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# SUMMARY OF TECHNICAL ASSISTANCE REPORTS:

# HEALTH FINANCING AND COST RECOVERY SYSTEMS IN THE CENTRAL AFRICAN REPUBLIC (1986–1993)

Submitted to:

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and

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## LIST OF ACRONYMS

| | |
|---|---|
| ADB | African Development Bank |
| ALO | AID Liaison Officer |
| ARI | acute respiratory infection |
| C.A.R. | Central African Republic |
| CCCD | Combatting Childhood Communicable Disease Project |
| C.E.S | Health Economics Unit |
| CNHUB | National University Hospital, Bangui |
| DAAF | Directorate of Administrative Affairs and Finance |
| DEPS | Planning and Evaluation Unit |
| DRG | Diagnosis related group, a set of services classified together for reimbursement |
| FCFA | Monetary unit used in C.A.R. |
| HFS | Health Financing and Sustainability Project |
| LTA | Long-term advisor |
| MOF | Ministry of Finance, C.A.R. |
| MOH | Ministry of Health, C.A.R. |
| MOP | Ministry of Planning, C.A.R. |
| OCSS | Central African Social Security Office |
| ORS | Oral rehydration salts |
| REACH | Resources for Child Health Project |
| RUMER | Registry for Essential Drug Use and Receipts |
| SAF | Budget unit of DAAF |
| STD | Sexually transmitted disease |
| US | United States of America |
| USAID | US Agency for International Development |

# 1.0 INTRODUCTION

For the last decade the Government and Ministry of Health (MOH) of the Central African Republic (C.A.R.) have pursued reforms in health care financing for health services. With the primary goal of improving the quality and coverage of health care services, policymakers have sought to increase resources for the health sector. MOH and donor representatives consider current expenditures on health insufficient to provide adequate care to the population. In 1988 it was reported that total government and donor funds for health amounted to approximately 2,400 FCFA per capita annually. Shortages of basic drugs and supplies persist in urban as well as rural areas, hampering the provision of quality health care services.

In 1986 the Combatting Childhood Communicable Disease (CCCD) Project approached the USAID-funded Resources for Child Health (REACH) project, requesting its assistance to examine the population's participation in the financing of CCCD programs and other MOH health activities. REACH fielded a short-term consultant, and since then numerous REACH and later Health Financing and Sustainability (HFS) consultants have visited C.A.R. The consultants, and their MOH counterparts, have conducted over 10 studies and analyses of different aspects of health care financing. The principal focus has been on developing a cost recovery program that would require the population to pay for a portion of the cost of government health care services it receives.

This document summarizes ten REACH and HFS reports written by health finance specialists. They encompass broad assessments of the health care sector, descriptions of ongoing cost recovery programs and experiments, and results of a nationwide willingness to pay survey. Exhibit 1.1 lists the titles and authors of the ten reports, by type of report and in chronological order. To put the reports in context, Exhibit 1.2 provides a chronology of events and studies from 1976-1993.

The rest of this report comprises six sections. Sections 2 and 3 summarize the findings and recommendations, respectively, of the ten reports. They are organized by topic and in chronological order. The remaining sections organize the reports into four categories: Assessments (Section 4), Reviews of Cost Recovery Programs (Section 5), Analyses of Ability and Willingness to Pay for Health Services (Section 6), and Analyses of Costs and Prices of Health Care Services (Section 7).

**EXHIBIT 1.1**
**HFS AND REACH REPORTS CONCERNING COST RECOVERY PROGRAMS IN C.A.R.**
(arranged by report sections, and in chronological order)

| |
|---|
| **ASSESSMENTS** |
| Interim Report on the Analyses of Health Care Financing and Cost Recovery (Leighton, March 1990) |
| Assessment Report for Central African Republic (Setzer and Weaver, November 1990) |
| Draft Trip Report: Central African Republic, April 24–May 1, 1993 (Makinen, April 1993) |
| **REVIEWS OF COST RECOVERY PROGRAMS** |
| Feasibility Study for the Implementation of a System of Household Contribution to Health Financing (Pasnik, September 1986) |
| Proceedings from the Workshop on Health Care Financing in the Central African Republic (Makinen, Graybill, and Percy, April 1989) |
| Current Health Care Cost Recovery Systems in the Central African Republic, HFS Technical Note No. 15 (C.E.S., February 1992) |
| **ANALYSES OF ABILITY AND WILLINGNESS TO PAY FOR HEALTH CARE SERVICES** |
| Cost Recovery in Central African Republic: Results from Two Preliminary Surveys and Selected Interviews (Levin and Weaver, October 1987) |
| Willingness to Pay for Child Survival: Results of a National Survey in Central African Republic, Technical Report (Weaver et al., April 1993) |
| **ANALYSES OF COSTS AND PRICES OF HEALTH CARE SERVICES** |
| Trip Report: Central African Republic (Barker, February 1992) |
| Preliminary Study of Financing the Community Hospital and Proposal for Provisional Fees, Technical Note (Weaver and Ngueretia, September 1992) |

**EXHIBIT 1.2**
**HEALTH FINANCING CHRONOLOGY, CENTRAL AFRICAN REPUBLIC, 1974-1993**

| YEAR | EVENTS | DOCUMENTATION |
|---|---|---|
| 1974 | Health card system introduced. | |
| 1986 | Feasibility study of cost recovery for CCCD services. | (Pasnik, 1986) |
| 1987 | Preliminary willingness to pay study. | (Levin and Weaver, 1987) |
| 1988 | Plans for cost recovery roundtable seminar. | (Leighton, 1988) |
| 1989 | Adoption of health care financing law establishing partial financial autonomy for government health facilities. | (Law no. 89.003) |
| 1989 | Workshop on cost recovery planning. | (Makinen et al., 1989) |
| 1990 | Scope of work for long-term advisor for MOH Health Economics Unit drafted. | (Leighton, 1990) |
| 1990 | Assessment of C.A.R. health system and its financing. | (Setzer and Weaver, 1990) |
| 1991 | User fees at government facilities are established. | (Decree no. 91.065) |
| 1991-92 | Long-term advisor (Weaver) for Health Economics Unit in place; review of existing cost recovery systems, cost of services studies, and willingness to pay study. | (Barker, 1992); (Weaver and Ngueretia, 1992); (Weaver et al., 1993); (C.E.S., 1992) |
| 1993 | Assessment of preparations for implementation of cost recovery and planning for new phase of HFS technical assistance. | (Makinen, 1993) |

# 2.0 SUMMARY OF FINDINGS

## EXHIBIT 2.1
## FINDINGS OF HFS, REACH, AND C.E.S. REPORTS ON HEALTH CARE FINANCING IN C.A.R. (1986-1993)

| STATUS | FINDINGS | REPORT |
|---|---|---|
| | **Global/General** | |
| | There is a lack of close collaboration between MOH and Ministry of Finance (MOF) in the drafting of health budgets. | (Seminar Plenary: Makinen et al., 1989) |
| | The possibilities for community participation in health care financing include: consultations, drugs, hospitalizations, diagnostic procedures, curative care, preventive care, prepayments, and third-party payments. | (Seminar Plenary: Makinen et al., 1989) |
| | The only social financing program in C.A.R. is the Central African Social Security Office (OCSS), which, among its various benefits, covers a limited number of health expenses (50% of maternity care costs, and wages and medical care for affiliated workers). | (Setzer and Weaver, 1990) |
| | Cost recovery has been in practice for several years in private, and some public, health facilities. The most common payment method is fee-for-service, followed by fee per episode, payment per visit, and lastly prepayment for a year of service. | (C.E.S., 1992) |
| | The African Development Bank (ADB) wants MOH cost recovery policies developed before it commences its pharmaceutical supply project in January 1994. | (Makinen, 1993) |
| | **Pilot Tests of Cost Recovery** | |
| | Policymakers are receptive to the idea of cost recovery programs for C.A.R. as evidenced by the expansion of the pilot cost recovery program from Castors Maternity to four other Bangui public maternities. | (Levin and Weaver, 1987) |

**EXHIBIT 2.1 - FINDINGS (continued)**

| | | |
|---|---|---|
| | **Legislation Concerning Health Care Financing** | |
| | C.A.R. adopted a progressive health financing law (March 1989), which allows government facilities to retain and use cost recovery receipts for operating expenses. | (Setzer and Weaver, 1990) |
| | An April 1990 draft law sets fees for certain levels of government health facilities. It proposed fixed, per bed day, fees for hospitalization, and fees for outpatient care. | (Setzer and Weaver, 1990) |
| | A series of MOH complementary orders and decrees is needed to operationalize the new laws (once they have been signed). | (Setzer and Weaver, 1990) |

EXHIBIT 2.1 - FINDINGS (continued)

| | | |
|---|---|---|
| | **Health Sector Resources/Fee Revenues** | |
| | If every National University Hospital (CNHUB) patient paid 1,000 FCFA per day (official fees range from 0 to 5,000 FCFA per day), annual receipts would equal 231 million FCFA. Actual 1985 receipts were only 26 million FCFA. | (Pasnik, 1986) |
| | Yalcke Hospital's (a private facility) cost recovery efforts provide sufficient revenue to pay salaries, and all drug, maintenance, and supply costs. Castors Maternity (Public) cost recovery revenues pay for maintenance, supplies, and some drugs. The government pays for the remaining operating expenses. | (Levin and Weaver, 1987) |
| | Total level (1988) of government and donor funds for the health sector (excluding private expenditures) was 3,731 million FCFA ($11.8 million), or approximately 1,382 FCFA ($4.39) per capita. | (Seminar Plenary: Makinen et al., 1989) |
| | Total resources for health in C.A.R. are insufficient. | (Seminar Plenary: Makinen et al., 1989) |
| | From 1984–1988 the MOH benefitted from rising health expenditures and rising share of total government expenditures. Since 1988 overall government spending on health has decreased significantly from 3.5 billion FCFA in 1988 to 2.9 billion FCFA in 1990. | (Setzer and Weaver, 1990) |
| | Foreign assistance to the health sector averaged $10 million annually from 1984-1988. | (Setzer and Weaver, 1990) |
| | The majority of MOH health spending is devoted to personnel: 72% in 1988. Of 1988 non-salary operating expenses, 72% was allocated to curative care. Ninety % of curative care spending was in Bangui. | (Setzer and Weaver, 1990) |
| | Of 26 facilities surveyed (4 private and 22 public), the average % of operating costs recovered by user fees ranged from 94% (public urban maternities) to 5% (public prefectural hospitals). | (C.E.S., 1992) |
| | Assuming activity levels similar to CNHUB, Community Hospital user fee revenue is estimated at 237.9 million FCFA. This is equal to 34 % of operating costs, or 84 % of nonsalary operating costs. | (Weaver and Ngueretia, 1992) |

