

A WORLD BANK COUNTRY STUDY

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Zimbabwe

Financing Health Services

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Financing Health Services

The World Bank
Washington, D.C.

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Abstract

The main objectives of the report are to identify options for improving efficiency and equity in the provision of health services in Zimbabwe, and to find more effective ways to mobilize additional resources for the country's rapidly evolving health system.

Through the use of national, provincial-district, and health facility-specific data (much of which were collected and analyzed for the first time for use in the present report), the authors are able to examine a series of key issues related to (a) allocative and technical efficiency in the health sector, (b) the equitable distribution of financial resources and health services, and (c) the immediate and long-run availability of funding to meet Zimbabwe's changing health needs. The context for the report is one of rising personal incomes (and demand for health care), increasingly severe budgetary constraints, and an epidemiological pattern that includes both "traditional" childhood and communicable diseases and new challenges in the form of adult chronic disease and AIDS.

The authors conclude that, while Zimbabwe has made enormous strides during its first decade of independence (1980-89) in expanding health services, especially to neglected rural areas, much remains to be done in the 1990s to: make services accessible to all segments of the population; improve allocative efficiency by directing more funds to preventive health care such as child immunizations, safe motherhood activities, family planning, and rural water and sanitation; and increase technical efficiency (especially in hospitals) by controlling length of patient stay, staff deployment, drug consumption, and vehicle usage. Continuing to improve access and enhance efficiency are especially important for Zimbabwe at this critical juncture, with the country about to embark on an economic adjustment program that will entail fiscal austerity and could have adverse effects on the poor, if countervailing measures are not adopted.

The report also concludes that, with the cash-strapped public sector now providing more than half the health services and health financing in Zimbabwe, non-governmental actors will need to play an increasingly important role in the future. This means that the Government will have to find ways to permit and encourage non-governmental institutions (including church missions, private doctors and nurses, commercial enterprises, and traditional practitioners) to extend service coverage. Moreover, a wide range of existing but under-exploited sources of health financing in Zimbabwe -- including user fees, private insurance, and municipal and local government revenues -- need to be tapped more fully, in order to stretch scarce central government funding further and ensure that all Zimbabweans will eventually have access to good quality health care services.

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(1988 Average)

US\$ 1.00 = Z\$ 1.8018

Z\$ 1.00 = US\$ 0.555

FISCAL YEAR

Government Fiscal Year: July 1 - June 30

ABBREVIATIONS AND ACRONYMS

Danish International Development Agency	-	DANIDA
Essential Drugs List of Zimbabwe	-	EDLIZ
European Economic Community	-	EEC
Gross Domestic Product	-	GDP
Government Medical Stores	-	GMS
Government of Zimbabwe	-	GOZ
Joint Allocation Committee	-	JAC
Length of Stay	-	LOS
Medical Aid Society of Central Africa	-	MASCA
Ministry of Finance, Economic Planning and Development	-	MFEPD
Ministry of Health	-	MOH
Ministry of Public Construction and National Housing	-	MPCNH
National Association of Medical Aid Societies	-	NAMAS
Non-Governmental Organization	-	NGO
National Health Development Fund	-	NHDF
National Health Insurance Scheme	-	NHIS
Norwegian Agency for International Development	-	NORAD
Primary Health Care	-	PHC
Personnel Management Information Systems	-	PMIS
Public Sector Investment Program	-	PSIP
State-Certified Nurses/State-Certified Midwives	-	SCN/SCMN
Swedish International Development Authority	-	SIDA
State Registered Nurses	-	SRN
Sexually Transmitted Diseases	-	STD
United Nations Development Program	-	UNDP
United Nations Children's Fund	-	UNICEF
United States Agency for International Development	-	USAID
Village Health Workers	-	VHW
Vote of Credit	-	VOC
World Health Organization	-	WHO
Zimbabwe Essential Drug Action Program	-	ZEDAP
Zimbabwe Expanded Program of Immunization	-	ZEPI
Zimbabwe National Family Planning Council	-	ZNFPC

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EXECUTIVE SUMMARY

Introduction

i. During the nine years that have passed since independence in 1980, Zimbabwe has made impressive progress in providing health care to its population. Millions of people have for the first time gained access to basic care, and a range of cost-effective preventive health programs have been launched. The service delivery and health status figures given below attest to this rapid progress, much of it financed through an expansion of Government spending for health.

ii. But, as Zimbabwean officials widely recognize, the country is now facing a mounting crisis in the financing of health services. In the prevailing environment of severe overall fiscal constraints, there is a danger that the Government may not be able to meet fully its existing financial commitments to the health sector (salaries, medical equipment and drugs, transport, manpower development, etc.). Yet not only will all of these commitments need to be met, but Zimbabwe will have to make a number of additional investments in preventive and curative care, if the country's health objectives for the 1990s and the beginning of the next century are to be achieved. The issue of how to pay for existing and expanded future health services is therefore a real and pressing one.

iii. To deal successfully with these growing difficulties in the financing of health care, Zimbabweans generally agree that ways must be found to mobilize additional resources for use in the sector, and to obtain more "good health" from existing expenditures. At the same time, the Government's ongoing efforts to achieve greater equity in health - both in access to care and in paying for this care - must be maintained, and even reinforced.

iv. This will require that Zimbabweans develop bold and imaginative policies and programs, and enhance their analytical and management skills in the financing of health care. It will also require a concerted and coordinated effort between the public and private sectors, including central, local, and municipal government, church missions and other NGOs, private modern and traditional practitioners, and industry.

v. This report offers a number of policy and program options that could help to resolve the crisis in financing health services in Zimbabwe. The recommended measures which are summarized below are organized into three main groupings: measures to inject additional money into the health sector (Resource Mobilization - including selective increases in user charges, greater cost-sharing between central and local government and NGOs, expansion of private insurance, and creation of a National Health Development Fund); measures to help Zimbabwe get more "value for money" in health (Allocative and Technical Efficiency - increased budget shares for primary and preventive health care, stronger management of hospital expenditures and patient stay, etc.); and measures to develop the systems and skills needed to support stronger health financing (Management of Health Expenditures - revised budget and expenditure procedures, improved

facility-based accounting skills/systems, decentralized procurement of goods and privatization of hospital services, etc.).

Successes of the 1980s, Challenges of the 1990s

vi. Zimbabwe's achievements in health during the 1980s have been truly impressive. More than 500 health centers have been built or upgraded, and more than a dozen district hospitals have been completed or are under construction. More than 2000 auxiliary nurses (State Certified Nurses, SCN) and 4000 Village Health Workers (now Community Development Workers) have been trained. The percentage of children fully immunized has nearly tripled from 25% in 1980 to 67% in 1988, and the proportion of married women of childbearing age using modern contraceptive methods has risen from 14% to 36% during the same period. Life expectancy has increased from 55 to 59 years, while infant mortality has declined to from 82 to 72 per 1,000 births and maternal mortality has fallen to 90 per 100,000 deliveries. All of these current indicators are significantly better than the averages for Sub-Saharan Africa.

vii. While the private sector, including both modern and traditional practitioners, for-profit and non-profit institutions, have had an important part in providing and paying for these expanding health services, the public sector - especially the central government - has played the leading role in this process. In 1986-87, the latest year for which comprehensive data were available, the public sector was responsible for 63% of all health-related expenditures (in financial terms), including Ministry of Health (40%) and other central ministries (13%), and municipal and local government (9%). The private sector, which provided the balance of health services, was composed of private doctors (25%), industries, mines, and commercial farms (8%), and NGOs (4%).

viii. By source of funds, the central government was even more dominant, accounting for 61% of all expenditures, including 12% in the form of foreign aid channeled through the Government and 49% in locally-generated revenues. This suggests that while foreign aid makes up about a fifth of public spending for health, Zimbabwe is not as heavily dependent on external assistance as many other developing countries. By contrast, municipal and local governments provided only 3% of all funds for health care, a reflection of their heavy reliance at present on central government subsidies. In addition, private sources of financing met about 36% of total expenditures, including private insurance (17%), out-of-pocket spending (10%), industry, mines, and commercial farms (8%), and NGOs (1%).

ix. In the years immediately following independence, public spending for health increased rapidly, by 38% in 1981 and 13% in 1982 (in real terms), as the Government sought to expand basic health services to communities that had been previously neglected. A series of preventive health initiatives were also launched in such areas as rural water and sanitation, child immunization, pre-natal care and family planning, malaria and other communicable disease control. Large numbers of additional paramedical staff were trained and deployed.

x. In recent years, however, the pace of Government spending for health has been slowing markedly, and the per capita level of expenditure

has even started to fall slightly, because of the severely constrained fiscal situation facing the Government coupled with a continued high rate of population growth of over 3% a year. During 1982-88, the MOH budget increased by an average of just 3.9% a year, with rises of only 3.1% and 2.1% in 1986-87 and 1987-88, respectively. In real terms, the MOH spent about Z\$ 12 per capita in 1987-88, the same amount as six years earlier.

xi. This situation is further complicated by the fact that the health sector's share of the Government budget - currently running at just above 5% - is not likely to rise significantly over the next few years. The Ministry of Finance, Economic Planning and Development (MFEPD) has indicated that any increase in MOH's budget share would probably depend on steps taken by MOH to generate more of its required resources internally within the health sector or to develop new sources of revenues.

xii. Under these circumstances of stagnant or even declining central government financing of health services, there is a real danger that the Government will find it difficult to meet its existing commitments for recurrent financing of the health system. Beyond this, there is still a large unfinished agenda of additional investments in health care that must be made, if Zimbabwe is to achieve its health objectives. The country's primary health care infrastructure and services and a range of preventive care activities in particular need to be further expanded over the coming years. Despite the important progress made in these areas during the current decade, the Government's health system remains somewhat top-heavy and urban-oriented, with a strong emphasis on curative, rather than preventive, services. In 1987, half of MOH's facility-based "patient budget" of Z\$ 188.2 million was spent at tertiary-level facilities, including Z\$ 67.4 million (36%) at the four central hospitals located in Harare and Bulawayo. Only about 28% of MOH expenditures were for preventive health activities. In addition to strengthening maternal and child health (control of diarrheal and respiratory illnesses, ante-natal care and family planning), the Government has indicated that it wishes to develop programs to deal with a range of chronic adult diseases related to environmental factors (diet, smoking, substance abuse, stress) and with AIDS. More needs to be done, too, to improve equity in access to basic health services, and in sharing the burden of paying for health care in Zimbabwe.

xiii. In dealing with the growing difficulties in financing health care described above, Zimbabwe is fortunate to be endowed with a large, diverse, and dynamic health system, embracing central and local government, church mission facilities, industrial clinics, private practitioners, and traditional healers. Funds flow into this system from a wide range of sources, many of them non-governmental. Zimbabwe also has many talented, well-trained, and highly-committed medical personnel and managers working in the health sector.

xiv. To address these imminent challenges in health financing successfully, Zimbabwean policy-makers must pursue three basic strategies:

- (a) Mobilize more resources for the sector, through a combination of increases in user charges, establishment of insurance programs or expansion of existing insurance schemes,

development of earmarked taxation, etc. The Government could also seek to induce non-governmental institutions to assume greater responsibility for providing and paying for health services, by encouraging church missions, other non-profit NGOs, private practitioners, commercial enterprises, health insurance companies, traditional healers, and local communities themselves, to increase their level of participation in the nation's health system;

- (b) Improve the efficiency of existing expenditures, i.e., obtain more "value for money" in health. This means improving both allocative and technical efficiency, especially in the public sector but also among private health providers; and
- (c) Strengthen the management of health expenditures, so that public and private health practitioners and administrators are able to design and implement measures for enhanced resource mobilization and efficiency. This requires the development of individual skills and broader systems of management in financial planning, project appraisal, expenditure control, procurement, etc.

xv. This report recommends that Zimbabwean policy-makers pursue simultaneously a combination of all three strategies outlined above, and suggests specific policy and program options for implementing these strategies. While the full list of options is spelled out and analyzed in the chapters which follow, some of the key recommendations are summarized below.

Mobilizing More Resources for Health (Chapter III)

xvi. In the area of resource mobilization, the priority actions should be to:

- (a) Increase user fees in public facilities, especially for to cover the full cost of patients in private wards and to meet part of the cost of basic out-patient services and drugs. The overall level of fees should be raised, and adjusted periodically in line with inflation. Fee collection efforts need to be strengthened significantly through a combination of procedural changes, skills training and automation, and incentives for individual facilities. At the same time, the poor should continue to be protected from higher fees through socially-accepted and administratively feasible arrangements for means-testing and granting exemptions.
- (b) Consider seriously the establishment of a National Health Development Fund (NHDF), financed through taxes on alcohol or tobacco, which would be used specifically to pay for essential primary care and preventive health services, especially in poor, underserved rural and urban communities. The NHDF, which would be incremental to the normal MOH budget, could be utilized for a combination of investment (e.g., clinic

upgrading, community health worker training) and recurrent expenditures (e.g., purchase of essential drugs).

- (c) Develop effective formulae for sharing costs of health care between MOH and (i) local government (rural and district councils and municipalities) and (ii) church mission health providers. Application of such formulae would generate additional local-level resources for health, reduce the central government's financial burden, and probably improve the quality of services by giving local government bodies and communities a stronger sense of ownership of health facilities.
- (d) Expand the existing private health insurance system, by encouraging greater competition among medical aid societies and enacting legislation requiring that formal sector employers assist their workers in obtaining and paying for a basic minimum package of health services.

xvii. If all four of these recommendations were adopted, their impact on the financing of health care in Zimbabwe would be profound: an estimated Z\$ 240 million in additional annual resources (1988 prices) would be injected into the country's health system, equivalent to nearly 38% of the Z\$ 636 million actually spent for health in 1987-88 (Table below). Of this incremental amount, about Z\$ 130 million would potentially be available to the MOH - equivalent to about 56% of MOH's 1987-88 budget - including Z\$ 50 million from user fees and Z\$ 80 million from the NHDF. In addition, expanded private health insurance could generate as much as Z\$ 80-100 million a year in expenditures, part of which would flow to the Government as user charges for private patients. Cost-sharing between central and local government and NGOs would also result in at least Z\$ 10 million in extra annual resources for health.

ZIMBABWE

Potential Impact of Health Resource Mobilization Measures

<u>Measure</u>	<u>Annual Incremental Revenues</u> (Z\$ millions)
1. <u>User Charges</u>	
- Full cost pricing for private in-patients	15-20
- Standard out-patient fees	10
- Drug charges on per item basis	10-15
- Adjusting fees to match inflation	7
<u>Subtotal</u>	42-52
2. <u>National Health Development Fund</u>	80
3. <u>Cost-Sharing Between MOH and Local Govt and Church Mission Hospitals</u>	10-15
4. <u>Expanded Private Health Insurance</u>	80
<u>TOTAL</u>	212-247

xviii. How should such potential incremental revenues be spent by MOH, to promote "better health for all"? As indicated below in this report, expansion of primary and preventive health activities should be considered as the first priorities for this additional Government spending. While Zimbabwean health planners and policy-makers would have to make the detailed expenditure decisions, incremental funds for health would open up to them a range of possibilities: with an extra Z \$40 million, for example, MOH could build five new district hospitals, or upgrade about 200 rural clinics; train and pay the salaries of thousands of additional SRN, SCN, and community health workers; quadruple the current budget of the Zimbabwe National Family Planning Council; or some combination of these and a number of other exciting options.

Utilizing Resources More Efficiently (Chapter IV)

xix. In the area of increasing efficiency of health expenditures, policy-makers should consider a number of priority actions, including those to:

- (a) Improve the allocative efficiency of Government spending, by increasing the MOH budget shares devoted to primary-level services and preventive care. Regarding PHC, the Ministry should seek to modify its facility-based "patient" budget, currently distributed 50%/30%/20% among tertiary/secondary/primary care, by developing realistic plans

and targets - for example, to achieve a 40%/30%/30% distribution by 1995. Similarly, MOH should set targets for raising the share of the budget devoted to preventive health programs from its current level of about 28% to, for example, 35% by 1995 and 40% by the year 2000. Preventive health activities that merit additional spending include community water supply and sanitation, communicable disease control, nutrition interventions, smoking prevention, and family planning. Setting of these targets and monitoring progress would be facilitated by the changes in budgeting and cost accounting recommended elsewhere in this report.

