

DRAFT

USAID/MOH
FAMILY PLANNING AND HEALTH
PROJECT OPTIONS

REPUBLIC OF GUINEA

ANNEX: HEALTH SYSTEMS ANALYSIS

Prepared by

William L.R. Emmet, II, Dr.P.H.

1. Overview of situation

In March and April 1994, a joint technical team from SEATS/JSI, BASICS, and WINS conducted an assessment of the health and family planning sector of the Republic of Guinea. The assessment, which was completed on April 22, was followed by a three-day meeting starting on 29 November 1994 at the American Cultural Center in Conakry between senior representatives of the Republic of Guinea's Ministry of Health and of USAID/Guinea. As a result of this meeting, participants were able to agree upon the general parameters for a Family Planning and Health Project for Guinea.

Subsequently, on March 2, 1995, The BASICS Project, in collaboration with Dr. Al Bartlett, CTO Global/H and Mr. Tom Park, Deputy Director of USAID/Guinea agreed upon the content of a BASICS Technical Directive, Project/Activity No. 00-GN-01-012 which called for the "... fielding of a five-person consultant team to Conakry, Guinea to perform a series of analyses and prepare strategy documents and annexes which USAID/Conakry will be able to use in the preparation of a long-term project design." The five-week scope of work specified under this directive was initiated on March 17 and was completed on April 21, 1995.

This annex, prepared by the Planner/Health Systems Specialist of the above-defined consultant team, provides background information in response to the following scope of work:

[To] Propose objectives for the institutional strengthening of the public health care system and strategies to attain them.

1a. Methodology

In acknowledging that it was necessary to complete as thorough a review of system-related issues as time permitted, this consultant should also acknowledge that the ambitious scope of work assigned to the consultant team called for each team member to rely upon the vast amount of materials and analysis available and the willingness of many respondents to provide us with much

of the information which we would need to move as rapidly as possible to the joint preparation of the analytical strategy document which precedes the annexes. As such, the methodology employed by this consultant for the preparation of this annex, followed two simple guidelines:

- To verify, clarify, correct and summarize but not repeat the findings contained in the many analytical documents and background papers noted in the bibliography attached to this report; and
- To work in an interdisciplinary approach with the other members of the consultant team in order to gain maximum benefit from their expertise and to avoid duplication in the collection and verification of information whose impact on systems analysis was shared in common with the disciplines (i.e. Finance, Drug Supply Management, Service Delivery [Child Survival, Safe Motherhood, HIV/Aids Prevention, Family Planning]) of one or more of the other team members.

As a final note on this consultant's methodology in preparing a background analysis on health systems for the strategic options presented in the body of this report, verification of data - either through a review of documents, through observations during limited trips to guinea's interior or through interviews with respondents listed at the end of this annex - focused on strengths, weaknesses, opportunities, and threats (i.e. assumptions, conditions precedent, and covenants which would help resolve issue beyond the control of an institutional contractor but essential to the success of the project) of system-related issues related to USAID/Guinea's Strategic Objective #2 and to the three targets (or sub-objectives) of that objective. While the exact wording of the strategic objective and of the three targets remains to be finalized, their general import can be summarized as follows:

Strategic Objective # 2: To increase access and utilization of quality sustainable family planning, mother-and-child health care, and HIV/AIDS preventive services.

Target # 2.1 To increase *demand* for MCH/FP and HIV/AIDS preventive services;

Target # 2.2 To increase *availability of quality* services; and

Target # 2.3 To increase *MOH capacity to implement policy reform* including decentralization, financial sustainability, and community participation.

As the reader will have already noted, each of the three *highlighted* portions of the three targets (e.g. demand-availability of quality services-Moh capacity to implement policy

reform) constitute the principal foci of the three strategic options proposed by this consultant team.

1b. Definition of "System"

Before turning to the results of this consultant's review of Guinea's health systems, it is important to define what is meant - in the context of this scope of work - by the term "systems". While available and acceptable definitions of this term are varied and legion, for the purposes of this report, the term "systems" is defined as:

A composition of managerial elements whose operational and technical viability is essential to the achievement of a program's goals and objectives.

In the context of the Guinea health care system - and as indicated in Table 1 - the managerial - or systemic - elements of the process contributing to the delivery of improved health care can be visualized as being part of a three-stage process: planning, development, and management. While space and time available for fully describing this process is limited, it is important to note the extent to which the health program manager can play a pivotal role in ensuring that the system works.

For example, in Step 2 of the continuum, which calls for a systematic approach to the dissemination of policies (including not only policies but also reforms and long and short-range planning), health program managers need to devise strategies which will respond to the informational needs of many different groups of constituents. In employing the term "constituents", it is important to note that health providers - doctors, nurses, midwives, laboratory technicians, etc. (especially those in pre-service and in-service training) - should be considered as constituents. For, a health program manager, in being responsible for the promotion of a policy focused on quality health care, must ensure there are systems in place to provide students with access to (a) norms, standards and protocols which accurately reflect current health care technology; (b) teachers who are qualified to teach the current health technology; and (c) supplies and equipment which will allow the student to practice what s(he) has learned. Should any of these system support elements - information, human resources, or material - not be available, the health program manager will fail in his/her task of developing a constituency committed to the promotion of quality health care.

Table 1 Systems Support: Points of intervention : Steps leading to Improved Health Care Service Delivery

Step 1: Planning Process	Step 2: Development Process	Step 3 Management Process
<p><u>Research</u> <u>Policy Formulation</u> <u>Program Definition:</u></p> <ul style="list-style-type: none"> - Policies - Reform - Long-Range Planning - Periodic <p>Planning</p>	<p><u>Dissemination & Constituency Development</u></p> <ul style="list-style-type: none"> - Health Care Client - Policy Maker - Opinion Leader - Health Manager - Health Provider - Donor <p>-----</p> <p style="text-align: center;"><u>Interventions</u></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border-top: 1px solid black; width: 100px; height: 10px;"></div> <div style="border-top: 1px solid black; width: 100px; height: 10px;"></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p><u>Training</u></p> <ul style="list-style-type: none"> Preservice Inservice On-the-job Workshops Seminars </div> <div style="text-align: center;"> <p><u>IEC</u></p> <ul style="list-style-type: none"> - Workshops - Seminars - In-field Promotion - Invitation- al travel - Coordination Meet- ings </div> </div> <p style="text-align: center; margin-top: 20px;"><u>Prime Beneficiaries</u></p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p><u>Training</u></p> <ul style="list-style-type: none"> - Health staff & managers </div> <div style="text-align: center;"> <p><u>IEC</u></p> <ul style="list-style-type: none"> - Policy makers - Health managers - Opinion leaders - Donors - Clients </div> </div>	<p><u>Resource Management</u></p> <ul style="list-style-type: none"> - <u>Human Resources</u> <ul style="list-style-type: none"> - Definition of Roles and Responsibilities - Career Development - Supportive Supervision - Reports and Feedback - Evaluation - <u>Drugs and Medical Supplies</u> - <u>Finances</u> - <u>Facilities</u> - <u>Communications</u> - <u>Service Delivery</u> <ul style="list-style-type: none"> - Quality Assurance - MIS - HIS - Supportive Supervision - Monitoring and feedback - Transport - Referral and support network

1c. USAID/Guinea : Opportunities for Systems Development: A Summary.