**EXHIBIT 2.1 - FINDINGS (continued)**

| | | |
|---|---|---|
| | **Ability and Willingness to Pay** | |
| | Much of the population has a very low income, meaning that fees must either be very low, or on a sliding scale. | (Pasnik, 1986) |
| | Group discussions indicated that people are willing to pay 100-500 FCFA for an episode of illness, up to 1,000 FCFA for a hospitalization or obstetrical delivery, and 500-1000 FCFA for a family health card entitling the family to free drugs when prescribed. | (Pasnik, 1986) |
| | Average Yaloke hospitalization expenditures (10,848 FCFA) represent 12% of annual per capita income; average drug purchases after visiting Mamadou M'Baiki (2,687 FCFA) represent 3% of annual per capita income. | (Levin and Weaver, 1987) |
| | Preliminary survey results found that 75% of respondents were willing to pay for care at government health facilities; 75% also responded that they were willing to pay for drugs at government facilities (assuming a sufficient supply). | (Levin and Weaver, 1987) |
| | The success of village pharmacies is another indication of the population's willingness to pay for health services and drugs. | (Levin and Weaver, 1987) |
| | Responses to survey questions indicate a majority of the population is willing to pay for quality improvements at government health centers: 64% are willing to pay for all seven proposed quality improvements; 74% are willing to pay for five of the seven quality improvements. | (Weaver et al., 1993) |
| | Rural respondents express a higher willingness to pay for quality improvements at government health centers than urban respondents. However reported expenditures for health care were higher in urban areas than in rural areas. | (Weaver et al., 1993) |
| | The populations in health regions IV and V have a lower median willingness to pay for quality improvements compared with region I. | (Weaver et al., 1993) |

EXHIBIT 2.1 - FINDINGS (continued)

| | | |
|---|---|---|
| | **Ability and Willingness to Pay (continued)** | |
| | Median total health care expenditures (facility fee, pharmacy, and transportation) for modern care (public and private) was 1,085 FCFA. | (Weaver et al., 1993) |
| | The estimated cost of the most expensive quality improvement (drugs for acute respiratory infection) was less than 2.4% of monthly household consumption. The amounts respondents reported they were willing to pay ranged from 4.4% to 9.0% of median household consumption. | (Weaver et al., 1993) |
| | Household expenditures for quality improvements at government health facilities will be less than current median monthly household expenditures for modern health care. | (Weaver et al., 1993) |
| | Health center and hospital fees proposed in government documents appear to be affordable to the great majority of the population. | (Makinen, 1993) |
| | The government hospital pricing document is difficult to understand, especially in regard to the system of "lettre clé." | (Makinen, 1993) |
| | **Cost of Services/Cost Containment** | |
| | The recurrent costs to operate new hospitals have a negative effect on strengthening rural health services. | (Seminar Plenary: Makinen et al., 1989) |
| | The average cost of drugs to treat common illnesses ranges from 5 FCFA to treat malaria to 1,018 FCFA to treat acute respiratory infections. | (Barker, 1992) |
| | A 200-FCFA fee for laboratory tests will cover the costs of consumable supplies for laboratory tests to detect intestinal parasites, malaria, and sexually transmitted diseases. This is less than the price of comparable tests performed at private facilities. | (Barker, 1992) |
| | The maintenance cost of the physical plant of an average government health center is 25-50 FCFA per user. | (Barker, 1992) |
| | The MOH is interested in the analysis of cost containment options similar to DRGs in the United States and other pricing systems that discourage over-use of hospital stays. | (Makinen, 1993) |

**EXHIBIT 2.1 - FINDINGS (continued)**

| | | |
|---|---|---|
| | **Prices** | |
| | Most government health services have no fees, however in reality patients pay for all or part of the cost of their care (side payments, drugs at private pharmacies, etc.). | (Pasnik, 1986) |
| | Government hospitals and maternal and child health centers have fees. The national hospital has five classes of patients charged fees ranging from zero to 5,000 FCFA per day. | (Pasnik, 1986) |
| | The population spends between $150,000 and $600,000 annually to purchase drugs at private pharmacies and at drug depots. | (Pasnik, 1986) |
| | It is difficult to explain and successfully implement a system of fees for preventive services. | (Pasnik, 1986) |
| | A preliminary survey of users at four health facilities revealed average expenditures ranging from 10,848 FCFA for hospitalization at Yaloke Hospital to 493 FCFA for a consultation (including drugs) at Foyer Charity. | (Levin and Weaver, 1987) |
| | An example of private health facility pricing structure is provided by Ippy Mid-Mission medical center. Drugs are marked up 63%: 39% for transport, 20% for handling, and the remaining 4% for insurance, taxes, and commissions. | (C.E.S., 1992) |
| | The fees outlined in Decree 91.065 are roughly comparable to the higher income category fees at mission facilities. The decree only has one fee category, whereas the missions have two or three fee categories (based on income level of patient). | (Weaver and Ngueretia, 1992) |
| | The fees outlined in Decree 91.065 differ substantially from the cost of care in the cases of X-ray exams (fee is more than double the cost) and inpatient stays (fee is less than half the cost). | (Weaver and Ngueretia, 1992) |

EXHIBIT 2.1 - FINDINGS (continued)

| | | |
|---|---|---|
| | **Incentives/Quality** | |
| | Private facilities appear to be chosen for quality of care (cleaner facilities and better equipment), whereas public facilities seem to be chosen because of their proximity to the user's home. | (Levin and Weaver, 1987) |
| | The system of bonuses for health care providers described in government documents may cause overutilization of medical procedures, as it is based on the number of procedures performed. | (Makinen, 1993) |
| | **Private Sector** | |
| | The private health sector is comprised of missionary, for-profit, and private company facilities. MOH data from 1988 indicate that private facilities only account for 3.5% of hospital admissions and outpatient visits. | (Setzer and Weaver, 1990) |
| | **Cost Recovery Preparation, Implementation, and Administration** | |
| | There is a need for at least three full-time persons, with special training in health care financing, to work as a health financing unit within the MOH. | (Leighton, 1990) |
| | Of the numerous studies and actions to be undertaken in preparation for cost recovery, eight have been completed by MOH and donors; six remain to be completed. | (Makinen, 1993) |
| | The role of the Health Economics Unit (Cellule d'économie en santé, [C.E.S.]) is to analyze, plan, and formulate recommendations, but not to implement the cost recovery program. | (Makinen, 1993) |
| | **Management Systems and Reform** | |
| | There is a permanent shortage of drugs at many rural health facilities; urban facilities also suffer from shortages. | (Pasnik, 1986) |
| | The health financing situation in C.A.R. is characterized by a lack of financial information for decision making. The result is a weak capacity for programming and financial planning. | (Seminar Plenary: Makinen et al., 1989) |
| | There is little management experience among local-level health personnel. | (Setzer and Weaver, 1990) |

# 3.0 SUMMARY OF RECOMMENDATIONS

## EXHIBIT 3.1
## RECOMMENDATIONS OF HFS, REACH, AND C.E.S. REPORTS ON HEALTH CARE FINANCING IN C.A.R. (1986-1993)

| STATUS | RECOMMENDATIONS | REPORT |
|---|---|---|
| | **Global/General** | |
| | Evaluate the entire health system and the capacity for financial management at each level of the public health system. | (Leighton, 1990) |
| | Collect baseline financial information on the health system from government ministries and donor organizations. | (Leighton, 1990) |
| | Consider construction of an outpatient wing at CNHUB to facilitate the collection of fees for outpatient services. | (Pasnik, 1986) |
| | **Dissemination** | |
| | Conduct a workshop/seminar to present cost recovery options for government facilities (conducted 1989). | (Levin and Weaver, 1987) |
| | Expand the seminar (proposed for fall 1993) agenda to disseminate results of recent analyses in order to allow decision makers to make necessary policy choices. | (Makinen, 1993) |
| | **Pilot Test of Cost Recovery** | |
| | Implement a pilot test of cost recovery at government health facilities. | (Pasnik, 1986); (Levin and Weaver, 1987) |
| | Begin the test at Castors Dispensary or Boy Rabe Dispensary; establish a revolving drug fund for chloroquine and ORS under CCCD program; after successful implementation of chloroquine and ORS revolving fund, establish a revolving drug and operating cost fund for all treatments and medications; charge all inclusive fee of 100 FCFA for visit, diagnostic exams and tests, and drugs. | (Pasnik, 1986) |
| | Establish a pilot test management committee within the MOH. | (Pasnik, 1986); (Levin and Weaver, 1987) |

EXHIBIT 3.1 - RECOMMENDATIONS (continued)

| | | |
|---|---|---|
| | **Legislation Concerning Health Care Financing** | |
| | Review laws and regulations concerning health care financing. | (Leighton, 1990) |
| | **Health Sector Resources/Fee Revenues** | |
| | Conduct a study of health sector fee revenues (current health facility revenues; revenue collection over the last 3–4 years; estimated gap between revenue remitted to government and potential revenue, given fees and utilization). | (Leighton, 1990) |
| | Conduct a study to estimate resources available to the health system from government, the private sector, communities, revenues from drug sales, and foreign assistance. | (Leighton, 1990); (Setzer and Weaver, 1990) |
| | Conduct a study comparing costs of planned health services to the available resources. | (Leighton, 1990) |
| | MOH should seek additional financial resources so that cost recovery prices are reasonable. | (C.E.S., 1992) |
| | **Ability and Willingness to Pay** | |
| | Conduct socioeconomic studies to determine family incomes (and ability to pay for health services). | (Seminar Plenary: Makinen et al., 1989); (Leighton, 1990) |
| | Conduct a demand study (household incomes and expenditures on health), a marketing study (willingness to pay for health care), and a socioeconomic study with focus groups (World Bank—planned). | (Setzer and Weaver, 1990) |
| | Conduct additional analyses of the national survey data to: 1) calculate mean and median monthly household expenditures, by rural and urban areas, and by health region; and 2) calculate ability to pay by median monthly household income, by income quintile, and by health region. | (Makinen, 1993) |

**EXHIBIT 3.1 - RECOMMENDATIONS (continued)**

| | | |
|---|---|---|
| | **Cost of Services/Cost Containment** | |
| | Conduct a study of costs of the priority health services; for hospitals the cost study should build upon earlier HFS/C.E.S. work by Weaver and Ngueretia, 1992. | (Seminar Plenary: Makinen et al., 1989); (Leighton, 1990); (Setzer and Weaver, 1990) |
| | Add a cost-containment study to the priority activities of C.E.S. | (Makinen, 1993) |

