

HFS Technical Note No. 18
THE EXPANSION OF HEALTH SERVICES
OUTSIDE THE PUBLIC SECTOR
MOZAMBIQUE

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TABLE OF CONTENTS

LIST OF EXHIBITS	iii
LIST OF ACRONYMS	iv
EXECUTIVE SUMMARY	v
1.0 INTRODUCTION	10
1.1 SCOPE OF WORK	10
1.2 DEFINITION OF THE PRIVATE SECTOR	11
1.3 OVERVIEW OF THE MOZAMBICAN ECONOMY AND HEALTH SYSTEM	8
1.4 JUSTIFICATION FOR A PRIVATE SECTOR IN HEALTH CARE	12
1.4.1 Satisfying Demand for Health Services	12
1.4.2 Reducing the Burden on Government Health Services	13
1.4.3 Preventing the Exodus of Health Providers	13
1.5 STRUCTURE OF THE REPORT	13
2.0 THE NATIONAL HEALTH SERVICE	14
2.1 BRIEF DESCRIPTION	14
2.2 PROBLEMS	14
3.0 DEMAND FOR PRIVATE HEALTH SERVICES	16
3.1 UNSATISFIED DEMAND FOR HEALTH SERVICES	16
3.2 ABILITY TO PAY	17
3.3 WILLINGNESS TO PAY	19
3.4 CURRENT "PRIVATE SECTOR" USE	19
3.4.1 Special Clinics	20
3.4.2 Retail Pharmacies	20
3.4.3 Traditional Healers	21
3.5 ESTIMATES OF WILLINGNESS TO PAY	21
4.0 CURRENT AND POTENTIAL SUPPLY OF PRIVATE CARE	23
4.1 CURRENT SUPPLY OF PRIVATE CARE	23
4.2 POTENTIAL FOR INCREASED SUPPLY OF PRIVATE CARE	24
4.2.1 Not-for-Profit Providers	24
4.2.2 Private Enterprises	26
4.2.3 Encouraging Not-for Profits and Enterprises	28
4.2.4 Private For-Profit Providers	28
4.2.5 Migration of Public Providers to the Private Sector	29
4.3 IMPACT OF PUBLIC SECTOR POLICIES ON THE PRIVATE SECTOR	29
5.0 THE NEW LEGISLATION	31
5.1 INTRODUCTION	31
5.2 GENERAL DESCRIPTION OF EXISTING LEGISLATION	32
5.3 ANALYSIS OF THE LEGISLATION	35

6.0	NATIONAL HEALTH SYSTEM (NHS) OPERATIONS	38
6.1	DISTORTIONS IN THE HEALTH SYSTEM CAUSED BY NHS POLICIES	38
6.1.1	Extreme Cases of Subsidies for Services and Goods	38
6.1.2	Effects on NHS	38
6.1.3	Consumer Attitudes and Behavior	39
6.1.4	Some Proposals for Cost Recovery	39
6.2	REFERRAL OF PATIENTS BETWEEN NHS AND PRIVATE HEALTH FACILITIES	39
6.3	ROLE OF ASSOCIATIONS	40
6.4	NGOs AND DRUG IMPORTATION	40
6.5	HEALTH INSURANCE	41
7.0	IMPACT ON THE PUBLIC SECTOR	43
7.1	THE PUBLIC-PRIVATE MIX: A POSSIBLE SCENARIO FOR THE SHORT-TERM	43
7.1.1	The NHS (Public Sector)	43
7.1.2	Private For-Profit Providers	43
7.1.3	Private Non-Profit Providers	44
7.1.4	Enterprises	44
7.2	LOSS OF STAFF	44
7.3	REDUCTION IN QUALITY	47
7.4	REDUCTION IN THE NUMBERS OF PATIENTS	48
7.5	THEFT OF DRUGS AND MEDICAL SUPPLIES	48
7.6	BUDGETARY SAVINGS	48
7.7	OVERALL EVALUATION OF SOCIAL OBJECTIVES REACHED WITH GREATER PRIVATE SECTOR PARTICIPATION	50
8.0	CONCLUSIONS AND RECOMMENDATIONS	52
	APPENDIX 1	
	CALCULATION OF WILLINGNESS AND ABILITY TO PAY	56
	APPENDIX 2	
	EVALUATION OF QUALITY	60
	APPENDIX 3	
	RECOMMENDED MODIFICATION OF THE LEGISLATION	62
	APPENDIX 4	
	COST RECOVERY PROPOSALS	64
	LIST OF PERSONS CONTACTED	65
	REFERENCES	67

LIST OF EXHIBITS

Exhibit 3-1: Annual Expenditures Per Capita 19
Exhibit A-1: Health Care Provided by Maputo Enterprises and Cost
Benefits Matrix 59

LIST OF ACRONYMS

ACRIS	Accao Cristao Interdenominacional para Saude
EPI	Expanded Program on Immunization
FARMAC	Agency responsible for operating state-run pharmacies
GDP	Gross Domestic Product
GNP	Gross National Product
GRM	Government of the Republic of Mozambique
HMO	Health Maintenance Organization
IMR	Infant Mortality Rate
LAM	Linhas Areas de Moçambique
MCH	Maputo Central Hospital
MCH/FP	Maternal and Child Health/Family Planning
MD	Medical Doctor
MEDIMOC	State-run drug monopoly
MOH	Ministry of Health
MSF	Medecins Sans Frontieres (Doctors Without Borders)
Mt	Meticals (Mozambican unit of currency)
NGO	Non-Governmental Organization
NHS	National Health System (run by MOH)
PHC	Primary Health Care
PVO	Private Voluntary Organization
RENAMO	Insurgent forces fighting against the government forces
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
UMCM	United Methodist Church of Mozambique
USAID	United States Agency for International Development
VHW	Village Health Worker
WHO	World Health Organization

EXECUTIVE SUMMARY

With a per capita expenditure on health of approximately 1,000 meticaís (Mt) (US \$0.33)¹ and an estimated 60 percent of the population without adequate health coverage, the Government of the Republic of Mozambique (GRM) must look to alternative providers and financiers of health care. One means of increasing health care coverage is through the private sector.

The justifications for the private sector in health are: to better satisfy demand for health care services, reduce the burden on the government, and permit the public sector to concentrate its resources on preventive and primary health care.

Established in 1975, the National Health System (NHS) initially achieved a number of successes in these areas. The NHS increased access to an integrated network of services, established primary health care facilities providing most out-patient care, dramatically reduced measles in urban areas, trained large numbers of health personnel and located them in primary health care facilities, and implemented a pharmaceutical policy which achieved considerable savings in drug imports.

By the mid-1980s, however, the NHS began to experience a number of problems resulting from declining government revenues and increased government spending on the war effort against the insurgent group, RENAMO. The effects of these problems were decreased management capacities and a reduction in effectiveness of preventive programs. From 1980 to 1989, total public resources allocated to the health sector decreased from 1,480 million Mt to 910 Mt (in 1980 Mt). Insufficient operating budgets have hurt staff morale. Lack of control mechanisms have led to waste and theft of supplies. Health coverage has not increased in recent years largely due to the civil war. Both curative and preventive care have suffered because of shortages of basic drugs.

Donor funds have offset some of the reduction in government spending on health. In 1990, for example, over 90 percent of drugs consumed in the country were donated.

There is substantial unsatisfied demand for government health care services. Almost 50 percent of out-patients at NHS facilities are unable to obtain from the facility pharmacy all their prescribed drugs. Waiting times in NHS facilities of two to three hours are common. Approximately 500 people a year are evacuated by the Ministry of Health (MOH) to South Africa for medical care.

Household expenditure data indicate that the wealthiest 25 percent of the population probably can afford to spend US \$3 to \$6 per capita annually on health care. Calculations for other income groups show similar, though somewhat smaller, ability to pay. Survey data indicate that the average citizen of Maputo spends 4,068 Mt (US \$1.36) per year on health.

¹ Government of the Republic of Mozambique, Ministry of Health and Ministry of Finance, "Gastos, Financiamento e Afectacao de Recursos no Sector de Saude em Mocambique: Avalucao Historica e Perspectivas Futuras", September 1990, pp. 17-18.

Even before the passage of the recent private sector legislation, there were many private providers operating in the health sector. These included traditional healers, special clinics, non-governmental organizations (NGOs), religious organizations, private commercial companies, clandestine private practitioners, and black market drug sellers. Not-for-profit providers, especially religious organizations, are interested in supporting NHS facilities and signing management contracts with the GRM to manage and finance NHS facilities. Private enterprises provide care to their workers (urban-based manufacturing companies are much more likely to provide services than rural agricultural companies). The monthly health care cost at companies visited during this study ranged from US \$7.70 to \$38.50 per worker.

For-profit providers are preparing to open clinics in Maputo and Nampula. Maputo can probably support one or two high-quality clinics, while Nampula and other provincial capitals can probably support one each. These estimates are based on data measuring willingness and ability to pay. The actual number of providers will depend on a number of factors, including the amount of government interference, prices and quality of care at NHS facilities, external investment, and availability of pharmaceuticals and other inputs.

The number of doctors and nurses in the public health system is inadequate to meet demand. Permitting private practice may entice some public sector doctors and nurses to leave for private practice. This will divert some demand to the private sector while reducing public supply. Not all doctors and nurses will go to the private sector if appropriate incentives and disincentives are in place. Permitting private practice in enterprises, private clinics, or special clinics enables the practitioner to supplement his/her public sector salary (about US \$250 per month) while keeping a full-time position in a public facility.

New private sector legislation, with the exception of maintaining the government monopoly on drug imports, is not an obstacle to the development of private sector health care in Mozambique. What will help or hinder private sector growth is how the law is put in practice, and the behavior of government officials, MOH administrators, providers, and consumers.

Several important issues related to the legislation are listed here:

- The law does not permit private sector importation of pharmaceuticals.
- The law inadequately defines the scope of activities allowed by both private and public sectors. The legislation does not preclude abuse of public sector resources by private providers.
- The law discriminates against private for-profit providers. For example, it requires a public sector health professional to obtain permission from his or her supervisor to practice private medicine, even when such practice will occur outside public sector hours.
- The special clinics have an important role to play until public and private health care becomes more separate. The operating procedures, however, should be modified to protect the public sector mission of the hospitals.

- It will be necessary to develop inspection guidelines for the purpose of licensure and health facility standards for the evaluation of quality.

Some of the extreme subsidies for goods and services provided by the NHS have to be drastically reduced (drugs, out and in-patient fees, etc.). To operate the NHS properly, a larger operating budget is needed which can be financed partly through greater cost recovery. Incentives and controls are needed to reduce wasteful prescription and drug use in NHS facilities. Consumers would benefit from better information about choices in the new private market.

Health insurance schemes, designed to serve the needs of large urban factories, are likely to be developed soon. The advantages of insurance include increasing the demand for private care, and thereby increasing the number of financially viable private providers (because of the greater demand). Various insurance programs are possible: public, employer-based, and private.

NGOs and other non-profit providers will require incentives to become engaged in health care provision. Incentives may include uncomplicated procedures for taking over government health facilities, authority to hire and fire personnel, an end to government monopoly on importation and distribution of drugs and other medical supplies, and authorization for NGOs to apply cost-recovery schemes while simultaneously providing amenity beds and services to better-off groups at or above full cost.

Private for-profit provision of preventive care should be promoted. The MOH can give providers supplies (vaccines, growth monitoring cards, etc.) free of charge and, in return, these providers can furnish preventive services free or at nominal prices.

Professional associations, which are in early stages of development, should be supported by the GRM and The U.S. Agency for International Development (USAID). The development of the private health sector in Mozambique will entail a trial-and-error process. The more stakeholders that are involved in the ongoing debate about the private sector, the better.

In the short and medium term, the NHS will continue to be the major provider; it may be obliged, however, to reduce present subsidies for services and drugs and redistribute the resources to rural areas. For-profit providers will operate mainly in urban areas. Non-profit providers should be encouraged, as much as possible, to assume management of rural NHS health facilities.

The NHS can prevent a large-scale departure of public sector doctors, nurses, and other health manpower. By permitting flexible work hours (allowing health professionals to work part-time in the private sector, supplementing their low salaries) and exploring other incentives (e.g., special training), the NHS will retain most of its key staff.

Individual providers are in urgent need of medical supplies (syringes, scalpels, etc.). Due to absence of controls within public facilities, material and portable equipment are already being stolen in great numbers. The problem of theft of equipment and material is partially due to the lack of discipline and dismissal authority in the public sector.

Conclusions and recommendations can be summarized as follows:

1. Demand: There is sufficient demand to support private for-profit medicine in most Mozambican cities. Assuming that the population spends one percent of total expenditures on health, the wealthiest 25 percent of Maputo's population will spend US \$980,000 per year on health care. If 20 percent of this amount were for private provider salaries (the other 80 percent for drugs and facility operating costs), approximately six private doctors and six nurses could be supported (US \$20,000 per year per doctor and US \$10,000 per year per nurse).

2. Loss of Public Sector Manpower to the Private Sector: In the short to medium term, this manpower migration should not adversely affect the public sector. Doctors and nurses express an interest in working full or at least part-time in the public sector. Special clinics, after-hour private clinics, and contracts with private enterprises provide doctors and nurses with opportunities to substantially increase their incomes, while remaining employees of NHS.

3. Legal Issues: The law creating MEDIMOC should be adapted to guarantee that the private sector has access to the drug importation and distribution network. New rules or practices should be developed regarding special clinics, separating special clinic patients from other patients, and requiring doctors to reimburse the hospital for the costs of space, equipment, and supplies.

4. Budgetary Savings for the MOH: The MOH will not experience significant budgetary savings over the short to medium term from private sector expansion. If, however, the MOH were to reduce drug subsidies by approximately 50 percent and increase out and in-patient fees (e.g., to 500 and 1,000 Mt, respectively) there is potential for doubling annual cost recovery revenues from approximately US \$614,000 to \$1,228,000.

5. Impact of Public Sector Policies on the Expansion of the Private Sector: Public sector policies, and, in particular, the large subsidies for drugs (the consumer pays only 25 percent of cost) and consultations (100 Mt fee for a curative out-patient visit) at NHS facilities, will continue to limit the growth of the for-profit private sector. Low prices in the public sector will keep the private sector uncompetitive. In addition, the monopoly on drug and medical equipment imports is likely to reduce the private sector's access to these important inputs.

6. Representation of Professional and Consumer Groups: The growth of professional health associations should be encouraged, as they can play an important role regulating the quality of private sector care and educating consumers about their rights and responsibilities when using private and public health care providers.