- (b) Reduce the cost per patient-day for care in Government hospitals, especially by ensuring referrals to the appropriate (lowest-cost) level of facilities, keeping patient length-of-stay to an acceptable minimum, and eliminating unnecessary expenditures for personnel, drugs, transport, feeding, and other support services. MOH needs to develop systems and skills for monitoring and analyzing these hospital expenditures, starting with the four national referral hospitals and eight provincial hospitals which account for half of the "patient" budget and a third of all MOH expenditures. Preliminary analysis contained in this report points to wide variations among hospitals in bed occupancy rates, average length-of-stay for maternity and general in-patients, and in average cost per patient admitted. One central hospital and several provinces's facilities appear to stand out as having average costs well above the norm: MOH may wish to examine their cost structures, as well as possible measures to reduce unit costs (e.g., contracting out services to the private sector) while maintaining or improving the quality of services, as part of a first round in improving hospital efficiency.
- (c) Enhance the efficiency of resource utilization, including foreign exchange and budget funds in general, for drugs. While the Zimbabwe Essential Drugs Action Program has made great strides in this area, more needs to be done. Scarce foreign exchange should be spent initially each year to meet the basic epidemiological needs of the country's population, especially for low-cost generic drugs. MOH should have a priority claim on adequate foreign exchange to cover its basic annual drug requirements, without having to buy from local suppliers in small quantities at high mark-ups, as currently takes place. To do this, the procedures for allocating foreign exchanges to the pharmaceutical system may need to be changed. MOH will also have to improve its ability to forecast accurately its annual drug requirements. In addition, inappropriate and excessive drug prescribing practices should be curbed, through a combination of fees for each drug item, limits on the number of drugs per out-patient attendance, monitoring of doctors' prescribing practices in hospitals, and doctor and patient education.

- (d) Scrutinize the public sector investment program for health, to ensure that the most cost-effective capital items are being selected, and that their implied incremental recurrent costs are sustainable. This is partly a matter of strengthening the planning and capital budgeting capabilities of the MOH, and developing enhanced procedures for preparing and assessing the sector investment program. It will also require that MOH review and revise periodically the technical specifications for standard facilities (e.g., district hospitals, health centers) and equipment, in order to eliminate or modify any unnecessary and costly items.

Strengthening the Management of Resources for Health (Chapter V)

xx. Finally, the health financing reforms outlined above, designed to mobilize additional resources and increase efficiency in the sector, will only be effectively implemented if the institutions and individuals working in the sector develop the complementary analytical, planning, and management skills and systems required. In fact, the pace of reform may be limited in some cases by the extent and timing of these management improvements: for example, improved fee collection in central and provincial hospitals may depend on automating cost accounting and billing systems and training hospital staff to use these systems. In this regard, policy-makers should consider a series of priority actions to strengthen management of health expenditures, including those to:

- (a) Revise the MOH budget and expenditure formats, to make them more responsive to the needs of managers at various levels of the health care system, including individual facilities. While such modified formats would need to be compatible with the overall Government budget categories, they should also make it easier for MOH policy-makers and managers to express their financial requirements, allocate resources, and track actual spending meaningfully, by functions (program, service, etc.) and type of expenditure, for various levels of aggregation (national, provincial, district, individual facility or hospital department).
- (b) Continue progressively to decentralize responsibility for preparing budgets, incurring expenditures, and effecting payments - starting with the four central hospitals and the eight provincial medical directors' offices. Implementation of this recommendation would need to be closely linked to (a) above, and to a major training program for MOH planners, provincial and district medical officers and health administrators, and hospital and clinic managers.
- (c) Build up MOH's health manpower planning capacity, so that the workload distribution, quality of care, and salary implications of alternative manpower scenarios can be promptly and accurately assessed.

- (d) Improve accounting skills and systems in all MOH, local and municipal government, and church mission health facilities, to include a basic minimum set of properly-maintained account books.
- (e) Decentralize to provincial or district level the procurement of certain goods and services that can be purchased locally in a more timely and cost-effective manner than through centralized procurement, and also experiment with "contracting out" to the private sector for selected hospital services such as patient feeding and laundry.

An Action Plan for Health Financing Reform

xxi. Once Zimbabwean policy-makers have selected the options for health financing reform that they wish to see pursued, and have gathered the necessary broad-based support for their proposals, an action plan should be formulated. Such a plan would include a detailed description of the reform measures, a timetable for their phased implementation, targets or other monitorable indicators of progress in achieving the reforms, estimates of their financial impacts, and a budget covering the related training, equipment, and studies required.

xxii. While the health finance reform program itself would be a home-grown Zimbabwean initiative, the Government should be able to count on strong interest and support from the donor community, which has been active in the country's health sector over the past decade. Donors, including the World Bank, could play a useful role in the reform process by providing technical assistance and funding for the required training and studies. Donors could also assist by focusing their project resources upon high-priority investments in primary health care and preventive services, as identified as a result of improvements in overall health sector financial planning and budgeting.

CHAPTER I

INTRODUCTION

Rationale for Study

1.01 Zimbabwe has made impressive gains in providing health care to its 9.3 million people during the past eight years following the country's independence in 1980. Progress has been especially great in redressing the marked inequities in health care that existed prior to independence. The Government has extended basic health care to hitherto underserved rural areas, by constructing and staffing about 290 clinics, reconstructing about 160 war-damaged clinics, and upgrading an additional 160 facilities. To provide preventive and promotive - and some simple curative - services at the grass-roots level, more than 4,400 Village Health Workers (now Community Development Workers) were trained between 1980 and 1985. To staff the clinics, large numbers of unqualified personnel were also retrained as State-Certified Nurses.

1.02 The Government's emphasis on primary health care (PHC), combined with other measures to improve the quality of life in the rural areas, has already started to bear fruit. The percentage of fully immunized children has increased from 25% in 1980 to 42% in 1984 and 67% in 1987, and could well approach the target level of 80% by 1990. Infant malnutrition has also declined from 29% in 1980 to 16% in 1984, and there is evidence that it has continued to drop to 10-12% in selected provinces at present. The proportion of women of childbearing age regularly using modern contraceptive methods has risen from 14% in 1980 to 27% in 1984 and to 36% in 1986.

1.03 Despite these major achievements, Government officials recognize that many problems remain in Zimbabwe's health sector. Some remote rural populations are still underserved, with more than 100 additional clinics required to reach them. PHC programs to provide clean drinking water and adequate sanitation still have a long way to go. Preventable communicable diseases including malaria, schistosomiasis, typhoid, respiratory infections, tuberculosis, and sexually-transmitted diseases (STD) continue to take a high toll in morbidity and mortality. AIDS is also beginning to impose a significant social and economic cost. Notwithstanding the important accomplishments to date of Zimbabwe's family planning program, the Government has indicated that the country's current population growth rate of 3.2% a year is unacceptably high, threatening to undermine social and economic gains.

1.04 As Zimbabwe's health care delivery system expands, the country is also experiencing serious shortages of staff, especially in the public sector. These include not only doctors and nurses, but also paramedical personnel such as nurse assistants and health assistants to staff health centers, as well as health administrators to plan and manage provincial and district health programs. These shortages are due to inadequate training facilities for the various health cadres and to significant differentials in salary and conditions of service between the public and private sectors.

1.05 The recent major expansion of health services in Zimbabwe has also been accompanied by an increase in spending for health care. Total expenditures for health (in real 1981 terms) have risen from Z\$ 155.8 million in 1981 to Z\$ 291.4 million in 1987, an annual growth rate of nearly 11%. Health's share of GDP has thus risen from 3.1% in 1981 to 4.2% in 1987. Increases in public expenditures for health have also outpaced overall GDP growth, averaging 8.7% a year in real terms. In recent years, however, Government spending for health has become constrained by the worsening overall fiscal situation, and levels of real per capita public spending have started to fall.

1.06 Under these circumstances, a number of important questions are being asked by Zimbabwe's policy-makers:

- (a) **Resource Allocation:** How much should Zimbabwe be spending on health care, given the country's limited resources? What should be the relative expenditure shares and financial contributions of Government and of non-governmental entities, including both commercial and non-profit institutions?
- (b) **Resource Mobilization:** How can additional revenues be generated for health? What is the appropriate role for user charges? Expanding coverage of medical aid (insurance) schemes? National health insurance? Is there scope for greater community participation and for cost-sharing between central and local government? Are there other innovative ways of mobilizing additional resources for health?
- (c) **Equity:** How can all Zimbabweans be guaranteed access to a basic minimum level of health care? Who should be paying for Zimbabwe's health costs? How can the basic health needs of lower-income groups be met while still ensuring the financial viability of the entire health care system?
- (d) **Allocative and Technical Efficiency Within the Sector:** Are resources in the health sector being spent in priority areas, where the returns are relatively high, such as basic rural health infrastructure and PHC activities (immunizations, family planning, water and sanitation, etc.)? How can technical efficiency also be enhanced, for example, by reducing the average patient's length-of-stay in certain facilities or modifying procedures for procurement and distribution of drugs? Developing alternative lower-cost staffing patterns for various levels of facilities? Devising new budgeting, expenditure, and accounting practices for Government health institutions? How much could be saved through such changes?
- (e) **Improved Management of Resources:** What improvements in health resource management skills and systems are most

urgently required? Does the MOH budget system need to be revised to make it more useful to policy-makers and health administrators? Are the financial implications of alternative manpower scenarios and drug policies being adequately analyzed? How can MOH procurement policies and procedures be modified to achieve greater efficiencies?

1.07 In 1988, the Government of Zimbabwe asked the World Bank to collaborate in the search for answers to these questions through a study of health care financing. The following report is the result of that collaboration. The Government has long been aware of these various health financing issues, and in recent years has become increasingly concerned about setting priorities in the use of scarce resources in the sector, generating additional revenues within the health sector, enhancing equity, and containing costs while increasing efficiency. The World Bank welcomed the Government's invitation to participate in the study, given the Bank's interest and involvement in the health sector, most notably through its earlier Population, Health, and Nutrition Sector Review (1983) and the ongoing Z\$ 80 million Family Health project (Loan 2744-ZIM, 1987-91). The study was also intended to provide a set of policy and program recommendations to the Government that could be incorporated in existing and planned projects, including a second World Bank-assisted health project to be formulated in 1989-90.

Background on Zimbabwe's Health Sector

1.08 Health Status. The health status of Zimbabwe's 9.3 million people (1988) is fairly typical for countries with a similar per capita income (per capita GDP of US\$ 630 in 1987) and at a similar stage of development. Life expectancy is 59 years, infant mortality is 72 per 1000 live births, and maternal mortality is about 90 per 100,000 deliveries. The major causes of mortality and morbidity among children are respiratory infections, malnutrition, diarrhea, meningitis, and malaria. The leading causes of death and illness among adults include respiratory diseases, tuberculosis, sexually-transmitted diseases, pregnancy-related complications, accidents, and cardio-vascular diseases.

1.09 Sector Organization and Institutions. The institutional make-up of Zimbabwe's health sector is highly heterogeneous, with the central government, municipalities and local authorities, church missions and other NGOs, industries and mines, private practitioners, and traditional healers all playing significant roles. Since independence, the Government has gradually organized the public and NGO institutions plus some private facilities into a four-tiered system of service delivery:

- (a) at the first level, 56 rural hospitals and 927 health centers (about 132 MOH, 510 local government, 70 mission, 55 urban, and 160 industry-owned facilities), providing a range of preventive services as well as some basic curative care;
- (b) at second level, 55 designated district hospitals (MOH and church mission-run), of which 26 meet the standard

requirements, providing a first line of referral;

- (c) at third level, 8 provincial and 4 general hospitals; and
- (d) at the fourth level, 5 central hospitals (including the specialist psychiatric hospital) located in Harare and Bulawayo and intended to serve as national referral facilities.

1.10 Health Manpower. Key personnel in Zimbabwe's health sector include about 1250 doctors, 9000 state-registered nurses (SRN) and state-certified nurses and nurse-midwives (SCN/SCMN). There are also about 350 health assistants involved in environmental health and other PHC activities, plus about 4500 village-health workers (VHW) who are currently being absorbed into the Ministry of Community Development, Cooperatives, and Women's Affairs as multi-purpose community development workers. About 12,000 traditional healers are registered in a Government-sponsored association, and their total number is believed to be about 20,000.

1.11 About two-thirds of Zimbabwe's physicians and SRNs and a third of the country's SCNs work in the private sector, where pay and conditions of service generally compare favorably to the public/NGO sector. As a result, the public health institutions continue to experience shortages of staff, especially doctors, nurses, and other specialists (e.g., pharmacists) at provincial, district, and health center levels. One of the challenges facing the Government is to devise a system of incentives and regulations that ensures adequate staffing of public health institutions, given that Government training facilities are graduating about 80 doctors and several hundred nurses annually.

Government Health Policies and Strategies

1.12 The Government's main policies and strategies for the health sector are spelled out in its 1984 white paper entitled "Planning for Equity in Health" and in its 1987 "Health for All Action Plan". The key sectoral objectives are to improve access and equity in the provision of basic health services and to ensure the financial sustainability of such a health system. In order to achieve these objectives, the Government's main programmatic strategies include:

- (a) Promoting PHC, especially in the rural areas. This means building and upgrading additional health centers and district hospitals and funding priority activities including immunizations, ante-natal care, control of diarrheal diseases, growth monitoring and therapeutic feeding for malnourished children, health education, control of communicable diseases, and supply of safe drinking water and sanitation;
- (b) Expanding family planning, especially by integrating FP services into the PHC activities of all health institutions, public and private;

- (c) Improving the supply and minimizing the cost of essential drugs;
- (d) Building or upgrading district-level hospitals and clinics;
- (e) Improving the patient referral system through a combination of expanded lower-level facilities, education, and incentives, including the structure of fees; and
- (f) Encouraging increased efficiency and financial viability of the health system through self-help, local financing mechanisms, appropriate user charges, and health insurance.

Outstanding Issues in Health Financing

1.13 While Zimbabwe has made significant progress since independence in reallocating resources for health care to previously neglected low-income groups, a number of important problems in the financing of health system remain. These include: (a) declining levels of per capita expenditure for health; (b) inadequate revenue generation within the sector from user charges and insurance payments, at a time of increasingly strained overall fiscal performance; (c) insufficient allocation of resources to cost-effective preventive care measures, and inefficiencies in expenditures, especially for drugs and hospital patient care; (d) persisting inequities in the distribution of benefits and costs of health care; and (e) weaknesses in budgeting, the incurring of expenditures, and the monitoring of costs in the public sector. Some of the key issues investigated in this report include the following:

1.14 Resource Mobilization (Chapter III):

- (a) Is there scope for increasing fees in Government health facilities? Who would be willing and able to pay more than they do at present (private patients, those covered by medical aid, other middle-income groups)? For which types of services? At what level should these fees be set? Should nominal fees be imposed for some services (e.g. out-patient consultations) in order to deter unnecessary use? How can the poor be protected?
- (b) How can the collection of fees be made more efficient, through new staffing and accounting procedures? Can institutions be given greater incentives to collect fees?
- (c) Should private medical aid schemes be expanded? How? If so, what would be the likely impact on the Government budget? The demand for, and cost of, private medical care? The availability of personnel, especially doctors and nurses, for delivery of health care in the public sector?
- (d) Does national health insurance make sense? In what form? How

would it work in practice? What degree of coverage can be achieved? What would be its net financial impact on the Government budget? On the use of public and private care?

1.15 Allocative and Technical Efficiency (Chapter IV):

- (a) Which programs with the health sector are most cost-effective, and how can funds be reallocated to these programs?
- (b) How can hospital-based services be made more efficient? By eliminating duplication of services among institutions? Reducing unnecessary surgery and hospitalization? Lowering average length of stay? Making physicians and hospital administrators more budget and cost-conscious, through changes in financial management practices?
- (c) How far has the Zimbabwe Essential Drugs Action Program (ZEDAP) gone in increasing the efficiency of pharmaceuticals manufacture and the supply and distribution system? What more can be done?
- (d) Are there other areas of inefficiency/waste/abuse that could be curbed? Unnecessary referrals? Inefficient use of transport?