In attempting to arrive at a sense of priorities with reference to Guinea's health care systems development needs and to the three USAID/Guinea targets of demand, access to quality services, and MOH reform capacity, this consultant has reviewed more than 50 documents, interviewed 30 respondents, and conferred and worked in daily close collaboration with the other five members of the BASICS interdisciplinary design team. Although a more in-depth presentation of findings related to possibilities for intervention can be found in subsequent sections of this report, a list of priority interventions in each of the USAID/Guinea target areas would include the following key opportunities:

Target # 2.1 To increase *demand* for MCH/FP and HIV/AIDS preventive services:

Key opportunities:

- Develop and implement IEC strategy;
- Improve health center management: Finances and drugs; and
- Develop and implement community outreach program.

Target # 2.2 To increase *availability of quality services*:

Key opportunities :

- Develop health service areas (district sanitaire) to reinforce supervision and referrals;
- Develop in-service training strategy focused on continuous quality improvement; and
- Train health service managers in the concept and use of data for decision-making.

Target # 2.3 To increase *MOH capacity to implement policy reform* including decentralization, financial sustainability, and community participation.

Key opportunities:

- Implement strengthened decentralization policy;
- Develop donor coordination mechanisms; and
- Re-organize central-level drug management.

When considered in more detail and with categorized in the context of interventions suggested in Table 1, systems issues which continue to require attention if Guinea is to respond to

the health care needs of its growing population are presented in the following paragraphs.

Key Health Systems Issues Related to the Planning Process:
Guinea

a. Planning

Positive points:

- As noted in the 1994 assessment, many of the central-level personnel have considerable technical experience with the mechanics of developing planning documents. However, while building on this expertise, the MOH will also need to define appropriate planning roles of regional and prefectural hospitals and the management committees at prefectorate levels if the concept of decentralization is to realize its full potential.

Points of concern:

- During the consultant team's visit, the MOH was going through a personnel and administrative reorganization. Consequently, it was not yet clear where the BEPR, as the key unit within the MOH responsible for planning, could be most effective. If the BEPR is to play a significant role in planning the MOH's program of interventions, the consultant team believes that the MOH and the GOG will need to find a way to elevate its status within the MOH. In addition, consideration of increased emphasis on assignment of qualified personnel to the BEPR is a matter of some priority.

- With reference to the MOH's planning capacity, the consultant team was able to confirm one of the key findings of the 1994 assessment: Although there are workplanning sessions down to prefectorate level, MOH staff capacity remains weak in the practical application of program planning.

- While the use of a monitoring exercise at health center levels is positive evidence of an MOH understanding of the importance of vesting responsibility for management in staff who are responsible for program implementation, program monitoring at health centers has evolved into somewhat of a static exercise with little staff knowledge related to the operational importance of the information which is collected. In other words, once they collect and chart information according to established targets, health center staff are unable to apply the data to the identification of problem areas and of solutions.

- Many of our respondents identified the necessity for effective and comprehensive donor coordination. The consultant team shares this concern and strongly recommends that the GOG should take a lead role in coordinating the activities of donors and in developing a forum within which donors and GOG officials can work

together in coordinating and maximizing a carefully planned use of available resources.

b. Research:

Positive Points:

• During our assignment to Guinea, the consultant team noted that a number of our respondents showed very real interest in developing their skills in research and in finding resources to support their interest in applied operations research. We believe that this interest should be encouraged within the context of USAID/Guinea's proposed project. While the consultancy provided insufficient time to explore research needs in relation to MOH development issues, there are indications that the Centre National de Formation et de Recherches en Sante Rurale in Maferinyah might represent a base for development of research protocols and that, with sufficient but modest resources, Maferinyah staff could be utilized to provide training and technical support in research for MOH staff.

Points of concern:

- Despite evident interest in developing an MOH research capacity, the consultant team could find little evidence that use of research findings had contributed to the MOH's planning considerations.
- There is little evidence of an organized approach to the identification of issues which would benefit from development of operations research protocols.

c. Policy Formulation:

Positive points:

• The consultant team believes that it is important to note the MOH's very positive role in establishing and promoting policies of vital importance to the development of essential health care services throughout the country. While the GOG and its Ministry of Health will need to remain committed to the maintenance of policies which have been put in place, the donor community also needs to provide the GOG with the necessary support to provide for the continued maintenance of Guinea's advances in such areas as decentralization, cost-recovery, integration of services, focus on prevention, community involvement in management of health services, health center supervision through a biannual monitoring and collaboration among ministries - notably the Ministries of Education, Interior, and Health - in the promotion of health care delivery.

Points of concern:

- Despite its obvious commitment to policy focused on improving services, the MOH's ability to put policies into effect is becoming a problem of very real concern to the respondents with whom the consultant team had contact. For example, the Code de Famille remains in draft form and its stance on a woman's right to access to contraceptive technology without spousal approval remains unclear.

On its policy on decentralization, the MOH appears to have made little concrete progress in the policy's practical implementation since the 1994 assessment. Indeed, the majority of respondents, when commenting on the decentralization policy's application in the field, were unable to show any confidence in its being effective in promoting the transfer of responsibility from its current central-level focus.

- Redeployment of personnel and decentralization of the authority to manage human resources, management of drug supply, and decentralization of financial resources are all areas of policy development and reform which would benefit from attention under the proposed project.