7. NGO Management and Financing of NHS Facilities: Using the successful experience of facilities such as Marrere Hospital (which is supported by the Grace Mission, an American religious PVO), USAID is encouraged to support the studies of similar health facilities to demonstrate to other NGOs that facilities can be effectively run with limited outside finances.

8. Health Insurance: Studying the potential for health insurance in Mozambique is recommended. Issues to consider are clientele, types of contracts with providers, cost-containment measures, calculating premiums, etc. Private health care and insurance go hand-in-hand. The private sector will be limited to serving primarily the well-off as long as no insurance exists to help finance hospitalizations and other catastrophic events.

9. Monitoring the Expansion of the Private Sector: Support should be provided to the MOH in developing capacities for monitoring and evaluating the overall impact that the growth of the private health sector has on the availability and quality of health care in Mozambique. Consideration should be given to employing short or long-term consultants to strengthen the technical capacity of the MOH's Planning Department in areas such as health economics, health planning, evaluation, sociology, and health information systems.

10. Modifications to the Scopes of Work for the Two Remaining USAID Policy Studies: Scopes of work for the upcoming studies (Budget Needs and The Pharmaceutical Sector) should include the following two items identified in this study: reducing present extreme subsidies in the public sector (increasing cost-recovery), and authorizing a NGO to operate in the area of drug importation for all NGOs involved in health care.

1.0 INTRODUCTION

1.1 SCOPE OF WORK

For several years, USAID has been interested in supporting policy reform in the Mozambique health sector. In preparation for a possible project or program of assistance, USAID and the Mozambique MOH designed a series of studies to examine important health policy issues and determine to what degree reform of certain policies would be advisable. The first two studies to be carried out by Fall 1992 include the current study of the expansion of health services outside the public sector, and an upcoming study of public sector budgetary needs and allocations in health. A third study, which will examine the pharmaceutical sector, has been postponed.

The private sector study called for a health planner, a legal specialist, and a health economist to examine legal, operational, and budgetary implications of private sector participation in the health sector. On the legal side, the team was asked to study the new private sector legislation and determine whether it creates a more conducive environment for private health providers, and, if not, how it might be modified toward this end. The operational issues to be examined concern administrative, financial, and operational guidelines which would have to be created to enable the establishment of for-profit and not-for-profit private practices. Supply and demand issues include a description of the potential private health care providers and the population's willingness and ability to pay. Finally, the impact of an expanded private sector on the public sector budget was to be addressed.

Studying the potential for private sector expansion is motivated by a number of factors, including very low coverage by the public health sector, high mortality and morbidity rates, and a relatively high rate of population growth. Even with relatively low population coverage rates by the public health system, the GRM is only able to finance 50 percent of the recurrent costs of health services, the other 50 percent being financed by donors. It is largely because of the inability of the public sector alone to satisfy the demand for care that many policymakers in the MOH, donors, and private citizens have pressured the GRM to allow greater private sector involvement in health care delivery and financing. It is believed that this would enable the MOH to concentrate its resources on the most underserved populations.

1.2 DEFINITION OF THE PRIVATE SECTOR

In this report, the private sector is defined broadly as the finance and provision of health services by entities other than the GRM. Thus, it includes health services provided by health posts operated by private enterprises, by non-profit local and international private voluntary organizations (PVOs), be they religious or secular, and by private for-profit individual and group providers.

1.3 OVERVIEW OF THE MOZAMBIKAN ECONOMY AND HEALTH SYSTEM

The Mozambican economy, which is agricultural and service-based, is highly donor-dependent. The weak economic situation is exacerbated by a 15-year-old war of insurgency², several years of drought, and the great number

² A peace accord was signed between the GRM and RENAMO in October 1992. Multiparty elections are tentatively scheduled for late 1993.

of internal refugees who have fled war and drought zones. In the early 1980s, real gross domestic product (GDP) decreased on average six percent per year³. After 1986, there has been a reversal of this trend with 4.4 percent growth per year from 1987 to 1989. Still, with gross national product (GNP) per capita estimated at US \$80 in 1990, Mozambique is considered the poorest country in the world⁴.

At independence in 1975, GRM inherited a fragmented health system which was concentrated in the cities. Besides the few government facilities, there were mission and company-run health centers and hospitals. The newly independent government placed a high priority on universal health care coverage. To reach this end, GRM socialized the health care system, incorporating mission and company health structures into the NHS. The first few years of independence saw a rapid growth in both the number of health facilities and trained health personnel. The emphasis during this period was on preventive and primary health care, especially in rural areas. The civil war, however, resulted in serious damage to the government health system. By 1989, a total of 274 primary health care units had been destroyed and an additional 550 closed, severely limiting the coverage of the population.⁵

Currently, the NHS has approximately 1,152 health facilities, including 1,119 health posts and centers (Level I), 25 rural and general hospitals (Level II), 7 provincial hospitals (Level III) and 1 central hospital (Level IV).⁶ In 1989 these facilities provided five million curative out-patient visits, and with 12,500 beds, discharged 458,000 patients⁷.

Health personnel number 16,000, of which 387 are doctors (50 percent Mozambican) and 3,393 are nurses. The remainder are health technicians, administrators, and other support persons.

Total estimated expenditures (government and donor) on health were 3.8 percent of GDP in 1989⁸, with the GRM contributing approximately 40 percent of the total and donors contributing the remaining 60 percent. The government health budget was 49.5 billion Mt (1990), which is roughly 4.4 percent of the total government budget.

³ WHO, Macroeconomic Evolution and the Health Sector, Mozambique Country Paper, February 1992.

⁴ World Bank Development Report, 1992.

⁵ WHO, Mozambique Country Paper, 1992.

⁶ WHO, Mozambique Country Paper, 1992.

⁷ MOH Annual Statistics, 1989.

⁸ World Bank, Aide Memoire "Social Sector's Public Expenditure Review Mission", 1991.

While it was only in the last few months that legislation was passed that acknowledges the existence of the private health sector, the private sector, in fact, has provided health services in Mozambique for a number of years. The oldest type of private health services in the country, as in much of Africa, is provided by traditional healers (curandeiros). In addition, there have long been traditional birth attendants (TBAs). Both kinds of healers are paid for their services.

In recent years, the GRM has begun to liberalize, if cautiously, the health sector. In 1991, legislation was passed which permitted private enterprises to provide health care to their workers. This included hiring full-time health staff (generally nurses) and, on a part-time basis, doctors who worked in the public sector. In addition, private ownership and management of pharmacies was legalized several years ago, and there are now about 12 such pharmacies in urban areas of the country. Finally, the MOH has begun to allow limited private practice in public hospitals. These services are called "special clinics."

1.4 JUSTIFICATION FOR A PRIVATE SECTOR IN HEALTH CARE

There are three principal justifications for permitting and encouraging the expansion of the private sector in Mozambique: 1) to better satisfy demand for health care services, 2) to reduce the burden on the government to provide all health services, permitting it instead to concentrate on preventive and primary health care which the private sector is less likely to provide, and 3) to prevent exodus of NHS health professionals to other countries in search of higher salaries.

1.4.1 Satisfying Demand for Health Services

There is clearly a small urban elite with the means to pay for higher quality, more expensive health services than those offered by NHS. Evidence of this is the use of special clinics in urban hospitals where patients pay 15,000 to 20,000 Mt for faster service with the doctor of their choice. In addition, there is anecdotal evidence of executives going to South Africa and Europe for special health care needs. The well-off are not the only ones seeking health care outside the public sector. Traditional healers are widespread in cities and in the countryside. The population spends over US \$1 million a year on medications, two-thirds at state-run pharmacies and private pharmacies, and one-third at health care facilities.

Public servants, tradesmen, merchants, and others make enough to more than cover the nominal fees at public health services, which, at the time of this report, were 100 Mt for an out-patient curative consultation and 500 Mt for an in-patient day. The former price is equal to the price of a cigarette, and the latter is less than a one-pound loaf of bread in Maputo.

1.4.2 Reducing the Burden on Government Health Services

With 98 percent of drug imports being financed by donors (1991)⁹ and health care coverage of the population estimated at 39 percent (UNICEF), in the short to medium term, GRM acknowledges it does not possess the resources to provide adequate health care to the whole Mozambican population. By permitting, and in some cases encouraging, the private sector, the government can facilitate greater health coverage for the population. This greater coverage will be supplied by private for-profit facilities and providers, mission and other non-profit organizations, and private enterprises interested in maintaining a healthy workforce. By offering mainly curative care in urban areas, for-profit providers and enterprises may enable the government to concentrate its efforts on the rural and poor, who are less likely to have either geographic or financial access to private for-profit providers.

1.4.3 Preventing the Exodus of Health Providers

Government salaries, including those of doctors and nurses, are tightly controlled both by GRM regulations and by agreements with international lending institutions. Prior to the 1992 private sector legislation, it was possible for doctors to earn, in a few evenings a week, the equivalent of their monthly salary by seeing private patients in their homes. While this practice was illegal, the rewards were quite large and the chances of being prosecuted very small.¹⁰

To keep physicians practicing in the public sector, the law makes it possible for doctors to have private practices and still work full-time in the public sector. Prior to the passage of the law, special clinics permitted this type of practice, but within the public hospital.

1.5 STRUCTURE OF THE REPORT

The remainder of this report is divided into six sections. Section 2.0 provides an overview of the current NHS. Section 3.0 analyzes demand for different types of private care. Section 4.0 describes the current private sector as it existed prior to the passage of the 1992 legislation, and suggests who will take part in the private provision of health care in the future. Section 5.0 summarizes the content of the new legislation, and provides some recommendations for improvement. Section 6.0 suggests means to operationalize the legislation, while protecting the population from harmful practices. Section 7.0 advances ideas of how the larger role of the private sector is likely to affect the public sector. Finally, Section 8.0 provides conclusions and recommendations about how the government can promote the private sector, while maintaining sufficient controls to protect the population.

⁹ Razak and Segall, Pojecto de Prvisão de Alguns Aspectos da Política Nacional de Saúde: O Sector Público de Saúde en Moçambique: Uma Estratégia Pós-guerra de Reabilitação e de Desenvolvimento Sustentado. Documento de Trabalho. Maputo, August 1992.

¹⁰ In a celebrated case, a physician who practiced private medicine openly was prosecuted, found guilty, and made to pay a fine. Now that the law is passed, he is about to open, legally, a private clinic in downtown Maputo.

2.0 THE NATIONAL HEALTH SERVICE

2.1 BRIEF DESCRIPTION

The NHS, established in 1975, integrated all public, private, and parastatal health facilities to build a pyramidal structure to which citizens could have easy access. To promote equity, priority was given to the expansion of rural primary health care (PHC) and preventive care. A symbolic fee was instituted for out-patient visits; referral to higher levels of care was free of additional charges. Preventive care was free of charge; fees were collected for drugs. Exemptions, both for services and drugs, were given to underprivileged groups.

The expansion of PHC met with success: 80 to 90 percent of NHS out-patient services were delivered at this level. Preventive medicine increased through a number of new programs: Expanded Program on Immunization (EPI), Maternal and Child Health/Family Planning (MCH/FP), tuberculosis (TB), malaria, and AIDS/Sexually Transmitted Disease (STD) control. Community participation was sought, including the promotion of village health workers (VHWs) and TBAs.

Drugs are dispensed at the pharmacies in NHS facilities, as well as in free-standing retail pharmacies. State-owned MEDIMOC was established in 1977 to respond to the need to import large quantities of drugs at low prices. Strict prescription practices have been enforced through the establishment of the National Drug Formulary (to be updated every four to five years) and the requirement that only generic drugs be prescribed.

Manpower development focused on nurses, medical assistants, and preventive health personnel.

Foreign assistance has played an important role in NHS since its inception. Expatriate personnel work in many NHS health facilities. Material support has included pharmaceutical supplies, equipment, and rehabilitation of health facilities. Foreign aid is an important source of income which supports the operating costs of providing basic NHS services. Since 1989, approximately 50 percent of NHS current operating expenditures and most health sector investments are donor-funded.

Since 1987, cost-recovery measures have intensified (higher out-patient fees, a new in-patient fee, higher drug prices), due to a decreasing health sector budget (in real terms) and the need to provide staff bonuses to improve morale in NHS facilities. Due to a number of factors (including a complex exemption system), however, NHS has never recovered more than eight percent of government expenditure on health.

2.2 PROBLEMS

The NHS lacks financial resources and suffers from inadequate management. Shortage of basic items (drugs, food, maintenance, fuel) is common, and services are of low quality. The lack of operational controls results in waste and stealing. Staff morale and discipline are low. An insufficient MOH budget results in newly trained health personnel not being hired by the NHS. Some of the specific problems which contribute to the low quality of NHS services are described as follows:

- Low and fixed prices provide few incentives for technicians and managers to use resources efficiently. The lack and low quality of curative care at health centers only increases the demand for expensive emergency services in hospitals.

- The infrastructure is poorly maintained (the Central Hospital of Maputo only allocates three percent of its limited operating budget to maintenance).
- Highly subsidized drugs are not subject to management controls in in-patient facilities. Waste and theft are common.
- The standard of living has been decreasing for large sectors of the population due to the war and the weak economy. Despite the efforts of the NHS, the infant mortality rate (IMR) is rising in rural areas.
- With the legalization of informal private practice (special clinics and private companies hiring doctors and nurses), the limited resources of the referral hospitals suffered from "parasitization": doctors and nurses obtain diagnostic tests and other services free of charge from the NHS, for which they charge their private patients.

3.0 DEMAND FOR PRIVATE HEALTH SERVICES

The demand for health services is the quantity of services which the population is willing to purchase at a given set of prices. Two terms frequently used to describe demand are "willingness to pay" and "ability to pay." Willingness to pay refers to the observed prices and quantities of goods exchanged between buyers and sellers. Surveys are often conducted to determine willingness to pay by asking respondents how many goods and services they purchased and at what prices. Ability to pay, on the other hand, is a more subjective measure of what a population can or should be able to afford. Based on income and expenditure data and other indicators of socioeconomic status (e.g., education, possessions, housing, etc.), estimates are made about the amount of certain types of goods and services a given group of people can afford. Estimates of ability to pay do not indicate, however, whether the population will, in fact, purchase all the goods and services it is estimated it can afford.

This analysis uses both measures to estimate the potential demand for private health services in Mozambique. Several household surveys have been conducted and the results contain information about expenditures on health (National Department of Statistics, Family Survey). Other studies look in detail at employment patterns (Ohio State University Peri-Urban Research Results: Maputo, Mozambique). From these and other studies a picture of willingness and ability to pay emerges. Other comparative measures are used to relate health care prices to prices of other common consumer goods. Willingness and ability to pay in other African countries are used as guidelines for what these measures might be in Mozambique.