1.16 Health Resources Management (Chapter V)

- (a) How can the Government's financial information system for health be improved to provide meaningful and timely information to managers at all levels of the health infrastructure and at various degrees of aggregation? By program as well as cost category? Can this information be combined with service statistics to produce unit cost data?
- (b) How can modified procedures for budgeting and monitoring of public expenditures for health help to contain costs and raise efficiency within the sector?
- (c) What financial planning skills need to be developed for the health sector, within the MOH head office, at provincial, district, and facility levels? In the areas of both capital and recurrent expenditures?
- (d) How adequate are basic accounting systems in Government and NGO health facilities, in relation to the needs for budgeting, expenditure reporting, and revenue collection? What can be done to strengthen these systems?

CHAPTER II

FINANCIAL PROFILE OF THE HEALTH SECTOR

Overview of Health Expenditures

2.01 Expenditures for health care in Zimbabwe in fiscal 1987 are shown in Table II-1, by source of funds and health service providers (users of funds). The size and complexity of the matrix is a reflection of the wide diversity of institutions providing health-related services in the country, and of the numerous mechanisms for financing the cost of those services. Providers include the Ministry of Health and other ministries (Water Resources, Local Government, Education, Labor); local government (district and rural councils) and municipalities; church missions and other NGOs; private enterprises operating their own hospitals and clinics (industries, mines, and commercial farms); and private practitioners comprising about 800 doctors. Sources of funds are both public and private, domestic and external; some providers are largely self-financing (e.g., industries, mines, and farms), while others rely heavily on outside sources of funding (e.g., church missions). Direct payment by patients is not a major source of financing for most of the provider categories.

2.02 As can be seen in the table, total expenditures on health and health-related activities covering capital, recurrent, and technical assistance costs amounted to Z\$ 636.2 million in 1987. This translates to per capita expenditures of about Z\$ 70 or US\$ 45 at the then prevailing exchange rate. Compared to many other developing countries, Zimbabwe's per capita expenditures for health are relatively high. According to a survey of 29 developing countries carried out for the 1987 World Bank policy study, Financing Health Services in Developing Countries, Zimbabwe's per capita expenditure level of about US\$ 30 in 1980 was one of the highest in Sub-Saharan Africa, exceeded only by Botswana, Swaziland, and Zambia, and was higher than a number of developing countries from other regions including China, Indonesia, Morocco, and Thailand. About 90% of Zimbabwe's total health expenditures in 1987 were for operating and maintenance purposes, and 10% for capital items. Using 1981 prices, 1987 expenditures amounted to Z\$ 291.4 million, nearly twice the Z\$ 155.8 million spent on health care in 1981. This implies a real increase of almost 11% a year over the 1981-87 period.

2.03 Providers of Health Care. Table II-1 and Figure 2.1 show that while Government provides nearly two-thirds of health care in Zimbabwe (in financial terms), private institutions and individuals also play a major role in the health system. In 1987, a little more than 63% of expenditures were incurred by public providers of health care, with the private sector accounting for the remaining 37%. Among the public providers, the MOH alone was responsible for two-fifths of all health expenditures in the country (Z\$ 255.5 million), and other ministries involved mainly in water and sanitation improvements spent another 13% of the total (Z\$ 84.4 million). Municipal health departments (dominated by Harare and Bulawayo, see Chapter V) were also major care providers (6%); rural local government, while important in terms of coverage (about 500 clinics serving two-thirds of the population), accounted for only 2% of nationwide expenditures for

health. The bulk of health expenditures by private providers were incurred by private doctors (Z\$ 156.8 million or nearly a quarter of the total) and private industries, mines, and commercial farms (Z\$ 50.8 million or 8%). The roughly 70 church mission hospitals which account for more than a third of the 18,000 hospital beds in Zimbabwe reported Z\$ 18.6 million in expenditures or 3% of the national total. Voluntary organizations, including the Red Cross and a number of local NGOs, spent an additional Z\$ 7.6 million or just over 1% of the total.

Table II -1

ZIMBABWE
Total Expenditures on Health Care, 1986-87
(Z\$ Millions)

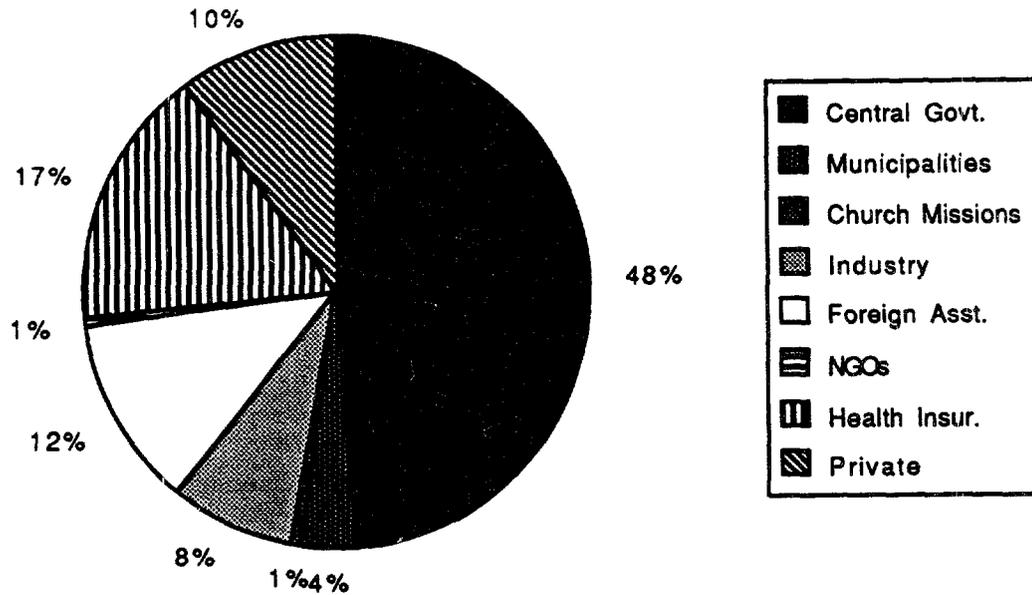
Service Providers	Sources of Funds									Total	Total %
	Central Govt	Municipalities	Church Missions	Industry Mines Commercial Farms	Voluntary Organizations	Foreign Assistance	Insurance Schemes	Private Individuals			
1. Ministry of Health	232.20					17.30	3.00	3.00		255.50	40.2
2. Other Ministries	36.27					46.11		2.00		84.38	13.3
3. Parastatals	5.04					3.46				8.50	1.3
4. District and Rural Councils	11.47					2.85		0.20		14.52	2.3
5. Municipalities	10.70	25.00						3.95		39.65	6.2
6. Missions	14.50		2.56			1.50				18.56	2.9
7. Industry, Mines Commercial Farms				50.75						50.75	8.0
8. Voluntary Organizations					4.50	3.10				7.60	1.2
9. Private Sector							102.00	54.75		156.75	24.6
TOTAL	310.18	25.00	2.56	50.75	4.50	74.32	105.00	63.90		636.21	
%	48.8	3.9	0.4	8.0	0.7	11.7	16.5	10.0		100.0	

Note: (1) All figures expressed in 1987 prices.

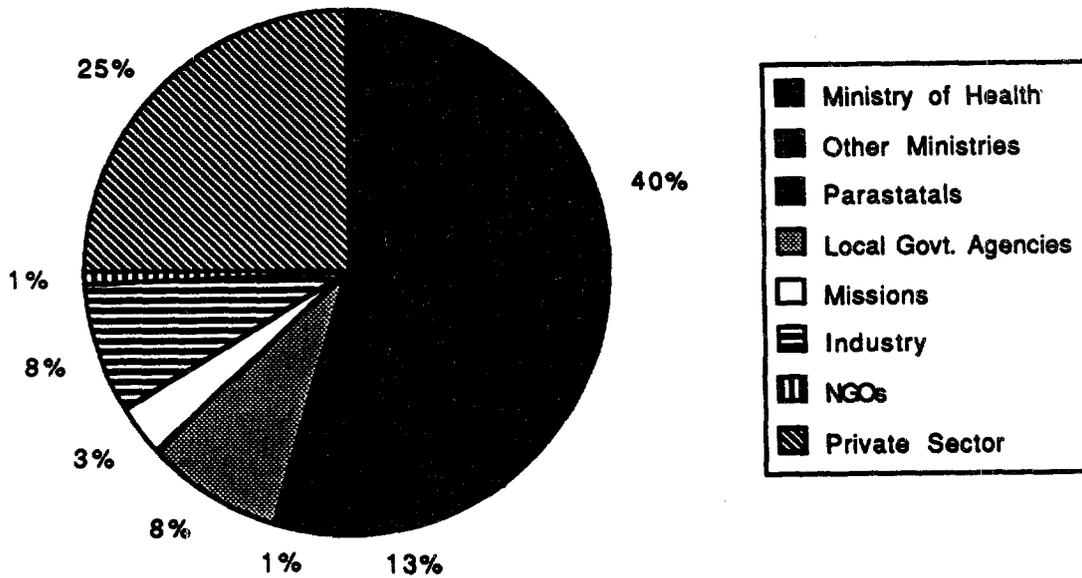
2.04 Sources of Funds. If foreign (mainly public) assistance to the health sector is included, the public purse in 1987 covered about 64% of total outlays for health, roughly the same share of expenditures incurred by public providers of health care in that year. Central government revenues for health amounted to Z\$ 310.2 million or nearly 49% of the total. These revenues financed about 90% of the MOH budget and, through direct subventions, 80% of the budgets of the local councils and church mission health providers. Central government funds also made an important contribution to health-related expenditures by other ministries (43%) and municipal health departments (27%).

FIGURE 2.1: HEALTH EXPENDITURES BY SOURCE AND PROVIDER

Total Expenditures on Health Care by Source of Funds, 1986-87



Total Expenditures on Health Care by Provider, 1986-87



2.05 Among the other important sources of financing for health care, private industry, mines, and commercial farms spent over Z\$ 50 million at their own facilities. Foreign assistance (mainly official multi-lateral and bilateral loans and grants) accounted for nearly 12% of expenditures, allocated to a wide range of Government, parastatal (ZNFPC), mission, and NGO providers. The largest share of foreign aid (Z\$ 46 million) went to ministries other than MOH, and was spent mainly for rural water and sanitation. Health insurance was also a significant source of financing for the health sector, with the 27 medical aid societies in the country paying out Z\$ 102 million or nearly one-sixth of all expenditures, for health care provided to 4% of Zimbabwe's population. Roughly 10% of outlays for health came in the form of out-of-pocket expenditures by private individuals, and most of these went to private doctors and pharmacies; direct payments by individuals covered just over 1% of MOH expenditures (2.3% when medical aid payments are included), and about a tenth of municipalities' expenditures for health. This indicates the relatively low level of cost recovery in the public sector (see Chapter III).

Recent Trends in MOH Expenditures

2.06 Table II-2 shows the growth of the Ministry of Health (MOH) recurrent budget relative to the Government of Zimbabwe (GOZ) budget since independence. Throughout the period 1981-88, the MOH budget has averaged about 5% of total GOZ outlays, although this declined to 4.5% in the drought year 1983 and recovered gradually to 5.4% in 1988. For middle-income developing countries with a per capita GDP level similar to Zimbabwe, the share of health expenditures in total government spending varies widely, from a low of 2-3% (Egypt, Indonesia, Morocco) to a high of 9-11% (Dominican Republic, Paraguay). In this regard, Zimbabwe occupies the middle ground, with its budget share allocated to health similar to Botswana (5.6%) and slightly lower than a number of other African countries (Lesotho, Liberia, Zambia) which spend 7-8% of the budget for health.

TABLE II-2

ZIMBABWE
MOH Expenditures for Health, 1980-88
(Z\$ millions)

GOZ Fiscal Year	Total ¹ GOZ Budget (1)	MOH Vote (2)	VOC ² Health (3)	Total MOH (4)=(2)+(3)	MOH as percent of GOZ Budget (%) (5)=(4)/(1)
1980-81	1627.5	83.7	n.a.	83.7	5.1
1981-82	2121.7	108.9	n.a.	108.9	5.1
1982-83	2936.6	131.6	1.3	132.9	4.5
1983-84	3052.7	139.0	3.0	142.0	4.7
1984-85	3568.4	159.4	7.1	166.5	4.7
1985-86	3875.3	196.2	8.6	204.8	5.3
1986-87	4837.3	240.6	8.2	248.8	5.1
1987-88 ³	5173.6	261.7	15.6	277.3	5.4

Source: GOZ Budgets

- Notes: 1. Includes contractual and statutory appropriations.
 2. Vote of Credit: foreign-assisted projects for which resources flow through the Ministry of Finance.
 3. Estimate.
 n.a. Not available.

2.07 Table II-3 presents MOH recurrent budgetary data that has been adjusted to take into account increases in the general price level and in the population. It shows that between 1979-80 and 1987-88, MOH expenditures grew more than fivefold in nominal terms (from Z\$ 54.2 million to Z\$ 277.3 million), by about 94% in real terms (from Z\$ 56.8 million to Z\$ 110.4 million), and by 48% in real per capita terms (from Z\$ 8.0 to Z\$11.8). These significant increases in public spending for health reflect the post-independence government's serious commitment to improving access to health care for a large segment of the population that was underserved before 1980.

TABLE II-3

ZIMBABWE
Ministry of Health Recurrent Expenditures, 1979-88
 (Z\$ millions)

Year	Total MOH (Nominal)	Total MOH (Real 1981 terms)	Real Annual Growth (%)	Population (000)	MOH Nominal Per Capita (Z\$)	MOH Real Per Capita (Z\$)
1979-80	54.2	56.8		7,096	7.63	8.00
1980-81	83.7	78.4	37.9	7,268	11.47	10.74
1981-82	108.9	88.2	12.5	7,538	14.52	11.76
1982-83	132.9	92.9	5.4	7,817	17.04	11.91
1983-84	142.0	87.5	-5.9	8,106	17.53	10.80
1984-85	166.5	91.8	4.9	8,406	19.82	10.93
1985-86	204.8	100.0	9.0	8,708	23.54	11.49
1986-87	248.8	108.1	3.1	9,014	27.64	12.01
1987-88	277.3	110.4	2.1	9,323	29.82	11.87

Average real growth rate 1979-87 = 8.7% per annum.

Average real growth rate 1982-87 = 3.9% per annum.

Sources:

- (1) MOH expenditures from Government budgets.
- (2) Government fiscal year index constructed from consumer price index for higher income urban families, QUARTERLY DIGEST OF STATISTICS.
- (3) Population estimates from World Bank data.

2.08 As column 4 of Table II-3 indicates, the big surge in real MOH expenditures occurred in the first two years following independence, when the budget increased by 37.9% and 12.5%, respectively. Since then, given the overall fiscal constraints facing the GOZ, the rate of real growth of the MOH budget has been much lower, averaging 3.9% a year during the six year period 1982-88. During the drought year of 1983-84, the MOH budget actually contracted by almost 6%. For 1987-88, the most recent year for which data are available, the health budget grew by only 2.1% in real terms, below the annual rate of population increase of 3.2%. This sluggish growth in public funding of health care has forced the Government to examine carefully ways in which available resources for health can be more efficiently utilized, and to search for additional sources of revenues for health services provided by MOH. The constrained state of public finances has also prompted GOZ to begin considering an expanded role for local government and the private sector (including NGOs) in providing health care in the future.

2.09 MOH Expenditures by Functional Category. Table II-4 contains a breakdown by functional category of the MOH budget for 1986-87. The table was constructed by analyzing the MOH budget contained in the GOZ budget "blue book" for that year, which utilizes standard expenditure categories not very amenable to functional analysis. This explains the large amount classified as "other". The blue book also includes some items (furniture, medical equipment, minor construction) which are capital rather than recurrent in nature. Nevertheless, the table shows that about two-thirds of the total MOH budget of Z\$ 240.6 million was spent on salaries, reflecting the labor-intensive nature of the health sector. In fact, this salary figure is relatively low when compared to a number of other African countries, and suggests that the balance between salaries and non-salary recurrent expenditures (drugs, transport, maintenance, etc.) is fairly good. The budget shares allocated to drugs (10%) and transport (2.2%) are also relatively high in comparison with other African countries. This functional analysis is corroborated by a 1986 WHO-sponsored study of Goromonzi District, which revealed that 60% of health expenditures went to salaries and 9% to medical and surgical supplies.