- The consultant team is concerned with the MOH's inability to galvanize support for its policies in terms of being able to compete effectively with other ministries in seeking an equitable allocation of GOG's limited resources. Our concern in this regard was reenforced in our discussions with the Ministry of Administrative Reform when the Ministry of Health was characterized as a "delicate" ministry, unable to compete with a more aggressive and assertive Ministry of Education.

d. Training

Positive points:

- In our examination of training-related systems issues, the consultant team found itself in agreement with the 1994 assessment on training and the MOH's 1995-1997 policy on continuing education: Pre-service training policy has sought to underline the importance of exposure to actual field conditions and, in doing so, has placed a major emphasis on appropriate technology and use of available resources. Similarly, the MOH, with its policy of multi-disciplinary regional and prefectural training, has underscored the importance which it attaches to on-the-job training and attention to current conditions.

Points of concern:

- Unfortunately, MOH policy on training has not been operationalized. In pre-service training, due to structural

adjustment constraints and limited resources, pre-service training schools have been unable to find employment for graduates of the last six classes of students trained in midwifery, nursing and laboratory sciences. Students trained as physicians and as pharmacists have faced very much the same fate, with none of the groups of trained medical personnel having any aspirations for employment in the near future outside of the small private sector. Training institutions are in a deplorable state, with lack of supplies, training materials, and out-dated curricula very much in evidence.

- In-service training suffers from a lack of resources to support purchase of equipment and supplies. With much of the effort at health service supervision focusing on management and administration issues, regional and prefectural training teams' orientation to quality assurance is largely non-existent. As a consequence, health center clients have a justifiably low level of confidence in the care which they can expect to receive from their communities' health agents.

- With structural adjustment employment constraints likely to remain in force for the foreseeable future and with the very large amount of effort which is needed to respond to quality assurance issues associated with health staff currently working in health facilities, the consultant team would support use of USAID/Guinea funding to respond to the MOH's emphasis on in-service training while placing less emphasis on the 1994 assessment's recommendation focused on strengthening pre-service institutions. However, we would recommend that the project lend support to other donors' efforts to revise existing pre-service curricula with the idea that the revised curricula could be established as a standard to guide up-grading efforts focused on in-service training.

e. Information-Education-Communication (IEC)

Positive Points:

- While IEC represents one of the weakest system-related elements of the MOH's portfolio, the consultant team was able to confirm that development of a coordinated IEC strategy was an issue of importance for the great majority of our respondents. In addition, as was noted in the 1994 assessment, there is a considerable potential for donor support of IEC activities provided that the MOH can define its strategy. Although PSI/FAMPOP have made excellent progress in promoting family planning through its program of social marketing, the director of PSI/FAMPOP in Guinea has acknowledged that the development of a coordinated IEC strategy remains a priority which the new project could effectively address.

Points of concern:

- While we were unable to confirm the 1994 assessment's finding of considerable work having been done on KAP studies, we were able to confirm that health center staff have little access to community-oriented IEC materials. At the same time, it was evident that, even with access to IEC materials, health center staff lack sufficient training or policy orientation toward their effective use.
- Activities designed to reach communities through planned IEC interventions are non-existent. No real concept of counseling or promotion of primary health care was evident in any of the limited number of facilities visited by the consultant team.
- The consultant team strongly believes that the GOG's positive attitude toward primary health care and integrated services could represent a positive force in that it could be supported through the use of IEC materials and counseling to respond to life-threatening illnesses such as diarrheal disease which accounts for 9% of child mortality and 15% of outpatient visits. At the community level, work on behavioral change needs a special emphasis because of the population's lack of orientation toward health centers.
- The consultant team has found that there is little understanding that IEC is also for health workers and for decision makers. We believe that USAID/Guinea assistance could effectively direct some of its resources to both target groups, with special attention to the need to promote and extend family planning and quality breastfeeding practices.
- The consulting team would support the recommendation of several of our respondents with regard to the development of a private sector IEC capacity. We believe that there is sufficient talent within Guinea's private sector which could be tapped to assist the GOG in the development of effective IEC materials and campaigns.

f. Human Resources

Positive Points:

- As discussed earlier, Guinea has developed a policy on redeployment of personnel but, as noted by the 1994 assessment, this policy remains to be implemented.

Points of concern:

- As in many countries throughout the world, human resource development in Guinea requires immediate and concerted action. As noted in the team's discussions with PSI/Fampop, turnover of

trained personnel is of such magnitude that as much as 25% of staff trained by PSI/Fampop are lost to attrition on an annual basis.

- While the World Bank is currently committed to addressing the question of job descriptions, there is real doubt whether the GOG has the ability to effectively apply job descriptions toward the rational redeployment of personnel.

- As noted earlier, current structural adjustment constraints on hiring of additional personnel would indicate that it will be some time before any identified additional personnel needs could be acted upon. As also noted, health staff are currently being trained in substandard conditions for positions which do not exist.

- While many of our GOG respondents have suggested that the project should make resources available to provide TOT (training of trainers) training for a wide variety of staff, the consultant team believes that USAID/Guinea resources would be better used in training a core of regional trainers whose job descriptions would call for them to coordinate all training within a region.

- While it has also been suggested that the number of trained personnel is insufficient to respond to the nation's needs, the consultant team would agree with a minority of our respondents who, aware of current under-utilization of health services, have called for a policy of upgrading the quality of current personnel before attempting to train additional staff.

g. Drugs and Medical Supplies

Positive points:

- As discussed in other annexes of this report, much of Guinea's progress on drug and medical supplies management deserves praise. Guinea's essential drug list, which includes contraceptives, is a working document used to manage Guinea's disbursement of drugs to health center clients. The consulting team has been able to confirm that regional warehouse record keeping systems appear to be solidly based and up-to-date.

Points of concern:

- Despite the above progress and record of solid achievements, there is considerable concern with the viability of Guinea's policy of autonomous health centers. While Guinea has certainly lead the way in attempting to institute the spirit of the Bamako initiative, drugs are considerably underpriced and little is known with regard to clients' ability to support additional cost increases related to drugs.

- Respondents have suggested to the consultant team that the MOH and prefectorate management teams need to work more closely with the communities to gain their support for increased drug prices. It is their belief that, if the community is fully informed and aware of the need to raise prices, it would be feasible to implement the necessary increases in drug costs. Indeed, with dispensing practices in health facilities leading to serious over-prescribing, the consultant team believes that additional emphasis on rational drug use would lead to decreased costs to the client.

- The 1994 assessment reported stockouts in a limited number of drugs. Field visits confirmed that this is becoming more of a problem leading to a dependency at hospitals on technical assistance to provide the necessary drugs and - at health centers - on the parallel market to do the same.