3.1 UNSATISFIED DEMAND FOR HEALTH SERVICES

The MOH and donors indicate that access to government health services is low, waiting time is high, and drugs are often unavailable. In Maputo, where there is a relative abundance of health resources per capita, interviews with patients at a peri-urban health center revealed that waiting times of one to three hours are common. Visits to hospital and health center pharmacies indicated that approximately 50 percent of out-patients are unable to obtain at least one of their prescribed drugs from the health facility pharmacy.

Discussions with physicians and patients suggest that, even before the new legislation, there was significant though undocumented clandestine practice in which health providers would see patients after hours at the home of either the patient or the provider.

Another example of unsatisfied demand is the rising number of MOH-approved evacuations of patients to South Africa. MOH statistics indicate that the number of evacuations, which was steady in the mid-1980s at about 265 per year, increased to 553 in 1991.¹¹

¹¹ Ministry of Health, National Health Department, Statistics, 1981-1992.

3.2 ABILITY TO PAY

Mozambique is the poorest country in the world, with an average per capita annual income of US \$80, as reported in the 1992 World Bank *World Development Report*. Such figures suggest that ability to pay is unlikely to be very high, on average. They do not, however, indicate that the entire population is unable to pay for health services.

The average monthly income per capita in Maputo is 26,000 Mt, while the monthly per capita expenditure is 36,000 Mt¹². The roughly 10,000 Mt difference is attributed primarily to underreporting of incomes, and secondarily to some overreporting of personal expenditures. These figures, which convert to US \$104 per capita annually for income and US \$144 per capita annual expenditure¹³, do not tell the whole story. With a median per capita annual expenditure in Maputo of 360,000 Mt (US \$120), half of the population is spending more than this amount. In fact, 24 percent of Maputo's population has total annual expenditures of more than 600,000 Mt (US \$200). The top nine percent of the population in terms of per capita family expenditures per year spends 1.2 million Mt (US \$400) and more. Exhibit 3-1 summarizes the per capita family expenditure data.

¹² National Planning Commission, National Department of Statistics, "Inquerito as Familias: Relatorio sobre os Resultados do 1o Modulo do Inquerito na Cidade de Maputo", Maputo, December 1991.

¹³ Throughout this report, an exchange rate of 3000 Mt per \$1 USD is used, unless otherwise indicated. This was roughly the official exchange rate during the consultancy in July and August 1992.

EXHIBIT 1 ANNUAL EXPENDITURES PER CAPITA			
Meticais	Dollars	Percent	Cum. Percent (a)
0-120,000	0-40	8.0	8.0
120,001-192,000	41-64	12.2	20.2
192,001-240,000	65-80	9.5	29.7
240,001-360,000	81-120	21.0	50.7
360,001-480,000	121-160	14.8	65.5
480,001-600,000	161-200	10.0	75.5
600,001-1,200,000	201-400	15.9	91.4
1,200,001 +	401+	8.5	99.9
Mean (Mt)	Mean (\$)		
432,000	144		
NOTES: Source: National Planning Commission, National Department of Statistics, "Inquerito as Famílias: Relatório sobre os Resultados do 1o Modulo do Inquerito na Cidade de Maputo", Maputo, December 1991: Table 32.2. (a) Total not equal to 100% due to rounding.			

These data demonstrate that while Mozambique is one of the world's poorest countries, expenditure levels vary widely. Using a definition of 360,000 Mt annual household expenditure per capita as the cut-off for absolute poverty¹⁴, 50 percent of Maputo's population lives in absolute poverty.

Other indications of ability to pay for goods and services are the prices that people pay for common consumer goods. In Maputo, the price of a cigarette (100 Mt) buys an out-patient curative visit, and for 500 Mt – less than the price of a one-pound loaf of bread – one receives an all-inclusive hospital in-patient day.

¹⁴ Shubert, Bernd, "Increasing the Food Security of Destitute Households in the Cities of Mozambique", Maputo, April 1992.

3.3 WILLINGNESS TO PAY

There are no household surveys that examine expenditures on health in detail¹⁵. General household surveys, however, do provide some information on health expenditure patterns.

To compare quarterly income and expenditure data in Maputo, the National Planning Commission of the National Department of Statistics conducted four household surveys from April 1991 through May 1992.¹⁶ Results from the first quarterly survey indicate that the average per capita out-of-pocket expenditure on health was 4,068 Mt per year. Of this, 17 percent was for out-patient visits, 16 percent for in-patient care, and 67 percent for drugs. Health represents less than one percent of total per capita expenditures. It is interesting to note that expenditures on pharmaceuticals are roughly equivalent to expenditures on tobacco products, the former being 2,724 Mt per year per capita, while the latter is 2,004 Mt per capita per year.

A recent survey conducted in rural areas¹⁷ reported results similar to the National Planning Commission study. In three districts of Nampula Province, for those families who reported expenditures on health¹⁸, these represented between 0.4 percent and 4.2 percent of total household expenditures during the harvest season. During the non-harvest season, these ranged from 0.1 to 1.0 percent of total expenditures.

The team also evaluated willingness to pay by conducting exit interviews at a peri-urban health center (Malhangalene) in Maputo. Of the 18 patients interviewed, the average expenditure per episode was 2,300 Mt, most of this for pharmaceuticals.

3.4 CURRENT "PRIVATE SECTOR" USE

Out-of-pocket expenditures are an indication of what consumers are willing to pay for health services. There are three primary sources of health services for which consumers pay fees and therefore are an indication of willingness to pay: special clinics, retail pharmacies, and traditional healers. Each is discussed in the following sections.

¹⁵ The second module of the DNE (Departamento Nacional de Estatística) study contains detailed health utilization and expenditure questions. During this consultancy, these data were not yet available.

¹⁶ National Department of Statistics, National Planning Commission, "Inquerito as Familias: Relatório sobre os Resultados do 1o Módulo do Inquerito na Cidade de Maputo", Maputo, December 1991.

¹⁷ Ministry of Health, Mozambique, Michigan State University, and University of Arizona, "A Socio-Economic Survey of the Smallholder Sector in the Province of Nampula: Research Methods", January 1992.

¹⁸ If households with zero reported expenditures on health were included, these figures would be much lower. Therefore, these figures overestimate the average expenditures on health because of the families which reportedly did not have any health expenditures but who are not included in this average.

3.4.1 Special Clinics

Special clinics have been officially established in three central hospitals in Mozambique: Maputo, Beira, and Nampula. This section deals with the two special clinics at Maputo Central Hospital (MCH) which were visited during the consultancy: the meticais special clinic (out-patient only) and the hard currency special clinic (in-patient and out-patient).

The meticais special clinic charges 15,000 Mt for a consultation. Repeat visits are 7,500 Mt. If a specialist is seen, the price is 25,000 Mt for the first visit and 15,000 for the second.

While he or she pays a price equivalent to 42 percent of the average per capita monthly total expenditure in Maputo, the special clinic patient sees the provider of his or her choice, and is seen before other patients. The examination rooms are more comfortable, and better maintained and equipped than other examination rooms. Diagnostic test results are returned more quickly than in the normal clinic.

Since the opening of this clinic in mid-1990, utilization has steadily increased from 250 visits per month in 1990 to approximately 350 visits per month in 1992, despite the higher cost compared to other government health services. On an annual basis, the 4,200 visits cost Maputo residents approximately 66.5 million Mt (approximately US \$22,000). On average (combining first time and repeat visits), users pay 22,500 Mt (US \$7.30) for a special clinic visit, not including the extra costs of diagnostic tests and medications for which special clinic patients pay many times more than other patients. A battery of tests can easily cost the patient another 60,000 Mt (US \$20) which means that many patients will be spending at least 80,000 Mt (US \$27) for the visit, more than double the average per capita monthly expenditure (36,000 Mt or US \$12) in Maputo.

The hard currency special clinic charges US \$20 for the first visit and \$15 for the second. A simple x-ray costs \$30 and a standard blood biochemistry exam costs about \$30. In-patient stays are \$100 per day for hotel services. Diagnostic tests, doctors fees, and medications are extra. Utilization levels in July 1992 were 698 out-patient visits and 30 in-patient admissions.

3.4.2 Retail Pharmacies

Although GRM health facilities have pharmacies for ambulatory patients and charge highly subsidized prices (more than a 75 percent subsidy), 57 retail pharmacies also exist. Forty-five of these pharmacies are run by FARMAC, a state-owned, theoretically financially autonomous company which sells drugs to the public with a sufficient mark-up to cover transportation, administrative, and other operating costs. The remaining 12 are privately owned and operated, but they must conform to the same price structure as FARMAC pharmacies.

While the retail pharmacy revenues represent 13 percent of the total value of all drugs consumed in the country¹⁹, their sales represent about 70 percent of out-of-pocket expenditures on drugs, out of a total of 3.2 billion Mt. Thus, while the vast majority of drugs are consumed at NHS facilities either free of charge (in-patients) or at highly subsidized prices (out-patients), the majority of private expenditures for drugs are made at retail pharmacies.

3.4.3 Traditional Healers

Traditional healers play a role in the delivery of health care services throughout Mozambique. Whether a traditional midwife or a curandeiro (healer), these providers do everything from assisting births to treating patients with TB, infertility, and STDs. An association of traditional healers exists in Maputo, though an exact count of members is not available. Association spokespersons stated that an average consultation fee is 3,000 Mt; this was confirmed by exit interviews at Malhangalene Health Center.

In a recent survey²⁰ of 33 families, five responded that they used a traditional healer for the treatment for their child's last episode of acute respiratory infection, compared to 14 who used an NHS facility. Traditional healers are active and well remunerated for their services in Maputo, based on the results of the Ohio State Peri-Urban study. Nine traditional healers reported average monthly earnings of 429,000 Mt (US \$143), the highest reported earnings of the 16 self-employment categories. Only carpenters and electricians, earning 400,000 and 406,000 Mt per month, respectively, came close to the earnings of traditional healers.

3.5 ESTIMATES OF WILLINGNESS TO PAY²¹

To determine the demand for private for-profit health care, it is useful to estimate ability to pay. It is clear that there is sufficient demand to keep a special clinic operating with 350 consultations per month at approximately 15,000 Mt per visit, as discussed in Section 3.4. But is there sufficient demand to support a special clinic *and*, for example, two or three private sector clinics each employing three doctors?

Approximately 25 percent of the population has average annual expenditures of over US \$200 (Exhibit 3-1). Assuming that the average expenditure for this 25 percent of the population is \$300, and they spend one percent on health, then total annual private health expenditure in Maputo would be \$975,000 (25 percent x 1.3 million population x \$300 expenditures x 1 percent on health).

Assuming this same population spent 67 percent of its health expenditure on medications, the remaining 33 percent (US \$321,750) could go towards the operating costs at private clinics. Assuming salaries are 60 percent of operating costs, there would be \$193,050 available for salaries.

¹⁹ Duroao, Joaquim, "Modelo da Circulacao de Medicamentos na Republica de Mocambique", Maputo, July 1991.

²⁰ Save the Children, "Mid-Term Evaluation Survey Umbrella Project," March 1992.

²¹ More detail is provided in Appendix 1, including sources.

Assuming a private sector MD expects to make US \$20,000 and a nurse \$10,000, the \$193,050 would support six doctors and six nurses (6 x \$20,000 plus 6 x \$10,000 = \$190,000), or some other configuration of health personnel. It appears that, based on ability to pay, there is sufficient demand for two clinics, each employing three doctors and three nurses.

Epidemiological and utilization data can be used to assess ability to pay. Using Maputo as an example, assume that the annual hospitalization rate is three percent and each person makes 1.5 curative out-patient visits per year. At this rate, a family of seven (average size in the National Planning Commission study was found to be 6.7) would experience 11 out-patient visits. At current fees (100 Mt per visit plus 350 Mt for drugs), this family would spend 4,950 Mt on out-patient care. If, in addition, the family experiences one hospitalization per year (much higher than the likely 30 per 1,000), this would cost them 5,400 Mt (500 Mt per day for 10 days, plus 450 Mt for drugs). Combining out and in-patient expenses, the family faces expenditures of 10,350 Mt per year.

Taking the average annual per capita expenditure of 432,000 Mt (Exhibit 3-1) multiplied by the family size of seven, the average family expenditure would be 3,024,000 Mt per year. The health expenditure (10,350 Mt) is equivalent to 0.34 percent of family expenditure, well below the 1 percent expenditure suggested by other studies. Using the rough guide of 1 percent of expenditure, this family could spend 30,240 Mt per year on health care: about 13,000 Mt for out-patient care and 17,240 for in-patient care (e.g., 1,500 Mt a day for 10 days plus 2,240 for medications).

Data and calculations suggest that the average family in Maputo spends in NHS facilities about 33 percent of the total it is "able" to spend on health care. It should also be noted that health expenditures, as a percent of income, are believed to increase with greater income.²² Thus, in a scenario of rising incomes possible with an end to hostilities and the concomitant increase in economic activity, willingness to pay for health services should increase. A somewhat more detailed discussion of ability and willingness to pay calculations is presented in Appendix 1.

²² Griffin, C., "Strengthening Health Services in Developing Countries through the Private Sector," International Finance Corporation, 1989.

4.0 CURRENT AND POTENTIAL SUPPLY OF PRIVATE CARE

4.1 CURRENT SUPPLY OF PRIVATE CARE

Long before the drafting of the new private sector legislation, various forms of private sector medicine were practiced in Mozambique. These included traditional healers who have practiced for centuries and whom the government does not attempt to regulate in the new legislation, and company health facilities which were permitted by law in 1991. This section briefly describes the private sector actors, both legal and illegal, who provide health care services to the population. Section 4.2 discusses the various roles different types of private providers may have in the future.

Special Clinics: Although they are located in public hospitals, special clinics are quasi-private in that their fees are much closer to cost and the doctors receive a portion of the revenues. About 4,000 patients a year pay 15,000 Mt for first visits (25,000 Mt for a specialist) and 7,500 Mt for second visits, in return for choice of doctor, faster service, and more comfortable surroundings. There is also a foreign currency special clinic which serves about 8,400 out-patients and 360 in-patients per year. Prices start at US \$20 for an out-patient visit and \$100 for an in-patient day (hotel services only).

NGOs, Religious Groups: A wide range of organizations from Doctors Without Borders (MSF) to the Roman Catholic Church provides health care in Mozambique. Some organizations have formal agreements with the government concerning their role in managing and financing NHS facilities.