**EXHIBIT 3.1 - RECOMMENDATIONS (continued)**

| | | |
|---|---|---|
| | **Prices** | |
| | Family health cards can be priced at 525 FCFA ($1.50) to 5250 FCFA ($15.00) based on family income; co-payments of 100–500 FCFA (based on income information shown on health card) should be charged at time of outpatient consultation. | (Pasnik, 1986) |
| | The population should participate in the determination of fees. | (Seminar Plenary: Makinen et al., 1989) |
| | Considering the estimated costs of treating these common illnesses, the following prices are recommended (and include consultation, drugs, diagnostic tests, and building maintenance): 800 FCFA for parasites and sexually transmitted diseases; 250 FCFA for diarrhea and malaria (plus 250 FCFA for malaria diagnostic test if required); and 1,200 FCFA for acute respiratory infections. | (Barker, 1992) |
| | Cross-subsidizing of drug costs should be considered; for example, the price for parasite treatment might subsidize the price of treatment of sexually transmitted diseases (STD). | (Barker, 1992) |
| | Prices should be rounded for administrative ease. | (Barker, 1992) |
| | MOH should consider establishing two more hospital fee categories, "nonsalaries," at half-price, for farmers and other nonformal sector workers, and "assistes sociaux," at price of zero, for those who are unable to pay anything. | (Weaver and Ngueretia, 1992) |
| | Consider fees for inpatient procedures and exams; this will increase revenues and discourage unnecessary hospital admissions when patients wish to save the price of outpatient exams. | (Weaver and Ngueretia, 1992) |
| | Consider establishing a maximum fee per hospitalization at the Community Hospital. | (Weaver and Ngueretia, 1992) |
| | Introduce a surcharge for nonreferred patients. | (Weaver and Ngueretia, 1992) |
| | Establish a uniform standard for the "lettre clé" for medical and surgical procedures. | (Weaver and Ngueretia, 1992) |

EXHIBIT 3.1 - RECOMMENDATIONS (continued)

| | | |
|---|---|---|
| | **Prices (continued)** | |
| | It may be possible to charge higher fees in rural areas than in urban areas. | (Weaver et al., 1993) |
| | More work is needed on pricing health center and hospital services. Costs should be estimated and should be considered (along with other objectives) in the pricing strategy. Affordability should also be a pricing criteria. | (Makinen, 1993) |
| | In addition to a flat hospitalization fee, daily bed fees should be considered to eliminate the incentive for patients to extend their hospital stay. | (Makinen, 1993) |
| | **Fee Exemption Policies** | |
| | Fee exemption criteria should be developed for certain population categories. | (Seminar Plenary: Makinen et al., 1989); (C.E.S., 1992); (Makinen, 1993) |
| | The cost recovery program should consider that probably 25%–30% of the population will have to receive subsidized prices; health regions IV and V may require subsidies for a greater percentage of the population than other regions. | (Weaver et al., 1993) |
| | **Incentives/Quality** | |
| | Conduct a study analyzing the advantages and disadvantages of the current bonus system for doctors and other health personnel. | (Leighton, 1990) |
| | Prior to implementing cost recovery, provide health facilities with sufficient supplies to raise the quality of health care and increase coverage. | (C.E.S., 1992) |
| | Personnel incentives should be incorporated into the cost recovery system; they should be connected to health outcomes rather than the number of procedures performed. | (Makinen, 1993) |
| | **Private Sector** | |
| | Conduct an analysis of the private sector (advantages and disadvantages of private sector care; coverage and methods of financing; incentives for appropriate utilization of care; barriers to expansion). | (Leighton, 1990) |

EXHIBIT 3.1 - RECOMMENDATIONS (continued)

| | | |
|---|---|---|
| | **Cost Recovery Preparation, Implementation, and Administration** | |
| | Families should contribute to curative health services through prepayments and fees-for-service. | (Pasnik, 1986) |
| | Recommended evaluation criteria for cost recovery systems: equity, access to health services, sufficient resources for quality improvements, administrative feasibility, and efficiency. | (Seminar Plenary: Makinen et al., 1989) |
| | In preparation for analyses, MOH should strengthen DEPS: nominate a point person for health care financing; provide point person with a staff; train the health financing staff (short courses); and provide a consultant to work with DEPS on health financing issues. | (Seminar Plenary: Makinen et al., 1989); (Leighton, 1990) |
| | In preparation for the implementation of cost recovery, 12 studies on various aspects of C.A.R. health care financing are recommended: seven to be conducted in the short term and five in the long term. | (Leighton, 1990) |
| | Conduct a study of existing systems of payment for medical care (advantages and disadvantages, amounts paid by patients, incentives to use appropriate level of care, etc.). | (Leighton, 1990) |
| | Two payment options should be adopted in C.A.R.: fee-for-service and payment per episode. | (C.E.S., 1992) |
| | In preparation for implementation of cost recovery: conduct information, education, and communication campaigns. | (C.E.S., 1992) |

EXHIBIT 3.1 - RECOMMENDATIONS (continued)

| | | |
|---|---|---|
| | **Management Systems and Reform** | |
| | Before implementation of a cost recovery system, MOH must consider: the need for accounting and financial information systems; management ability at the facility level; and the creation of community management committees. | (Seminar Plenary: Makinen et al., 1989); (Setzer and Weaver, 1990) |
| | Conduct analyses of the decree to decentralize the health system, the role of community management committees, and needed administrative systems. | (Seminar Plenary: Makinen et al., 1989) |
| | Conduct an analysis of community financing and management (evaluate the performance of village pharmacies and village primary health care services; identify effective community financing methods for application to other parts of the country). | (Leighton, 1990); (Setzer and Weaver, 1990) |
| | Conduct a study of the availability of pharmaceuticals in government and private health facilities (supply and distribution systems). | (Leighton, 1990) |
| | Conduct a study of hospital financial management (current systems, shortcomings, and training needs). | (Leighton, 1990) |
| | Before implementation of cost recovery, develop monitoring and evaluation systems to assess impact. | (Setzer and Weaver, 1990) |
| | Accounting and management systems should be reorganized to increase transparency and eliminate abuse. | (C.E.S., 1992) |
| | Pharmaceutical accounts should be kept separately from other revenue accounts because of the importance of drugs to the treatment of illness and the perception of quality. | (Barker, 1992) |
| | Conduct a study of patient registration and fee collection at the Community Hospital. | (Weaver and Ngueretia, 1992) |
| | Contract with a private company to provide food service at the Community Hospital. | (Weaver and Ngueretia, 1992) |
| | **Training** | |
| | Develop a training plan for MOH health financing staff once they have been named. | (Leighton, 1990) |
| | Include management training as part of cost recovery implementation to improve the operational efficiency of health facilities. | (C.E.S., 1992) |

## 4.0 ASSESSMENTS

- Interim Report on the Analyses of Health Care Financing and Cost Recovery (Leighton, March 1990)
- Assessment Report for the Central African Republic (Setzer and Weaver, November 1990)
- Draft Trip Report: Central African Republic, April 24-May 1, 1993 (Makinen, April 1993)

## 4.1 Interim Report on the Analyses of Health Care Financing and Cost Recovery (Leighton, March 1990)

### Summary

Leighton traveled to C.A.R. for the REACH project to identify studies to be conducted to provide more information about cost recovery in C.A.R.; to develop a workplan for the completion of the studies; and to identify training needs of members of the MOH finance cell. Leighton identified seven studies to conduct in the short term, and five for the long term. The studies examine a variety of cost recovery and health financing issues, including legislation, the private sector, revenues, costs, and household expenditures. Leighton provided a short-term workplan and a plan for a collection of baseline data on health care financing.

### Introduction

REACH consultant Charlotte Leighton travelled to Bangui to follow up on recommendations made in the 1989 Health Financing Workshop. MOH held a planning meeting with Leighton at which she was asked to: a) identify specific studies related to health care financing in C.A.R. to be conducted in the short- and long-term; b) develop a work plan for the studies; and c) assess training needs of the MOH staff responsible for health financing issues.

### Baseline Studies to Conduct in the Short Term

1. **Existing systems of payment for medical care.** Analyze advantages and disadvantages of current systems; estimate amounts paid by patients for different types of care; assess incentives for utilization of the appropriate level of the health system; evaluate current fee systems in terms of an equitable and efficient allocation of resources and sound management.

2. **Review of Laws and Regulations Relevant to Health Care Financing.** Review the new health financing law for requirements of additional decrees before its enactment; review parts of the law which may require changes in existing regulations about fee schedules and payment methods; evaluate the laws for incentives and disincentives to the expansion of private health care.

3. **Private Sector.** Analyze advantages and disadvantages of private sector health care (companies, church missions, and private practitioners); collect information about coverage and methods of financing; analyze incentives and disincentives for appropriate utilization of services; evaluate opportunities and barriers to the expansion of the private sector.

4. **Community Financing and Management.** Analyze advantages and disadvantages of village pharmacies and village primary health care services; identify the most effective community financing and management methods to apply to other parts of the country.

5. **Fee Revenues.** Estimate current health facility revenues; collect baseline data on revenue collection over the last three to four years for different health care services; estimate the gap between revenue remitted to government (MOH and Ministry of Finance (MOF)) and the potential revenue, given current fee structures and facility utilization rates.

6. **Provider Bonus (Incentive) System.** Analyze the advantages and disadvantages of the current bonus system for doctors and other health personnel.

7. **Complementary Studies and Activities.** a) Availability of pharmaceuticals (supply and distribution systems); and b) hospital financial management (current systems, shortcomings, and training needs).

**Studies to Conduct over the Long Term**

1. Estimate costs of providing services and meeting priority health goals.

2. Estimate resources available to health from government, private sector, communities, revenues from drug sales, and foreign assistance.

3. Compare costs of desired/planned health services to available resources. Evaluate the role of each financing partner.

4. Conduct a household survey to determine incomes and expenditures, with a special focus on health care expenditures.

5. Evaluate the entire health system and the capacity for financial management at each level of the public health system.

**Workplan - Short Term (March to May 1990)**

1. Collect baseline financial information (e.g., from Ministry of Planning (MOP), MOF, international organizations, etc.).

2. Utilize short term technical assistance. MOH requested a team of short-term consultants (REACH project-USAID) to:

   - Review data collected by MOH (*see item 1., above*).

   - Work with designated MOH staff to conduct two of the above-mentioned baseline studies for the short term.