- Serious questions have been raised with reference to UNICEF's continuing support for purchase of vaccines. According to our respondents, Japan has committed itself to supporting 1/3 of future drug purchase costs with financing for the remaining 2/3 currently in doubt. Nevertheless, the consultant team does not support a suggestion that the new project should be engaged in providing funds for vaccine purchases. We believe that, given UNICEF's success in fund raising, purchase of vaccines can be assured through other funding sources.

- All respondents would agree that the Central Pharmacy (PCG) management is in need of a total realignment. Although the 1994 assessment stated that the new drug distribution system (i.e. PCG) offered Guinea an opportunity to "do it right the first time", unfortunately, all respondents now agree that the system is near collapse and emergency measures are called for. While a number of our respondents have suggested PCG should be disbanded, the consultant team believes that it would be better to attempt to work to improve what exists rather than to start over.

h. MIS/HIS

Positive Points:

- As earlier noted, Guinea's highly developed system of "monitorage" can be viewed as having set the standard for other countries' management of the Bamako initiative. In the consultant team's limited visits to the field, we were able to confirm that the monitoring system - however limited - does provide a solid base for management.

Points of concern:

- Although the monitoring system's six-month scheduling would appear to be strictly followed, the consultant team has confirmed

that the results are focused on numbers rather than quality. While the system of monitoring appears to be very detailed, health center staff have difficulty in determining priorities for action related to the information which they collect. In addition, we were able to confirm that staff are sufficiently skilled in data reporting to be able to manipulate the data toward more positive conclusions.

- Health center staff, while adept and conscientious in the collection of data, have little understanding of the importance of the data or of its use for management purposes. In addition, with targets set on the basis of 1983 population figures, data related to achievement of targets is highly suspect.
- With the last feedback on data dating back to 1992, the role of BEPR needs to be reconsidered and strengthened. While the recent DHS provided valuable information on a variety of indicators, the current and continued lack of reliable population data makes it difficult for us to have an accurate picture of the nation's delivery of health services. An orientation focused on a situation analysis would help complete the picture provided by the DHS.

i. Finances

Positive Points:

- From the consultant team's discussions with respondents, we can confirm that there is a very real interest and considerable experience at the health center level with the management of funds generated by the sale of drugs and services. During our limited visits to the field, we were able to observe that health centers had adopted a standard - albeit under-funded - system of financial management and forecasting.

Points of concern

- While the consultant team confirms and agrees with many of the findings of the 1994 assessment related to financial management, we seriously question the assessment's suggestion that a decrease in drug costs to the client will result in increased demand. Under UNICEF financing, drug costs have remained unrealistically and we do not believe that current pricing structures are sustainable. However, we were able to confirm that little knowledge exists on the clients' ability to pay for increased costs and we support the assessment's recommendation that studies in this area should be undertaken.
- Although this report's annex on finances will explore financial issues in much more detail, this analysis on systems-related financial issues should note that adherence to the preservation of 60 percent of the "reserve fund" has led to the development of

unrealistic budgets, faulty depreciation scheduling, and a reluctance to use funds to develop activities beyond a fixed number of catchment area communities.

• At the same time, Guinea's lead in instituting the Bamako initiative has led donors to believe that a great majority of the health centers are moving towards autonomy and self-sufficiency. On the basis of our field observations and of our discussions with respondents, the consultant team considers to be false and misleading any suggestion that the majority of health centers in Guinea will, at any time in the future, be in a position whereby they will be self-sufficient. All indications would point to the need for a long-term donor and GOG commitment to health centers for continued financial support for salaries, for the purchase of vaccines and contraceptives, for capital improvements, for the purchase of transport (vehicles for hospital referrals and motorcycles for health center outreach activities), and for the purchase of medical equipment and supplies especially in the area of appropriately-defined laboratory configurations and cold chains.

j. Facility Maintenance

Positive Points:

• Although the consultant team noted little attention to the actual application of preventive maintenance procedures at either health centers or prefectoral hospitals (except for that which is supported by donor contributions), respondents responsible for facility management all recognized the importance of this issue and were interested in technical assistance in this area. In one of the centers which the consultant team visited, we were pleased to note that the health center manager had used his reserve fund to repair a leaking roof and to hire a cleaner. In addition, a number of respondents cited the existence of strong community spirit as a positive factor in being able to look for support from the community in the context of "self-help" initiatives focused on improvement to existing structures. As noted several times in this report, the key to the development of such cooperation would appear to rest with the definition and application of a community outreach/I.E.C. strategy.

Points of concern:

• As noted above, there would appear to be little funding available for day-to-day facility maintenance of hospitals except for those supported by donors.

• With respect to health center maintenance, every health center visited by the consultant team suffered from weaknesses in facility and equipment maintenance. While the time constraints and scope of work of the assignment prevented the team from

focusing on this most important issue, we were able to confirm that, of those centers visited, most were without running water, many lacked basic equipment to facilitate appropriate laboratory diagnoses, and all suffered from the need for structural repairs so necessary to the maintenance of a facility's presenting itself to the community as an institution concerned with quality care. The consultant team believes that, in addition to increased financial support for capital improvements, facility maintenance could be markedly improved with the help of simple maintenance manuals and with an increased emphasis on facility and equipment maintenance during monitoring visits.

k. Communications, coordination, and supportive supervision

Positive Points

• The consultant team was able to confirm the assessment's findings on the existence of health center management committees and the maintenance of a biannual monitoring schedule. Knowledge of health center activities on the part of prefectural health officers was clearly in evidence and the relationship between the health center manager and prefectorate appeared to be one based on mutual trust and respect. As noted earlier, collaboration with the Ministry of Interior's prefectural-based Director of Microrealization helped to focus attention on community development in the delivery of services.

Points of Concern

• While it would appear that the monitoring system is carried out on schedule, it would also appear that most of the attention on monitoring was directed toward administration and management rather than quality assurance. And, despite the existence of the monitoring system, supervision continues to be weak in the sense that it lacks an emphasis on the application of practical measures to respond to identified deficiencies. As noted in the 1994 assessment, regular visits focused on technical quality care issues are infrequent and, when scheduled, often canceled because of a reported lack of funding.