Company Health Posts: A law passed in 1991 permits private companies to treat their workers at onsite health facilities. A number of urban companies provide care to their workers. This reduces productivity losses when workers must spend time trying to obtain care through NHS.

Private Pharmacies: Mozambique has 45 parastatal FARMAC pharmacies, and 12 private pharmacies which sell drugs at FARMAC prices. Most drugs are sold by prescription.

Traditional Healers (Curandeiros): Healers exist throughout the country, especially in rural areas, and they have an association in Maputo. Exit interviews at a peri-urban clinic found that about one in six respondents had visited a traditional healer before coming to a NHS clinic.

Clandestine Private Practice by Physicians and Nurses: Doctors and nurses provide care on a fee-for-service basis either by visiting the home of the sick person or having patients come to the home of the provider. Exact numbers of such providers are not known.

Black Market Drug Sellers: Drugs are sold without prescriptions in the marketplace. It is believed that these drugs are stolen from hospitals and other health facilities.

This overview of private providers demonstrates that a private health sector is not new to Mozambique. New forms of private health care (e.g., private clinics) are expected to meet with sufficient demand to support their operating costs.

4.2 POTENTIAL FOR INCREASED SUPPLY OF PRIVATE CARE

In discussing the expansion of the private sector, it should be noted that different providers have different motives for providing care:

- Non-profit providers (religious groups and other humanitarian NGOs) are interested in bettering the lives of the population.
- Private enterprises that provide health services to their workers are concerned with the well-being of their workers, usually with a profit motive.
- For-profit providers are interested in operating a profitable enterprise, which happens to be the business of providing health services.

Despite different motives, all three types of providers can improve health care coverage in Mozambique. The end result of their participation in the health care sector will be to increase the number of services available and provide consumers with more options for care. In encouraging and monitoring these three groups, the GRM should be aware of the different motives and act accordingly. The following sections describe the potential growth of each of these providers and cites some of the conditions and concerns which must be addressed to encourage each type of provider.

4.2.1 Not-for-Profit Providers

Under this rubric, there are two main types: religious organizations and international relief/development organizations. While there is some blurring of the distinctions between these two groups, it is possible to treat them differently based on their motive for being involved in the health sector. Of all private providers, the MOH is most interested in encouraging not-for-profit providers, because, like the MOH, they see health care as a basic human right.

Religious Organizations: Prior to independence, churches and mission groups provided health care in the communities where they were active. For these groups, the physical health of the population was an extension of its spiritual health. They constructed, equipped, and ran everything from hospitals to health posts. After independence, however, the state took control of these health facilities, incorporating them into the NHS.

With the government currently more open to non-government provision of care, it realizes that, in the short to medium term, it will not be able to provide care to the majority of the population. Various religious groups are increasing their presence and negotiating with the government about resuming control of facilities they once managed.

The United Methodist Church of Mozambique (UMCM) and Grace Mission are similar in their interest in running, and financing to a large extent, health facilities which would be part of the government health system. In Chicucue, UMCM provides the rural hospital with five medical and administrative staff members and supplements the GRM's allotment of drugs. An agreement with the GRM outlines the responsibilities of each party, giving UMCM some management control over the hospital while the GRM agrees to supply the facility with some drugs, as well as allow UMCM duty-free importation of drugs. Unfortunately, despite the written agreement, UMCM has experienced great difficulty in getting its drug shipments out of customs. What UMCM understood would be duty-free ended up costing them 50 million Mt (US \$16,700) because the MOH did not have the necessary funds to pay customs.

In the province of Nampula, about 10 miles outside Nampula city, a surgeon from Grace Mission has been working in the NHS health center for the last two years. Grace Mission, in addition to paying for the surgeon, provides the facility with some drugs and equipment. The mission is interested in signing a management contract with the government. Grace Mission has prepared a proposal and there have been discussions with the MOH about the responsibilities of each party.

These examples of involvement in the management and financing of health services appear to be well received by the MOH. This partnership results in an expansion of coverage and an improvement in quality.

Some religious organizations are not interested in the management of facilities. They see themselves providing support to existing government facilities and programs. Accao Cristao Interdenominacional para Saude (ACRIS) is placing expatriate doctors and nurses primarily in rural areas to support GRM programs. These professionals work in government health centers or hospitals and train mobile units to provide care in outlying villages. In addition, they supply drugs to supplement government allotments.

For this type of organization with limited financial resources, managing and being largely responsible for operating costs of a fixed health facility is a daunting prospect. It should be noted, however, that representatives of ACRIS were somewhat interested in running a peri-urban maternity, which is currently closed.

The Catholic church, which prior to independence ran and financed a number of facilities around the country, is providing support only in terms of personnel and drugs. The idea of assuming control of an NHS facility is not seriously contemplated.

International NGOs: The large international NGOs have a different mission in Mozambique than the local NGOs and religious groups. Their main purpose is to provide emergency relief for the victims of war and drought, and to strengthen the existing government systems. Organizations which fit this description are World Vision, Save the Children, and MSF.

MSF, for example, is involved in Quelimane, where it has rehabilitated the NHS hospital at Gurue and is doing the same at Mocuba. In addition, MSF provided an expatriate doctor to Gurue hospital until a Mozambican could be placed there. An MSF doctor is still working in Mocuba, but MSF hopes he will be replaced by a Mozambican in the near future.

This type of support, which enables districts to provide at least a minimum of health services and helps to satisfy the health needs of extremely poor, displaced populations, is not a solution for the medium to long term. The international NGOs are interested in developing local capacity to take over after crisis situations have passed. These organizations, therefore, are not a good option for the MOH in terms of expanding private health services.

4.2.2 Private Enterprises

Prior to independence, private companies owned plantations covering vast tracts of land. The populations living in and around these plantations were dependent on the company not only for employment, but also for housing, food stores, and health care. It was common for a company to build and operate a health center or even a hospital to serve the thousands of employees and their families. With independence, these health facilities were taken over by the state.

In 1991, the GRM once again permitted private enterprises to run health facilities for their employees. A number of companies took advantage of this law to establish health posts on company grounds. However, unlike pre-independence times, the companies that have started providing health care directly to their workers are mostly urban-based manufacturing companies, rather than rural, agricultural-based companies. The main motivation for providing onsite health services is to increase the productivity of the workforce by minimizing the time needed to seek and receive health care from NHS. In this assessment, urban-based companies are considered separate from rural-based.

Urban-Based Private Enterprises: Visits to five urban-based manufacturing and service industries (four in Maputo and one in Quelimane) revealed that a variety of services are offered and costs per worker also vary. Appendix 1 provides details on services provided and costs.

The health facilities visited ranged from small, single-room health posts to multi-room, multi-provider health centers. Only one company provided care free of charge to immediate family members; one provided care to family members for a fee. In most cases, the health post took care of relatively minor problems that could be seen by a nurse or on an out-patient basis. Most also had a higher-level nurse or doctor who visited several times a week to see the more complicated cases. Anything that could not be handled by the doctor or nurse was referred to the hospital. Usually workers paid for drugs, which generally were provided by NHS at the normal subsidized prices. In most cases, the company covered the full cost of hospitalization.

Costs per worker for health services provided by the company ranged from US \$7.70 to \$38.50 per month for the three companies where data were available. In one company where annual salary data were available, the expenditure on health benefits was equivalent to 3.8 percent of total salaries.

Company management unanimously agreed that the investment in their workers' health paid for itself in greater worker productivity. One of the companies, FAVEZAL, was expanding its health services by building a separate health facility to treat its workers, their families, and eventually the surrounding community on a fee-for-service basis. The other companies had made recent investments in health equipment, and were interested in contracting to the private sector for most services.

In most cases, management was concerned about rising costs of health care. In anticipation of rising costs, managers have considered cost-sharing arrangements with their workers. Linhas Aereas de Moçambique (LAM) – the national airline – has implemented such an arrangement, and it only applies to drugs obtained outside the NHS. None of the companies currently makes any deductions from worker salaries to pay health care costs.

Rural-Based Agricultural Enterprises: Visits to four agricultural companies in Quelimane suggest that worker health is a low priority. Simply paying wages is much more pressing.

While some of these companies at one time actually ran hospitals and were the only source of health care over large geographic areas, they are currently not in a position to retake control of facilities which have been in government hands for the last 17 years, now badly damaged or not operating. Prerequisites for their greater involvement are a stronger economy and an end to the war. Some of the companies have had heavy losses of equipment during the war, and areas that they used to cultivate are unsafe.

Even if they were doing better financially, there would be concerns about opening a facility for their workers. There would be pressure to treat the entire population that does not have access to an NHS facility.

4.2.3 Encouraging Not-for Profits and Enterprises

The new legislation encourages a partnership between NHS and private non-profit providers of care, which appears to be a good strategy. The following points should be highlighted:

- Some religious groups are prepared to manage and heavily subsidize health center and hospital operating costs (e.g., Grace Mission in Nampula).
- The number and experiences of such arrangements should be monitored to learn what type of arrangement works best. Lessons learned should be shared with NGOs, which have a history of providing health care services.
- Security is an important factor for encouraging religious groups to take over a facility. Private groups will hesitate to invest in equipment and supplies until security is improved.
- Drug importation by mission groups is still a major stumbling block to greater expansion. A solution must be found for the long delays at customs and the inability of the MOH to cover customs fees they agreed to pay. A possible solution is a mission/religious drug importer that could work alongside MEDIMOC. Or its role might be limited to assisting missions with customs clearance. Kenya, Rwanda, and Tanzania have had experience with this type religious/NGO drug importer. The experiences of these countries may hold some lessons for Mozambique.

4.2.4 Private For-Profit Providers

There appears to be sufficient demand for private sector health services to support the private practices of six doctors and six nurses in Maputo alone. One must ask whether there is sufficient supply to satisfy this demand. It is difficult to predict who will be willing to risk a private venture, given the controls maintained by the government on the importation of drugs and medical equipment, and the highly subsidized prices of care in NHS. Despite the risks, there is evidence of investment in private practices. Two examples are provided here:

- A private for-profit clinic appears to be on the verge of opening in Maputo. It will be staffed by Mozambican and South African doctors with, reportedly, investment by South Africans and the African Development Bank. If it is successful it is likely to spawn other clinics which fit different niches. Clinica Azul is targeted to the well-to-do expatriate community; follow-on clinics will probably also cater to the upper-middle to upper-class Mozambican community.
- In Nampula, the team met with the developer and investor of a private pharmacy which is to open soon. Above the pharmacy, the developer has rented out space for doctors' offices, a laboratory, and x-ray equipment. This will be the city's first private out-patient clinic. Offices will be rented to doctors, and lab and x-ray services will be provided at a charge to the doctors who rent space and to other private MDs in Nampula.

Based on calculations for Maputo, it is likely that cities like Quelimane, Beira, and other provincial capitals have sufficient demand to support at least one private clinic each with two to three doctors. As described in Section 4.2.5, doctors work 20 to 40 hours per week in the public service and then work in their private clinic after their public service is completed. Nurses will either follow a similar pattern of dividing their time between public and private, or, because there are currently in Mozambique trained nurses who have not been placed into service by the GRM, private clinics may be able to hire trained but unemployed nurses without affecting the public sector.

4.2.5. Migration of Public Providers to the Private Sector

The liberalization of the private sector poses several questions relative to the public sector. Primary among them is whether highly trained public sector health staff will leave the public sector for more lucrative private practice. Such a departure could negatively affect the quality of care at NHS facilities, overburdening the remaining staff and resulting in an overall deterioration of the quality of care.

This scenario is possible but, in the near future, not probable. At current income levels, the market will support only a limited number of private sector practitioners. Health professionals wish to remain in the public health system as long as there are acceptable means of augmenting their salaries through practice in the special clinic or through private practice. The issue of loss of NHS manpower is discussed in more detail in Section 7.0.

4.3 IMPACT OF PUBLIC SECTOR POLICIES ON THE PRIVATE SECTOR

There are at least four areas in which public sector policies have a direct impact on the private sector:

- Pricing policy for consultations and drugs;
- Drug importation and distribution policies;
- Quality of care, and
- Quantity of care.

The first two restrict the private sector, while the last two tend to encourage the private sector. The four areas are discussed briefly in the following paragraphs:

Public Sector Pricing: To make health services available to even the poorest, the GRM has set very low prices for out-patient and in-patient care and pharmaceuticals. The highly subsidized prices (e.g., drugs sold at NHS pharmacies for one-tenth to one-third their cost, and out-patient consultations costing 100 Mt) make it difficult for the private sector to compete in terms of price. Only those with sufficient means who put a high priority on choice of doctor and faster and more comfortable service will use the private sector, where prices will be many times higher.

Availability of Drugs: With the GRM (through MEDIMOC) being the sole importer and distributor of pharmaceuticals and medical supplies, there are restrictions and limitations on the availability of drugs for private providers. Choosing among the types and quantities of drugs is outside the control of private providers. When NHS is in short supply

of drugs, private providers have an even more difficult time obtaining the drugs they require.

Quality of Care: This is one area where the private sector will have a competitive advantage. In fact, it is the relatively low quality of care at NHS which provides a market opportunity for better quality and higher-priced private care. The private sector can cater to consumers who are dissatisfied with NHS health care characterized by frequent drug shortages, poor facility maintenance, a paucity of doctors, and short and impersonal consultations.

Quantity of Goods and Services within NHS: Closely related to quality is the quantity of goods and services. NHS is not able to meet demand. Waiting times are long and many patients do not find the drugs they need in the health facility pharmacy. This unsatisfied demand is another contributing factor for the growth of the private sector.

Summary: The private sector will grow because there are individuals for whom time, quality, and choice are worth the much higher prices. The extent to which the private sector will grow, and conversely the reduction of the burden on NHS to provide all health services, depends in part on GRM's position regarding reform of pricing policies (both for drugs and consultations) and reform of drug importation and distribution.

5.0 THE NEW LEGISLATION

5.1 INTRODUCTION

This section examines conditions in the private health care sector, particularly restrictions and incentives under the current legislation, and provides recommendations for improving the legislation. The proposed recommendations are intended to clarify and promote the development of the private sector.

General recommendations related to the legislation take into account the need to:

1. Mobilize resources for the health care sector, both public and private;
2. Promote competition between the public and private sectors and within the private sector;
3. Direct public financing towards achieving public health goals;
4. Change the behavior patterns of the principal medical and managerial agents along with changes in the legislation itself;
5. Improve quality standards in health care services;
6. Improve the efficiency of the public sector;
7. Make the state responsible for greater equity in access and utilization of health care services;
8. Create financial incentives for health care professionals in order to ensure their continuing service;
9. Satisfy those who demand better quality health care and who have the necessary means to pay for it;
10. Liberalize the acquisition and utilization of certain products, mainly medicines and hospital equipment, with incentives for private sector consumption of lower-cost generic medicines;
11. Monitor private activity in public hospitals;
12. Clearly separate public and private sectors to prevent conflicts between them;
13. Reinvest health revenues in the health sector as opposed to submitting them to the National Treasury, and
14. Involve professional associations in quality control in both the public and private sectors.

