rank the following reports according to time spent <i>(4 most time spent, 1 least time spent)</i>				
Reports	Time spent <i>(Rank 1 to 4)</i>	How is the report prepared?	Any difficulties?	
a. ACT Drug reports		<input type="checkbox"/> Manual <input type="checkbox"/> Computer, specify software:		
59. Do you ever find that some facilities do not report in time for you to include their information in your summary report?			<input type="checkbox"/> Yes <input type="checkbox"/> No	
60. If this happens, What do you do? <i>(Do not prompt for responses. Please check one answer only)</i>				
<input type="checkbox"/> Remind the facility of delay and wait before reporting <input type="checkbox"/> Send report without the missing information <input type="checkbox"/> Send report without the missing information and include information in quarterly or annually report an updated report later <input type="checkbox"/> Other, please specify:				
61. Do you regularly use any information from these reports to determine the relative performance of your facilities?			<input type="checkbox"/> Yes <input type="checkbox"/> No	
V. COMMENTS/SUGGESTIONS				

62. In your view, what are the main problems with the current ACT Information System?

63. Do you have suggestions for how the current ACT drug information system can be improved?

THANK YOU FOR YOUR HELP

3) Facility Level

1. INTRODUCTION, PURPOSE OF ASSESSMENT

First, **thank you for receiving us today**. I would like to introduce to you myself and the members of our team. (*present team members*)

The Ministry of Health is trying to **simplify and improve its ACT Drug information system**. One of the first steps of this process is to **conduct a rapid assessment** of the existing system.

We are visiting selected Centers on behalf of the Ministry of Health in order to **look at how information is collected, processed and used**. Our goal is to better understand your information needs and concerns about the current information system and to improve the usefulness of information for managing your ACT drugs. After this assessment, the results will be used to make changes to the types of information collected and how this information is processed and used for planning and managing your ACT drugs both at your local level and at higher levels.

In order to conduct this assessment, **we would like to talk to all members of your staff who are involved in recording and reporting on information** in your facility and also look at some of your recording forms, registers and reports. We estimate that it **will take between 1 and 2 hours** to conduct the assessment. We want to stress that we do not want you to go to any inconvenience or expense because of our visit. Our schedule is unfortunately very busy and we will be leaving you right after completing the assessment.

Lastly, please be assured that **this is not a visit to evaluate you personally or to evaluate the performance of your facility. This information will be used only to evaluate the functioning of the existing information system**. We very much appreciate your help in trying to improve the ACT Drug information system.

Interviewer:		Date of interview:	
1. IDENTIFICATION OF THE HEALTH FACILITY AND SERVICES			
1. Name of facility		2. District	
3. Type of facility	<input type="checkbox"/> Only Malaria <input type="checkbox"/> Integrated <input type="checkbox"/> Other	4. Ownership of the facility	<input type="checkbox"/> GOZ <input type="checkbox"/> NGO <input type="checkbox"/> Mission <input type="checkbox"/> Other
5. Number of people on average that are provided malarial services per day? _____			
6. No of staff in the center engaged in malarial services: _____			
7. Appx. time it takes to travel from drug distribution center by the quickest means of transportation (in hours): _____			
2. COMPUTERIZATION STATUS AND COMMUNICATION			
8. Has electricity <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
9. If the electricity is not dependable do you have standby generator <input type="checkbox"/> Yes <input type="checkbox"/> No			
10. Has telephone <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
11. If yes what kind? <input type="checkbox"/> Satellite <input type="checkbox"/> VHF <input type="checkbox"/> Wired			
12. Does your center have <input type="checkbox"/> Computers <input type="checkbox"/> Printer <input type="checkbox"/> UPS <input type="checkbox"/> Internet <input type="checkbox"/> E-mail only			
13. If yes please provide the following information			
Equipment	Qty	Type (e.g. Pentium, HP LaserJet, APC 600v)	
Computers and Windows version			
Printers			
UPS			
14. If your computer breaks down can it be repaired locally? <input type="checkbox"/> Yes <input type="checkbox"/> No			
15. Are Internet services available in your city/village? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes but not dependable			
16. Does your center have access to Internet <input type="checkbox"/> Yes <input type="checkbox"/> No			
17. If yes, what kind of services are available <input type="checkbox"/> E-mail only <input type="checkbox"/> Full Internet			
18. What max speed you connect to the Internet: <input type="checkbox"/> 12K <input type="checkbox"/> 24K <input type="checkbox"/> 33.6K <input type="checkbox"/> 56K <input type="checkbox"/> >56K			
19. How much you pay for the Internet per month? _____			
20. How many of your malaria staff can use MS Word? ____ MS Excel ____ MS Access ____ Internet _____			
3. TRAINING AND INFORMATION SYSTEM			
21. Who are the staff here at the facility involved in recording information and preparing reports			
Title or Post	How long at post?	Has the staff received any special training in the recording, processing or reporting of information? If Yes, what year and what subjects were covered?	
		<input type="checkbox"/> yes <input type="checkbox"/> no	Year: Topic:
		<input type="checkbox"/> yes <input type="checkbox"/> no	Year: Topic:

		<input type="checkbox"/> yes <input type="checkbox"/> no	Year:	Topic:
		<input type="checkbox"/> yes <input type="checkbox"/> no	Year:	Topic:
22. Does your center check to see if the data you collect and report is accurate? <input type="checkbox"/> yes <input type="checkbox"/> no				
23. If yes, who checks it how it is checked to verify that the information you collect and report on is accurate?				
24. How many times the report was sent to supervisor on time over the last 6 months: _____				
25. How many <u>hours in total per month</u> would you estimate that you or other health personnel spend either recording or reporting information			Recording	Reporting
4. KNOWLEDGE AND USES OF INFORMATION BY THE FACILITY				
26. What is the information you collect used for? <i>(Please do not prompt for answers, check all that apply)</i>		<input type="checkbox"/> to prepare reports <input type="checkbox"/> to manage the care of your patients <input type="checkbox"/> to monitor/evaluate performance <input type="checkbox"/> to order supplies and drugs <input type="checkbox"/> to plan and track activities <input type="checkbox"/> to share information <input type="checkbox"/> other (specify):		
27. Could you please give an example of how you have used the information that you record or report to make a decision or take ion regarding your services in your locality?				
28. How many of the staff know what an Indicator means? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Please tick Yes only if correct answer is given)</i>				
How many of the staff can plot graphs and interpret them? _____				
29. Do you know if the number of people coming for services increasing or decreasing since the beginning of this year? <input type="checkbox"/> Yes <input type="checkbox"/> No				
30. Do you know if the number of people coming for services increasing or decreasing since the beginning of this year? <input type="checkbox"/> Yes <input type="checkbox"/> No				
31. If you knew it was decreasing what would you do?				
5. SUPERVISION AND INFORMATION SHARING				
32. Where do you get the supply of ACT drugs from? <input type="checkbox"/> From the Govt dist./regional center (specify _____) <input type="checkbox"/> Directly from donor (specify: _____)				
33. How many supervisory visits have you had from your supervisor during the last 12 months?				
34. If you had such supervisory visits, did you discuss your information collection or report preparation activities?			<input type="checkbox"/> Yes <input type="checkbox"/> No	
35. If Yes, did your Supervisor: <i>(check all that apply)</i>				
<input type="checkbox"/> Verify your recording and reporting formats? <input type="checkbox"/> Discuss service utilization trends? <input type="checkbox"/> Discuss the ACT drug related information like stock out, expiry etc? <input type="checkbox"/> Other information related activities (specify _____)				
36. During the past 12 months, did you receive comments from your Supervisor in reports you have submitted?			<input type="checkbox"/> Yes <input type="checkbox"/> No	

37. If yes, were these comments written?	<input type="checkbox"/> Yes <input type="checkbox"/> No
38. Do you receive any comments or reports from your supervisor that compare or summarize the information you have sent (feedback reports). <i>(If interviewee says yes, please verify by asking what the comment was)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No
39. Frequency of these comments/reports.	<input type="checkbox"/> Regular <input type="checkbox"/> Ad hoc
40. Are information results discussed among the staff in the facility?	<input type="checkbox"/> Regularly <input type="checkbox"/> Ad hoc <input type="checkbox"/> Never
41. If yes, what topics do you remember discussing. Could you please describe or show me some examples of how and when you discuss information among yourselves?	