TABLE II-4

ZIMBABWE
Composition of MOH Expenditures, 1986 - 87

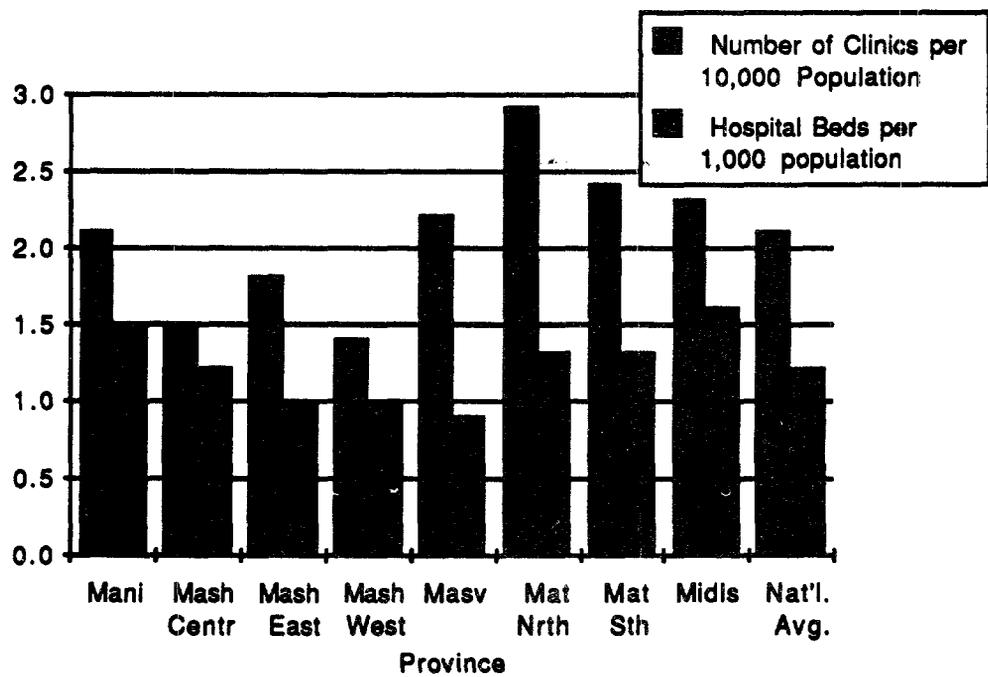
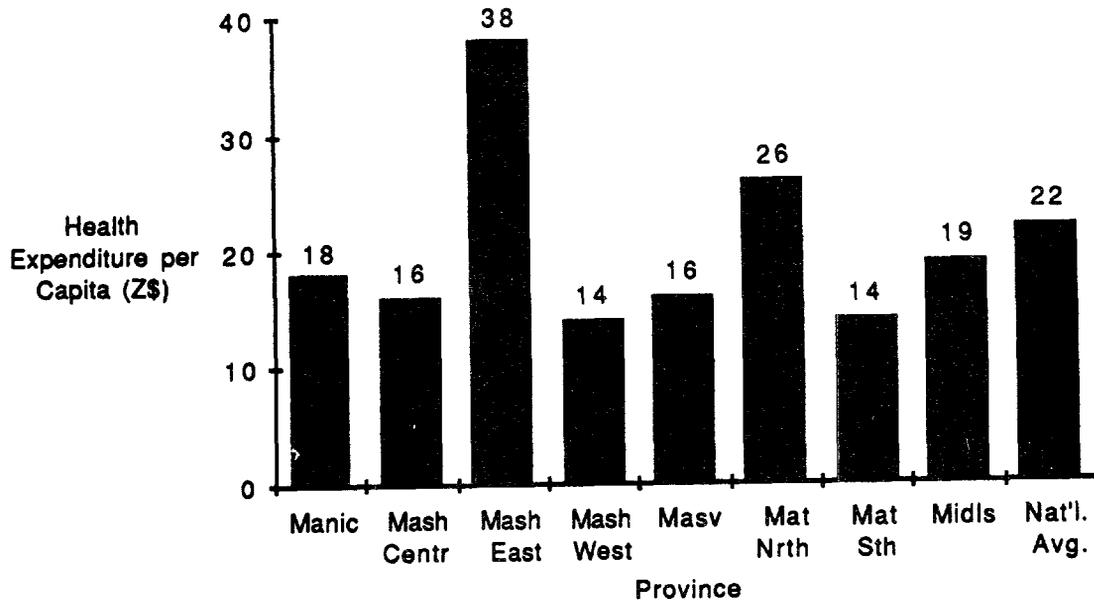
Category	86-87 Amount (Z\$ million)	86-87 Percent (%)	Budget Reference
1. Salaries			
- MOH Administration	8.36	3.47	vote IA
- MOH Medical Services	83.02	34.50	vote IIA
- MOH Preventive	15.30	6.36	vote IIIA
- MOH Research	0.96	0.40	vote IVA
- MOH Grants	33.78	14.04	2/3 X ID, IIE, IIH, IID
- Parirenyatwa	19.89	8.27	2/3 of IIF
Subtotal	161.32	67.05	
2. Drugs/Dressings	23.70	9.85	votes IID, IIE, IIF
3. Furniture/Equipment	7.48	3.11	various votes
4. Subsistence/Transport	5.31	2.21	votes I-IVB
5. Construction	1.50	0.52	votes IIE, IIIE
6. Other	41.30	17.17	various votes
<u>Total</u>	<u>240.60</u>	<u>100.00</u>	

Sources:

- (1) Government Budget, 1987-88.
- (2) Monthly Financial Reports, Parirenyatwa Hospital.

FIGURE 2.2:

Summary Data on Health Services by Province, 1987



2.10 Allocations by Level and Type of Service. Further analysis of the blue book suggests that about 71% of the 1987 MOH budget (Z\$ 171.3 million) was allocated to facility-based health services, with the balance of funds for community-based programs (water and sanitation, disease control campaigns, etc. - 11%), training (10%), central administration (5%), grants to ZNFPC (2%), and research (1%).

2.11 If the expenditures incurred by municipal and local government health authorities using their own resources are added to the MOH budget, then total public outlays for facility-based services come to Z\$ 188.2 million; this is the so-called "patient budget" for GOZ health care. Of this amount, nearly 50% (Z\$ 93.5 million) was spent at tertiary level, including 36% (Z\$ 67.4 million) at the four central hospitals and 12% (Z\$ 21 million) at provincial hospitals. About 30% of the patient budget (Z\$ 56.4 million) was allocated to secondary-care facilities, including the 55 district and mission hospitals, with the remaining 20% (Z\$ 38.3 million) spread across the roughly 1000 urban and rural clinics at the primary-care level.

2.12 As Table II-5 and Figure 2.2 show, the distribution of Government health facilities by province, as measured by hospital beds per 1000 population and clinics per 10,000 population, is fairly equal. However, the per capita distribution of public financial resources for health is 2-5 times higher in the two provinces where the four central hospitals are located (Mashonaland East - Z\$ 48, and Matabeleland North - Z\$ 33) than in the other six provinces (Z\$ 10-15 per capita). Even when these figures are adjusted to take into account patients referred from the other provinces to the central hospitals in Harare and Bulawayo, per capita expenditures in the two "urban" provinces are still 1.4-2.7 times higher than in the others.

2.13 This top-heavy allocation of financial resources, while common in developing countries, indicates that while much has been done since independence to correct the urban, high-technology bias of Zimbabwe's health system, that bias still persists to some degree. Data on the average cost per patient-day at various levels of health facilities confirms this bias. The Government has already taken a number of positive steps to improve the situation: (a) new construction at the central hospitals has generally been halted since the early 1980s; (b) district hospitals and clinics are being built or upgraded to relieve pressure on the tertiary-level facilities; and (c) MOH is implementing regulations requiring that young doctors serve in the rural areas, while providing incentives (e.g., good quality housing) to health personnel to work outside of the major towns. In addition, the GOZ may wish to consider several other measures designed to reallocate resources to lower levels of the health system, including improvements in referral procedures and a fee structure that encourages patients to seek care at the appropriate level. Costs at the major hospitals could also be better contained if these facilities developed effective financial information systems for use by senior medical and administrative staff (see Chapters IV and V).

2.14 Government Capital Expenditure. Table II-6 contains a time series on capital outlays for health between the years 1982-88. Capital expenditures for health appear in four different sections of the GOZ budget

blue book: (a) funds for equipment and minor construction financed out of the MOH budget using domestically-generated revenues (MOH Vote); (b) donor funds for a range of health programs of a non-building nature, e.g., immunizations, water and sanitation, health training, which are channeled through the Ministry of Finance's Vote of Credit (VOC-Health); (c) funds for major building projects for health undertaken by the Ministry of Public Construction and National Housing on behalf of MOH (MPCNH/MOH), using domestic resources; and (d) donor funds for health buildings put up by MPCNH on behalf of MOH, and thus channeled through the Vote of Credit (VOC MPC/MOH).

TABLE II-5

ZIMBABWE

Summary Data on Health Services by Province, 1987

	Health Expenditure Per Capita (Z\$)		Hospital Beds per 1,000 Population		Number of Clinics per 10,000 Population	Hospital Admissions per 1,000 Population		Outpatient Hospital Attendance per Capita
	(A)	(B) ^{1/}	(A)	(B) ^{2/}		(A)	(B) ^{2/}	
Manicaland	14	18	2.0	2.1	1.5	60	64	0.9
Mash Central	12	16	1.5	1.5	1.2	59	67	0.7
Mash East	48	38	2.0	1.8	1.0	82	71	0.6
Mash West	10	14	1.4	1.4	1.0	61	67	0.9
Masvingo	10	11	2.1	2.2	0.9	65	70	1.3
Mat North	33	26	3.1	2.9	1.3	92	80	0.7
Mat South	10	14	2.3	2.4	1.3	66	74	0.9
Midlands	15	19	2.2	2.3	1.6	63	67	0.9
Natl. Average	22	22	2.1	2.1	1.2	70	70	0.8

Source : MOH service and expenditure data.

Notes :

- 1/ In version (B), the data have been adjusted for the 20% referral rate and this share of expenditures of the central hospitals is apportioned on a population-weighted basis.
- 2/ Version (B) distributes national referrals of central hospitals equally to all provinces, i.e. 20% of beds and admissions are national referral and are distributed equally among the provinces.

2.15 The figures in Table II-6 show a dramatic increase in capital spending for health during 1982-88, reflecting the expansion of a range of primary health care-related programs (especially the Essential Drugs Action Program (ZEDAP), the Expanded Program of Immunizations (ZEPI),

rural water supplies and latrines, and training of PHC workers) and the implementation of projects to build multi-disciplinary health training centers, district hospitals, and clinics in rural areas. While the local contribution to the capital budget has generally remained constant in absolute terms, it has declined relative to foreign financing, which accounted for three-quarters of the budget in 1987-88. Capital expenditures for health can be expected to continue rising over the next 5-10 years, particularly in connection with the Z\$ 80 million upgrading and equipping of eight district hospitals and 70 clinics under the World Bank-assisted Family Health Project.

TABLE II-6

ZIMBABWE
Capital Expenditures for Health, 1982-88
(Nominal Z\$ millions)

Year	MOH Vote ^{1/}	VOC Health ^{2/}	MPCNH/ MOH ^{3/}	VOC MPC/MOH ^{4/}	Total	Foreign Share (%)
1982-83	14.9	1.3	n.a.	n.a.	16.2	8.0
1983-84	5.1	3.0	n.a.	n.a.	8.1	37.2
1984-85	7.8	7.1	1.2	7.2	23.2	61.6
1985-86	14.3	8.6	4.6	9.3	36.8	48.5
1986-87	9.0	8.2	7.3	7.5	31.9	49.8
1987-88	5.7	15.6	8.0	25.0	54.3	74.8

Source: MOH Documents

Notes:

- (1) MOH Vote: Capital items include furniture and equipment and capital items covered by the MOH grant to councils and missions.
 - (2) VOC Health: Vote of credit for MOH, i.e., donor-assisted health projects, largely capital in content, including EPI, CDD, water and sanitation.
 - (3) MPCNH/MOH: Ministry of Public Construction vote on behalf of MOH. This covers building construction projects fully-funded by GOZ.
 - (4) VOC MPC/MOH: Vote of credit to Public Construction on behalf of MOH. This covers health construction activities managed by MPCNH and foreign-funded, e.g., district hospitals under the Family Health Project.
- n.a. Not available.

2.16 Capital spending for health since independence, with its strong orientation toward preventive health activities and improvements of facilities in the rural areas of the country, has helped to redress some of the earlier imbalances in the distribution of health-related benefits in Zimbabwe. However, given the persisting urban bias and the fact that most private doctors are located in the towns, the emphasis on MOH capital expenditures for PHC and rural facilities should probably continue for some years to come, provided that the central and provincial Government hospitals are adequately maintained.

2.17 However, in focusing on these areas of investment in health, the GOZ will need to consider three important issues:

- (a) Planned capital expenditures should be related in a realistic manner to the implementation capacity of the responsible institutions. Technical and managerial staff in MOH, for example, are currently in short supply. This may soon begin to frustrate implementation of some PHC programs, unless additional capacity is created; similarly, there is increasing evidence that shortages of architects, engineers, and transport in MPCNH may be constraining health civil works projects. This situation highlights the importance of creating additional capacity in MOH and other Government agencies, through measures to improve both the supply (training and technical assistance) and demand (competitive civil service salaries and attractive terms and conditions of employment) for these critical skills;
- (b) Current technical specifications for major capital investments, especially new and upgraded buildings, should be carefully scrutinized, to ensure that the most cost-effective technical solutions are being followed. This is especially important in the case of standard civil works which are repeated over and over again in many locations, e.g., district hospitals and clinics, and where cost reductions for relatively minor items (e.g., size of wards, examination rooms, choice of building materials, etc.) can ultimately result in major savings overall. It would be useful for MOH to review these technical specifications periodically, with assistance from outside architects if necessary, and revise technical standards as required; and
- (c) The financial sustainability of the recurrent costs associated with capital expenditures should be closely monitored, and these additional costs should be fully budgeted. This issue is examined in more detail in Chapter V.

CHAPTER III

ISSUES IN RESOURCE MOBILIZATION

Introduction

3.01 As mentioned in the previous chapters, since independence, the Government of Zimbabwe has backed up its pledge to provide adequate health care for the population by committing a significant level of resources to the health sector. The share of national wealth allocated to health compares well with other countries at a similar stage of economic development. However, given the constrained macroeconomic situation and related budget austerity, Government officials recognize that it is becoming increasingly difficult to allocate sufficient public funds, obtained from general revenues, to the health sector to keep up with the demand for an expanded array of high-quality services for a population growing at over 3% a year. Unless other sources of financing can be tapped, both for public and privately-provided health care, the Government will find it hard to maintain current service levels or continue its efforts to correct inherited imbalances. Creative solutions are required not only to stretch Government's expenditures further, but also to mobilize additional resources.

3.02 In searching for solutions, one of Zimbabwe's strengths to be exploited is the current diversity of providers and sources of funding for health. As discussed in Chapter II, Government health institutions at present utilize general tax revenues, local taxes, insurance payments, and user fees; NGO institutions rely on a combination of public subsidies, fees, and donations; employer health institutions (industries, mines, etc.) fund services out of internally generated revenues; and private providers receive out-of-pocket payments from clients and insurance payments. In the sections below, some options for further developing existing sources of financing, as well as for creating new mechanisms, are examined. These include: increasing user fees for public health services; private and government insurance; local government cost-sharing and community contributions; and taxation of privately-provided health care.

3.03 As Zimbabwean officials review the historical pattern of expenditures for health and consider options for the future, they may wish to assess these options in terms of a series of key criteria:

- (a) financial impact: what level or amount of additional resources would result if the option were adopted?
- (b) reliability and robustness: can the financing mechanism be counted on from year to year, or will it suffer year-to-year shocks in response to changing circumstances? Will funds increase over time to satisfy the needs of a growing population?
- (c) efficiency: will the financing measures enhance the technical efficiency of expenditures?