This section on legal considerations has three parts:

- A general description of the principal legislation regulating the private health sector;
- A broad analysis of the existing legislation, and
- A detailed analysis of key articles of the existing legislation.

5.2 GENERAL DESCRIPTION OF EXISTING LEGISLATION

This section describes the principal acts of legislation relating to the private health care sector.

1. Decree No. 35/77 of August 16 creates the State Enterprise for Importation and Exportation of Medicines - E.E. MEDIMOC (Empresa Estatal de Importacao e Exportacao de Medicamentos - E.E. MEDIMOC) whose specific functions are to import, store, distribute, and export medicines and other products (vaccines, bandages, chemical reagents, x-ray film, hospital equipment, etc.).

2. Law No. 26/91 of December 31, which authorizes private individuals or companies, either for profit or not, to render health care services, and also establishes the following basic rules:

(1) The private health entities *complement* the public sector activities, thus cooperating with them;

(2) To carry out their private activities, the providers must comply with the *conditions* stipulated in Article 4 of Law 26/91;

(3) Both the *registration* of private health care professionals and recognition of their professional qualifications shall be the responsibility of an appropriate organization to be created by law, and to be exercised in the meantime by the MOH;

(4) All private institutions shall be subject to *inspection* by the appropriate health structures and units of the MOH;

(5) Private sector professionals shall *render services* to the public sector under conditions to be defined by the GRM;

(6) Entities foreseen by this law include cooperative, mixed, and private *associations*;

(7) The establishment of the various institutions shall be the *responsibility* of the entities mentioned in Article 11, No. 1;

(8) The state may *participate* in the capital formation of the above-mentioned institutions, may subsidize them or grant them special privileges, including tax exemptions, excluding the concession of direct importation of medicines, except in cases to be defined under appropriate legislation;

(9) The above-mentioned institutions will only employ health *professionals* whose training has been recognized by the MOH, and

(10) This law does not apply to activities related to *traditional medicine*, nor to the activity of traditional midwives.

3. Decree No. 09/92 of May 26 approved the Regulation of the Provision of Health Care by Private Entities (Regulamento de Prestacao de Cuidados de Saude por Entidades Privadas) which foresees essentially:

(1) **The Licensing and Registration of Private Health Units**, which establishes those entities competent to issue technical opinions and authorize the opening of private entities, required documents and where they should be submitted, deadlines for their authorization, intervention in case of appeal, and the registration and filing to be kept by the competent authorities.

(2) **Professional Recognition and Registration**, which establishes those documents which should be submitted by the private entity wishing to own or manage the institution, ways to recognize foreign professional qualifications, the preference to be given in the recognition and registration of professionals in categories and specialties which are lacking in Mozambique, documents required for purposes of registration, need for health professionals working in the private practice to provide at least 20 hours of service weekly in an NHS institution, and to prevent conflicts of interest in the exercise of private medicine.

(3) **Conditions for Establishment of a Private Health Care Institution**, which sets requirements for inspecting and examining the documentation which must accompany the application to establish a private health care institution, the certificate attesting to its licensing and registration, and the competent GRM authorities for that purpose.

(4) **Correlation and Collaboration**, permitting the use by private entities of the resources of NHS units, the use of NHS units and their management by non-profit private entities (stipulating the conditions and responsibilities for using NHS means and resources), celebration of cooperative agreements between NHS units and private health care entities.

(5) **Technical Characteristics and Specific Functions of Private Health Institutions**, reported under No. 1 of Article 8 of Law No. 26/91 of December 31, which establishes the type of health care to be provided (preventive, ambulatory, in-patient), including diagnostic activities and the prescription of medicines, technical referral to other health units, fee or non-fee basis of health care provision, geographic distribution, population to be served, distance between units, technical management, specialties and services, number of beds, management of services, and technical aspects of care provided.

(6) **The Exercise of Pharmaceutical Activity and Use of Medicines, which:**

- Prohibits the importation of medicines by the institutions under this regulation (Regulamento);
- Requires proof that medicines were obtained legally;
- Prohibits the use of medicines not included in the National Formulary (Formulario Nacional);
- Requires the description of drugs by their generic name;
- Prohibits drug trials by private entities;
- Prohibits the simultaneous practice of both medical and pharmaceutical professions or the joint ownership of health care and pharmaceutical establishments;
- Prohibits dispensing of drugs in private clinics and private doctors' offices as well as in specialized hospitals, limiting their administration to in-patients and emergency cases;
- Permits Health Posts and Health Centers, General and Rural Hospitals to dispense drugs to both inpatients and outpatients;
- Prohibits unethical competition and collusion between the clinical and pharmaceutical professions, and
- Permits private entities to maintain a drug stock commensurate with their rate of patient utilization and a requirement to maintain an up-to-date registry of medicines.

(7) **Auditing and Inspection**, which designates inspectors in the various fields of activity and establishes standards and procedures for conducting inspections.

(8) **Final Dispositions**, requiring private entities to submit annual reports of activities and prohibiting advertising by health institutions and professionals.

4. Ministerial Act No. 78/92 regulating *Home Care* (Assistencia Sanitaria ao Domicilio do Doente), particularly those health professionals permitted to provide such care, the entity competent to authorize such care, the limits of health professional intervention, the principle of the patient's right (or the right of his/her relatives) to choose the health care provider, as well as the right to initiate and continue home care.

5. Ministerial Act No. 79/92 defines the *Standards, Procedures, and Responsibilities for the Recognition and Registration of Health Professionals* in the Private Sector, especially the authorities competent to that end and their qualifications, the deadlines for submitting requests and deadlines for evaluation, decision, and appeal of decisions regarding registration.

5.3 ANALYSIS OF THE LEGISLATION

Laws alone will not change people's behavior. The reform of the Mozambican health system, which permits the active participation of the private sector in the provision of health care, must include incentives to improve the efficiency and equity of the system. These incentives must reach patients, health professionals, health managers, companies, and policymakers. However, the creation of a system of incentives without a strong implementing structure, sufficiently flexible to incorporate changes, runs the risk of failure. Limiting the intervention of the state does not mean that the actors should have complete freedom to do as they wish. Rather, it means that the state has to be more lucid, cautious, and attentive to the expected reactions of the affected groups.

A multilevel, autonomous, for-profit private sector is not anticipated in the near future. Therefore, NGOs (their missions, in particular) will play important roles in the health market, especially where they are the only providers in a large geographic area.

The remainder of Section 5.3 examines the extent to which the legislation described in Section 5.2 meets these objectives:

- 1. Drugs:** In 1991, the state contributed only two percent of the cost of acquiring drugs, while the remaining 98 percent was donated. Still, the general lack of drugs persists throughout the country, promoting a black market in drugs. In addition to a Public Program of Basic Drugs (Programa Publico de Medicamentos Basicos), including planned distribution and recommendations for efficient use, it is necessary to guarantee that the private sector has equal access to the drug import and distribution network. The law that created E.E. MEDIMOC must be modified, guaranteeing that private importers receive adequate foreign exchange for continued purchasing operations, and creating incentives for the private sector to use lower-cost generic drugs.
- 2. Public Network of Services:** The classification of NHS health units in Article 8, No. 1, of Law No. 26/91 and Article 33 and following articles of Decree No. 09/92, should be made into separate legislation that establishes standards for national, regional, and local planning, and regulates the characteristics of each health institution, including the definitions and standards for NHS facilities in the legislation and regulations that define the private sector and may create confusion between the different objectives and functions of each sector.
- 3. Correlation of the Private and Public Sectors:** Non-profit NGOs, which generally possess external financial resources and have a history of experience, should pursue their activities and, in some regions, even replace the state in providing health care services. The conditions, however, under which NGOs provide services must be made clear, especially regarding the State's contributions; Article 30 of the regulation (Regulamento) and the special benefits foreseen in Article 13, No. 1 of Law 26/91 should be revised.

4. Profitable Private Sector: Competition between the public and private sectors and within the private sector is the best guarantee for a normal functioning of the health system. Clear rules are necessary to permit consumers to choose providers according to price and quality.

The obligation for private practitioners to provide at least 20 hours of service weekly in the public network is understandable because of the need to meet basic and urgent care, but unacceptable in terms of the competition being promoted.

The long-term development of distinct public and private sectors will require a clear separation of public and private professionals. Until then, the argument for freedom of choice makes it advisable that each professional may opt, if so desired, to work exclusively in the private sector.

5. The Exercise of Private Activity in Public Hospitals:

In some African countries, the concept of "pay beds" is being developed: doctors practice private medicine in public hospitals in a limited number of beds and in out-patient facilities. This experience has some disadvantages: coexistence of two classes of patients in the same hospital, discriminatory bonus payments among doctors, nurses, and other professionals, and a general postponement of the creation of an autonomous private sector.

"Special clinics" have existed in Mozambique for three years. Hospital and doctors' incomes have increased, and patients willing to pay experience less waiting and can select their provider. The clinics also create competition with the autonomous private sector, which will grow now that legislation has passed.

It is necessary, however, to prevent private activity within the hospital from subverting the objectives of the public health system. Thus, it is recommended that the special clinics be regulated in accordance with the following principles:

- (1) The primary public function of the hospital and therefore the hospital's public activity should not be, in any instance, harmed by private activities, especially regarding the number of hours that professionals are obliged to serve the hospital as well as maintaining or increasing their productivity;
- (2) The principle of freedom of choice by the user of any of the sectors, public or private;
- (3) The principle of patient freedom in choosing a private sector doctor;
- (4) The principle of separating public and private provision of care, either temporally (e.g., before vs. after 4 p.m.) or physically (e.g., separate wards) and with separate billing and payment for consultations and staff;
- (5) The principle of the provider's dual responsibility to user and institution, and

(6) The principle of the individual doctor's responsibility to the patient under his/her care.

The following are recommendations for regulating or monitoring the special clinics:

- With regard to out-patient consultations, the hospital should charge doctors who see private patients a monthly fee for the use of office, examination rooms, reception and waiting areas; materials and supplies (increased by a percentage such as five percent for administrative expenses); services rendered by the hospital, such as sterilization and telephone; and diagnostic and therapeutic services. The doctor may recruit, with the agreement of the hospital management, those professionals he needs to carry out his work, especially nurses and administrative staff, and is responsible for their payment.
- Regarding in-patient services, the hospital must charge patients a daily rate, in addition to charges for diagnostic and therapeutic services, and the use of the operating room.
- The requisitioning of materials, examination, or services to be provided by the hospital, either in consultation or in-patient services, must mention that they refer to a private medicine patient.

6. Evaluation of Quality: Article 82, No. 2 of the Regulation (Reglamento) states that the standards and procedures to carry out inspections of private institutions will be handled in a separate legislative act. It is important, however, that those rules be equally applied to both public and private sectors to avoid discrimination.

Prior to an inspection, general standards of quality must be developed which may be used as objective measures, such as those described in Appendix 2.

Specific articles for which clarification or amendment is recommended are found in Appendix 3.

6.0 NATIONAL HEALTH SYSTEM (NHS) OPERATIONS

6.1 DISTORTIONS IN THE HEALTH SYSTEM CAUSED BY NHS POLICIES

6.1.1 Extreme Cases of Subsidies for Services and Goods

A comprehensive analysis of NHS cost recovery is outside the scope of this study; however, a few cases of highly subsidized services and goods delivered by the NHS are considered here, since they affect consumer choice among health care providers.

Drugs: Drugs supplied at pharmacies in NHS facilities are highly subsidized. Their prices for out-patients are very low (for two to four different drugs, the patient may pay 300 to 500 Mt, or roughly US \$0.10 to \$0.16), and they are free of charge for in-patient treatment.²³ Even basic drugs are frequently out of stock. In retail pharmacies, which attempt to cover 100 percent of costs, drugs may cost seven to eight times the NHS price.

Out-patient Fees: The present fee of 100 Mt (US \$0.03) is less than one-fifth the price of a loaf of bread. Consumers tend to mistrust the quality of a service which costs so little. A fee of 1,000 Mt was recently introduced for emergency services at the Central Hospital of Maputo. The intended effect of reducing unnecessary utilization proved short-lived; after a one to two-month reduction in visits, utilization returned to its previous level.

In-patient Fees: Presently, the daily fee of 500 Mt (less than US \$0.20) covers all services and supplies. It is a large subsidy used mainly by urban dwellers.

Preventive Care: This is completely free of charge (including treatments for chronic diseases, such as TB).

6.1.2 Effects on NHS

The NHS faces constraints in providing good quality care:

- Acute shortage of resources;
- Lack of incentives for both health professionals and managers;
- Tolerance of waste; and
- Low productivity.

²³ A system to control the use of drugs in in-patient wards is virtually non-existent. As a result, approximately 70 percent of all drugs consumed by NHS are in in-patient care.

Some examples clarify the disincentives for cost-effective behavior:

- The prescriber (doctor or nurse) knows his or her patient will pay extremely low drug prices and that 30 to 50 percent of the drugs he or she prescribes will be out of stock. Under these conditions, the prescriber has an incentive to prescribe multiple drugs, therefore increasing the chances that the patient gets at least one or two that he or she needs.
- 70 percent of all NHS drugs are used in in-patient services, compared to 30 percent for out-patient. In 1990, there were 227,000 hospital discharges, compared with 5.6 million out-patient consultations. The lack of controls for ordering and administering drugs in in-patient departments results not only in waste but theft (for illegal private clinics and the black market).
- Clinic managers worry about lengths of stay only when wards become overcrowded.

6.1.3 Consumer Attitudes and Behavior

The common citizen perceives the quality of care in NHS as very low. Informal interviews with middle-income and poor citizens reveal a willingness to pay more for better quality and more effective services. The demand for NHS services is greatest when basic drugs are available.

6.1.4 Some Proposals for Cost Recovery

A complete set of proposals has already been prepared by a World Bank-sponsored study. This study highlights some of the most promising cost recovery proposals in Appendix 4.