   - Develop a detailed workplan to complete the rest of the short-term studies by the end of 1990.

3. Utilize long-term technical assistance. MOH has requested a long-term health financing advisor from USAID.

4. Identify MOH staff responsible for health care financing issues. MOH should name three people full time to work in the budget section (SAF) of the Direction of Administrative Affairs and Finance (DAAF). They should serve as the MOH's core group addressing health care financing issues.

5. Train MOH health financing staff. Once full-time people are named, a training plan can be developed.

## 4.2 Assessment Report for the Central African Republic (Setzer and Weaver, November 1990)

### Summary

The consultants conducted a broad assessment of health financing activities in C.A.R. and developed a draft workplan for a long-term advisor (LTA) to be placed in MOH. Topics covered include: legislation, the private sector, government health expenditures, resource allocation, decentralization, and social financing.

### Introduction

HFS consultants Setzer and Weaver traveled to C.A.R. to conduct an assessment of the C.A.R. health system, with a special focus on the state of health care financing. Following HFS assessment guidelines, they summarized the status of health care financing, and developed a draft workplan for health financing reform.

### Findings

1. **Assessment of Laws and Policies regarding Alternative Delivery and Financing Arrangements.**

   - C.A.R. adopted a progressive health financing law, March 1989. It allows facilities to retain and use receipts for operating expenses.

   - April 1990 draft law sets fees for certain levels of health facilities and proposes fixed fees for hospitalization (fees are per bed day) and fees for outpatient care.

   - MOH must issue a series of complementary orders and decrees to make the laws operational (once they are signed).

2. **Private Health Sector, comprised of Missionary, For-profit, and Private Company Facilities.** MOH data (1988) indicate that the vast majority of visits are made to public facilities. Private facilities account for only 3.5 percent of hospital admissions and outpatient visits.

3. **Trends in Government Expenditures on Health Services.** MOH benefitted from rising expenditures and rising share of total government expenditures for the years 1984-1988. Since 1988 overall spending has decreased significantly: from 3.5 billion FCFA in 1988 to 2.9 billion FCFA in 1990. Bilateral and multilateral aid to the health sector averaged $10 million annually for the years 1984-1988 (*see Exhibit 4.1 below*).

**EXHIBIT 4.1**
**TRENDS IN C.A.R. GOVERNMENT AND HEALTH BUDGET, 1984-1990**
(in millions of FCFA)

| YEAR | MOH BUDGET | GOVERNMENT BUDGET | MOH BUDGET AS % OF GOVERNMENT BUDGET |
|---|---|---|---|
| 1984 | 2,371 | 34,106 | 7.0 |
| 1985 | 2,539 | 33,332 | 7.6 |
| 1986 | 3,113 | 35,829 | 8.7 |
| 1987 | 3,240 | 36,200 | 9.0 |
| 1988 | 3,454 | 37,288 | 9.3 |
| 1989 | 2,926 | 28,202 | 10.4 |
| 1990 | 2,899 | 27,774 | 10.4 |

4. **Resource Allocation Trends.** The majority of MOH health resources are devoted to personnel—72% in 1988, down from 77% in 1984. Of 1988 non-salary operating expenses, 72% was allocated to curative care. Curative care expenditures are largely focused on Bangui (90%).

5. **Degree of Decentralization.** There is some commitment by the MOH to decentralize, as seen by the "microplans" and the plans for local fee retention and management. However local-level health personnel possess little management experience.

6. **Extent of Social Financing and Other Health Insurance.** The only social financing program is the Central African Social Security Office (OCSS), which covers a limited number of health care expenses, namely 50% of maternity care, and medical care, drugs, and workers' salary for disability.

7. **Gaps in Knowledge.**

- Laws relevant to cost recovery.
- Extent of private provision of health care.
- Household expenditures on health.
- Pharmaceutical sector.
- Estimates of costs of delivery of various types of inpatient and outpatient services.

**Recommendations (Draft Workplan)**

1. **Identification of Data Collection, Analysis, and Research Needs.** The consultants developed a draft workplan, based on the workshop of 1989.

2. **Role of Health Finance Partners (Government, Community, Donors, and Private Sector).**

   - Estimate the cost of health priorities identified in the regional plans and "microplans."
   - Estimate the capacity of partners to respond to health needs: government data is available in terms of annual budgets; community data is the subject of further study; donors should be consulted to determine what funding they are willing to provide; and the private sector requires further study.

3. **System of Community Participation (Cost Recovery Methods).**

   - Socioeconomic studies to help MOH make decisions about the community's capacity to respond to health needs.
     - **Demand Study:** Shows the relationship of quantity of care demanded to price of care and household income;
     - **Marketing Study:** Answers questions about what services the population would like and how much they are willing to pay; and
     - **Socioeconomic Study:** The World Bank has proposed this study, involving focus groups, as part of its Social Dimensions of Adjustment Program.
   - Cost of Services studies to provide information on the cost of providing health services and the cost of potentially higher quality services.

4. **Management and Implementation of the Cost Recovery System.** Need to resolve operational issues linked to the introduction of a cost recovery system, including: a) role of village-level structures in management and accounting systems; b) the development of appropriate accounting and financial information systems; and c) development of systems to monitor and evaluate the operation and impact of the cost recovery system.

## 4.3 Draft Trip Report: Central African Republic, April 24-May 1, 1993 (Makinen, April 1993)

### Summary

HFS Project Technical Director, Marty Makinen, visited C.A.R. to address implementation issues for a national cost recovery system for government health facilities. Makinen met with MOH policymakers and discussed three issues: planned pricing structure, implementation plan, and the results of the recent willingness-to-pay survey. Makinen found the proposed pricing structure to be affordable, given the results of the willingness-to-pay survey. Other results of the trip were that a hospital cost-containment study was added to C.E.S. priority activities, and the agenda for the proposed cost recovery policy seminar was expanded to include a synthesis of work done to date and an analysis of policy choices.

### Introduction

HFS Project Technical Director, Marty Makinen, visited C.A.R. to address issues related to the national implementation of a cost recovery program for government health facilities, and to discuss HFS assistance to the MOH. Principal issues to be addressed were:

- Planned cost recovery pricing structure;
- Cost recovery implementation plan;
- Results of the recently completed willingness-and-ability-to-pay survey; and
- Donated drugs and the essential drugs policy (this issue was resolved before Makinen's arrival).

Makinen feels that the price structure for hospital and ambulatory care is generally affordable, given the results of the willingness-to-pay survey. He was not in a position to judge the prices in relation to costs, as cost data are lacking. A six-step process was outlined to ready the MOH for implementation of the cost recovery program.

### Findings

1. **Cost Recovery.** The African Development Bank (ADB) wants implementation of cost recovery initiated before it commences its pharmaceutical supply project in January 1994.

Some senior MOH officials feel the HFS hospital cost study was not extensive enough to help MOH with pricing decisions. Further work was recommended in this area to complement the analysis already completed (*see Recommendations*).

Reorganization occurring within the MOH will result in the C.E.S. becoming a part of the Planning and Evaluation Unit (DEPS). The MOH made it clear that the role of C.E.S. is to analyze, plan, and formulate recommendations, but not to implement the cost recovery program. Recent modifications to C.E.S.' terms of reference were:

- Adding hospital cost-containment study to priority activities; and
- Expanding the proposed cost recovery policy seminar to include a synthesis of what has already been accomplished; analyses of policy choices which need to be made; and a plan for completing the analyses and moving to implementation.

There is interest in the analysis of cost-containment options similar to diagnostic research groups (DRGs) in the United States and other pricing systems which discourage overuse of hospital stays.

A review of government documents that set prices and establish regulations regarding cost recovery produced the following findings.

- Prices proposed for health centers and hospitals appear to be affordable to the great majority of the population.
- The hospital pricing document is difficult to understand, especially in regard to the system of "lettre clé".
- The described system of bonuses for health providers based on number of procedures performed may cause overutilization of medical procedures.

2. **Plan for Technical Assistance to the MOH.** A general plan for technical assistance was developed and includes the following six steps in the implementation of cost recovery.

- Synthesis of analyses done to date, decision making about additional analyses to conduct and options to implement, and planning for remaining steps.
- Conduct the additional analyses identified in step 1.
- Planning for implementation, including final decisions based on the analyses of step 2.
- Implementation of the cost recovery system.
- Monitoring the performance of the cost recovery system.

- Evaluation and revision of policies, based on the data gathered during monitoring; revision of policies where indicated by the data.

A more detailed list of steps to be carried out by MOH in preparation for the implementation of cost recovery is provided below. There is some overlap with the technical assistance plan outlined above.

3. **MOH Steps Remaining to Prepare for Cost Recovery.**

   - **Primary health care facilities:**

     - Conduct meetings to disseminate study results;
     - Ensure the availability of essential drugs;
     - Develop a monitoring system;
     - Develop a fee exemption/means testing system;
     - Conduct a public education campaign; and
     - Develop final documents on fees, regulation, and granting of autonomy status to facilities.

   - **Higher level facilities:**

     - Develop an improved accounting system and train relevant staff in its use;
     - Develop an improved management system and train staff; and
     - Conduct a study on cost containment.

**Recommendations**

1. Make use of short-term technical assistance in health economics and hospital management to conduct final analyses (e.g., hospital cost studies, cost containment, etc.).

2. Field the long-term administration and management advisor in time to plan for implementation and see the cost recovery through monitoring and evaluation.

3. Expand the proposed policy seminar to disseminate results of recent analyses, allowing decision makers to make the necessary policy choices.

4. Continue work on pricing of health center and hospital services. This should include estimating the costs of services, setting prices to reflect costs and other objectives, then reanalyzing prices in terms of affordability.

5. Incorporate personnel incentives into the cost-recovery system. This will have the effect of raising quality of care.

6. Add a hospital cost-containment study to the priority activities of the C.E.S.

7. Conduct additional analyses on the national survey data to: a) calculate mean and median monthly household expenditure by rural and urban areas and by the five health regions; and b) calculate ability to pay by median monthly income of households, by income quintile, and by health region.

8. Consider actions concerning government documents that set prices and establish regulation regarding cost recovery.

   - Although proposed prices generally appear to be affordable, for the poorest segments of the population a fee exemption policy will be necessary.

   - Bonuses for health care providers should be connected to healthy outcomes among patients rather than the number of procedures performed—this should have the effect of reducing overutilization of medical services, and of providing an incentive for care givers to provide high quality care.

   - In addition to the flat hospital fee, daily bed fees should be considered to eliminate the incentive for patients to extend their hospital stays longer than necessary.