• The consultant team was also able to confirm that lack of communications exacerbated problems associated with lack of transport for referrals. We believe that, with support from the USAID/Guinea project, radio communication in the project's areas of concentration would help focus health center manager's attention on the importance of timely referrals. At the same time, it should also be noted that, in areas where communication systems presently exist, prefectural and health center managers are less than effective in using the system to improve communications or to respond to needs associated with improved quality of care. Thus, in addition to providing funding for the installation of a radio communication system, USAID/Guinea should

consider supporting training initiatives designed to instruct communications users in ways in which they can most effectively employ the established communication system.

1. Service Delivery

Positive Points:

• A large percentage of existing health centers (300 out of 386) have integrated programs of PHC. On the basis of its field observations and its discussions with respondents, the consultant team sees no reason to question the ability of the MOH to respond to its resolve in being able to reach 100 percent coverage by the end of 1995. The consulting team also confirmed that Guinea has every reason to be proud of the continued commitment of its staff and of its administrators to integrated services and to the importance of an effective balance between curative and preventive services.

Points of concern :

- Despite Guinea's impressive record in employing limited resources to provide for integrated PHC services throughout the country, earlier sections of this and other annexes have registered the consultant team's concern with the quality of care provided under the program of integrated services. To summarize the major points:
- Health center staff routinely over-prescribe medications due to a lack of supervision and due to the staff's inability to effectively use available diagnostic and treatment algorithms;
- Quality of care is deficient both in terms of health agent knowledge and practice and in terms of the availability of basic drugs and medical equipment;
- Clients right to privacy is largely ignored due to a lack of sensitivity training of staff and due to poor physical planning of health facilities;
- Client attitude toward care provided by the center is negatively influenced by the poor staff counseling skills.
- A strategy for community outreach activities, while present on paper, remains unsupervised and is given only passing attention by health center staff who regard such activities as being beyond their scopes of work.
- In the many instances where staff were clearly interested in providing quality care, morale was low due to staff awareness of their technical insufficiencies and due to lack of basic equipment and drugs to support the provision of quality care.

• Maternal mortality (most positive rate is 666/100,000) and under-5 mortality (250/1,000) remain issues of real concern and are largely due to poor communication with communities, lack of an effective referral system, and inability of staff to identify and respond to high risk clients. On the issue of maternal mortality it is important to note that a recent study indicated that, in Guinea, maternal mortality could be reduced to less than five per cent if high risk patients could get to the nearest district hospital within 12 hours of the identification of the emergency.

1d. How do systems work together: Strengths and weaknesses.

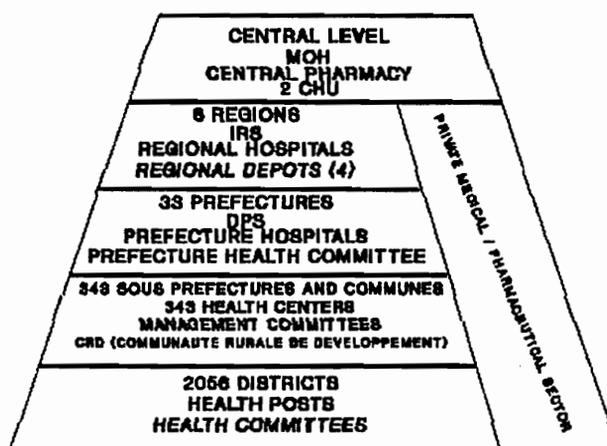
Currently, Guinea's health service delivery structure can be described as presented in Figure 1. As space and time constraints do not allow for a detailed analysis of Guinea's health system, the following comments are meant as a summary of major strengths and weakness of each divisions within the structure:

The central level of Guinea's health service delivery structure is currently in a state of flux due to the GOG's reorganization plan. At the current time, it would appear that the status and hierarchial positions of both the BEPR and MCH/FP within the MOH's organogram are under study. However, both units need to have a strong role and place within the central level if issues related to policy making and reform in the areas of planning and of delivery of quality services are to be effectively addressed. Central

level personnel continue to see one of their primary roles as being focused on supervision rather than on the development and dissemination of policy. However, if - as suggested by World Bank efforts on job descriptions - the concept of decentralized authority should include an emphasis on delegation of responsibility, central level personnel's traditional emphasis on supervision promises to be focused on regional level support.

Guinea's four health regions will shortly be expanded to eight, with Upper Guinea being one of those regions which will be split into two separate regions. The regional inspector of health is nominally responsible for health activities within his region with a specific responsibility for training, supervision, administration, quality assurance, and equipment maintenance. However, at the present time, regional officials have little

REPUBLIC OF GUINEA HEALTH CARE DELIVERY SYSTEM



SOURCE: ILO/OP, USAID/GE/INHA

access to funding with which to carry out their responsibilities. Each of the existing four regions has a regional hospital and three of the four - including both of the USAID target regions - has a regional depot. All respondents would agree that the region's greatest needs rest with definition of roles and responsibilities and concomitant access to resources with which to respond to their defined roles.

Each of Guinea's 33 prefectures is overseen by a Prefecture Director of Health, with each having a hospital, and a prefectural health committee. Each hospital has an administrative council. In addition, each prefecture has a defined number of subprefectures and health centers within its area of responsibility. With the GOG's interest in decentralization, each of the prefectures could develop its own health service area or HSA (i.e. "district sanitaire") which, with the help of the Ministry of Interior's Director of Microrealization could unite its prefectorate hospital (as a referral center), its health centers and its communities in a coordinated approach to the delivery of appropriate levels of quality health care. Although prefectorate health directors currently lack the managerial skills and resources to institute such a concept, donor agency respondents all indicated their interest in supporting the development of HSAs.

As presented in the option papers on increase in demand and on access to quality, the consultant team has recommended working in two regions (Upper Guinea and Forest Guinea) and in five of the prefectures in which PSI has introduced family planning activities and in which other donors are not currently working. If the option for either demand generation or access to quality is chosen, technical assistance in the two regions will involve close collaboration with 30 health centers, with their communities, and with members of each subprefecture's CRD (Committee Rurale de Developpement). Population estimates and current staff ratios in terms of midwives and nurses per catchment area populations for the 30 health centers is presented in Table 2.¹ The analysis would indicate that there is an average of one nurse for every 1,989 inhabitants in the target area and one midwife for every 5,203 inhabitants for a ratio of approximately one midwife for every four certified nurses. This data would clearly indicate that midwives assigned to health centers are in very short supply and that, if USAID is to work with the health centers in upgrading either quality or demand, much of the work will have to focus on upgrading the skills of

¹ Information on populations, staffing patterns, and utilization patterns were obtained from the Rapport de Synthèse National published by the Ministry of Health in April 1994. However, as cautioned in the SEATS/JSI 1994 assessment, population-based information should be considered generally underestimated as the last full census was performed in 1983.

the nurses - especially in the area of safe motherhood. In addition, with many of the health centers dependent on auxiliary nurses (ATS) to carry out the duties normally reserved for midwives, it would seem important for resources to be spent upgrading the quality of their technical skills.