6.2 REFERRAL OF PATIENTS BETWEEN NHS AND PRIVATE HEALTH FACILITIES

One of the main points of Section 5, The New Legislation, is that there is no clear differentiation between non-profit and for-profit behavior, duties, and rights. This is clearly an important matter if both types of providers are to be promoted. Suggested refinement of the regulations is provided here:

- Referral between non-profits and the NHS (and vice-versa) should always involve NHS (subsidized) fees;
- Referral between for-profits and the NHS cannot be compulsory. If a patient from a for-profit facility is referred to NHS, she or he should pay non-subsidized rates (either the for-profit rate or the special clinic rate). This is considered important for two reasons: (1) the NHS should not be "parasitized" (exploitation of low-cost or free NHS services for essentially private patients) by referred patients, who started treatment at for-profit facilities and can afford for-profit rates; and (2) the for-profit provider is not bound to accept unprofitable patients coming from lower-level NHS health facilities.

6.3 ROLE OF ASSOCIATIONS

The process of creating a new scenario of a mix of public and private providers in Mozambique is going to be one of trial-and-error, requiring compromise between conflicting interests. The more informed parties are, the better for all (population, providers, government, and financial sources).

Professional associations for nurses and MDs are already active and are becoming legally registered. These associations are highly interested in the issue of private practice. Nurses and doctors feel, among other grievances, that salaries at NHS are too low. Both, too, have had difficulty playing a substantial role in the formulation of legislation regarding the private sector. They suffer from institutional weakness and lack of information.

Professional associations need support to have an informed dialogue with the MOH and to communicate with their members. Such associations could be involved in registration activities (registering new private providers) if they were represented on the Technical Commission On Professional Activity, which is established in the new legislation. They could play an important role examining fee schedules for for-profit providers, addressing ethical issues which involve their members, and ensuring appropriate standards in private facilities.

Consumer associations as such do not exist in Mozambique. Some of the newly established local NGOs and trade unions are concerned with aspects of consumer protection, but not explicitly with matters of medical care.

The views and interests of health consumers should be promoted. The activity of a consumer protection organization might include, among other things, publicizing especially poor conditions in specific health facilities; and disseminating information and organizing public debates on how to choose providers.

6.4 NGOs AND DRUG IMPORTATION

It is assumed that NGOs should be encouraged to complement the capacities of the NHS in rendering services to the underprivileged populations. To facilitate this, the GRM should ensure that NGOs are encouraged and supported in obtaining inexpensive and effective drugs.

Legally, state-owned MEDIMOC has a monopoly on the importation and distribution of drugs in Mozambique, although a few companies and commercial pharmacies import small shipments directly. Over the last 10 to 12 years, MEDIMOC has been instrumental in obtaining inexpensive drugs for the NHS and retail pharmacies.

There are plans for a pharmaceutical sector policy study, so the present study has not examined this issue in detail. It was noted, however, that the MOH has some interest in modifying the monopoly. A number of local import-export companies have expressed interest in being authorized to trade in pharmaceuticals.

An important point is that NGOs can be more easily motivated to operate in the health field if they have access to shipments of inexpensive and effective drugs either from MEDIMOC or another supplier. There are examples in other African countries of the establishment of a local NGO whose function is to import and distribute drugs to all the health NGOs. Usually the created NGO buys generic drugs on the international market at prices comparable to those received by large, official GRM or parastatal importing agencies. Several East African countries have experience with these NGO/PVO

import agencies: MEDS in Kenya, BUFMAR in Rwanda, and CMBT in Tanzania. In these three countries, the import agency is a non-profit organization created by religious NGOs that supply most of their drug requirements.

The importing NGO could be authorized to compete with MEDIMOC to supply NHS as well as for-profit providers. A side effect of the existence of another drug importer is that MEDIMOC would no longer be the sole, uncontested provider of drugs, and would thus have a strong incentive to be more aggressive and competitive in obtaining low prices for drugs.

6.5 HEALTH INSURANCE

As in other countries, there will be increasing demand for health insurance in Mozambique for people wanting to be free from the risk of unaffordable costs for catastrophic episodes of illness. Insurance brings advantages, but also risks (e.g., rapidly rising costs) for both providers and consumers.

The present situation can be summarized as follows:

- Health insurance is virtually non-existent.
- There are some incipient co-payment arrangements between factories and their workers for health expenditures.
- Consumers at special clinics or private practices (until recently illegal) have to pay on a fee-for-service basis.

The advantages of establishing health insurance are several:

- The total numbers of private sector clients will increase as previously unaffordable care (lengthy and resource-intensive hospital stays) will be covered by insurance companies (particularly for middle and upper-middle-income strata in urban areas).
- Recovering payment on outstanding bills for care received at both public and private providers will become simplified, more effective, and possibly at a lower administrative cost.
- Cost-sharing between employers and employees will become more explicit and regularly calculated.

Forms of health insurance for consideration in Mozambique can be categorized as follows:

- Compulsory (public) health insurance covers NHS and non-profit services. Employees of the formal sector of the economy (government, parastatals, factories, enterprises, and big rural companies), which may total approximately 110,000 to 120,000, can be enrolled in this scheme.
- Employer-based health insurance may be privately managed and organized on a "professional grouping" basis, with cost-sharing between employers and employees. It may cover costs of worker health care obtained either from the local health post (within premises) or from a nearby health facility (mainly private). Contracts between private companies and private providers can be established.

- Community-based health insurance is targeted to groups of people with common interests (electricians, merchants, or village organizations) that may be willing to establish mutual benefit schemes which hire local practitioners (doctors, nurses, midwives) to provide care to the whole group.
- Private health insurance (for-profit) already covers a very small number of urban elite, who receive regular check-ups and medical visits in South Africa. These insurers can hire the services of both local providers (the few for-profits with expensive amenities) and South African providers.

Mozambique should avoid allowing exemptions from taxes for companies which provide health care or health insurance for their workers. This has occurred in other African countries, and can result in a depletion of revenues from the National Treasury.

7.0 IMPACT ON THE PUBLIC SECTOR

7.1 THE PUBLIC-PRIVATE MIX: A POSSIBLE SCENARIO FOR THE SHORT-TERM

What is considered here is the interplay among providers (their objectives and behaviors), consumers, and financiers.

7.1.1 The NHS (Public Sector)

Based on weaknesses of the private sector and the fact that about half the population lives in absolute poverty, it can be assumed that the NHS will remain the major provider of health services. It will keep all referral hospitals (provincial and central), the majority of rural hospitals, and the majority of primary level units (health centers and health posts). Assuming that private providers will locate mainly in urban/peri-urban areas, the public sector is expected to expand basic services for underserved populations in rural areas.

Due to its present scarcity of resources, the public sector will have to increase cost-recovery programs, focusing primarily on hospital services. Fees will have to be increased and consideration given to charging full-cost prices to the well-off. Higher prices for medium and high-income strata clients will encourage these groups to look for private provision alternatives.

The NHS may compete with private providers for contracts with insurance schemes. Contracts to provide workers of specific companies with a set of specified services will facilitate recovery of outstanding unpaid bills. It will also require a greater degree of autonomy for NHS facilities and incentives for NHS facility managers.

Expansion of basic services in rural areas should also include support for community initiatives such as village health workers, TBAs, and village pharmacies.

7.1.2 Private For-Profit Providers

Private for-profit providers are expected to concentrate in urban and peri-urban areas. Three sets of clients will frequent for-profit providers:

- High socio-economic strata who look for quality of service, amenities, and prompt attention. This group will use clinics, doctors' offices, lab and x-ray facilities, in-patient facilities, home care, and well-supplied pharmacies. The establishment of employer-based insurance and an increase in NHS prices is expected to increase private sector demand.
- Medium-level urban strata (e.g., shop owners and semi-qualified workers) for whom lost time means less income. They will make use of suburban doctors' offices, nurse stations, over-the-counter drugs, and home care.
- Semi-qualified factory workers will use company health posts supplemented by company contracts with private clinics. Private laboratories will be established to provide efficient care to groups of companies.

In the first years, due to the general shortage of capital and the limited number of well-off clients, it is expected that the private sector will purchase some services from the public sector, including diagnostic

tests, surgery, specialty hospital beds (for upper strata), and emergency services (particularly for OB/GYN services for medium to low strata).

In rural areas, some private for-profit services will be provided to small groups of clients (out-patient and home care) by doctors and nurses who also work for the NHS.

7.1.3 Private Non-Profit Providers

In the short to medium term, this category will primarily include religious organizations. Local, secular NGOs are still emerging and are economically and technically weak. Their focus will be mainly rural (health posts and some rural hospitals) and, to a lesser degree, peri-urban (health posts and maternities). Due to their philosophy of providing for the underserved, these providers can be easily integrated with the NHS.

Twenty to thirty years ago, religious groups were active in providing health care in Mozambique. Now these organizations are finding that health care delivery costs are escalating and support from sister organizations abroad is less generous. Thus few will be able to assume the full operating costs of in-patient facilities. Non-profits providers will rely on two additional sources of funds:

- Co-payments by their patients, and
- Co-financing by the government (e.g., for salaries and some supplies).

The population around the health facility with ties to the religious entity may be willing to pay fees which are somewhat higher than those charged in NHS. Non-profits should be authorized to provide services to restricted clienteles at more profitable prices. These groups would include well-off patients and agricultural workers in insurance or health maintenance organization (HMO)-like contracts.

7.1.4 Enterprises

Large rural (agricultural) companies managed their own health services, including health posts and small hospitals, prior to independence. In a few cases, they are requesting to have their former facilities back. In general, however, their financial situation is desperate because the rural economy has been ravaged by the civil war. In most cases, these companies will be looking for a way to deliver health care to their workers, and, in some cases, to the worker's immediate family, in low-cost health facilities. Some form of co-payment by the workers may be considered, although salaries in these rural companies are low, equivalent to US \$10 per month. None of these companies will be in a position to take over a rural hospital. The greatest risk that these companies face in running a health facility is being inundated by the general population for whom the facility is the only source of health care in a large geographic area. The potential benefits for the agricultural companies (higher productivity of their workers) would be largely offset by the large expenditure required to provide services to the poor population living nearby.

Small rural companies have two alternatives:

- Send their patients to NHS health facilities, paying fees for service or establishing capitation contracts, and

- Set up a small health post where a medical assistant or nurse from a nearby NHS facility can come a few times a week. A cost-sharing system with the workers can be developed.

Large urban companies (industrial) may be interested in two models of care:

- Small health posts within the company's premises which have the advantages of low costs and control over workers' time, and
- Organized medical care and diagnostic tests from groups of clinicians which may be available in the vicinity of the factory.

Cost-sharing between company and workers can evolve towards insurance, possibly with providers being paid on a capitation basis. Cost-sharing may be necessary in the near future if drug prices increase, since most urban industrial companies, while better off than their rural agricultural counterparts, are not in strong financial positions.

Small urban companies can group together to obtain more favorable rates from polyclinics and insurance companies. NHS health facilities can compete with private providers for contracts to care for factory workers. Drugs for the small "on-premises" health posts could be supplied by the NHS at subsidized cost, since these companies are reducing the burden on NHS for the care of these workers.

7.2 LOSS OF STAFF

Measures must be taken to avoid loss of personnel from the public sector which could endanger its capacity to provide the current level of services. Different categories of health manpower are discussed in this section, and suggestions are provided as to how best retain these people in the NHS.

Medical Doctors: Senior doctors are an important asset for Mozambique, and efforts should be made to retain them in the NHS. They are the core of referral services at the Central Hospital of Maputo, where, in addition, they teach students and function as advisors to the MOH for questions ranging from the revision of the National Drug Formulary to what type of equipment to purchase. They also form the core of the teaching body at the Medical School in Maputo.

In considering private practice, the doctors are concerned about the risks of financial losses if there is insufficient demand for their services. They prefer to stay in the NHS, making use of the special clinics using NHS resources (knowing that the for-profit sector lacks expensive equipment in the short to medium term). They prefer an arrangement enabling them to continue serving the underprivileged and teaching in the Medical School, while increasing their incomes through special clinics or private practice arrangements. If they have difficulty supplementing their salaries or if the gap between public and private earnings becomes too great, some will be tempted to leave the NHS.

Options to retain NHS doctors include:

- Offer flexible work schedules to be negotiated between each hospital and their doctors, and
- Clarify the function and regulations of the special clinics, requiring doctors to pay for hospital facilities and services (see Section 5).

Younger MDs are not as committed to the "spirit" of the NHS as older MDs. They may be willing to engage in the private sector right after completing their degrees. A recent government decree (August 1992) has put an end to a statute obligating graduates to work in public service for the number of years equal to the years of their studies. They can, therefore, start a private practice immediately after graduation. The Regulations for Private Practice (Article 20 of Decree 09/92), however, give the MOH the power to select the location where their minimum 20 hours per week of public service is to be provided. This appears to be an instrument to allow the NHS to place doctors in rural districts.

Medical Assistants: Although this category accounts for only 150 to 200 technicians, medical assistants are instrumental in keeping rural health services, and the PHC level in general, performing. Arrangements for "special services" after working hours should be authorized to allow them to supplement their public sector wages.

Basic (Non-Registered) Nurses and MCH Nurses: Because of their low salaries, a non-negligible number of basic and MCH nurses may be willing to engage in some form of private practice. The private market has already shown signs that it will not absorb a great number of nurses. The NHS can replace those who leave, because these are categories for which there is a high output from training institutes and their rate of training can be easily increased. As mentioned before, because of budget shortages, there already are nurses whom the NHS has been unable to place, creating a reserve.

Specialized Nurses: This is a group of specialized paramedical staff critical to the operation of all referral hospitals. They hold positions as chief nurses in wards, anesthetists, surgical assistants, and intensive care nurses; some are specialized in biopsies, ECG (Electro-cardiogram), and echography. As a rule, there are only a few of these nurses in each category. If, for instance, six anesthesia nurses were to leave the Central Hospital in Maputo for private practice, in the short term, basic surgery programs would be reduced to emergencies and some specialized examinations would have to be canceled.

Unfortunately, these are also the categories of nurses that for-profit clinics may be most interested in, and these clinics will offer salaries at six to seven times the salaries in the NHS. One of the first clinics to open in Maputo will focus on emergencies, intensive care, and surgery.

Measures should be taken to avoid a loss of these personnel. Flexible working hours should be arranged similar to those of the doctors. Another possibility is to increase their share of the revenue generated in the special clinics. If such measures are effective, they will still engage in private after-hours activities, but it may be possible to keep the bulk of their time in the public sector. These types of nurses have many years of public service, and as with senior doctors, would be glad to continue serving the public as long as their income needs are met.

Difficulties in Placing Personnel in Rural Areas: Placing and keeping health personnel in rural areas has been a continual problem for the MOH. Living and working conditions in rural areas are normally substandard, and the GRM no longer has the leverage of being able to oblige recent graduates to work for the public sector for a given number of years.