## 5.0 REVIEWS OF COST RECOVERY PROGRAMS

- Feasibility Study for the Implementation of a System of Household Contribution to Health Financing (Pasnik, September 1986)
- Proceedings from the Workshop on Health Care Financing in the Central African Republic (Makinen, Graybill, and Percy, April 1989)
- Current Health Care Cost Recovery Systems in the Central African Republic, HFS Technical Note No. 15 (C.E.S., February 1992)

## 5.1 Feasibility Study for the Implementation of a System of Household Contribution to Health Financing (Pasnik, September 1986)

### Summary

A REACH consultant visited C.A.R. to help strengthen the self-financing of CCCD program and other health activities. She evaluated ongoing cost recovery efforts in public facilities and assessed potential financing schemes for CCCD services. Group discussions were held to estimate willingness to pay for services. Fees of 100 FCFA for an outpatient episode and 1,000 FCFA for delivery or hospitalization were considered acceptable by the discussants.

### Introduction

The REACH project was asked to provide technical assistance to CCCD to strengthen self-financing of CCCD and other health activities in C.A.R. A REACH consultant visited the C.A.R. to evaluate ongoing cost recovery efforts of hospitals (National University Hospital, Bangui (CNHUB) in particular) and dispensaries (Castors in particular), and to analyze financing schemes for CCCD services.

### Findings

1. **Health Care Financing Situation in C.A.R.** The Central African Republic is a relatively poor country, with a per capita annual income of approximately $260.[1] Most government health services are provided free of charge, however people often have to purchase prescribed drugs at a private pharmacy. Budget constraints are making it increasingly difficult for the government to continue to provide free health care services.

   Several general constraints were noted.

   - Much of the population has a very low income, meaning that fees must either be very low or on a sliding scale.
   - It is difficult to explain and successfully implement a system of fees for preventive services.
   - There is a permanent shortage of drugs at many rural health facilities; urban facilities also suffer from shortages.
   - Difficulties in receiving good quality health care at all levels of the system are such that in reality patients pay for all or part of the cost of their care (side payments, drugs at private pharmacies, etc.). *To propose that the population contribute to the costs of improved health would ultimately mean standardizing an already existing price.*

[1] A September 1986 exchange rate of 350 FCFA per $1.00 is used throughout this report.

2. **Existing Examples of Fees at Government Health Facilities.** Financing schemes in which the population pays for some of the cost of care at government health facilities already exist. Government hospitals and maternity and child health centers have fees. The national hospital (CNHUB) has five classes of patients which are charged fees ranging from 0 to 5,000 FCFA. It was estimated that, if every patient paid 1,000 FCFA per day for hospitalizations at CNHUB, annual receipts would equal 231 million FCFA. In fact annual reported receipts for 1985 were 26 million FCFA, roughly one-tenth the predicted amount. Explanation: not all the money is collected, and not all is remitted to the Treasury.

   In addition to expenditures at government facilities, the population spends between $150,000 and $600,000 annually for drugs at the 19 private pharmacies in Bangui and at drug depots throughout the country. Retail prices are generally two to three times what it costs to acquire the drugs at central pharmacies, suggesting that many government facilities should be able to provide drugs at lower prices than at retail pharmacies.

3. **Population Willingness and Ability to Pay for Health Care.** A critical question facing the government of C.A.R. is, can the population afford payment for health services? The consultant organized group discussions to learn about willingness to pay for health services. These discussions revealed that people were willing to pay:

   - A fee for health services as long as they were treated;
   - 100-500 FCFA for an episode of illness and up to 1,000 FCFA for a hospitalization or obstetrical delivery; and
   - 500-1,000 FCFA for a family health card valid for one year, entitling family members to free drugs when prescribed.

**Recommendations**

1. It is recommended that families contribute to curative health services in government facilities through *a system in which families make prepayments and pay fees* (co-payments).

   - **Prepayment Component:** Families purchase a health card, paying 525 to 5,250 FCFA per year ($1.50 to $15.00), based on their income. This would generate 575 million FCFA ($1.6 million) per year. An autonomous central committee within the MOH would be formed to manage the revenues, which would be used to provide curative and preventive services.
   - **Fee-for-Service (Co-payment) Component:** Payment for each outpatient consultation, 100 FCFA to 500 FCFA, based on information shown on the health card. This system would generate approximately 890 million FCFA ($2.5 million) per year. Receipts would remain with the health facility.

Jointly the prepayment and fees would generate 1.5 billion FCFA ($4.2 million) per year. Additional fees for inpatient hospital care could also be implemented. It is predicted that the above payment plan will correct existing arbitrary and inequitable user fee systems and improve equity and efficiency.

2. Consider construction of an outpatient wing at CNHUB as a means of charging fees for outpatient visits.

3. Implement a Pilot Test of the Fee-For-Service System.

   - USAID should provide technical assistance to the MOH to assist with a pilot fee system at a health facility.

   - Begin the test either at Castors Dispensary or Boy Rabe Dispensary (Castors Maternity already has a viable fee-for-service program). Once the test is operating successfully at one facility, establish it in the other.

   - Establish a revolving drug fund for chloroquine and ORS under the CCCD program.

   - Establish a revolving drug and operating costs fund for all treatments and medications (after successful implementation of CCCD revolving drug fund). 100 FCFA is proposed; it would cover consultation, examinations, and drugs.

   - Designate a CCCD person to coordinate and advise during the initial experiment: monitor its progress and assure revenues are used to replenish drugs and supplies.

   - Establish a Management Committee within the MOH. Its initial tasks should be:

     - Act as a review board to determine the best cost recovery system;

     - Propose necessary studies to collect background information needed to establish cost recovery systems;

     - Propose institutional reform for C.A.R. to facilitate implementation of cost recovery; and

     - Evaluate the cost recovery test in the pilot dispensaries after a period of operation, and recommend steps to extend cost recovery nationwide, and supervise the operation of the whole system.

4. Additional Constraints to the Implementation of Cost Recovery.

- Legislation does not permit facilities to retain receipts.
- Up to twenty percent of the population cannot afford fees—a survey may be needed to verify the percentage and define who these people are.
- The memory of the 1974 health card may hamper programs to charge fees for service.
- The drug distribution system is ineffective.
- Uncontrolled side payments made to health care providers are incompatible with the standardized fee system being proposed.
- World Bank agreements in the early 1980s resulted in a shortage of qualified health personnel (due to conditions of the loan agreement which imposed hiring and wage restrictions).

## 5.2 Proceedings from the Workshop on Health Care Financing in the Central African Republic (Makinen, Graybill, and Percy, April 1989)

### Summary

The CCCD Project requested the REACH project to undertake a workshop for C.A.R. government officials to discuss health care financing issues and a proposed health care cost recovery program. The workshop participants included senior policymakers from the National Assembly, Ministries of Health, Finance, and Interior, as well as hospital directors and regional health chiefs. Participants agreed that C.A.R. should move toward a shared responsibility to pay for health services among the population, government, private sector, and foreign donors.

### Introduction

The REACH Project was requested by the CCCD Project to undertake a health care financing workshop for government officials in C.A.R. The purpose was to facilitate the development of a proposed cost recovery program for health. The workshop was held from April 24-28, 1989, and was attended by officials of MOH, MOF, MOP, National Assembly, and other key actors.

The health system in C.A.R. suffers from both insufficient funding and poor distribution of resources. Total level of government and donor funds (excluding private expenditures) in 1988 was 3,731 million FCFA (US$ 11.8 million), or approximately 1,382 FCFA[2] (US$4.39) per capita.[3] Despite only 14 percent of the

[2] The Makinen, Graybill, and Percy report contained a typographical error, stating 2,382 FCFA rather than the correct 1,382 FCFA shown here.

[3] US$ 1.00 = approximately 315 FCFA.

population living in the capital, Bangui, 85 percent of curative care expenditure occurs in Bangui.

**Workshop Components**

The workshop addressed the following issues.

- Current state of health financing in C.A.R.
- Criteria for evaluation of alternative methods of financing the health sector.
- Possible methods of community participation through cost recovery.
- Presentation of two case studies from Africa–Health Zones in Zaire, and Projet Pikine in Senegal.
- Administrative and management aspects of cost recovery systems.
- Drafting, presentation, and discussion of workshop conclusions.

**Workshop Conclusions Agreed upon by Plenary**

1. Case studies from other African countries helped participants formulate ideas for health financing in C.A.R.

2. The health financing situation in C.A.R. is characterized by:

   - A lack of financial information for decision making;
   - A lack of close collaboration between MOH and MOF before budgets are drafted;
   - The recurrent costs of new hospitals negatively effect rural health services;
   - Insufficient total resources for health in C.A.R.; and
   - Weak capacity for programming and financial planning.

3. The evaluation criteria for cost recovery systems should be:

   - Equity;
   - Physical and functional access to health services;
   - Sufficient resources to allow improvements in quality of services;
   - Administrative feasibility; and
   - Efficiency.

4. Responsibilities for financing the health sector should be divided among:

   - Government budget allocations;
   - Community participation;
   - Private sector cooperation; and
   - International assistance.

5. Possibilities for community participation in health care financing:

   - Consultations;
   - Drugs;
   - Hospitalizations;
   - Diagnostic procedures;
   - Curative care;
   - Preventive care;
   - Prepayments; and
   - Third party payments.

   There is a need for further study of listed options. It is important that the population participate in the determination of fees.

6. Criteria need to be developed for fee exemptions for certain population categories.

7. Administrative aspects of cost recovery to be considered before implementing a system include:

   - Need for financial information systems;
   - Management ability at facility level; and
   - Creation of community management committees.

8. Projects should be integrated into health sector development plans.

**Next Steps Toward Community Participation in Health Care Financing**

1. The plenary agreed to the eight conclusions listed above and formulated a process for the design of a health financing system which includes community participation. Three decisions must be made before proceeding, and analyses conducted to inform and guide decision makers. The decisions and analyses are listed below.

- The roles to be played by each of the partners (government of C.A.R., foreign assistance agencies, the private sector, and the population of C.A.R.) in the shared responsibility for financing health services.

  **Analysis:** Studies of the costs of priority health services and the capacities of each of the partners to meet financing needs.

- What kind of community participation to implement.

  **Analysis:** Socioeconomic studies, including income of population (ability to pay) and the advantages and disadvantages of various cost recovery systems.

- How to implement the system.

  **Analysis:** Degree to decentralize, role of the community management committees, administrative systems to develop, and evaluation mechanisms to institute.