- (d) equity: will the proposed option improve the distribution of health benefits among the population, and ensure that even the poorest groups have access to a basic minimum of health care?

User Fees for Government Health Services

3.04 Policy and Achievements. Following independence, the GOZ articulated its policy of making the distribution of health services in Zimbabwe more equitable. Consistent with this policy, the GOZ decided that public sector health institutions would provide care free of charge to the poor. Consequently, families with monthly incomes of less than Z\$150 have been exempt from paying fees since shortly after independence (September 1980); this cut-off line has not been adjusted since 1980. For those households above the cut-off line, the GOZ has established a schedule of fees for MOH facilities, differentiated by household income and level of facility. Current charges, which have been in effect since 1985, include:

- (a) for each of the four central hospitals' general wards, an inpatient fee, ranging from Z\$5 to Z\$35 per day depending upon income, with subscribers to medical aid (health insurance) charged at the highest monthly income rate (i.e., Z\$ 800 or more);
- (b) for the central hospitals' private wards, a fixed inpatient fee of Z\$60/day;
- (c) at the provincial and district hospitals, a daily flat rate for inpatient care of Z\$10 in general wards and Z\$35 in private wards (halved after 14 days of hospitalization);
- (d) an outpatient fee, which at the central hospitals is either Z\$5 or Z\$13, depending on income and insurance coverage, and is fixed at Z\$3, Z\$1.5 and Z\$1 at the provincial, district and rural hospitals, respectively, regardless of household income; and
- (e) additional charges (not income-linked) for specific procedures, e.g., operations, injections, wound dressing, etc.

3.05 At all facilities, fees for children are lower than those quoted above, while non-residents pay more. Both inpatient and outpatient fees include the cost of any drugs and supplies used in treatment. While the rural and district council clinics and church mission hospitals also adhere to the MOH fee schedule, municipal health care institutions are not governed by the MOH fee structure, other than the exemption for poor households. The municipal health authorities set their own fees, subject only to the fee schedule being published in advance without receiving 20 or more formal complaints from citizens.

3.06 For a number of reasons discussed below (low level of fees, difficulties in establishing correct charges in relation to income, weak collection efforts, etc.), cost recovery from user fees in Government

health facilities is very low, amounting to only 2-4% of the MOH recurrent budget during 1981-88 (Table III-1). Excluding one of the central hospitals.

TABLE III-1
ZIMBABWE
Ministry of Health Cost Recovery, 1981-88
(Z\$ '000)

Year	Total MOH Budget (1)	Of Which Parirenyatwa (2)	Fee Collections		Cost Recovery Ratios	
			Total (3)	Of Which Parirenyatwa (4)	National (5)=(3)/(1)	Parirenyatwa (6)=(4)/(2)
1981-82	108,936	16,344	3,975	2,326	3.6%	14.2%
1982-83	130,300	18,262	3,559	2,158	2.7%	11.8%
1983-84	137,615	20,218	4,361	2,881	3.2%	14.2%
1984-85	131,374	22,784	5,594	3,464	4.3%	15.2%
1985-86	196,200	26,845	4,990	2,230	2.5%	8.3%
1986-87	240,600	32,822	5,730	3,000	2.4%	9.1%
1987-88	261,700	34,000	7,755	3,450	3.0%	10.1%

Source:

Ministry of Health and Parirenyatwa Group of Hospitals.

Parirenyatwa - where collected fees during this period covered 8-15% of expenditures, cost recovery has met less than 2% of MOH outlays. On the other hand, municipal health departments recover a significantly larger share of their expenditures - varying from 10-30% - in part because their urban clientele is able to pay more (Table III-2), but also because city health authorities have the incentive of knowing that MOH subventions will only meet a portion of their total costs.

TABLE III-2

ZIMBABWE
Cost Recovery for Municipal Government
Health Institutions, 1986-87
 (in Z\$ '000)

Municipality	Recurrent Expenditure	Fees Collected	Cost Recovery Ratio
Bulawayo	3,490.5	556.6	16.2%
Chegutu	30.9	7.9	25.7%
Chinhoyi	64.0	19.0	29.7%
Chitungwiza	2,568.6	367.8	14.3%
Gweru	1,025.0	171.4	16.7%
Harare	16,201.2	2,447.9	15.1%
Kadoma	178.7	43.4	24.3%
Kwekwe	364.6	86.6	23.8%
Marondera	272.7	30.3	11.1%
Masvingo	266.1	32.0	12.0%
Mutare	1,088.9	174.9	16.0%

Source: Municipal Governments Annual Reports.

3.07 Issues Concerning User Fees. Zimbabwe Government officials generally recognize the weaknesses of the existing system of cost recovery through user fees: the level of cost recovery is too low, and the system does not effectively target users according to ability to pay, i.e., some persons who are exempted could afford to pay at least a small fee, and others who could meet most or all the costs of their care are being undercharged.

3.08 There are a number of reasons for low cost recovery. First, the level of fees is set too low, in relation to actual costs and to individuals' willingness to pay. While the actual cost of providing various health services has not been systematically studied, it appears that even the maximum fees charged are well below full cost: for example, private in-patient care at Parirenyatwa is estimated to cost Z\$ 100-150 a day, while the rate for private patients is only Z\$ 60. The overall MOH fee schedule has not been adjusted since 1985, even though inflation has averaged 10-20% a year during 1985-89: this has seriously eroded the real cost of user charges. There is also strong anecdotal evidence (high out-of-pocket payments to private doctors, pharmacies, and traditional practitioners) to suggest that many Zimbabweans would be willing to pay more for reasonable quality health care.

3.09 Second, the revenue collection efforts of MOH, local government, and church mission health facilities are generally poor, in part because they lack incentives to collect fees, and also because trained accounting personnel are scarce. It is not known how much revenue is lost

in this manner, but probably amounts to Z\$ 5-10 million a year or 2-4% of MOH expenditures. The provincial hospitals collect some fees, but lack of registration and billing information and inability to enforce payment often results in lost revenues: it has been estimated, for example, that 50% of ambulance fees are never collected. The tertiary care hospitals are generally stricter in imposing fees, but the central government computer bureau is very slow in sending bills to patients, often taking 9-12 months after the patient is discharged. As a result, MOH may be losing as much as Z\$ 10-20 million annually in potential medical aid payments for private care in these referral hospitals.

3.10 Poor fee collection can be partly related to the lack of skilled financial managers and clerical staff at all levels of health facilities. The relatively sophisticated skills required at secondary and tertiary facilities to apply successfully the variable fee schedule scaled to household income are frequently unavailable. The fee collection procedures themselves tend to weaken cost recovery: hospitals do not always present in-patients with their bills before they are discharged, and patients who are billed prior to discharge are not required to settle their accounts before they leave. The tertiary hospitals' reliance on the highly-centralized and overworked computer bureau is also a factor. In addition, since the annual MOH budget allocations and subventions to individual facilities are not affected by their cost recovery performance during the previous year, MOH, local government, and mission health facilities have few incentives to strengthen their fee collection efforts.

3.11 Third, cost recovery is low because the current system for granting the exemption from paying fees is very difficult to apply. Except in some of the MOH central hospitals and municipal facilities, patients can qualify for the exemption on the basis of an uncontestable verbal statement, without having to document their income level. Monthly pay slips are generally used as the only valid proof of income; and as only a handful of persons in the rural areas (school teachers and other civil servants) receive a monthly wage, virtually everyone else is exempted from paying user fees, even if their cash and in-kind income is actually above the Z\$ 150 cut-off. It is therefore likely that large numbers of households with incomes above this level are receiving free health care. By contrast, in the MOH central hospitals and municipal health facilities, where the burden of proof of income - and possible indigence - is placed upon the patient, in the form of pay slips or a letter from the local social services agency, cost recovery is significantly higher.

3.12 Another weakness of the current cost recovery system, widely acknowledged by Government officials, is its ineffectiveness in targeting fees to various socio-economic groups. In this sense, the system is not fully consistent with the Government's equity objectives. As mentioned above, while the truly needy may receive health services free of charge, others who can afford to pay something are also benefitting from free care. In addition, because the highest income groups (including medical aid patients) are not being charged the full cost of the care they receive, and a large portion of those charges is not being collected, the Government is effectively providing a large subsidy to these groups who could afford to pay considerably more. Furthermore, the Government's failure to collect fees from higher income groups may ultimately be constraining its ability

to invest in new facilities, manpower, drugs, etc., especially to serve poor rural communities.

3.13 Poor fee collection at the secondary and tertiary hospitals may also be compromising the efficiency of the health referral system. By charging more at higher level facilities, the current fee structure not only approximates relative costs at those facilities; theoretically, such a structure should also encourage patients to seek care at the appropriate level of the referral system, without by-passing lower-level facilities. However, failure in practice to collect fees at provincial and central hospitals may be one factor in the relative underutilization of peripheral facilities - as measured by lower occupancy rates and longer length of stay for in-patients at peripheral facilities - as compared to the higher level hospitals.

3.14 Options for Increasing Cost Recovery. In many developing countries, there are strong arguments for governments to provide certain types of health services to some groups at less than full cost: these include equity considerations and the externalities associated with many preventive health programs, e.g., infectious disease control, family planning, etc. The appropriate level of cost recovery will also vary from country to country, depending on average household income, distribution of income among groups, and the income profile of those served by government health facilities (as opposed to the NGO and private sectors).

3.15 Nevertheless, most Zimbabweans recognize that cost recovery for health care is too low at present, and that measures to increase cost recovery are feasible in terms of ability and willingness to pay more. It is generally acknowledged that most people (with the exception of low-income households which would have to be protected) would be willing to pay more for good quality health services: the fact that Zimbabweans incur substantial out-of-pocket expenditures for payments to traditional healers, private practitioners, and private sellers of drugs, attests to this willingness to pay. While Government officials would ultimately need to set new cost recovery targets themselves, an overall level of 15-20% of MOH recurrent expenditures would seem attainable, especially as several other countries with lower per capita incomes (e.g., Ghana, Lesotho) have managed to achieve cost recovery of this magnitude in recent years.

3.16 Zimbabwe faces a number of possible options with regard to user fees, that could help to increase cost recovery, promote greater efficiency, and improve equity in access to health care. These options could be adopted individually or severally, depending on various political and administrative factors; however, the impact of many of them will be greater if adopted in tandem with other complementary options, e.g., the revenue effects of new or increased fees will be significantly enhanced by improvements in billing and collection procedures. The options for new or increased fees include:

- (a) raising the overall level of fees in Government institutions. At a minimum, this might involve bringing fees, which were last adjusted in 1985, back into line with price inflation over the past four years;

- (b) increasing fees for private patients (mainly covered by medical aid) to cover full, or most, actual costs. While such fees could be boosted immediately to bring them into line with charges in comparable private hospitals, a detailed study of the actual costs of various health services at different facility levels would need to be undertaken before fees could be calibrated precisely in relation to costs;
- (c) charging a small nominal fee for out-patient visits at all Government health facilities. Such a measure would help to simplify the administration of out-patient fees, which currently involves scaling charges to household income and assessing eligibility for exemptions. Experience from other countries also shows that nominal out-patient charges can improve efficiency by eliminating much (medically) unnecessary treatment, while still ensuring that the poor are not denied access to out-patient services they need;
- (d) starting to charge separately for all drugs provided to out-patients and to those hospitalized. To preserve equity, a simple, three-tiered system of pricing for drugs might be envisioned: full cost for those covered by medical aid, free or nominal charges for those able to demonstrate their low-income status, and low (less than full cost) fees for all others.

3.17 In addition to the above changes in the level and structure of fees, a number of management improvements are also possible. These options include:

- (e) requiring that, in the case of in-patient care, the burden of proof of income (and the related scaling of hospital fees to income level, as well as exemptions from fees for the poor) be placed upon the patient (see para. 3.11), rather than the hospital. In addition to pay slips or income tax returns, a letter from social services agencies or from the local authority (council) could also be used as proof of income status. In urban areas, this should not create excessive difficulties. In the rural areas, where it may be more problematic to establish household incomes precisely, marketing board receipts or other relevant documented criteria, e.g., size of landholdings, could possibly be used to determine a patient's ability to pay. Another option to explore for the rural areas would involve establishing a set of criteria known to be closely related to households' ability to pay for health services, based on the results of recent household expenditure and income surveys. These criteria might include, e.g., number of persons in household, number employed, size of landholdings, type of dwelling, etc. Admissions clerks could then interview patients upon their arrival at the hospital, asking questions derived from the survey data. Patients meeting a

certain number of the income criteria, and therefore judged to be from low-income households, would then have hospital fees waived;

- (f) improving billing and collection procedures. Government-operated or subsidized facilities should strive to present bills to patients and collect fees upon discharge, as a routine matter. A deposit could also be required of patients upon admission. This may require hiring and training additional managerial and clerical staff, and automating billing and other accounting systems. An important first step in this direction would be to decentralize billing and fee collection at the four national referral hospitals, including the installation of micro-computer systems, in order to stem the enormous loss of potential fee revenues. The ongoing MOH initiative to train and deploy health administrators to the provincial and district levels could also help in this domain, as one of the administrators' chief responsibilities would be to strengthen revenue collection; and

- (g) developing incentives to individual health facilities to strengthen their revenue collection efforts. A range of approaches to providing such incentives can be envisioned, and MOH may wish to consider their appropriateness under Zimbabwe conditions. A reasonable target level of recoveries could be set for each institution, with MOH then allocating the remaining funds to meet an approved overall budget and each institution retaining for use the fees collected; this is the system currently in use in Ghana. Alternatively, institutions reaching or exceeding their cost recovery targets could be given extra funds or other benefits (e.g., new uniforms, equipment, transport, etc.), in addition to their normal budgets; this approach is being adopted in Lesotho. What is required is for MOH and other Government officials to review these various incentive schemes, in the light of GOZ accounting procedures, institutional capacity, and health workers' and communities' preferences, and identify the most appropriate approach.

3.18 While it is difficult to quantify precisely the financial impact of these user fee reforms, the adoption of all the above measures could result in increased revenues of about Z\$ 40-55 million a year, including Z\$ 7 million from adjusting fees in line with inflation, Z\$ 15-20 million from full cost pricing for private patients, Z\$ 10 million from out-patient fees, and Z\$ 10-15 million from drug charges. The sum of these incremental revenues would be equivalent to 15-20% of the 1988 MOH budget. Of course, the costs of collection (for extra staff, equipment, etc.) would have to be set off against the additional revenues gained. For this reason, it would be critically important to make the changes in the user fees system as cost-effective as possible, by adopting the management reforms indicated in para. 3.17.

Private Health Insurance

3.19 Background. Medical aid societies (non-profit health insurance companies) have been present in Zimbabwe for many years. There are currently about 30 such companies, serving both public and private sector employees, under the umbrella of the National Association of Medical Aid Societies (NAMAS). About 380,000 employees and their dependents are currently covered, representing about 4.6% of the population, up from about 220,000 at the time of independence (Table III-3). Although severely underrepresented at independence, black employees now account for about 70% of those covered. The three big medical aid societies (CIMAS, Public Employees, MASCA) account for 85-90% of subscribers covered, with CIMAS and MASCA accepting members from any type of private firm; the smaller societies generally serve a single firm or industry. Only CIMAS offers a health insurance package for individuals.

TABLE III-3

ZIMBABWE
Medical Aid Societies Membership, 1981 - 87

Year	Membership (000)	Annual Growth (%)
1980-81	224.14	-
1981-82	240.05	7.1
1982-83	268.61	11.9
1983-84	292.97	9.1
1984-85	315.56	7.7
1985-86	346.67	9.9
1986-87	384.05	10.8

Source: NAMAS

3.20 Government policy has been to allow medical aid societies to conduct their own affairs, without regulation. Monthly premiums are determined by the societies themselves, with the relative contributions of employees and employers decided by the firms involved. The levels of such premiums are scaled according to employees' income and number of dependents. NAMAS negotiates directly with private physicians in setting fees to be paid by the medical aid societies for various recognized medical procedures, which are then published in a Relative Value Schedule. NAMAS also negotiates the fees to be paid to GOZ hospitals for medical aid members admitted as in-patients. While these hospitals charge higher rates for those covered by medical aid (who use private wards, if available), such rates remain well below cost, with the result that the GOZ effectively subsidizes private care in public facilities.