Critical for the MOH will be improving rural living and work conditions for the key rural hospital staff of doctor, surgery technician, anesthesia and surgery nurse, chief nurse, and chief midwife. In addition to ensuring minimal medical supplies, the MOH must provide decent living conditions, including houses, to ensure they will stay in that area for a number of years.²⁴

The MOH cannot afford the same benefits for the rest of the health personnel (nurses, etc.). Other means to attract personnel to the rural health facilities have to be found. The simplest thing to do is to recruit and train these staff in the provinces where they are to be placed. These "locals" can more easily find their own housing, and will have the support of nearby relatives and friends.

7.3 REDUCTION IN QUALITY

With the emergence of private medicine, NHS hospitals may have very few doctors in the afternoons; it may be necessary to reinforce emergency shifts or rely more on doctors on call. The loss of specialized paramedical personnel will be felt in critical services such as surgery teams, intensive care units, specialized tests, and in the laboratory.

During the transition years that follow the passage of the new legislation, sharing of special clinic revenues among these categories of personnel will be critical to reduce staff losses.

²⁴ In Zambia, commercial mines have used cars as a lure to get doctors to work in the hospitals, with considerable success (source: communication with Taryn Vian).

7.4 REDUCTION IN THE NUMBERS OF PATIENTS

In urban areas, there may be a reduction of patients in health centers as middle-income patients go to private providers. Similarly, fewer well-off patients are expected at referral hospital emergency services, as some will receive care at home by private doctors on call.

Night-shift emergencies will maintain constant numbers of patients. Private emergency facilities may open in suburban areas. Overall, however, no substantial reductions are expected either at urban referral hospitals (in-patient care) or at rural facilities.

7.5 THEFT OF DRUGS AND MEDICAL SUPPLIES

Theft is a real problem for the NHS, and will increase. Supplies (e.g., syringes, sphygmomanometers, speculas, scalpels, etc.) for medical offices and nursing stations as well as for home care will be the most likely targets of theft by staff who work both in the public and private sectors. Drugs will also disappear, to be used in home visits and for illegal dispensing at small private facilities. Measures should be taken to import large quantities of these supplies to be sold to doctors and nurses starting their own practices. Control measures for drug supplies in NHS hospitals should also be installed. The authority to discipline and dismiss health workers who steal drugs and supplies should be given to hospital management.

7.6 BUDGETARY SAVINGS

As has been discussed in previous sections, even with an increase in the number of private providers, the MOH will remain the dominant provider of health care. The numbers of people who will rely on the private sector are small in relation to the total population, and the health sector lacks so many resources that any "savings" realized will be immediately absorbed in maintaining the current NHS.

The direct results of the expansion of the private sector are an increase in both coverage and quality of care. Some non-profit NGOs provide inputs, and in more and more cases, actually run facilities which function only with great difficulty and without many of the required supplies. Other NGOs will resume activities in nonfunctioning or underfunctioning facilities, facilities which the government is not in a position to finance.

Most NGOs dedicated to providing services to the population are interested in a partnership with the GRM. They expect the MOH to continue to supply the facilities with the normal allotment of supplies and staffing according to the level of NHS facility.

Reference hospitals, which currently consume a large part of the GRM health budget, are large, risky investments which will remain in government hands for the foreseeable future. Due to their relatively high fixed costs, it is not expected that MOH will realize substantial savings even if five or ten percent of users seek care at private or NGO facilities.

Rural health posts and centers, like referral hospitals, are likely to continue to be principally managed and financed by the GRM. A small number of NGOs will become involved in hospital care, which will reduce the burden on the GRM, but not to the degree that will free up substantial MOH resources.

Although direct budgetary savings are not expected from the expansion of the private sector, there are some measures which, if taken by the government, will encourage the private sector and generate resources the GRM can invest in the most important areas of the health sector (e.g., primary health care, rehabilitation of damaged facilities, training, etc.).

The two principal areas where resources can be generated are in general cost recovery fees for consultations and in-patient care, and reduction of the large subsidies for drugs. Previous sections of this report have explained the rationale behind these policies and the population's ability and willingness to pay for a greater share of the cost of health care. The purpose of this section is to provide estimates of the financial resources that could be generated. Four areas are mentioned: out-patient curative consultation fees, in-patient daily fees, out-patient drug prices, and in-patient drug prices. Amounts are in U.S. dollars.

- **Out-patient Curative Consultation Fee:** Increasing the 100 Mt fee to 500 Mt. Assuming greater exemptions, and some reduction in utilization, revenues of three to four times the current might be expected.

Current Revenues per Year: \$75,000
Future Revenues per Year: \$225,000 to \$300,000

- **In-patient Daily Bed Fees:** Increasing the 500 Mt fee to 1,000 Mt per day. Assuming greater exemptions and some reduced utilization, revenue increases of 50 to 75 percent might be expected.

Current Revenues per Year: \$168,000
Future Revenues per Year: \$252,000 to \$294,000

- **Out-patient Drug Prices:** Doubling the current prices but increasing the exemptions, it is estimated that revenues will increase 50 to 75 percent.

Current Revenues per Year: \$371,000
Future Revenues per Year: \$556,500 to \$649,000

- **In-patient Drug Prices:** By instituting prices (ranging from 300 Mt in lowest-level facilities to 750 Mt in central hospitals) and assuming approximately 40 percent exemptions, approximately \$25,000 in revenues would be generated.

Current Revenues per Year: \$0
Future Revenues per Year: \$25,000

Combining all sources of revenue provides the following estimates:

Current Total Revenues per Year: \$614,000
Future Total Revenues per Year: \$1,058,500 to \$1,268,000

While these figures should be considered illustrative estimates rather than definite additional revenues, the point is that revenues can probably be at least doubled without an adverse affect on the poorest segments of society. This is achieved by increasing the percent of patients who are exempted from payment, charging lower fees at lower-level facilities, and continuing to provide free or low-cost preventive services such as peri-natal care and vaccinations.

In addition to revenue generation, there are important savings from reduced drug consumption which have not been calculated. Currently, in-patient care consumes almost 70 percent of all drugs in the NHS. Controls on the use of drugs by doctors and nurses are almost non-existent, and the providers know that use of additional drugs do not affect the patients' hospital charges. By instituting modest fees, plus some control systems over the in-patient use, in-patient consumption of drugs can be reduced by a minimum of 20 percent.²⁵ This would represent a considerable savings in addition to the revenues generated as discussed.

Thus, while the expansion of the private sector is not expected to generate large savings for the MOH, it is probable that coverage will expand and quality of care will increase due to an increase in investment and inputs.

7.7 OVERALL EVALUATION OF SOCIAL OBJECTIVES REACHED WITH GREATER PRIVATE SECTOR PARTICIPATION

The broader legalization and promotion of the private sector in health are likely to have important social implications. It is recommended that the process be monitored and evaluated by asking questions such as:

- Has the intervention of private providers brought an increase in the coverage of health care in Mozambique?
- Has the total number of providers increased?
- What have the consequences been for overall financial flows of resources for health care?

The following areas are considered priorities for monitoring:

- Numbers of for-profit and non-profit providers;
- Movement of personnel from the public to the private sector;
- Total coverage (all providers) and geographical accessibility to PHC (particularly in rural areas);
- Total expenditures on health, including public (NHS) and out-of-pocket private expenditures;

²⁵ In 1990, the NHS implemented an experimental control system on drug use in in-patient care at Maputo Central Hospital, with impressive results. Doctors and nurses were required to make daily orders for the 12 to 15 commonly used drugs (normal operating procedure was to request large quantities which were kept in the wards). The use of the drugs had to be justified with the patient's medical record. Over a three-month period, the use of these drugs was only 30 to 55 percent (depending on the drug) compared to the same three-month period of the previous year. Source: Dr. Jorge Cabral.

- Percentages of total imported drugs used by NHS, non-profits, and for-profits; and
- Comparison of efficiency (unit costs and number of services) of health facilities among the NHS, non-profit, and for-profit providers.

Monitoring such indicators could be undertaken by the Planning Department of the MOH; it may be necessary to strengthen its capacities in disciplines like health planning and evaluation, health economics, and epidemiology. This undertaking should involve collaboration with the MOH's Health Information System.

8.0 CONCLUSIONS AND RECOMMENDATIONS

1. **Demand:** There is sufficient demand to support private for-profit medicine in most Mozambican cities. Assuming that the population spends one percent of its total expenditures on health, the wealthiest 25 percent of Maputo's population will spend \$980,000 per year on health care. If 20 percent of this amount were for private provider salaries (the other 80 percent of drugs and facility operating costs), approximately six private doctors and six private nurses could be supported (\$20,000 per year per doctor and \$10,000 per year per nurse). Similar calculations can be made to estimate what other income groups can support. Average annual per capita out-of-pocket expenditure on health (including consultation, drugs, and hospitalization) is approximately 4,000 Mt.

2. **Loss of Public Sector Manpower to the Private Sector:** In the short to medium term, this should not be a major concern for the MOH. Doctors and nurses express an interest in working full or at least part-time in the public sector. Special clinics, after-hour private clinics, and contracts with private enterprises provide NHS doctors and nurses with opportunities to substantially increase their incomes.

3. **Legal Issues:** The law creating MEDIMOC should be adapted to guarantee that the private sector has the same access to the drug import and distribution network as the public sector. New rules or practices should be developed regarding special clinics, separating special clinic patients from other patients, and requiring doctors to reimburse the hospital for the costs of space, equipment, and supplies.

Individuals and organizations interested in establishing for-profit or non-profit facilities/activities should face simple and quick procedures to obtain the required permission.

Procedures for professional registration and licensing are already contained in the legislation. It is important that the MOH act quickly on registration and licensing requests.

4. **Providing Incentives to Encourage the Growth of the Private Sector:** To encourage the growth of the private sector (non- and for-profit), the GRM must be aware of the major obstacles to rehabilitating and operating health facilities. With the current economic situation in Mozambique, the GRM is not in a position to offer incentives such as seed capital to rehabilitate a facility or subsidies for drugs and other supplies.

There are at least three ways in which the MOH can encourage or reduce obstacles to the growth of the private sector:

- The MOH has made contractual agreements with mission groups and NGOs on the importation of drugs and equipment. It is important that the MOH follow through on agreements to pay import duties. A possible strategy is to establish an escrow account into which MOH puts funds for specific shipment of drugs and supplies. Alternatively, the government can allow religious NGOs to join drug import associations.

- The MOH should continue to provide non-profit NGO-run health facilities, which are considered part of NHS, with the allotment of drugs that a comparable NHS facility receives. Depending on the arrangement with the NGO, it should also provide health staff commensurate with the comparable NHS facility.
- The MOH should provide technical assistance to non- and for-profit health ventures. Interviews in Nampula revealed that a private developer of a health clinic was in need of assistance to install laboratory and diagnostic equipment. Technical experts in the MOH could occasionally make missions to such sites and have the developer cover costs (transport, lodging, etc.) of MOH technical assistance.

5. Drugs and Equipment: Competition among distributors and importers should help to ensure a good supply of drugs at commercial (retail) pharmacies in urban areas. Medical equipment for NGOs should be covered by similar importation exemptions as those proposed for their drug donations.

6. Representation of Professional and Consumer Groups: The growth of professional associations (e.g., doctors and nurses) should be encouraged, as they can play an important role regulating the quality of private sector care. Consumers need to be educated about their rights and responsibilities when using private (and for that matter, public) health care providers.

7. NGO Management and Financing for NHS Facilities: Using the successful experience of facilities such as Marrere Hospital (which is supported by the Grace Mission), the MOH could support studies of similar health facilities to demonstrate to other NGOs that facilities can be effectively run with limited outside finance. The MOH should encourage non-profits to take over and manage already existing NHS health facilities rather than build new ones. This will contain total recurrent costs. NGOs that agree to manage existing health facilities should be permitted to retain the personnel already in place, but not obliged to retain them if they so choose. NGO personnel should be released from the regulations' obligation of giving extra hours of service to the NHS (currently the regulations are unclear on this point, as both non-profits and for-profits are considered "private").

Management contracts between NGOs and the MOH should make clear that authority to manage, and if necessary, to transfer personnel rests with the NGO even if the MOH is paying some of the salaries.

Consumers in rural areas tend to have a greater willingness to pay for care at NGO-run hospitals than at MOH-run hospitals. Cost recovery at these rural facilities may be as important a source of financing as external support or GRM contributions. Non-profits should be authorized to apply fees that are somewhat higher than those of the NHS, but still accessible to the majority of the population, and to establish means testing procedures to identify individuals who are unable to pay the fees. For the small number of affluent citizens living in the vicinity of these hospitals, non-profits should be authorized to charge them fees near or at full-cost in exchange for amenities, but similar medical treatment.

Non-profits operating and financing NHS facilities should only be asked to deliver the same types of subsidized care and grant the same access to the underprivileged as is done by NHS. The financial management and personnel administration of their health facilities should not be subject to interference from the MOH.

8. Promoting Preventive Service: Non-profits that substitute for the NHS are expected to deliver preventive care. To that end, the MOH should supply them with vaccines, standard forms, and other supplies free of charge. Consideration should be given to allowing them to charge modest flat fees (pre-payment type) for certain series of services (child care up to two years of age, ante-natal care, TB treatment, etc.). Vaccines and other preventive supplies should be free of charge for consumers.

The MOH should consider promoting delivery of preventive care by for-profit providers. As with the non-profits, MOH should consider providing goods (vaccines, contraceptives, etc.) free of charge to for-profits who would agree not to charge their clients for these items (a charge for the consultation would still be allowed). This preventive care should not be compulsory. For-profits, however, may see a benefit in this service in that clients will be able to receive a wider range of services (both curative and preventive) at a single provider. Total demand for services is likely to increase.

9. Health Insurance: USAID and the MOH should study the potential for health insurance in Mozambique. Issues to consider are clientele, types of contracts with providers, cost-containment measures, calculating premiums, etc. Private health care and insurance go hand-in-hand. The private sector will be limited in size and serve primarily the well-off as long as no insurance exists to help finance expensive hospitalizations and other catastrophic events.

10. Budgetary Savings for the MOH: It is not anticipated that the MOH will experience significant budgetary savings over the short to medium term from private sector expansion. The demand for services (at current MOH prices) is so great, that even if the private sector were to provide services to 20 percent of the population, the current MOH budget would still be insufficient to provide the necessary drugs, supplies, and staff to the remaining 80 percent. The benefits, however, of private sector expansion include increased coverage (e.g., by non-profit organizations running and financing NHS facilities that the GRM is unable to run) and improved quality of care resulting from somewhat fewer patients at NHS facilities and increased inputs provided by non-profits. If the MOH were to reduce drug subsidies by approximately 50 percent and increase out-patient and in-patient fees (e.g., to 500 Mt and 1,000 Mt, respectively) there is the potential for doubling annual cost recovery revenues from approximately US \$614,000 to \$1,228,000 .