2. The analyses were all assigned to DEPS, with a provision that MOH strengthen DEPS over the medium- to long-term. It was agreed that the MOH should:

   - Strengthen DEPS;
   - Nominate a point person for health care financing;
   - Provide the point person with a health financing staff;
   - Train health financing staff (short-term courses); and
   - Provide a REACH consultant to work with DEPS on health financing issues.

## 5.3 Current Health Care Cost Recovery Systems in the Central African Republic, HFS Technical Note No. 15 (C.E.S., February 1992)

### Summary

The Health Economics Unit (Cellule d'économie en santé, C.E.S.) of the Ministry of Health analyzed cost recovery systems in use in C.A.R. in 1991. The purpose of the study was to document the different types of cost recovery being practiced, to assess their revenue generation potential, and to recommend to the government which system is best suited to the population and conditions of C.A.R. The study examined 28 public facilities and 7 private. The study identified four types of cost recovery and recommended two for nationwide implementation: 1) Fee-for-service and 2) payment per illness episode. The study identified several main problems needing resolution: indigence and identification of the poor; misuse of civil servant privilege of subsidized care; ministries not paying for the care of their employees; and inadequate management practices in public health facilities.

### Introduction

Cost recovery has been in practice in C.A.R. for several years in private and some public health facilities. The purpose of this study was to document the different types of cost recovery being practiced, to assess their revenue generation potential, and to recommend to the government which system is best suited to the population and conditions of C.A.R.

### Findings

1. The investigators examined 35 facilities (28 public and 7 private). They found that four principal cost recovery systems existed. The frequency, among the 35 facilities, is shown below, followed by an explanation of each system.

| | |
|---|---|
| Fee-for-service (payment for each service received) | 62% |
| Payment for episode of illness | 22% |
| Payment per visit | 13% |
| Prepayment for a year of service | 3% |

- **Fee-for-service**. Patient pays out of pocket at time of service. All services are added up (exams, consultation, drugs, etc.) and patient pays total. It promotes better resource allocation in health facilities, but requires more developed accounting and management systems than payment per visit, described below.

- **Payment per illness episode (fee-per-episode)**. Patient pays for the first visit. Follow up visits for the same illness are free of charge. Fees can be set based on the average cost of treating all illnesses, or based on the average cost of treating categories of illnesses (e.g., respiratory infections, sexually transmitted diseases, etc.).

- **Payment per visit.** Patient pays a lump sum at each visit. This type of system leads to efficient resource allocation and reduces the likelihood of overutilization of services. On the other hand, unlike the fee-per-episode method, some patients may not make needed follow up visits because of the extra fees they will face.

- **Pre-payment for a year of service.** The Bougila medical center employs such a system for nearby high school and theology students. They report that this payment method is partially responsible for an overuse of services, resulting in an operating deficit. Prices must be carefully calculated, and if possible a co-payment should be required at time of care to reduce frivolous use.

2. In addition to the different methods of payment, the study found that fees are applied to services in basically three different ways: fees are charged for all health services and medicines, fees are charged for only certain categories of services, and annual fees are charged for medical certificates only.

   Average cost recovery rates are shown in the following exhibit. These rates are computed as total cost recovery revenues divided by total recurrent costs.

**EXHIBIT 5.1**
**AVERAGE COST RECOVERY RATE (AND RANGE) FOR SURVEYED FACILITIES[4]**

| FACILITY | AVERAGE | RANGE | |
|---|---|---|---|
| | | LOW | HIGH |
| Private Hospitals (n=4) | 33 | 15 | 67 |
| Public Central Facilities (n=2) | 18 | 15 | 20 |
| Public Urban Maternities (n=3) | 94 | 81 | 104 |
| Public Regional Hospitals (n=4) | 25 | 10 | 53 |
| Public Prefectural Hospitals (n=4) | 5 | 3 | 6 |
| Public Provincial Health Centers (n=9) | 27 | 2 | 93 |

[4] Tables in Section 4 of the technical report provided the data to construct this table. Here, cost recovery performance was calculated using as the denominator the sum of reported expenditures and subsidies. The numerator was the reported user fee revenues. This results in lower cost recovery rates than in the technical report, which did not include government subsidies as part of the denominator.

Among public facilities, the urban maternities are notable for their high rate of cost recovery. Unlike other many other government facilities which receive some government funds for supplies and other operating costs, in addition to salary and drug costs, the urban maternities only receive government assistance for salaries and drugs.

3. **Fee structures and use of revenues.** One private health facility, the Ippy Mid-Mission medical center, has a 63% markup on drugs to cover costs of transport, handling, insurance, taxes, and commissions. Although the other private facilities use similar markups for medicines, the prices of drugs vary by more than twofold from one hospital to the next. Private hospitals also have fee scales that vary according to income level of the patient and, in some cases, by age of patient (e.g., adult vs. child).

   Fee structure and prices also varied in public health facilities. For example, three out of four regional hospitals provided free surgical procedures. Two required payment for laboratory examinations, whereas the other two perform them for free. Two of the public health centers reviewed carried out systematic cost recovery for all services and medicines, whereas the others charged only for medical certificates.

   Most public health facilities used informal methods for identifying indigents, or people without enough resources to pay fees. Civil servants, who are to pay 20 percent of the fee while the government pays the balance, reportedly rarely paid their share, and frequently had extended family members, as well as nuclear family members, treated free of charge.

   Most public health facilities paid a portion of fee revenues to health personnel as bonuses, or incentive payments.

4. **Management and accounting.** The study concluded that time and financial administrative costs of the cost recovery systems they examined were insignificant. They identified several management tools, including a notebook for recording revenues and expenditures, a receipt booklet for payments made to the Treasury (for public hospitals only), and in some facilities stock and management note cards. In public hospitals in general, except for the regional hospitals and some hospitals that have their own administrators, accounting was handled by the directors of the facilities, who are doctors, senior health technicians, or hospital attendants certified by the state.

   The investigators found that record keeping systems to control the flow of drugs were rarely used in public hospitals, where drugs are distributed free of charge and pharmacies are not well stocked. On the other hand, they cited regular use of management systems, such as RUMER (Registry of Essential Drug Use and Receipts) by private health facilities.

## Conclusions/Recommendations

1. Economic status of the population and size of population covered by the health facility play a major role in determining whether cost recovery will be viable.

2. Cost recovery at public facilities is applied differently from facility to facility.

3. Two payment options should be adopted: fee-for-service and payment per illness episode.

4. In preparing to implement these two options, the following steps should be taken.

   - Information, education, and communication campaign to explain the new financing systems to the population and to health workers.

   - The country's leaders need to focus on general economic development; a higher standard of living will contribute to the success of cost recovery schemes.

   - Plans should be made for identifying the indigent who will be eligible for free or partially subsidized services under the new cost recovery program.

   - Health facilities should be provided with sufficient supplies to raise the quality of health care and increase coverage.

   - Management training should also be a part of the cost recovery system to improve operational efficiency of health facilities.

   - Additional financial resources should be sought so that prices remain reasonable. High prices will exclude a large part of the population.

   - Accounting and management systems should be reorganized to increase transparency and eliminate abuse.

## 6.0 ANALYSES OF ABILITY AND WILLINGNESS TO PAY FOR HEALTH SERVICES

- Cost Recovery in Central African Republic: Results from Two Preliminary Surveys and Selected Interviews (Levin and Weaver, October 1987)
- Willingness to Pay for Child Survival: Results of a National Survey in Central African Republic, Technical Report (Weaver et al., April 1993)

## 6.1 Cost Recovery in Central African Republic: Results from Two Preliminary Surveys and Selected Interviews (Levin and Weaver, October 1987)

### Summary

Three REACH consultants were asked to evaluate potential activities to promote cost recovery at government health facilities. The three activities were: a household expenditure survey, a cost recovery pilot project, and a seminar/workshop to discuss cost recovery policy issues. The consultants interviewed policymakers, surveyed managers and users of health care facilities, and interviewed village pharmacy managers. Survey data indicated that patients were paying from 493 FCFA at Foyer Charity for consultations and pharmaceuticals to 10,848 FCFA for hospitalizations (all inclusive) at Yaloke Hospital.

### Introduction

The Government of C.A.R. has agreed to contribute to a study of the self-financing of recurrent costs of the CCCD project, and to consider recovering some of the costs of government health services as a means of financing those recurrent costs.[5]

A team of consultants from the REACH project was asked to explore three potential activities that promote cost recovery and which could be implemented in C.A.R.:

- Household expenditure survey to measure willingness and ability to pay;
- A pilot project to test the ability to manage a government cost recovery program; and
- A seminar or roundtable discussion on cost recovery issues for C.A.R. policymakers.

In examining the question of which of the above activities would best promote cost recovery in C.A.R., the consultants carried out four activities, which included:

- Interviews with policymakers;
- A preliminary survey of health facility managers;
- A preliminary survey of health care facility users; and
- Interviews with managers of two village pharmacy programs.

[5] An October 1987 exchange rate of 300 FCFA per $1.00 U.S. is used throughout this report.

## Findings

1. **Interviews with Policymakers.** Policymakers were very receptive to the idea of a cost recovery program for C.A.R. government health facilities. Evidence of this is that the pilot cost recovery program at Castors Maternity has been extended to four other public maternities in Bangui. Interviews revealed that decision makers were not aware of the full range of cost recovery options.

2. **Survey of Health Facility Managers.** Yaloke Hospital (private) and Castors Maternity (public) provide useful models for the further investigation of cost recovery options for C.A.R. Yaloke's cost recovery efforts provide sufficient revenue to pay salaries, all drug costs, maintenance, and supplies. Castors' cost recovery revenues pay for maintenance and supplies, and some drugs, while the government finances all salaries and the remainder of drugs. The managers at Yaloke and Castors were proficient at setting prices, developing fee exemption policies, and ordering and maintaining supplies.

3. **Survey of Facility Users.** Users of the four facilities already pay for such things as consultation fees, laboratory exams, and pharmaceuticals. Reported expenditures for services ranged from 10,848 FCFA for hospitalization at Yaloke Hospital to 493 FCFA for consultation and drugs at Foyer Charity (*see Exhibit 6.1 below*).

**EXHIBIT 6.1**
**REPORTED USER AVERAGE EXPENDITURES AT FOUR HEALTH FACILITIES IN C.A.R. (FCFA)**

| FACILITY | GOODS AND SERVICES | EXPENDITURE (FCFA) |
|---|---|---|
| Yaloke Hospital | consultation, drugs, surgery, and hospitalization | 10,848 |
| Castors Maternity | prenatal and maternity care | 1,178 |
| | drugs from outside pharmacies | 9,196 |
| Foyer Charity | consultation and drugs | 493 |
| Mamadou M'Baiki | consultation | 0 |
| | drugs from outside pharmacies | 2,687 |

Financial burden was estimated by calculating the above expenditures as a percentage of annual per capita income. Yaloke hospitalization represents 12% of annual per capita income, whereas purchasing drugs after visiting Mamadou M'Baiki represents 3% of annual per capita income.