3.21 Most medical aid subscribers are treated by private physicians, located mainly in the large towns of Harare and Bulawayo. As there are few private hospitals in the country, the Government allows most

private physicians to admit their patients to public hospitals, principally the four big central hospitals, where the patients go into private wards. Despite the heavy use of Government facilities by medical aid members, Government received only about 3.5% of all medical aid payout in 1987, because of both low overall fees and inadequate billing and collection (see para. 3.09). Most medical aid payments go to private doctors and dentists (49%), private hospitals, nursing homes, laboratories and x-ray services (26%), drugs (18%) and out-of-country referrals (4%, Table III-4). Medical aid generally pays directly to health care providers rather than through reimbursement of the patient. The one exception is for drugs, where the member is reimbursed a portion of the cost, various levels of co-payment being applied. There are no other co-payments or deductibles included in the medical aid societies' policies.

TABLE III-4

ZIMBABWE
CIMAS, MASCA, and Railmed Medical Aid Societies
Expenditures for Medical Care, 1982-83 and 1986-87

Payments To/For	1982 - 83		1986 - 87	
	Amount (Z\$ million)	Share of Total (%)	Amount (Z\$ million)	Share of Total (%)
1. Ministry of Health	1.29	5.7	1.68	3.5
2. General Practitioners	4.21	18.8	9.89	20.6
3. Specialists	4.88	21.7	8.56	17.8
4. Dental Practitioners	2.63	11.7	4.89	10.2
5. Private Hospitals/ Nursing Homes	2.02	9.0	7.32	15.3
6. Private Laboratories	2.01	9.0	3.10	6.5
7. X-Ray Services	0.91	4.1	2.21	4.6
8. Out-of-Country Referrals	0.73	3.3	1.70	3.5
9. Drugs	3.77	16.8	8.65	18.0
Total	22.45	100.0	48.00	100.0

Source: CIMAS, MASCA, and Railmed.

3.22 Issues and Options for Medical Insurance. Policy-makers in Zimbabwe recognize that the main issues concerning private insurance (medical aid) include: (a) estimating the potential for increasing the number of persons covered by such insurance, and the related rise in resources devoted to health care; (b) predicting the impact of expanding medical aid upon the cost and quality of health services provided by the public sector; and (c) determining whether some of the existing features of medical aid schemes are inequitable and should therefore be corrected.

3.23 While the population covered by medical aid has nearly doubled since independence, it still amounts to less than 5% of all Zimbabweans. How much larger can the medical aid clientele grow? The largest medical aid societies estimate that there is a "market" consisting of an additional 0.6 million persons who could be covered by private health insurance. This would bring the total number of subscribers to about 1.0 million or 11% of the country's population. Presumably, in order to saturate that market, medical aid societies would have to seek new customers aggressively, something that the industry-specific insurance schemes have not historically done. The Government could be instrumental in supporting this process, in part simply by encouraging firms and their employees to enter medical aid schemes, but also by requiring through legislation that all employers over a certain size provide a minimum level of health benefits to their workers. This would force these employers to establish their own health services (workplace clinics, etc.) and/or enroll their workers in medical aid programs.

3.24 While the full potential market for medical aid is difficult to estimate precisely, it does appear that private health insurance could expand considerably beyond its current clientele base. Zimbabwe's medical aid industry is well organized and staffed; NAMAS provides the various societies with a common front in negotiating fees with private doctors. In addition to the political and legislative actions mentioned above, two other factors are likely to affect the cost of medical aid coverage and its related affordability for middle-income households. The first factor is the level of Government subsidies to health care covered by medical aid: if these subsidies were reduced by charging full costs in public hospitals and cutting the income tax credit for individual contributions to medical aid - the cost of private insurance would almost certainly increase, with a corresponding fall in demand. However, as the average annual premium paid at present (around Z\$275 per beneficiary) is low relative to wage incomes in Zimbabwe, the market could probably absorb a rise in premiums without a significant drop in demand. The second factor is the share of medical aid premiums borne by the individual and his employer: if employers assumed a larger percentage of these costs, more middle-income workers could afford medical aid coverage. On the other hand, some of these costs would ultimately be passed on to consumers in the form of higher prices for various goods and services. Some amount of switching from relatively labor-intensive production methods to more capital-intensive ones might also occur.

3.25 The impact of expanded medical aid upon MOH revenues is hard to quantify exactly, but is likely to be positive, assuming that billing and collection procedures at the major hospitals are strengthened. This is because a large number of middle-income households who previously paid little or nothing for in-patient care would be charged at a higher (possibly full-cost) fee level, with virtually no reduction in demand for hospitalization from this group. Revenues for out-patient services would also rise, even if some of the new insurees went to private doctors for such care, since it is doubtful that they pay for out-patient visits at present.

3.26 The likely impact of expanded medical aid upon the overall quality of Government health services is more controversial. One concern

voiced by some Zimbabweans is that growth of medical aid membership would expand the market for private health care and thus cause many doctors and nurses currently working for the Government to leave public service for private practice. This, in turn, would lead to a deterioration in the quality of publicly-provided health services. Notwithstanding the fact that at present, about two-thirds of Zimbabwe's 1200 doctors are already in private practice, it is possible that the expansion of medical aid might induce some additional doctors to leave the public sector. The Government does have at its disposal, however, a number of policy options that could counteract such a drift to the private sector:

- (a) pay and conditions of service (housing, allowances, career development opportunities) can be enhanced in order to attract and retain more doctors and nurses;
- (b) young doctors graduating from Zimbabwe's medical school can be required to serve in the public sector for a minimum period before becoming eligible for licensing as a private doctor. This period of public service has recently been increased to eight years (three years of housemanship and five years of additional service); and
- (c) private doctors' rights to admit and attend to their private patients in MOH hospitals can be made conditional upon their willingness to treat general patients (e.g., at clinic sessions) at public sector pay levels. This system, which currently operates at all the major hospitals, could possibly be further expanded.

3.27 Another issue related to medical aid is the equitability or fairness of some of its current features, aside from the possibility, discussed above in para. 3.27, that it creates an unfair "double standard" of care between the private and public sectors. It has already been argued in this chapter (para. 3.20) that medical aid patients do not pay the full cost of the treatment they currently receive in MOH facilities, and this is inherently inequitable. In addition, medical aid patients obtain an important tax benefit, in the form of a deduction from income liable for personal income tax, amounting to 20% of their medical aid contributions and other out-of-pocket medical expenses. (Employers can also deduct from taxable company profits the contribution they make to their employees medical aid scheme). Prior to the 1988 reform of tax legislation, 100% of individuals' medical aid contributions were deductible. In this sense, a measure of greater equity has been introduced as a result of the recent tax reform, and it is unlikely that further changes will take place in the near future. However, inasmuch as even a partial deduction against taxes is allowed, this should be recognized as a public subsidy to private medical care for the better-off income groups in Zimbabwe.

3.28 One final issue is that the lack of any co-payment or deductible requirement by Zimbabwean medical aid societies, except for some pharmaceuticals, has probably contributed to an unnecessary increase in demand for health care by their clients. This is because they are not faced with additional costs per unit of care consumed. The NAMAS member societies might look more carefully at options for introducing co-payments

and deductibles if they faced the full costs of Government-provided care, and if other existing subsidies were reduced further. Higher costs to medical aid societies and individual members would help restrain demand for private care, and thus ease somewhat the pressures on Government doctors to shift to private practice.

Government-Operated Health Insurance

3.29 Background. In 1985, Government began exploring the possibility of introducing a public-sector "National Health Insurance Scheme" (NHIS) tied to a new social security system. Participation in the scheme would be compulsory for all salaried workers. Several variants have been drafted and discussed by MOH, Ministry of Labor and Ministry of Finance. The proposals generally include the following features:

- (a) the scheme would be financed through payroll deductions amounting to 2.5% of salaries, contributed partly by employees (1%) and by employers (1.5%);
- (b) these payroll deductions would be additional to those required for the proposed social security system run by the Ministry of Labor, for which legislation is pending;
- (c) the insurance "premiums" would be earmarked for public health services, and would be additional to the "normal" MOH budget;
- (d) contributors and their dependents would present cards at Government health facilities, which would entitle them to receive free care; and
- (e) certain groups (e.g., MOH employees, armed forces) would obtain the free care "benefits" without payment.
- (f) those not covered by the NHIS would pay for health services at Government facilities, according to the existing sliding scale with its exemption for low-income families; and
- (g) NHIS would not cover private treatment (i.e., private doctors, hospitals, etc., would not be reimbursed). These costs would have to be met through medical aid or out-of-pocket payments.

3.30 The variants on this basic proposal have revolved around items (d) and (e) above, and other cost-recovery and demand-restraining measures intended to enhance the revenue mobilization and efficiency benefits of NHIS. It has been suggested that the need for insurance cards be eliminated, either by abolishing all fees for health services at GOZ facilities, or, alternatively, by requiring that even NHIS contributors pay the same fees as non-contributors (under these circumstances, contributing to NHIS would not confer a specific benefit). The idea of exempting certain groups of civil servants from payroll deductions has been criticized as unfair and inequitable. To prevent NHIS insurees from

demanding excessive care, the imposition of some level of fees (or "co-payment") has also been put forward.

3.31 Issues and Options for National Health Insurance. The principal issues surrounding NHIS concern: (a) its political acceptability; (b) net revenue effects of such a scheme; and (c) the impact of national health insurance upon the efficiency of GOZ-provided health care. On the first issue, there appears to be an increasingly prevailing view among Zimbabweans that taxation of personal incomes is becoming excessive, and that the planned social security scheme plus NHIS could be financially onerous. Private employers have also expressed some opposition to the social security system, arguing that it will only add to their costs and, ultimately, to the prices they must charge, thus increasing the cost of living and making Zimbabwean products less competitive internationally. Such a "tax on labor" might also cause firms to substitute (relatively cheaper) capital for (relatively more expensive) labor in a number of industries, thus increasing the level of unemployment in the economy. Whatever the intrinsic merits of NHIS might be, therefore, it may not gather the necessary political support and could have negative social repercussions under prevailing economic conditions in Zimbabwe, especially if the benefits of NHIS are perceived to be few or none - as the case would be if contributors had to continue medical aid coverage for all private health care.

3.32 When MOH was refining its NHIS proposals in 1986-87, the Ministry estimated that the scheme would bring in about Z\$ 80 million in extra revenues annually, when fully operational. In converting these ideal gross revenues to actual net revenues, however, a number of factors would have to be taken into account. These include initial resistance from employers and administrative weaknesses in collection, which would reduce gross revenues during the early years of the scheme, plus administrative costs associated with NHIS. Experience from other developing countries has shown that these administrative costs can be extremely high, wiping out much of the gross revenue gain. Related to this, administrative difficulties in defining the boundaries of a benefitting "household" and its members (simple conjugal or extended family) can result in a higher level of health costs. In addition, if health care at MOH facilities was provided freely to insurees, there would be both a corresponding loss of revenues from fees that would otherwise be collected, as well as incremental costs related to excessive demand for free public services.

3.33 A fundamental related issue is whether any amount of net revenues gained through NHIS would actually result in "additionality" to the MOH budget, or whether the Ministry's allocation from Treasury would simply be reduced by a corresponding amount. Clearly, this would depend on any agreements reached between MOH and Ministry of Finance.

3.34 The adoption of NHIS, as proposed, could also seriously compromise the allocative efficiency of the Government health system, if all insurees receive free care at GOZ hospitals and clinics. Only a scheme that included some form of individual co-payment (through fees, deductibles, or cost-sharing) would transmit price signals to NHIS contributors that would curb excessive demand for Government health services.

3.35 Virtually all of the NHIS variants mentioned above would improve equity to some degree, even if the net revenue yield was low and there was no rationing of demand from the higher-income salaried workers through positive pricing. This is because the higher-income groups would be paying more for health: there would thus be greater equity in shouldering the financial burden of health care. This same result could also be achieved, however, by increasing fees for medical aid patients, strengthening collections, and reducing subsidies that benefit the more affluent disproportionately. Furthermore, equity in access to health care can only be enhanced by investing more in health services for poor urban and rural groups. This, in turn, depends on a number of factors not directly related to NHIS, including the size of the MOH budget and the budget share spent in underserved areas. The capacity of local government, NGOs, and communities themselves to finance health care is also critically important.

3.36 Another option in this area - and an alternative to NHIS - that the GOZ might wish to consider would be the establishment of a special fund for improving health services in low-income communities. Such a fund - a "National Health Development Fund" (NHDF) - could be raised through consumption taxes on tobacco, alcoholic beverages, etc. Since payroll deductions would either be passed on to consumers in the form of higher prices or to workers as lower wages, and could also provoke increased unemployment (see para. 3.32), a tax on alcohol or tobacco (which would itself have a beneficial effect on health) would probably be more appropriate. The urgent need for supplemental financial resources for primary and preventive health activities, as well as the direct link between reduced tobacco and alcohol consumption and improved health status, would argue in favor of an earmarked tax.

3.37 The NHDF, administered by MOH, would only be financially meaningful if it were understood as being incremental to the Ministry's "normal" budget. It could then be used for a number of specific health development activities targeted at low-income groups, such as clinic construction and renovation, drug supplies, and training of community health auxiliaries. While most NHDF projects would be in rural areas, some NHDF activities would also be located in low-income urban neighborhoods where health services are currently inadequate. The NHDF could also help to stimulate local participation in health services, by providing grants to match local financing according to a cost-sharing formula linked to local income levels (see para. 3.42 below).

3.38 Establishing an NHDF would not be an easy matter. MOH would have to negotiate with the Ministry of Finance on incremental budgeting, as well as on the fiscal merits of such a tax scheme. The GOZ would have to enact legislation establishing the taxes, and this could meet some political opposition. Such opposition might be effectively overcome, however, if the NHDF was to receive high-level political support and was also well-publicized as a fund with basic humanitarian and egalitarian goals, e.g., "to allow a poor mother to give birth to her child in a basic hygienic place" or "to enable a sick child to obtain simple care without having to travel 50 kilometers from his village, as in the past".

Local Government, NGO, and Community Financing

3.39 Local Government and NGOs. The roughly 700 clinics and hospitals operated by municipalities, rural and district councils, and church mission receive sizeable subventions from the Central Government through the MOH budget, amounting to about Z\$ 36.8 million in 1987. Central Government grants to rural and district council clinics accounted for virtually all of their operating costs in that year, while grants to the church mission facilities made up about 90% of their recurrent expenses. The municipalities were somewhat less dependant on MOH financial support: subventions in 1987 covered 25% to 100% of their recurrent budgets, with an average of about 42%.

3.40 GOZ officials have recognized several problems inherent in the existing system of financial relations between MOH and local government and NGO health institutions:

- (a) MOH allocations are centralized in the Ministry's head office, which makes it difficult to tailor financial assistance to the particular needs of individual health institutions;
- (b) As there is no defined cost-sharing formula between the Central Government and local health institutions, MOH allocations often seem arbitrary and unpredictable to the recipient institutions, making it hard for local government and NGO facilities to prepare and adhere strictly to financial plans;
- (c) As mentioned above (para. 3.10), local government and NGO facilities have little incentive to improve the range and quality of services provided or to raise their share of internally-generated revenues. For example, under the existing procedures for determining Central Government subventions, district and rural council facilities have no incentive to increase cost recovery, since subventions are intended to cover gross operating expenditures, rather than net outlays, and fees are not retained at the point of collection; and
- (d) Most importantly for the local councils, there is a noticeable apathy and lack of commitment and "ownership" of their clinics, which is related to the 100% Central Government subvention and the absence of any matching with local funds.