Districts: Throughout Guinea, there are currently 2056 districts in each of which Guinea plans to establish a health post, staffed by a village midwife (Accouseuse villagois). While it was not possible for the consultant team to assess whether there was a village midwife in every village health post in the 30 subprefectures in which the project may be working. However, available data does indicate that, in the 22 target subprefectures in Upper Guinea, there are 28 health posts - or one for every 10,000 inhabitants. In the eight target subprefectorates in forest Guinea, there are 12 health posts - or one for every 8,000 inhabitants. While currently not used to any effective degree, the health posts represent an excellent opportunity for basic preventive health care and for the development of IEC initiatives.

TABLE 2. REPORTED RATIO OF MIDWIVES AND NURSES TO POPULATION IN TARGET CENTERS

PREFECTURE	U=URBAN R=RURAL		REPORTED TOTALS PER CENTER		ESTIMATED RATIO TO POPULATION	
	HEALTH CENTER	TYPE	POP.	MIDWIVES NURSES	MIDWIVES	NURSES
<u>UPPER GUINEA</u>						
FARANAH	BANIAN	R	25329	2 6	12664	4222
	FARANAHCEN.	R	25421	1 7	25421	3632
	MARELA	R	11410	1 4	11410	2852
	TIRO	R	11777	3 4	3926	2944
KANKAN	BALANDOU	R	11262	NA* 5	NA*	2252
	KARIFAM.	R	8634	1 6	8634	1439
	BATENAFADJI	R	19223	3 4	6408	4806
	TOKOUNOU	R	9693	1 5	9693	1939
	BARANAMA	R	6264	NA* 1	NA*	6264
	TINTIOULEN	R	7056	1 5	7056	1411
	MISSIRA	R	6164	NA* 3	NA*	2055
MORIBAYA	R	9295	2 1	4648	9295	
KOUROUSSA	CISSELA	R	13340	6 7	2223	1906
	SANGUIANA	R	11029	1 4	11029	2757
	BARO	R	8699	1 2	8699	4350
	BANFELE	R	10797	1 3	10797	3599
	BALATO	R	10561	NA* 3	NA*	3520
SIGUIRI	FRANWALIA	R	7310	1 5	7310	1462
	KINTINIAN	R	16761	1 7	16761	2394
	DOKO	R	17636	4 12	4409	1470
	NORASSOBA	R	18806	3 5	6269	3761
	SIGUIRIK.	R	11056	1 1	11056	11056
<u>FOREST GUINEA</u>						
MACENTA	MACENTAB.	U	24226	2 27	12113	897
	KOYAMA	R	15678	5 5	3136	3136
	BALIZIA	R	8551	3 7	2850	1222
	DARO	R	8971	6 6	1495	1495
	KOUANKAN	R	9257	3 7	3086	1322
	PANZIAZOU	R	6509	6 5	1085	1302
	SEREDOU	R	10327	5 9	2065	1147
	BOFOSSOU	R	11414	1 4	11414	2854
TOTALS			TOTAL POP.	MIDW. NURSES	AVERAGE RATIO TO POPULATION	
			372456	65 170	MIDWIVES	NURSES
					5203	1989

* NA = Information not available

2. Emerging Issues

Introduction

As part of the process in determining priority interventions and options for addressing the key development needs associated with the proposed Guinea Health and Population Project, this consultant was able to call upon the advice of a considerable number of respondents in both the government and with the donor committee. In an effort to summarize respondents views on emerging issues and ways in which USAID/Conakry might provide assistance on selected issues, the following tables provide an overview of interventions suggested by (1) Government of Guinea officials (2) Donor Community officials - including USAID/Conakry staff; and (3) Members of the BASICS consultant team. As can be noted in Tables 3 - 12, the presentation of emerging issues follows general systems categories outlined in Table 1 of this annex.

2.1 Emerging Issues by Systems-Related Points of Intervention

Table 3. Guinea Health and Population Project: Issues Emerging: Research		
GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Include research as a major component of the project. - Provide support to CNRSC Maferinyah as research center. - Develop strategy for involving Comite de Sante in development of research priorities, protocols, and in their implementation. - Coordinate with universities on research. 	<ul style="list-style-type: none"> - Fund research literature review for health-related research performed in Guinea and in West Africa. - Develop research capacity related to epidemiology. 	<ul style="list-style-type: none"> - Link research to project implementation needs, - Establish coordinating committee for research. - Focus research on ways in which to increase (1) referrals (2) community development (3) innovation in decentralized management of health services.

Table 4. Guinea Health and Population Project: Issues Emerging: Policy, Reform, Project Management

GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Work with Ministry of Finance to transfer finances to prefectorate level. - Develop, in collaboration with Ministry of Finance, financial management procedures manual for prefectorates. - Upgrade status of SMI/PF to directorate level. - Encourage implementation of World Bank work on roles and responsibilities. - Provide central level with expert assistance on administrative reform. - Develop guidelines to assist with emerging role of Comite de Sante. - Develop and implement policy to integrate hospitals into decentralization effort. - Manage USAID Project on two levels: (1) Central: Comite de Consultation (2) Prefectorate: Comite Restraint. 	<ul style="list-style-type: none"> - Develop and implement strategy for strengthening . - Develop and implement strategy for increasing coordinated planning capacity among all levels with appropriate and defined delegation of authority and responsibility per level. - Develop and implement strategy to empower local groups and thereby promote governance. - Assist in development of policy which will strengthen role of prefectorate. - Develop policy to increase role of NGOs. - Focus project interventions on strengthening what has been accomplished. - Encourage institutional contractor role as broker for health service needs which USAID may not be able to provide. - Address problems associated with customs and clearance of project commodities. 	<ul style="list-style-type: none"> - Review Bamako initiative to assess need for adjustment. - Develop and implement policy to coordinate donor activities. - Situation analysis as bridging activity prior to project startup.