6. DATA ORGANIZATION

(Please ask the interviewee to tell you the number of patients seen in April 2006. Verify if individual patient's records are maintained and the filing system is appropriate)

42. Individual patient data is maintained? Yes No
43. If yes, indexed? Yes No
44. Computerized? Yes No
45. Are the data recording done appropriately? Yes No
46. Are reports filed appropriately? Yes No

(Please ask the interviewee to tell you the quantity of received and dispensed last month and the current stock. If it could be verified with the records please tick Yes)

47. Did the interviewee give correct answers to all three asked quantities? Yes No
48. If not what is/are the reason(s)? *(check all that apply)*

- No records are kept
- Records are not up-to-date
- Others (specify)_____

49. How many stock outs were there in the last 6 months? _____
50. If one or more stock outs what was/were the reasons? *(check all that apply)*

- Stock cards are not properly maintained
- Quantity asked was low
- Asked quantity not supplied
- Stock does not arrive on time
- Short dated (expiring within 6 months) stocks are received
- Others (specify)_____

51. How many drugs expired during the last 6 months? _____
52. if one or more drugs expired what was/were the reasons? *(check all that apply)*

- No system to track expiring drugs
- First expiring drugs are not dispensed first
- Short dated (expiring within 6 months) stocks are received
- Others (specify)_____

53. Are ACT drugs always kept at recommended temperature Yes No

54. If No, what are the reasons? *(check all that apply)*

- There is no cooling facility (e.g. fridge etc.)
- No system of monitoring the temperature the cooling room is at
- Drugs are not kept in properly shelves
- Others (specify)_____

7. ADEQUACY AND USER-FRIENDLINESS OF THE FORMATS			
Please fill in the following table			
Reports	Available?	If yes, stock enough for months/days	Ease of use (1-5 scale: 5 very easy 1 very difficult)
55. Forms for stock management	<input type="checkbox"/> Yes <input type="checkbox"/> No		
56. Requisition form	<input type="checkbox"/> Yes <input type="checkbox"/> No		
57. Issue Form	<input type="checkbox"/> Yes <input type="checkbox"/> No		
58. Receipt voucher	<input type="checkbox"/> Yes <input type="checkbox"/> No		
59. Bin Card	<input type="checkbox"/> Yes <input type="checkbox"/> No		
60. Tally Card	<input type="checkbox"/> Yes <input type="checkbox"/> No		
61. Damaged / Expired items record form	<input type="checkbox"/> Yes <input type="checkbox"/> No		
62. Stock-out record form	<input type="checkbox"/> Yes <input type="checkbox"/> No		
63. Drug Dispensing Register	<input type="checkbox"/> Yes <input type="checkbox"/> No		
64. Reporting formats			
65. Other formats (specify _____)	<input type="checkbox"/> Yes <input type="checkbox"/> No		
8. QUALITY OF DATA			
<p><u>Completeness:</u> (Select 10 different bin cards randomly and count the number of cards with complete entries)</p> <p>66. No of forms that had complete entries out of randomly selected 10 forms: _____</p> <p><u>Reporting accuracy:</u> (Select 2 monthly reporting formats of different period and select 3 data elements from each report and verify if these data elements are correctly compiled)</p> <p>67. No of data elements accurately compiled out of randomly selected 6 data elements. _____</p>			
9. COMMENTS AND SUGGESTIONS			
68. In your view, what are the main problems with the current ACT information system?			
69. Do you have suggestions for how the current system can be improved?			

THANK YOU FOR YOUR HELP!

Annex 6: Visited Sites by Level

Region / Niveau	Dakar	Thies	Kaolack	Diourbel	Total
Central	PNLP, SNIS et PNA	-	-	-	3
Regional	PRA Dakar		PRA Kaolack	PRA Dioubel	3
District	Guediawaye <input type="checkbox"/> ECD <input type="checkbox"/> Dépôt District <input type="checkbox"/> Centre Santé Guediawaye <input type="checkbox"/> Poste Santé Hamo V	Tivaouane <input type="checkbox"/> ECD <input type="checkbox"/> Dépôt District <input type="checkbox"/> Centre Santé Tivaouane <input type="checkbox"/> Poste Santé Médine Cherif Lo	Kaolack <input type="checkbox"/> ECD <input type="checkbox"/> Dépôt District <input type="checkbox"/> Centre Santé Kasnack <input type="checkbox"/> Poste Santé Gandiaye	Diourbel <input type="checkbox"/> ECD <input type="checkbox"/> Dépôt District <input type="checkbox"/> Centre Santé Diourbel <input type="checkbox"/> Poste Santé Keur Serigne Mbaye Sarr	4 4 4 5
Community	-	-	Case de santé de Gamboul	-	1
Total	8	5	6	5	24