Other results of the survey:

- 75% of users reported they are willing to pay for care at government health facilities;
- 75% of users reported they are willing to pay for drugs at government facilities (given a sufficient supply of drugs);
- Private facilities are apparently chosen for quality of care (cleaner facilities, better equipped); and
- Public facilities appear to be chosen because of their proximity to home.

4. **Interviews with Managers of Village Pharmacies.** The success of village pharmacies is another indication of the population's willingness to pay for health services (and goods). Villages contribute 50% of the cost of the village pharmacy, and acquire a loan for the remaining 50%. Loans are repaid from profits on the sale of drugs. One pharmacy had enough profits to pay a pharmacist full time.

**Recommendations**

Of the three potential cost recovery activities being considered, the team recommends initially pursuing a *seminar/roundtable* for policymakers. Participants can discuss a wide range of cost recovery options for C.A.R., and can create a constituency for cost recovery for CCCD.

Specific Recommendations.

1. Conduct a 3-5 day seminar/roundtable utilizing REACH technical assistance to present options available for recovery costs in government facilities. Present results of successful cost recovery programs from other African countries. Discuss criteria for the selection of a site for a pilot project.

2. The seminar should result in the creation of a team to develop specifics of a cost recovery pilot project. The team should design a pilot project to include innovative management practices and to identify an appropriate site for the project. The team would manage the collection of baseline data on consumer health expenditures and operating costs of test site health centers.

3. After recommendations one and two have been executed, the pilot project should be initiated in government health facilities in the selected zone. The project will require data collection, the training of personnel in finance and accounting, an evaluation of the project, and dissemination of results.

## 6.2 Willingness to Pay for Child Survival: Results of a National Survey in Central African Republic, Technical Report (Weaver et al., April 1993)

### Summary

MOH is designing a user-fee program for public facilities. A survey was conducted to estimate willingness and ability to pay for quality improvements at public facilities. The survey used two methods of measuring willingness and ability to pay for quality improvements: contingent valuation and current expenditures. Conclusions: 75% of the population is willing to pay for five of the seven improvements, and 65% is willing to pay for all seven improvements; current expenditures are greater than the estimated cost of quality improvements; residents of *rural* areas are willing to pay more than residents of *urban* areas; there is variation among health regions in how much households are willing to pay.

### Introduction

A team of HFS and C.E.S consultants conducted a nationwide survey in C.A.R. to estimate current health expenditures and willingness to pay for a specific set of seven quality improvements in government health services. The investigators employed two methods: contingent valuation and estimation of current household expenditures. Contingent valuation was used to estimate willingness to pay; it involves asking respondents hypothetical questions about how much they would be willing to pay for an improved service. Current household expenditures were estimated by asking the head of household an exhaustive list of questions about expenditures and consumption in the last month.

The survey attempts to estimate willingness to pay for different quality improvements at government health facilities: health facility maintenance, improved skills/knowledge of health personnel, and the availability of drugs for the treatment of five common illnesses (malaria, sexually transmitted diseases (STD), parasites, acute respiratory infections (ARI), and diarrhea).

### Findings

The results of the survey indicate that a majority of the population is willing to pay for improvements to government health services. A summary of the survey findings is provided below:

1. Responses to survey questions indicate a majority of the population is willing to pay for quality improvements at government health facilities (*see Exhibit 6.2*). This suggests that a cost recovery program to support quality improvements is likely to be successful.

   Estimated cost of quality improvements and willingness to pay:

   - 74% or more of respondents are willing to pay estimated cost of five of the seven improvements; and
   - 64% or more of respondents are willing to pay estimated cost of all seven improvements.

**EXHIBIT 6.2**
**WILLINGNESS TO PAY FOR QUALITY IMPROVEMENTS: PERCENTAGES OF RESPONDENTS AND MEDIAN AMOUNT WILLING TO PAY**

| QUALITY IMPROVEMENT | ESTIMATED COST (FCFA) | PERCENTAGE OF RESPONDENTS WILLING TO PAY AT LEAST COST | MEDIAN AMOUNT WILLING TO PAY (FCFA) |
|---|---|---|---|
| Facility Maintenance | 100 | 81% | 2,540 |
| Improved Skills of personnel | 100 | 75% | 1,815 |
| Drugs to treat: | | | |
| Malaria | 150 | 77% | 1,850 |
| STD | 500 | 66% | 2,950 |
| Parasites | 300 | 76% | 3,520 |
| ARI | 1,000 | 64% | 3,725 |
| Diarrhea | 150 | 74% | 3,730 |
| Sample Size | | 251 | 1,263 |

2. Rural respondents express a higher willingness to pay for quality improvements at government facilities than urban respondents (*see Exhibit 6.3*). This may be due to the greater availability of private pharmacies in urban areas, and therefore a lesser willingness to pay for additional costs for improvements in government facilities.

   Median willingness to pay for quality improvements was significantly higher in rural areas (villages) than in urban areas (including Bangui).

**EXHIBIT 6.3**
**SELECTED EXAMPLES OF WILLINGNESS TO PAY FOR QUALITY IMPROVEMENTS**

| QUALITY IMPROVEMENT | RURAL (FCFA) | URBAN (FCFA) |
|---|---|---|
| Facility Maintenance | 4,622 | 1,304 |
| Malaria Treatment | 2,688 | 934 |
| Acute Respiratory Infection | 5,237 | 1,763 |

3. Health regions IV and V have lower median willingness to pay for quality improvements compared with region I.

4. Of those respondents using modern care, public facilities were the most frequently visited. Median total health care expenditures (facility fees, pharmacy, and transportation) were 1,085 FCFA at all modern facilities combined, and 2,000 FCFA at private facilities.

   Expenditures are highest for those who visited private facilities, and lowest for those who visited a pharmacy only. Median expenditure for public facilities reflects pharmacy and transportation expenditures only, as median public facility fee was zero (*see Exhibit 6.4*).

**EXHIBIT 6.4**
**HEALTH CARE UTILIZATION AND TOTAL EXPENDITURES DURING MONTH PRIOR TO INTERVIEW**
**(facility fee, pharmacy fee, and transportation)**

| TYPE OF CARE | % OF SAMPLE | TOTAL EXPENDITURE FOR ALL CARE (FCFA) |
|---|---|---|
| Modern Care | 76% | 1,085 |
| Public Facility | 41% | 1,500 (*) |
| Private Facility | 15% | 2,000 |
| Purchased Drugs (no facility visit) | 16% | 800 |
| Traditional Care | 47% | |
| Sample Size | N = 922 | |

(*) For pharmacy and transport costs; reported median public facility expenditures were zero.

5. Reported median monthly total expenditures for health care were higher in urban areas than in rural areas, for all people who used modern care. Regional differences also exist.

   Median monthly total expenditures were higher for urban than for rural areas for all people who used modern care; median monthly total expenditures for regions II, III, IV, and V were lower than in region I. Regions IV and V appear to have the lowest median total expenditures.

6. The cost of quality improvements is less than what respondents reported as being willing to pay for the improvements.

The estimated cost of the most expensive quality improvement (pharmaceuticals for ARI) was less than 2.4 percent of monthly household consumption. Based on the responses to questionnaire, the median amount respondents were willing to pay ranged from 4.4 percent to 9.0 percent of median total household consumption (*see Exhibit 6.5*).

**EXHIBIT 6.5**
**ABILITY TO PAY FOR HEALTH CARE BASED ON CONTINGENT VALUATION MEASURES OF WILLINGNESS TO PAY**

| QUALITY IMPROVEMENT | ESTIMATED COST AS A % OF MEDIAN MONTHLY TOTAL HOUSEHOLD CONSUMPTION | MEDIAN AMOUNT RESPONDENTS WILLING TO PAY AS % OF MEDIAN MONTHLY TOTAL HOUSEHOLD CONSUMPTION |
|---|---|---|
| Facility Maintenance | 0.2 | 6.1 |
| Improved Skills of Personnel | 0.2 | 4.4 |
| Drugs to Treat: | | |
| Malaria | 0.4 | 4.4 |
| STD | 1.2 | 7.1 |
| Parasites | 0.7 | 8.4 |
| ARI | 2.4 | 9.0 |
| Diarrhea | 0.4 | 9.0 |

7. Household expenditures on the quality improvements will be less than current median monthly household expenditures for modern health care.

   Median monthly total expenditure per episode of illness represents 2.6% of median total consumption for persons who sought modern care. This amount is greater than the cost of any one of the seven quality improvements which ranged from 0.2 to 2.4 percent of median monthly total consumption (*see Exhibit 6.6.*).

**EXHIBIT 6.6**
**ABILITY TO PAY FOR HEALTH CARE BASED ON CURRENT TOTAL HEALTH CARE EXPENDITURES**

| TYPE OF CARE | MEDIAN TOTAL EXPENDITURE PER EPISODE OF ILLNESS AS A PERCENTAGE OF MEDIAN MONTHLY TOTAL CONSUMPTION |
|---|---|
| Modern Care | 2.6% |
| Public Facility | 3.6% |
| Private Facility | 4.8% |
| Purchased Drugs Only | 1.9% |

**Recommendations/Policy Implications**

1. Although the survey results suggest that the government user fee program has good prospects for success, the estimated costs will have to be subsidized for 25-35 percent of the population.

2. Results suggest that it may be possible to charge higher user fees in rural areas than in urban areas. If costs of providing quality services are greater in rural areas (e.g., higher transportation costs), it may be possible to recover the higher costs through somewhat higher fees.

3. It may be necessary to provide a greater percentage of the populations of regions IV and V with a subsidy, than in other regions.

## 7.0 ANALYSES OF COSTS AND PRICES OF HEALTH CARE SERVICES

- Trip Report: Central African Republic (Barker, February 1992)
- Preliminary Study of Financing the Community Hospital and Proposal for Provisional Fees, Technical Note (Weaver and Ngueretia, September 1992)

## 7.1 Trip Report: Central African Republic (Barker, February 1992)

### Summary

HFS Task Manager Barker estimated the cost per person of four cost recovery options: drugs, laboratory exams, building maintenance, and consultation fees. He found that generic drug costs range from 5 FCFA (malaria treatment) to 1,671 FCFA (whooping cough treatment), whereas brand drugs costs range from 31 FCFA to 5,128 FCFA, for malaria and whooping cough, respectively. Lab exam costs range from 84 FCFA for parasites to 216 FCFA for syphilis. Health center buildings can be maintained with a 25 FCFA fee per person. Consultation fees should range from 75 to 175 FCFA, based roughly on treatment time.