3.41 In order to foster local interest in these important primary health facilities, and also to reduce their financial burden on the Central Government, Zimbabwean officials should consider options for returning to local governments a greater share of financial responsibility and authority for providing health care. One possibility would be to develop cost-sharing formulae for MOH subventions to municipal and local councils. These formulae would take into account the relative financial strength of these different forms of local government, which vary considerably. In

general, the municipalities and district councils are able to raise substantial revenues through taxes and fees, while the rural councils (located in the communal farming areas) have a relatively weak fiscal base. For simple purposes of illustration, under these circumstances, MOH might provide a smaller share of budgeted funds to urban clinics (e.g., 25%) than to district council clinics (e.g., 50%) and rural council clinics (e.g., 75%). The same approach could be taken with church mission health facilities, in order to give these institutions greater incentives to collect patient fees and seek private donations within Zimbabwe and from abroad. While the mission hospitals provide important health services at relatively low cost, the current level of Government subvention of nearly 80% appears to be unnecessarily high.

3.42 The savings accruing to MOH through these revised cost-sharing arrangements could be significant. For example, by applying to the actual expenditure figures for 1987 a set of revised MOH subvention levels of 25% for municipalities, 50% for rural councils, and 75% for district councils and missions, MOH would realize savings of about Z\$ 11 million or 4% of the Ministry's budget.

3.43 To implement such a cost-sharing policy, MOH, in collaboration with the Ministries of Finance and Local Government, would need to analyze in detail the financial strengths and weaknesses of the municipalities, local councils, and church mission health providers. This would require that all these institutions openly disclose their financial position. The Central Government ministries would then have to negotiate with the urban, rural, and mission facilities the appropriate cost-sharing formulae. Reforms of the local government system in Zimbabwe, some of which are currently under active consideration by GOZ, would have an important bearing on cost-sharing for the health sector. Any moves in the direction of expanding the financial responsibility of local government and church mission health institutions would also need to be accompanied by staff training in the areas of cost accounting and financial management.

3.44 Another MOH policy which, if strictly adhered to, could reduce significantly the cost to the Central Government of providing health care would be to enter into "contracts" or agreements with major church mission hospitals, stipulating that the NGO institutions serve as the district referral hospitals in areas where no Government facility currently exists. The church missions account for a significant share of health services nationally, especially in the rural areas, and do so at relatively low cost. They are therefore an integral part of Zimbabwe's health system, which the Government should strive to maintain. At the same time, however, the system of public subventions should encourage the missions to generate as much local revenue as possible, and should reward facilities which meet clearly-defined standards for quality and range of care and take on added responsibilities. The agreements between MOH and the mission hospitals could specify minimum care standards, cost recovery targets, and a "base" subvention level. Additional subventions would then be provided to compensate mission hospitals for "special" services such as supervising adjacent clinics, training paramedical staff, sponsoring PHC programs, etc. If necessary, MOH could also provide capital grants to church mission hospitals, in situations where it would be less costly to expand an existing NGO institutions than to build a new Government facility.

3.45 One additional way in which local governments and church missions could increase their financial contribution to the cost of health care would be by establishing drug revolving funds. The health facilities would procure their own drug supplies from Central Medical Stores or through other channels, and would then charge prices enabling them to recover all or part of the costs. In cases where full-cost pricing would make some drugs unaffordable to low-income households - especially in rural areas - cost-sharing between MOH and the local institution would again be required. Drug revolving funds might be especially appealing to patients attending local government and mission hospitals and clinics, since they have already shown their willingness to pay others (traditional healers, private pharmacies) for a timely supply of drugs. Since drug shortages occasionally occur at the rural clinics which represent the last point in the national pharmaceuticals distribution network, clinic customers might also be inclined to support a revolving fund which ensures them the availability of essential drugs.

3.46 Community Participation. Zimbabwe has a long tradition of community participation in development activities, especially in the country's rural areas. Local communities have historically donated time and labor to help build primary schools and to maintain access roads; since independence in 1980, some communities have also constructed "waiting mothers' lodges" for women waiting to give birth at rural clinics. These kinds of local initiatives not only reduce the cost to the Central Government of such public assets and services, but also instill a sense of pride and ownership in the community which uses them. While the financial capacity of many local communities is extremely limited, the GOZ may wish to consider additional ways in which community participation in the health sector could be elicited, for example, in building houses for clinic staff.

Tax Treatment of Health Expenditures and Health Professionals Incomes

3.47 Taxation of Health Expenditures. Until recently, tax credits were granted for most out-of-pocket health expenses above a Z\$72 deductible, and for individual and corporate contributions to medical aid schemes. In April 1988, the Government reduced this tax credit considerably when it amended the Income Tax Act. The tax credit is now limited to 20% of all medical expenses above Z\$250, including medical aid subscriptions.

3.48 Given that medical aid contributions in 1987 amounted to about Z\$ 100 million, and that private out-of-pocket expenditures were estimated at over Z\$ 50 million (Table II-1), the net revenue gain to the GOZ as a result of the new income tax legislation should be enormous. The Ministry of Finance might take this into account in reviewing with relatively greater sympathy the annual MOH budget requests.

3.49 In considering future reforms in this area, Government officials might wish to examine the household financial security and equity aspects of the tax law. On the first point, it can be argued that the tax credit above the Z\$ 250 deductible provides a partial form of "catastrophic" health insurance, to protect families from being wiped out financially in the case of extremely costly care for a severe illness. If

this were the case, however, the deductible should apply to out-of-pocket expenses only, not medical aid subscriptions which already have "risk-sharing" built into them. Furthermore, the percentage of expenditures allowable as a tax credit should then be graduated to the amount of out-of-pocket expenditure, so that the percentage increases with the amount of private cost (i.e., the severity of the "catastrophe"). To make the tax provision equitable, too, the amount of the deductible should be graduated to the level of household income, so that poorer families start benefitting from the tax abatement at a lower level of out-of-pocket expense.

3.50 Taxation of Private Health Professionals. The Department of Internal Revenue is currently strengthening its capacity to review tax returns and enforce compliance with tax laws, including tax payments from professional groups (e.g., doctors, lawyers, architects, etc.) which have not been fully collected. While the amount of additional revenue which could be raised through more rigorous application of income tax law to such individuals as well as companies is difficult to estimate, Internal Revenue staff indicated that it would be substantial, given the strength of the private sector in Zimbabwe. Of course, any measures to enhance collection of income taxes from private doctors, pharmacy and laboratory workers, and nurses would have to be a part of a larger effort applied to a wide range of private professionals in the country.

CHAPTER IV

EFFICIENT USE OF RESOURCES IN THE HEALTH SECTOR

Introduction

4.01 Given the fact that resources for health care, public and private, are scarce in Zimbabwe, policy-makers have recognized the importance of utilizing those resources in a manner which maximizes their health benefits for the country's population. This means ensuring that resources are devoted to those activities which will bring about the greatest improvement in health status, especially when their costs are relatively modest: conversely, large amounts of resources should not be poured into health care activities which confer only minor benefits at a high cost per individual treated. In other words, attention should be focused upon allocative efficiency. In addition, for any given health service provided (e.g., delivery of a child in a hospital or clinic, treatment for malaria, disinfection and dressing for a wound, etc.), the cost should be kept as low as possible, consistent with acceptable standards of care. This suggests that health care providers in Zimbabwe must also strive toward high levels of technical efficiency.

4.02 In the sections that follow below, aspects of both allocative and technical efficiency in Zimbabwe's health sector are examined, and options for enhancing such efficiency are explored. The ultimate objective of such an exercise is to search for ways in which Zimbabwe can obtain more "value for money" in its expenditures for health care.

Allocative Efficiency

4.03 The debate over allocative efficiency in Zimbabwe, as in most countries, boils down to the issue: how much is being spent on promotive and preventive health activities, as opposed to the treatment of illnesses themselves? In both developed and developing countries, health policy-makers agree that, given prevailing expenditure patterns, at the margin financial outlays for preventive care are more cost-effective than for curative care. In developing countries on average, the approximate treatment cost per additional life saved by curative care ranges from US\$500 to US\$5,000, while the approximate cost per additional life saved by preventive programs such as childhood immunizations, vector control, and sanitation improvements is less than US\$250. While all countries including Zimbabwe must allocate resources for the treatment of those already ill, it makes sense under these circumstances to devote an increasing proportion of resources to preventive measures.

4.04 In an effort to improve allocative efficiency, the Government in its post-independence policy statement, "Planning for Equity in Health," gave first priority to establishment of a primary health care (PHC) network responsive to the needs of the vast majority of the population.

PHC-essentially a combination of preventive health activities plus treatment of basic illnesses at community or clinic level (the clinic being a "primary" facility) - was to be implemented through:

- (a) upgrading the few existing rural clinics and building new clinics to ensure access by the entire population to basic services;
- (b) training paramedical personnel to staff rural health centers and village health volunteers to educate and motivate the population;
- (c) retraining doctors and nurses to supervise PHC activities; and
- (d) integrating rehabilitated district and provincial facilities into a referral system to support the PHC system.

Recognizing that it would be politically difficult to transfer existing resources away from urban and curative health services, the Government undertook to increase overall financial allocations for health substantially, and to ensure that these incremental resources were devoted to PHC, including preventive care activities.

4.05 How has Zimbabwe performed since independence in this area of allocative efficiency, especially regarding Government expenditures? The systems for budgeting and monitoring spending make it exceedingly difficult to answer this question with any precision. Budgets are broken down by broad expenditure categories (e.g., salaries, transports, drugs, etc.) rather than by program; even the distribution of funds on a geographical basis or by level of care (primary, secondary, tertiary) is far from transparent. While it is clear that the Government has been successful in increasing substantially the overall level of public resources devoted to the health sector, especially in the years immediately following independence, efforts to strengthen PHC and preventive care are harder to evaluate.

4.06 However, by re-analyzing the available expenditure data from 1987 (Chapter IX) and making several reasonable simplifying assumptions, it appears that as much as one-quarter of all public expenditures for health in that year was devoted to preventive activities. More specifically, about 28% (Z\$ 71.1 million) of the Z\$ 258.2 in public (MOH, municipal and local government) spending in 1987 may have gone to prevention, including Z\$ 39.8 million for facility-based activities, Z\$ 26.5 in community-based programs, and Z\$ 4.8 for family planning services provided by ZNFPC. The chief assumption here is that 10% of spending at tertiary facilities, 20% at secondary level, and 50% at primary level is devoted to health prevention. Since hospitals and clinics in Zimbabwe account for the overwhelming majority of health expenditures, the above analysis is quite sensitive to any assumptions concerning the share of hospital funds assigned to preventive care, and the results should therefore be treated with caution.

4.07 It also appears that, since independence, Zimbabwe has been increasing the proportion of Government health outlays targeted at preventive health services, thus improving allocative efficiency. As stated in Chapter II, since 1980 the MOH has established or expanded significantly a number of important preventive health programs, with donor support playing a major role in several of them. These include childhood immunizations (UNICEF, WHO, and others); rural water and sanitation (UNDP, NORAD, Netherlands, DANIDA); growth monitoring and supplemental feeding for children (SIDA); ante-natal care and family planning (USAID, UNDP, World Bank); and malaria control.

4.08 In addition, the construction or rehabilitation of rural clinics (African Development Bank, EEC, SIDA, NORAD) and district hospitals (World Bank) and their staffing has facilitated the delivery of primary and preventive health care to underserved communities. Since 1980, access to these health care facilities at the local level has increased substantially, with the upgrading of more than 100 clinics and construction of more than 200. Government-sponsored training programs have also produced impressive number of paramedical personnel, including more than 3,000 SCN/SCNM, 300 environmental health assistants, and about 7,000 village health workers (now community development workers). In this regard, the Government's policy and program measures designed to improve "equity in health" by focusing investment on rural areas have also paid off in enhancing allocative efficiency.

4.09 While these past efforts are commendable, Zimbabwean officials recognize that more needs to be done in the future to emphasize preventive health care:

- (a) safe water supplies and sewerage must be expanded, to avoid the transmission of water-borne diseases;
- (b) growth monitoring, nutrition education, and measures to raise the incomes of poor households should be strengthened in order to reduce child malnutrition;
- (c) a range of prevention activities for disease control need to be built up, to lower the incidence of malaria, respiratory infections, and tuberculosis. Slowing the spread of the HIV virus and thus the incidence of AIDS cases will also depend heavily on effective prevention measures (i.e., protecting the blood supply and changing sexual behaviors through education); and
- (d) expanding family planning services to meet growing demand will also constitute a vital preventive activity. This is because effective family planning improves maternal and child health by reducing the number high-risk pregnancies (young, over-age, and high-parity mothers, and too closely-spaced births).

4.10 As Zimbabwe is likely to achieve near or full coverage of the population with these prevention programs for maternal and child health and infectious diseases control over the coming decade, health planners

should also begin to consider additional prevention activities to deal with adult chronic diseases (hypertension, heart disease, stroke, diabetes, etc.). As the risk of acquiring these diseases has been shown to be affected significantly by a series of environmental and behavioral factors (diet, exercise, smoking, alcohol consumption), prevention efforts will need to focus on changing such behavior.

4.11 As stated in Chapter II, a continuation of current Government policies which emphasize that most new investments (facilities, housing, transport, communications) in health and incremental personnel should be targeted in the rural areas will also help to improve allocative efficiency. Existing urban health facilities should not be neglected: they will need to be well maintained, and there will be cases for selective expansion and upgrading in the towns and for development of a clinic structure that prevents patients from automatically turning up at the large hospitals. This is important, if the urban health infrastructure is to continue serving its urban clientele, as well as providing referral care to the entire country's population. However, given the heavy concentration of high-level health workers and facilities in the urban areas - 20% of all hospital beds, 65% of MOH doctors, and half of SRNs belong to the four referral hospitals in Harare and Bulawayo, for example - it would be hard to justify any major new health investments in the towns over the next few years.

Issues in Technical Efficiency

4.12 Hospital Efficiency. Since hospital-based services account for the bulk of health-related expenditures in Zimbabwe and other countries, enhancing the technical efficiency of hospitals should be a key priority for policy-makers attempting to maximize the benefits of health spending. Hospital efficiency depends heavily on keeping down the unit costs per in-patient admitted and treated, which absorbs most financial outlays at the hospitals. This in turn means maintaining low daily in-patient costs through high bed occupancy rates and cost-effective use of technical inputs, especially drugs and health manpower. At the same time, in-patient length of stay (LOS) should be kept to a minimum, consistent with good medical practice.

4.13 The data required to analyze the technical efficiency of Zimbabwean hospitals is not easily obtained. Information on numbers of hospital beds and admissions by facility is routinely collected, but total numbers of patient-days and average LOS data are not currently available for the 77 church mission hospitals which account for 35% of the 18,100 Government and NGO hospitals beds in the country. No information on admissions, patient-days, and LOS is assembled for the private and industrial hospitals which probably cover at least an additional 1000 beds. Furthermore, hospital expenditure data are generally not broken down by in-patient and out-patient care or by functional category, which severely limits assessments of technical efficiency. In addition, some Government expenditure figures are simply recorded on an aggregate basis for all provincial, district, and rural hospitals in a given province, making it difficult to assign these costs to individual facilities. If in the future health officials are to monitor the technical efficiency of the nation's

hospitals, an appropriate facility-based budget and expenditure system will need to be designed and put in place (see below).

4.14 Despite the above limitations, the available data do suggest a number of important issues in hospital efficiency:

- (a) Bed occupancy rates (Table IV-1 and Figure 4.1) are generally higher in central (average of 89%) and provincial (91%) hospitals than in district hospitals (75%). In five of the eight provinces (Manicaland, Mashonaland East, Matabeleland North and South, and Midlands), district hospitals reported less than 80% occupancy. This suggests the relative under-utilization of hospital facilities at the district level, especially as LOS in the higher-level hospitals does not appear to be unreasonably long. Under-utilization at district level may be a result of weaknesses in the existing referral system, with patients either bypassing the district and going directly to provincial or central hospitals, or with district facilities referring patients to a higher-level without admitting them, because of shortages of staff, drugs, etc. Overall weaknesses in these peripheral hospitals, including those operated by the church missions, seem to be confirmed by the available data on the mission hospitals: assuming an average LOS similar to the district hospitals (i.e., 8.7 days, which would be very conservative), the average occupancy rate for the mission facilities in 1987 would be only 62%. The reasons for low-bed occupancy in district - and probably mission - hospitals need to be investigated, and measures taken to correct this situation. These might include improvements in the quality of health services in the district hospitals, as well as adjustments in the user fee structure to encourage patients to refer themselves at the outset to the nearest district or mission facility.