Table 5. Guinea Health and Population Project: Issues Emerging: Training

GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Train more personnel for service delivery level. - Develop collaboration between Min. of Education and MOH on pre-service training. - Include preventive health norms and standards in pre-service training curricula. - Develop effective program of recyclage for MOH field staff. - Develop community-based training programs for mothers. - Developing in-service training in quality assessment. - Support complete review of training curricula. - Develop in-service training in management. - Support needs assessment and provide training directly linked to findings. - Provide training at district hospitals and at health centers in preventive maintenance. - Provide basic training in MIS for key health center personnel. - Train central level in management. 	<ul style="list-style-type: none"> Support needs assessment. - Train core of master trainers at regions. - Center training for midwives in Conakry to ensure enough practical experience. -Develop norms and procedures as a bridging activity. - Adapt training materials to reflect current policy and technology. 	<ul style="list-style-type: none"> - Include safe motherhood in pre-service and in-service training. - Include breastfeeding in pre-service and in-service training. - Concentrate project's efforts on in-service training with additional support for development of norms and standards which can be used in pre-service program development. - Concentrate TOT training on core of trainers at regional level rather than TOT for all.

Table 6. Guinea Health and Population Project: Issues Emerging: IEC		
GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Assist MOH to revitalize and coordinate IEC efforts. - Link EPS with SMI/PF IEC Program. - Develop IEC program for mothers in communities. 	<ul style="list-style-type: none"> - Support private sector capacity for development of IEC materials rather than develop IEC materials development capacity within MOH. - Coordinate IEC strategy at central level. 	<ul style="list-style-type: none"> - Develop IEC program for adolescent health care promotion.

Table 7. Guinea Health and Population Project: Issues Emerging: Human Resources		
GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Review salary scales and support GOG efforts to find ways to increase salaries where indicated. - Apply deployment policy. 	<ul style="list-style-type: none"> - Develop strategy for addressing attrition rate which equals 25% per annum among mid-wives. - Apply deployment policy with emphasis on service delivery levels. 	<ul style="list-style-type: none"> - Develop computerized center-specific human resource data file for target areas. - Define roles and responsibilities for health personnel.

Table 8. Guinea Health and Population Project: Issues Emerging: Supervision		
GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Focus on supervision to promote quality. - Develop an effective "Grille de supervision". - Review, modify, and update, and expand existing norms and standards. - Develop supervision and monitoring tools to assist health center/district sanitaire referral process. 	<ul style="list-style-type: none"> - Include drug use in the monitoring system. - Clarify norms, standards, and protocols related to supervision. 	<ul style="list-style-type: none"> - Encourage accent on quality delivery of services rather than on simply on management issues.

Table 9. Guinea Health and Population Project: Issues Emerging: Service Delivery

GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Re-enforce integration of services. - Improve referral process: Only 60% of people referred ever arrive at referral point. - Use ATS more effectively. - Expand services to increase coverage. - Focus on quality assurance. - Increase access to family planning from current level of 130/450 facilities. - Develop and implement strategy to reenforce concept of district sanitaire. - Focus on practical improvement of priorities at health center level. - Develop and implement strategy to increase community participation. - Develop and implement strategy for CRD participation in service delivery. 	<ul style="list-style-type: none"> - Develop effective role for health posts and expand health post coverage. - Develop program for effective community-based distribution to respond to basic preventive and curative and family planning needs. - Support role of private sector in extending and improving services. - Use Peace Corps volunteers as catalyst for service delivery at health center levels and to assist with management issues at prefectorate levels. 	<ul style="list-style-type: none"> - Integrate sick child algorithm into services offered. - Encourage continued commitment to integration. - Develop competency in safe motherhood. - Encourage breastfeeding promotion as integral part of services offered. - Expand, as practical, services to communities and role of village health agent.

Table 10. Guinea Health and Population Project: Issues Emerging:MIS/HIS		
GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Support revitalization of MOH research unit. - Assist health center managers to use data for management purposes. - Support census to update 1983 population data. - Develop practical, in-field training course to develop decentralized MIS/HIS capacity. 	<ul style="list-style-type: none"> - Develop central-level financial management data file. - Develop central data file on donor activities. - Coordinate MIS efforts being developed by individual donors. 	<ul style="list-style-type: none"> - Develop MIS/HIS strategy. - Develop active program of use of data for decision making purposes at hospital and health center levels. - Improve health center record keeping with reference to need for follow-up.

Table 11. Guinea Health and Population Project: Issues Emerging: Finance		
GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Provide SMI/PF with an operating budget. - Explore voluntary contributions by communities to support referrals. - Clarify Director of Micro-Realization role in financial management. - Provide central level budget item to promote decentralization. - Develop financial management unit at the level of prefectorate. 	<ul style="list-style-type: none"> - Study drug pricing structure. - Assist health centers to improve management of operational costs at health centers. - Increase and clearly define role of management committees at each level of system. 	<ul style="list-style-type: none"> - Encourage better use of available finances at health center levels. - Support study on increased level of cost support by clients for purchase of drugs.

Table 12. Guinea Health and Population Project: Issues Emerging: Logistics and Drug Management

GOG ISSUES	DONOR ISSUES	CONSULTANT TEAM ISSUES
<ul style="list-style-type: none"> - Assist hospitals and facilities in establishment of management system for facilities and equipment maintenance. - Strengthen drug and medical supplies logistics system to ensure the availability of essential drugs and medical supplies at hospital and health center levels. - Explore possibilities to establish transport for logistics. - Support establishment of radio communication linking prefectorate headquarters (DPS) and hospitals with health centers. - Provide assistance in essential upgrading of health centers' physical structures. 	<ul style="list-style-type: none"> - Review options for revamping and revitalizing central pharmacy management and develop and implement strategy in coordination with all interested parties. 	<ul style="list-style-type: none"> - Develop strategy for strengthening central pharmacy.

3. Program assumptions

While other annexes in this report will address priority issues related to the other three foci of this assignment (finances, drug management, and service delivery), it is important to emphasize the strong relationship - in terms of assumptions - among each of four focus areas. While time and space constraints do not permit a comprehensive presentation of relationships, the following interventions in each of the above areas of development will need to be addressed if suggested responses to identified needs for improvement in Guinea's health systems are to have their desired effect:

3.1 Finance

Clearly, if suggested interventions are to be effective in responding to the need for improvements in Guinea's health care system are to be effective, the GOG's Ministry of Finance and its Ministry of Health will need to work together on the development of a stronger analytical base related to present and future health expenditures. Without such a base of information, the validity of any planned systems interventions must be seriously questioned.