### Introduction

MOH recently completed a National Health Plan (1992-96) which identifies activities to combat the principal causes of morbidity and mortality. MOH has proposed that the activities be partially financed by cost recovery. However, few estimates of patient treatment costs exist.

Barker estimated the costs of four improvements to the public health system to serve as a basis for pricing for cost recovery. The four improvements are:

- Pharmaceuticals to treat the 10 most important illnesses;
- Supplies and reagents to perform basic laboratory tests;
- Building maintenance; and
- Consultation fee (inclusive of revenue to be distributed as a bonus for all health care workers).

## Findings

For ease of pricing and administration Barker recommended the following groupings (parasitic and STDs combined; diarrhea and malaria combined; and ARI) (*see Exhibit 7.1 below*).

**EXHIBIT 7.1**
**SUGGESTED GOVERNMENT HEALTH CENTER PRICES FOR DRUGS, TESTS, MAINTENANCE, AND CONSULTATION**

| | PRICES (FCFA) | | | | |
|---|---|---|---|---|---|
| | DRUGS | TESTS | MAINTENANCE | CONSULTATION | TOTAL |
| Parasites and STDs | 400 | 200 | 25 | 175 | 800 |
| Diarrhea & Malaria (with test) | 150 | 200 | 25 | 125 | 500 |
| Diarrhea & Malaria (without test) | 150 | 0 | 25 | 75 | 250 |
| ARI | 1,000 | 0 | 25 | 175 | 1,200 |

## Derivation of Prices

1. **Pharmaceuticals.**

**EXHIBIT 7.2**
**AVERAGE HEALTH CENTER DRUG COSTS, AND RECOMMENDED PRICES, FOR COMMON MEDICAL CONDITIONS**

| DISEASE | AVERAGE DRUG COST IN FCFA (generics) | SUGGESTED AVERAGE PRICE IN FCFA |
|---|---|---|
| Parasitic Infections | 128 | 300 |
| Diarrhea | 262 | 200 |
| Malaria | 5 | 100 |
| ARI | 1,018 | 1,000 |
| STD | 257 | 500 |

Based on available epidemiological and utilization data, a health center serving 100 patients, charging the above prices, would have a loss on drug sales of 2,605 FCFA. This could be eliminated by raising the price of two treatments by 100 FCFA.

For ease of administration, the five categories of illness can be combined into three price categories, as seen in Exhibit 1.1.

2. **Laboratory tests.** A 200 FCFA fee for laboratory tests will cover the costs of consumable supplies for malaria, intestinal tract parasites, and STDs (*see Exhibit 7.3 below*).

**EXHIBIT 7.3**
**AVERAGE COSTS OF CONSUMABLE SUPPLIES FOR LABORATORY TESTS CONDITIONS**

| ILLNESS | AVERAGE COST OF SUPPLIES (FCFA) |
|---|---|
| Intestinal Parasites | 84 |
| Syphilis | 246 |
| Gonorrhea (2 tests) | 115 |
| Malaria (2 tests) | 192 |
| AVERAGE | 152 |

A fee of 200 FCFA at public facilities is lower than the price of comparable tests performed at private facilities.

3. **Physical plant of health facilities can be maintained with a per episode payment of 25-50 FCFA** (*see Exhibit 7.4*). This assumes each person will use a health facility once a year, on average, and that maintenance costs are equal to two percent of construction costs.

**EXHIBIT 7.4**
**CALCULATION OF HEALTH FACILITY MAINTENANCE COSTS PER PERSON**

| | |
|---|---|
| Construction Costs: | 57 million FCFA |
| Maintenance (2%): | 1.14 million FCFA |
| No. of health centers: | 66 |
| Population: | 3 million |
| Population per health center: | 45,454 |
| Cost per person for maintenance: | 1.14 million FCFA/45,454 people = 25.08 FCFA per person |

4. **Consultation fee.** Consultation fee is set based on relative amount of time required to treat diseases and a preference for round numbers when combined with the pharmaceutical, laboratory tests, and building maintenance fees (*see Exhibit 7.5*). They are not the result of a detailed analysis of labor costs to treat the different illnesses.

**EXHIBIT 7.5**
**PROPOSED CONSULTATION FEES, BASED ON APPROXIMATE PROVIDER LABOR TIME TO TREAT CONDITION**

| ILLNESS | PROPOSED CONSULTATION FEE |
|---|---|
| Parasites and STDs | 175 FCFA |
| Diarrhea and Malaria (with tests) | 125 |
| Diarrhea and Malaria (no tests) | 75 |
| ARI | 175 |

Revenues would be used to offset operating costs, and provide bonuses for all health workers. The bonuses are intended to provide motivation to serve more patients, and create an informal financial control system as all workers will be affected by misappropriated funds.

**Additional Conclusions/Recommendations**

1. This analysis indicates that it is not necessary for the price of each drug to cover its cost, as long as, on average, total drug receipts cover total drug costs. This means that cross-subsidization is occurring: e.g., the price for treatment of parasites partially subsidizes the cost of treatment of STDs.

2. Rounding of prices for administrative ease is recommended.

3. The accounts for pharmaceuticals should be kept separately from the accounts for other revenue accounts because of the importance of pharmaceuticals to the treatment of illness and the perceived quality importance attached to the availability of drugs.

## 7.2 Preliminary Study of Financing the Community Hospital and Proposal for Provisional Fees, Technical Note (Weaver and Ngueretia, September 1992)

### Summary

The consultants examined user fees as set by Decree No. 91.065. Fees are reasonable for civil servants and other fully employed persons. They are roughly equal to or greater than costs (except for inpatient stays). Application of user fees at the Community Hospital would recover 84 percent of nonsalary operating costs; 34 percent of *all* recurrent costs. Consultants recommend "non-salarie" (unemployed or informal sector employed) be charged half price and "assistes sociaux", indigent, not be charged at all. Also, inpatients and outpatients should be required to pay for examinations and other medical procedures. The end result is a shifting of costs from "non-salarie" and "assistes sociaux" to other categories (civil servants and fully employed).

### Introduction

MOH is developing a plan for financing recurrent costs of the Community Hospital. The goal is partial financial autonomy, which means the government pays salaries and some operating expenses, and cost recovery finances personnel bonuses and other operating expenses.

The study examined the application of Decree 91.065 to the Community Hospital and attempted to answer the following questions.

- Are fees for medical and surgical procedures affordable?
- Should the hospital charge inpatients for medical and surgical procedures and diagnostic exams?
- Should the hospital charge for anesthetic and recovery room procedures?
- Are the fees equitable for lower and higher income people?
- What percentage of recurrent costs can the Community Hospital expect to finance with revenue from user fees?

1. **Comparison of fees in Decree 91.065 to prices at mission facilities.** The fees are roughly comparable to mission fees for *higher income categories* at mission facilities. The decree only has one category whereas missions have two or three income categories (*see Exhibit 7.6 below*).

**EXHIBIT 7.6**
**COMPARISON OF DECREE 91.065 FEES TO PRIVATE MISSION FACILITY FEES[6]**

| PROCEDURE | FACILITY | | | |
|---|---|---|---|---|
| | BRETHREN | GAMBOULA (salaried workers) | BAPTIST (income > 20K FCFA) | DECREE 91.065 (CNHUB, Lettre K = 400 FCFA) |
| Circumcision | 4,000 | 10,500 | 6,000 | 12,000 |
| Simple Hernia | 12,000 | 28,000 | 24,000 | 20,000 |
| Amputation (large limb) | 14,000 | 18,000 | 27,000 | 32,000 |
| Skin Graft | 5,700 | 8,000 | 6,000 | 4,000 |

2. **Comparison of fees in Decree 91.065 to the cost of services.** The greatest discrepancy between fees and the average cost of care seems to be for an inpatient hospital stay and for X-ray exams. Fees for outpatient visits are comparable to their average costs (*see Exhibit 7.7*).

[6] For Gamboula and Baptist, the highest income categories were chosen; Brethren and Decree 91.065 fees have only one category.

**EXHIBIT 7.7**
**COMPARISON OF FEES ESTABLISHED IN DECREE 91.065**
**AND THE AVERAGE COSTS OF CARE (IN FCFA)**

| TYPE OF CARE | FEE (Decree 91.065) | ESTIMATED AVERAGE COST |
|---|---|---|
| TSS Outpatient Visit | 500 | 790 |
| Generalist Outpatient Visit | 1,000 | 790 |
| Specialist Outpatient Visit | 2,000 | 790 |
| Surgery (*) Hospitalization/Day | 1,000 | 2,880 |
| Medicine (*) Hospitalization/Day | 500 | 2,880 |
| X-ray Exam (bone) | 3,000 | 1,060 |
| Surgery Procedure | 16,000 | 18,800 |

(*) For a Central African Republic citizen staying in category 3 room.

3. **Comparison of revenue from user fees to total recurrent costs.** Assuming activity levels at the Community Hospital are equivalent to CNHUB, hospital revenue from user fees is estimated at 237.9 million FCFA. This is equal to 36 percent of total recurrent costs, or 34 percent when commissions for personnel are included in total costs.

   Given that the government intends to continue to pay salaries and some other operating costs, it is interesting to note that expected revenue will equal more than 100 percent of nonsalary operating costs (210 million CFA).

**Conclusions/Recommendations**

1. The government should consider establishing two more categories of fees, "nonsalaries" for farmers and other nonformal sector workers, and "assistes sociaux" for those unable to pay anything. The first should be approximately half the price, while the second would be zero.

2. Consider fees for inpatient procedures and exams. This will increase hospital revenue, and discourage people from getting admitted to the hospital so that they avoid the outpatient exams, which have fees.

3. Consider establishing maximum fees-per-episode of hospitalized illness at the community hospital. This would prevent patients from receiving a financially crippling hospital bill after an extended stay or multiple procedures.

4. Introduce a surcharge for nonreferred patients. As many as 30-40 percent of CNHUB and Community Hospital patients may come to the hospital without consulting a lower-level facility.

5. Conduct a study of the patient registration and accounting system at the community hospital. If fees are not applied to all patients, or registration and collection practices are ineffective, the new fees and above recommendations will not increase revenues at the Community Hospital.

6. Contract with a private company to provide food service at the Community Hospital.

7. Establish a uniform standard for the "lettre clé" for medical and surgical procedures.