11. Impact of Public Sector Policies on the Expansion of the Private Sector: Public sector policies, in particular the large subsidies for drugs (the consumer pays only 25 percent of cost) and consultations (100 Mt for a curative out-patient visit) at NHS facilities, will limit the growth of the for-profit private sector. Low prices will make the private sector uncompetitive. In addition, the monopoly on drug and medical equipment imports is likely to reduce the private sector's access to these important inputs. Without a more liberal drugs importation policy in Mozambique, the private sector will be dependent on the often unreliable and donor-dependent drug import system run by MEDIMOC. This dependency takes away one of the private sector's greatest advantages: better perceived quality, i.e., a complete stock of drugs and modern, well-functioning equipment.

12. Evaluating the Expansion of the Private Sector: USAID should support the MOH in developing capacities for evaluating the overall impact of the growth of the private health sector on the availability and quality of health care in Mozambique. Employing short or long-term consultants to strengthen the technical capacity of the MOH's Planning Department in areas such as health economics, health planning, evaluation, sociology, and health information systems should be considered.

13. Modification to the Scope of Work for Remaining USAID Policy Study: USAID should consider including the following item in the scope of work for the upcoming pharmaceutical study: examine the political and economic feasibility of authorizing an NGO to operate in the area of drug importation for all NGOs involved in health care.

APPENDIX 1

CALCULATION OF WILLINGNESS AND ABILITY TO PAY

Approximately 25 percent of the population has average annual expenditures of over US \$200 (Exhibit 3-1). If we assume that the average expenditure for this 25 percent is US \$300 (to account for the 8.5 percent earning \$400 and higher), and assuming they spend one percent of their income on health (which is compatible with the survey results presented in the exhibit), with a Maputo population of 1.3 million, total annual private health expenditure would be US \$975,000 (25% x 1.3 million population x \$300 expenditures x 1% on health).

If we assume that this 25 percent of the population will spend 67 percent of this amount on medications (as seen in the National Planning Commission study), then the remaining 33 percent, or US \$321,750, could go towards the operating costs and salaries at private clinics. With operating costs 40 percent and salaries 60 percent, there would be US \$193,050 (60% x \$321,750) for salaries. Assuming a private sector MD expects to make US \$20,000 and a nurse \$10,000,²⁶ \$193,050 would support six doctors and six nurses (6 x \$20,000 plus 6 x \$10,000 = \$190,000), or some other configuration of health personnel. It appears that based on ability to pay, there is sufficient demand for two clinics, each employing three doctors and three nurses.

Another method of assessing ability to pay is by looking at epidemiologic and utilization data. Again, using Maputo as an example, assume that the hospitalization rate is three percent of the population per year, plus 1.5 curative out-patient visits per person per year.²⁷

At 1.5 curative out-patient visits per year, a family of seven (average size in the National Planning Commission study was found to be 6.7) would experience 11 out-patient visits. At current fees (100 Mt per visit plus a rough average of 350 Mt for drugs), this family would spend 4,950 Mt on out-patient care (450 x 11 visits). If, in addition, the family experiences one hospitalization per year (much higher than the likely 3 percent hospitalization rate), this would cost them 5,400 Mt, assuming the current 500 Mt per day with a 10-day length of stay, plus 450 for drugs upon discharge. Combining out-patient and in-patient expenses, the family faces expenditures of 10,350 Mt per year.

²⁶ Currently, a senior physician in the public sector might earn 800,000 Mt per month, which he or she might double by working a few afternoons or mornings a week at a private enterprise. Thus, under good conditions, he or she would be earning 1,600,000 Mt per month or 19,200,000 Mt per year (\$6,396 USD). A nurse might be earning 120,000 Mt per month in the public sector. If he or she supplements the public salary, total income could double to 240,000 Mt per month, or 2,880,000 Mt per year (\$960 USD).

²⁷ These are substantially higher than actual utilization rates for the country as a whole, of which has 1.5 percent of the population is hospitalized per year (227,720 discharges for a population of 15 million) and 1.8 out-patient contacts per capita per year for Maputo, which include preventive care for which fees are generally very low or non-existent (source: Republic of Mozambique, Ministry of Health, "Health Manpower Development Plan 1992-2002," by Oscar Gish, December 1991).

Taking the average annual per capita expenditure of 432,000 Mt multiplied by the family size of seven, the average family expenditure would be 3,024,000 Mt per year. The health expenditure (10,350 Mt) is equivalent to 0.34 percent of family expenditure, well below the one percent expenditure suggested by other studies. Using the rough guide of one percent of expenditure, this family could spend 30,240 Mt per year on health care: about 13,000 Mt for out-patient care and 17,240 for in-patient care (e.g., 1,500 Mt a day for 10 days plus 2,240 Mt for medications).

The data and calculations suggest that the average family in Maputo spends in NHS facilities about 33 percent of the total it is "able" to spend on health care. It should also be noted that health expenditures, as a percent of income, are believed to increase with greater income.²⁸ Thus, under a scenario of rising incomes possible with an end to hostilities and the concomitant increase in economic activity, willingness to pay for health services should increase.

²⁸ Griffin, C., "Strengthening Health Services in Developing Countries through the Private Sector," International Finance Corporation, 1989.

EXHIBIT A-1 HEALTH CARE PROVIDED BY MAPUTO ENTERPRISES AND COSTS

BENEFIT MATRIX

	MATOLA	PROTAL	ENTREPOSTO (**)	LAM
PERSONS COVERED				
Workers	Y	Y	Y	Y
Immed. Family	N	Y	N	N (*)
BENEFITS				
Consultation	Y	Y	100 mt	Y
Meds at Post	Y	Y	SNS fees	Y
Meds from SNS	Y	Y	SNS fees	70% covered
Meds outside SNS	N	N	N	70% covered
Transport to hosp.	Y	Y	Y	Y
Hospital fees		Y	Y	Y
Tests, Procedures			Y	Y
Vaccinations	N			
Family planning		Condoms		
Foreign evac.			50%	70% covered

* Family receive pass for special faster care at Maputo Central Hospital

** Considered a NHS post though on company grounds

Exhibit A-1 Continued

	MATOLA 1991	PROTAL 1992 (*)	ENTREPOSTO 1992 (*)	LAM 1991

	(in 000 meticaís)			
Salary (000 mt/month)				
nurse		114		
contract MD		50		
Other				
Total	555.26			
Supplies (000 mt/month)				
drugs		83		
supplies				
other				
total	1893.961			
Cost/month (000 mt)	2,449	247	5,520	
Cost/year (000 mt)	29,391	2,968	66,240	
Number of workers	1120	143	637	1500
Cost/worker/mo (000 mt)	26.24	20.76	103.99	
Cost/worker/month \$	9.72	7.69	38.51	
Avg visit/mo.	255	102	225	433
Avg visits/worker/year	2.73	8.56	4.24	3.47
Avg cost/vist (000) mt	9.60	2.42	24.53	
Avg cost/vist \$	3.55	0.90	9.09	
Tot. sal./yr. 000mt	780,000			
Health ben./yr.	29,391			
Health ben/salary	3.77%			

NOTES

* No. visits based on first 6 months of the year

Entreposto reported more capital investment in the health post this year than usual

APPENDIX 2

EVALUATION OF QUALITY

Illustrative standards which might be used in public and private health facilities are provided here:

1. General Facilities

- 1.1. means of access
- 1.2. rooms and wards
 - 1.2.1. classification (private rooms, semi-private rooms, wards)
 - 1.2.2. minimum area, width, and height
 - 1.2.3. sanitary facilities
 - 1.2.4. ventilation and lighting
 - 1.2.5. floors and walls (surfaces)
- 1.3. corridors (width)
- 1.4. stairs (main and service stairs or emergency stairs; width)
- 1.5. doors (width)
- 1.6. doctor and nursing offices
- 1.7. storing of material
- 1.8. visiting rooms

2. Special Facilities and Equipment

- 2.1. operating room
- 2.2. x-rays (protection)
- 2.3. laboratories
- 2.4. emergency services
- 2.5. gas network
- 2.6. patient monitoring and emergency communication system
- 2.7. emergency electric circuits
- 2.8. hot and cold water installations
- 2.9. telephone booths
- 2.10. bed and food elevators (units with more than one floor)
- 2.11. sterilization
- 2.12. kitchen
- 2.13. laundry
- 2.14. incineration
- 2.15. fire protection

3. Staff

- 3.1. medical
- 3.2. nursing
- 3.3. other

4. Functioning

4.1. internal regulations

For example, the inspection of the operating room should take into account the following aspects:

- anaesthesia apparatus (in cases of surgery with general anaesthesia)
- utilization of oxygen, with debitometer
- sphygmomanometer
- material sterilization
- sufficient number of surgical instruments (boxes) for the number of anticipated surgeries
- drugs for emergency situations
- washable floors and walls
- washing and dressing rooms for staff

The inspection team might include a medical inspector and a supervising nurse with the support, whenever necessary, of diagnostic and therapeutic professionals. This team would be responsible for the initial inspection and periodical inspections (for example, every three years), whose results should be registered, in addition to sporadic inspections due to users' complaints.

Finally, it is recommended that in a second stage the process of evaluating the quality of the private providers be initiated by setting performance standards in conjunction with the professional associations.

APPENDIX 3

RECOMMENDED MODIFICATION OF THE LEGISLATION

Specific recommendations of amendments and modification to the legislation are provided here:

Law No. 26/91 (Authorizes health care services by private individuals or companies of a profit or non-profit nature)

- Article 4, No. 4 (General Conditions for Authorization): In light of the above-mentioned principles, it makes no sense to require public sector professionals to obtain authorization from the institution's director, since their private activities will always be conducted outside normal working hours.
- Article 13, No. 2 (State participation and benefits). This article must be revised in accordance with contents of Point 2.1.
- Article 14, No. 3 (Staff and Responsibilities): Legislation currently in force relative to professional confidentiality must be precise, in the sense that all health service staff are forced to keep professional information in confidence during the exercise of their functions.

Decree No. 09/92 (Approves the regulation of health care services by private entities)

- Article 2, No. 2 (correlation in relation to public sector): The Health Center and Health Unit of the workplace should not be required to present proof of community need, especially if they provide health care exclusively to the company's workers, as per Article 49 of Regulation (Regulamento).
- Article 4, No. 1, b) (technical committees): Terms of reference of the medical-inspector should be made more precise, especially the professional qualifications (required years of professional experience, deep knowledge of both the organization and functioning of the health units, etc.).
- Article 20 (Provision of services in an NHS institution): The alteration of this article seems to be advisable, as stated in 2.4.
- Article 22 (Conflicts of Interest): It will be necessary to limit the range of conflicts of interest to avoid creating biases against senior managers, causing them to earn incomes substantially lower than those professionals working in private practice. The inherent recruitment difficulties are obvious.
- Article 28 (Licensing): The preference given to licensing complementary entities of NHS units is questionable, since this is an administrative act that must occur at predetermined periods, and at a non-complementary NHS unit, mainly if it is for profit in nature, should not automatically have to wait for the licensing of the former entities.
- Article 41 (Health Centers in the Place of Residence): As mentioned in 2.2., classification of the health units should be the subject of autonomous legislation. Thus, we can question the fact that these centers force patients is an administrative act

that must occur at predetermined periods, and at a non-complementary NHS unit, mainly if it is for profit in nature, should not automatically have to wait for the licensing of the former entities.

- Article 41 (Health Centers in the Place of Residence): As mentioned in 2.2., classification of the health units should be the subject of autonomous legislation. Thus, we can question the fact that these centers force patient qualification requirements – basic nurse training – than the director of a nursing post (medium-level nursing training) (cfr. Article 56).
- Article 55 (Nursing Units): It would be advisable to permit these units to administer vaccinations in accordance with the policy of the MOH, since they have nursing staff with the requisite technical capacity.
- Article 75, No. 4 (Drugs): It seems excessive and not applicable in clinical practice to require private health entities, especially doctors, to indicate in their clinical reports drugs by their generic name.

Ministerial Act No. 78/92 (Regulates Home Care):

- Article 3: It is advisable to consolidate the requirements for the registration and recognition of professional qualifications with the regulation for Home Care by Private Entities (Regulamento de Prestacao de Cuidados de Saude por Entidades Privadas, cfr. Articles 13 and 18 of the "Regulamento").

Ministerial Act No. 79/92 (Defines standards, procedures and qualifications for the recognition and registration of health care professionals in the private sector):

- Article 2, No. 3: It is advisable to include representatives of medical and nursing associations in the technical commissions to be created for that purpose.
- Article 5, No. 8: It is advisable that the refusal be formalized by a formal notification including the justification. Therefore, we propose the revision of this topic, which foresees that the lack of decision during the proposed time period be considered, for purpose of appeal, as a tacit refusal of the request.

APPENDIX 4

COST RECOVERY PROPOSALS

Important reform measures should include:

- Increase the price of out-patient drugs and institute fees for in-patient drugs (as well as establishing control measures);
- Increase out-patient consultation fees, with progressively higher fees for referral levels;
- Increase fees for emergency services in referral hospitals to reduce unnecessary demand;
- Increase in-patient fees and apply them to more rural hospitals. Make fees progressively higher for referral levels. Protect low socio-economic strata by applying a flat fee (independent of duration of stay or complexity of services rendered) to widely used services, like pediatrics and OB/GYN in referral hospitals. Establish a fee for deliveries, while ensuring that the poor pay a low fee, and
- Introduce a small one-time fee for preventive services such as child growth monitoring, immunization, and ante-natal visits, while keeping vaccines and supplies free of charge.

LIST OF PERSONS CONTACTED

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Head Nurse

MARRERE HEALTH CENTER, NAMPULA

Head Nurse

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Mr. M. J. Chire, Director of Quelimane Office, Sena Sugar

NGOs

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Ms. Reva Manhiça, United Methodist Church of Mozambique
Ms. Linda Mercer, ACRIS
Ms. Jeannette Botha, ACRIS
Dr. Jerome Duntze, Medecins Sans Frontieres, Quelimane
Dr. Vincent Krotoff, Medecins Sans Frontieres, Quelimane
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OTHER

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Medical Association of Mozambique, led by Dr. J. Schwalbach
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