3.2 Drug Management

As the linchpin without which any system of health service delivery cannot function, drug and medical supply management remains an issue of priority concern noted by all respondents with whom the consultant team conferred. With an initial emphasis on revitalization of the central pharmacy (PCG) and extending to the delivery and management of drugs and medical supplies, effective and concentrated USAID/Guinea assistance in this vital area of health services management promises to have far-reaching and long-lasting impact on Guinea's delivery of health care to its population.

3.3 Service Delivery

While acknowledging Guinea's significant commitment to primary health care and to the support of health service delivery through development of its network of health services, the quality of care currently delivered by these services must be addressed as a priority issue. As noted earlier in this report and in other annexes, USAID/Guinea support focused on quality assurance and on continuous quality improvement would appear to be the most viable and realistic approach for responding to this issue. Without such support, any improvements in systems management would be cosmetic.

4. Vision for the Year 2020.

As presented in this and in other annexes, priority issues and suggested solutions are viewed in the context of the somewhat limited vision of a 5-7 year technical assistance project. While each of the three options presented in the body of the paper assumes that the proposed scope of work can be carried out within the suggested time frame, it is important to clearly state that the consultant team considers the suggested interventions as representing the start of a long-term commitment to the support of the Republic of Guinea's remarkable advances in providing effective health care to its population. Drawing on our experience in a variety of other health settings, we are aware of the very real constraints under which Guinea has existed and with which Guinea has had to contend. At the same time, we are also very much aware of the strong dedication to continued development of its health system which has been exhibited by so many of Guinea's public servants. For this reason - and with an awareness of the uncertainties of continued long-term donor funding - we would urge a careful and considered step-by-step approach to health care service delivery focused first on the development of a solid base for continued quality and utilization of current services and second, as resources permit, on an expansion of those services to include those areas currently underserved.

April 27, 1995

List of Contacts

USAID/Guinea

Mr. Wilbur Thomas, Director
Mr. Tom Park, Deputy Director
Mr. Helene Rippey, TACS Advisor
Dr. Mariama Bah, Health Office
Ms. Sally Sharp, PPD Officer
Mr. Andy Lohof, Health/General Development Office
Mr. Charles Morgan, Design Officer
Mr. Kenda Diallo, Economist

Ministere de la Sante Publique et de la Population, Conakry

H.E. the Minister of Health
Dr. Bangoura Ousmane, Directeur General de la Sante
Dr. Seidu Pathe Barry, Cooridnateur PEV/SSP
Dr. Thierno Souleymane Diallo, Planificateur
Dr. Boubacar Toure, Charge de la Programme Maternite Sans Risque a la Section SMI/PF
Dr. Mahi Barry, Directeur de la Section SMI/PF
Mme. Diallo Fatoumata Fofana, Sage-femme, Charge de la Formation a la Section SMI/PF
Dr. Donzo, Economiste de la Sante a l'Inspection Generale de la Sante
M. Alpha Amadou Diallo, Biochimiste Charge de Recherches au MSPP
M. Diallo Abdoulaye, Chef de Division Infrastructure, Equipement and Maintenance au MSPP
Dr. Mohammed Sylla, Systeme Nationale d'Information Sanitaire (SNIS)
Dr. Cader Conde, Directeur national des Etablissements de Soins
Dr. Toure Mohamed Lamine, MPH, Directeur National de la Sante Publique
Dr. Sandouno, Inspecteur des Formations Sanitaires
Dr. Douno, Pharmacien a la Direction Generale des Pharmacies et des Laboratoires
M. Moussa Kourouma, Direction d'Administration et des Affaires Financieres
Dr. Setou Kaba Conde, Service SMI/PF
M. Kamano Aly, Sociologist, Cellule de Formation
Dr. Alpha Camara, MD, Cellule de Formation

Other Contacts in Conakry

Dr. Bintou Bamba, West African Regional Coordinator of the Societe Africaine des Femmes Contre le SIDA
Dr. Sidatty Mohamed Keita, SMI Coranthie
Ms. Connie Hedrington, Peace Corps Volunteer working at CPTAFE
Malcolm Donald, PSI
Dr. Ousmane Camara, Responsable Celllule d'Appui, Ministry of Interior
Mr. Jean Pierre Le Marc, MOH Adviser/EEC
Dr. Bernard Couche, Adviser in Systems Management, FAC/MOH

Dr. Antoine Ortiz, Advisr in Hospital Management, FAC/MOH
Dr. Mamadie Conde, Director, World Bank Health Project
Dr. Germaine Mahoudeau, MIS Adviser, FAC/MOH
Dr. Agniol Zinsou, Directrice, FNUAP/Guinea
Mr. Facinet Yattara, UNICEF Adviser on SMI/PF
Mr. Mamadouba Tounkara, Directeur National de la Decentralization

Kindia Hospital

Dr. Drame Lansana, Directeur Prefectoral de Sante de Kindia
Dr. Kondore Oulare, Directeur de l'Hopital de Kindia
Dr. Bacari Conde, Directeur de la Maternite de Kindia
Dr. Sekou Mohamed Sisse, Chief of Surgery, Kindia Hospital

Kindia Center Urban Health Center

Dr. Gilbert Milimono, Chef de Centre
Dr. Kankou Diabate, in charge of laboratory
Sage-femmes: Mme. Nyata Camara, in Charge
Mme Aissatou Seydi Diallo

AGBEF, Kindia

M. Lamine Diallo, Coordinateur Regional
Mme. Dalanda Bah, Sage-femme

Ecole de Sante de Kindia

M. Momo Soumah, Director
Student Nurses, Student Midwives, and Student Laboratory
Technicians

CERAC (Conseil Education Recherche Animation Communautaire)

Mme. Monique Kinde, Sage-femme, Presidente

Centre de Sante Rurale de Maferinyah

Dr. Fernandez, Medecin-Chef
Mme Diallo Halimatou, Sage-femme

Direction Prefectoral de Sante de Forecariah

Dr. Bangourah Nfaly, Directeur Prefectoral de Sante
Dr. Nassah Camara
Mme Conote
Mlle Binta Diallo, Statistique

Forecariah Health Center

Mme. Mayalan Krumah, ATS in Charge of Prenatal Care

Prefecture de Forcariah

M. Blaky Bangoura, Secretaire General des Collectivites
Decentralisees

Centre de Sante Rurale de Farmoriah

M. Fassouma Mara, Infirmier, Chef de Centre
M. Abdoulaye Bangoura, ATS Charge du PEV

Forecariah Hospital
Dr. Barry Ahmed, Acting Director