TABLE IV-1

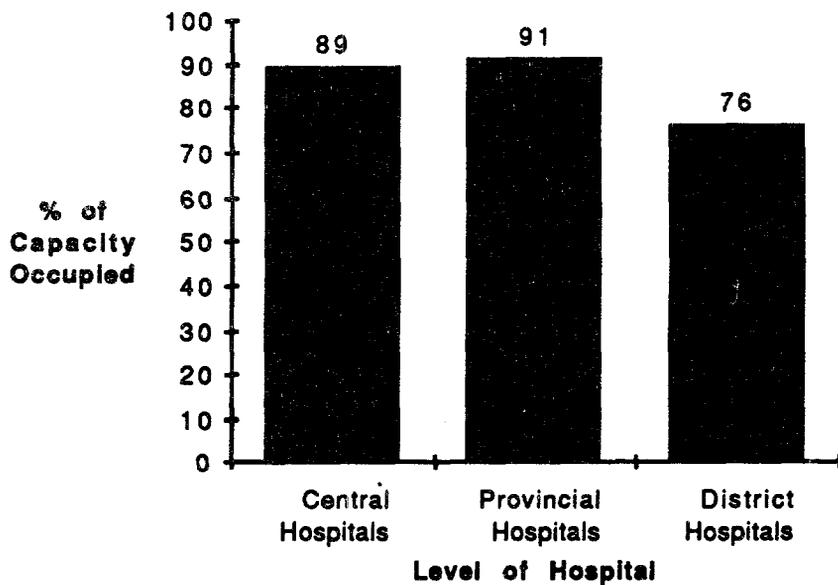
ZIMBABWE
Hospital Occupancy Rates and Average Length of Stay, 1987

	Number of Beds	Avg Daily Inpatients	Occupancy %	Average Length of Stay (Days)	
				General	Maternity
<u>Central Hospitals</u>					
Parirenyatwa	901	782	87	9.9	3.9
Harare Central	1,256	1,198	95	8.2	3.2
United Bulawayo	651	429	66	9.1	5.1
Mpilo	937	935	100	8.9	3.9
<u>Sub-Total</u>	<u>3,745</u>	<u>3,344</u>	<u>89</u>		
<u>Provincial Hospitals</u>					
Manicaland	192	211	110	6.3	3.9
Mashonaland Central	120	148	123	8.4	6.9
Mashonaland East	453	367	81	7.5	3.7
Mashonaland West	175	154	88	7.2	6.1
Masvingo	239	256	107	5.9	7.3
Matabeleland North	-	-	-	-	-
Matabeleland South	184	125	68	12.0	4.9
Midlands	254	208	82	5.2	5.3
<u>Sub-Total</u>	<u>1,817</u>	<u>1,469</u>	<u>91</u>		
<u>District Hospitals</u>					
Manicaland	662	501	76	8.8	5.3
Mashonaland Central	116	106	91	7.6	2.5
Mashonaland East	169	118	70	12.7	1.3
Mashonaland West	609	533	88	7.5	4.0
Masvingo	325	335	103	9.1	3.1
Matabeleland North	188	98	52	7.8	3.1
Matabeleland South	413	318	77	9.8	4.1
Midlands	728	434	60	6.3	4.7
<u>Sub-Total</u>	<u>3,210</u>	<u>2,443</u>	<u>76</u>		

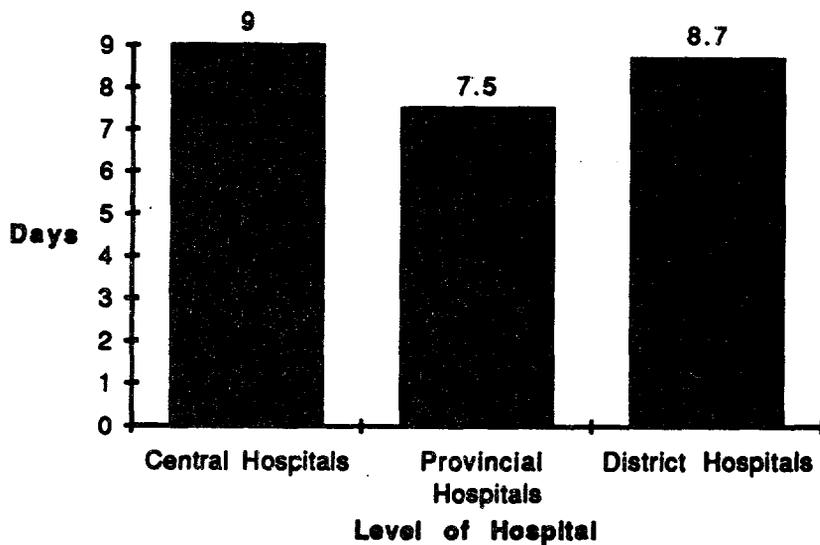
Source: MOH service and expenditure data.

FIGURE 4.1:

Hospital Occupancy Rates



Average Hospital Length of Stay

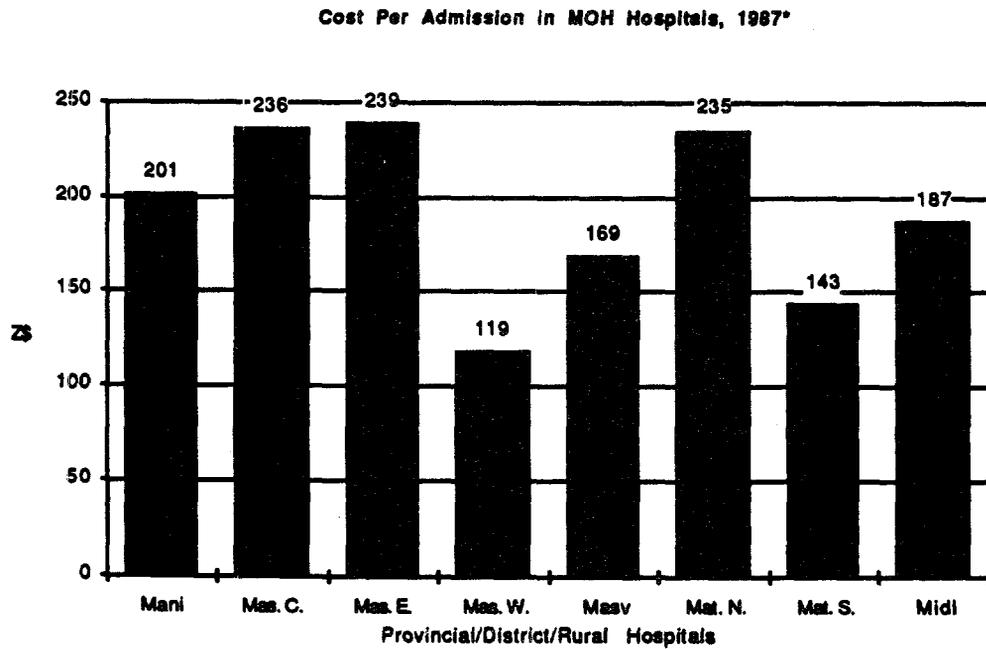
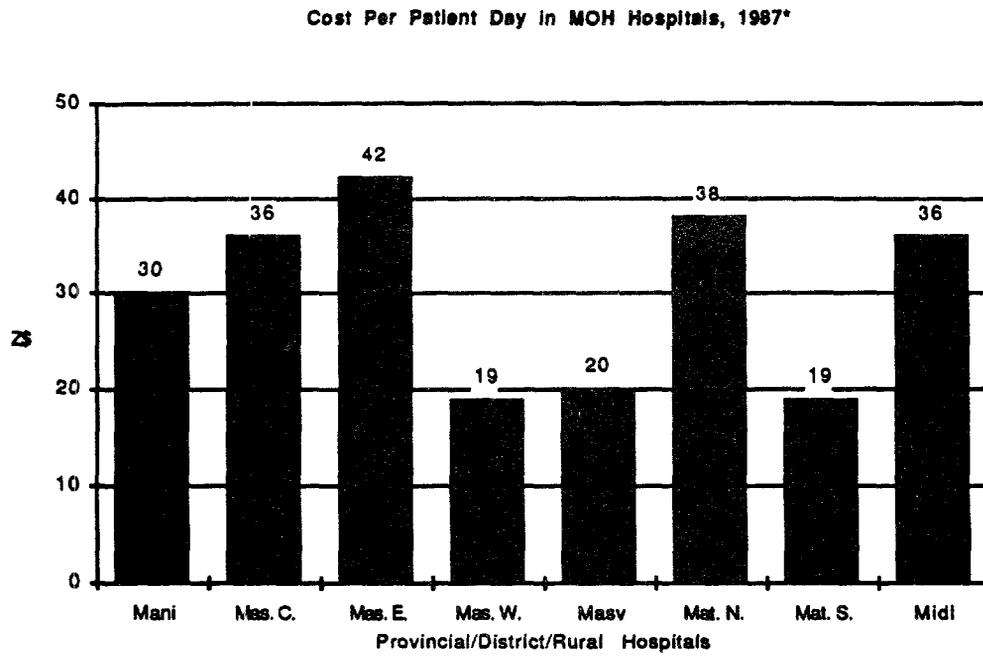


- (b) Bed occupancy rates in the central and provincial hospitals are generally good, with only one of the four central facilities (United Bulawayo Hospital) and one of the eight provincial facilities (Matabeleland South) reporting less than 80% occupancy in 1987. While one central hospital and three provinces experienced bed occupancy rates in excess of 100%, it would seem hard to justify creation of additional bed capacity at higher-level facilities, except in the case of Masvingo, where both district (103%) and provincial (107%) hospitals are also overcrowded. In the case of Mpilo Hospital (100%), future patient overflow might be sent to United Bulawayo, which is located in the same town. In Manicaland and Mashonaland Central (110% and 123% at provincial level), improved referrals to the district hospitals, which still have some spare bed capacity, might mitigate or eliminate the existing overflow at the provincial hospitals. Reduced LOS, where medically justified, would also help to decongest these hospitals. While the present analysis can help to suggest such possible low-cost solutions to these hospital utilization problems, a more detailed study of individual facilities is required before final decisions can be taken.
- (c) Bed occupancy rates exhibit high variation among facilities at the same level of the referral system. At central hospital level, the range is from 66% to 100%, at provincial level from 68% to 123%, and at district level from 52% to 103%. MOH should study the reasons for this great variation, especially by examining the district-provincial hospital occupancy rates within the same province, ideally with rural hospital and church mission hospital data integrated as well. Table IV-1 suggests three types of district-provincial occupancy patterns: high-high (e.g., Masvingo, Mashonaland Central), low-high (e.g., Manicaland), and low-low (e.g., Mashonaland East, Matabeleland South). For each of these patterns, a somewhat different solution is probably warranted.
- (d) LOS is generally lower in provincial (7.5 days) than central (9 days) hospitals, but, contrary to what might be expected in a situation of good hospital management, is nearly as high at district level (8.7 days). This suggests that many district hospitals may be keeping patients too long, perhaps because of spare bed capacity. If LOS were reduced in these facilities, bed occupancy rates would probably fall further, revealing even more clearly the fact of current underutilization of the peripheral hospitals. LOS might be brought down at some district hospitals through improvements in transport arrangements (special buses, taxi services) to eliminate unnecessary delays in in-patient discharge.
- (e) As in the case of bed occupancy, average LOS also shows wide variation among facilities at the same level of the referral system, where LOS ought to cluster closely around a norm for

a given patient caseload mix. MOH officials should identify the hospitals which represent "outliers" in LOS, and determine the reasons for upward or downward deviations in length-of-stay. Table IV-1 suggests several facilities that might be examined more closely: for example, United Bulawayo's maternity ward (LOS of 5.1 days); general wards at the provincial hospitals for Matabeleland South (12 days) and Mashonaland Central (8.4 days); and general wards in selected district hospitals in Mashonaland East (12.7 days) and Matabeleland South (9.8 days). MOH might also establish LOS norms for general, maternity, and other specialized patients (e.g. tuberculosis) at the various hospital levels, and develop an accurate and responsive system for monitoring actual LOS performance.

- (f) Technical efficiency, as measured in terms of cost per admission (Table IV-2 and Figure 4.2), is virtually identical at three of the four central hospitals (Z\$ 236-238), but is about three times higher at Parirenyatwa Hospital in Harare (Z\$ 742). While Parirenyatwa's status as a specialized referral hospital handling complicated cases requiring sophisticated equipment and manpower may explain much of this variation, hospital officials might re-examine the institution's cost structure and try to identify ways to reduce expenditures in appropriate areas.

Figure 4.2: Zimbabwe - Cost Data by Province



*Excludes four central hospitals

TABLE IV-2
 ZIMBABWE
Cost Per Admission and Per Patient-Day
in MOH Hospitals, 1987

<u>Central Hospitals</u>	<u>Cost Per Admission (Z\$) 1/</u>	<u>Cost Per Patient-Day (Z\$)</u>
Parirenyatwa	669	75
Harare Central	274	40
United Bulawayo	238	28
Mpilo	256	33
<u>Provincial/District/Rural Hospitals</u>		
Manicaland	201	30
Mashonaland Central	236	36
Mashonaland East	239	42
Mashonaland West	119	19
Masvingo	169	20
Matabeleland North	235	38
Matabeleland South	143	19
Midlands	187	36

Source : MOH service and expenditure data.

Note : 1/ Assumes that 80% of hospital expenditure is for in-patient services and 20% for out-patient care.

- (g) Unfortunately, the figures in Table IV-2 on cost per admission at hospitals below the central level aggregate the results for all facilities within a province, thus masking inter-institutional variation. These figures do, however, point to wide variations among provinces, with several (Mashonaland Central and East and Matabeleland North) reporting costs per admission similar to the central hospitals, while the other five provinces show costs roughly 20-50% lower. The reasons for these variations also merit careful investigation on a facility-by-facility basis: one starting point might be to look at those hospitals with high per-admission costs in Mashonaland Central and East and Matabeleland North. It is also significant to note that the average cost per admission at three typical church mission hospitals (ranging from Z\$ 87 to Z\$ 144) is generally lower than in comparable Government hospitals. By including several church mission facilities in the analysis of hospital costs, certain efficiency-enhancing measures

applicable to MOH facilities might also be uncovered.

4.15 Expenditures for Drugs. One specific area in which Zimbabwean officials have recognized for a number of years that technical efficiency could be improved has been the utilization of pharmaceuticals, on both an in- and out-patient basis. At the time of independence, it was felt that expensive brand-name drugs, catering to an urban elite, were absorbing most of the funds (and foreign exchange) available for pharmaceuticals: drug cost per patient treated was therefore unnecessarily high, and other persons who needed drugs were not receiving them, because of national shortages, weaknesses in the distribution system, and inability to pay. To correct this situation, the GOZ proposed in its policy statement "Planning for Equity in Health" the adoption of an "essential drugs" list for use by Government facilities, offering the potential of greater internal efficiency and equity. The policy has been implemented through the Zimbabwe Essential Drugs Action Program (ZEDAP), which since its inception in 1986 has developed and published a national essential drugs list (EDLIZ) for use by Government health workers and has begun to train nurses and doctors in cost-effective prescribing practices. ZEDAP also makes possible important cost savings through bulk procurement and the use of international competitive bidding. The expansion of primary care facilities and introduction of free services for low-income households are, in part, intended to make essential drugs more accessible to the mass of Zimbabwe's population.

4.16 While ZEDAP has brought about many positive changes in the efficiency and equity of drug use in Zimbabwe, GOZ officials acknowledge that several problems remain. First, the current system for allocating the country's increasingly scarce foreign exchange does not satisfy the drug needs of Government health facilities. The foreign exchange content of Zimbabwe's pharmaceuticals is high - whether the drugs are imported in finished form or are manufactured locally using imported materials - and the competition for limited foreign exchange is intense. The chronic failure of MOH to obtain centrally, through Government Medical Stores (GMS), all the drugs needed for public facilities is due to two factors: (a) inability to estimate accurately annual drug requirements, and (b) unwillingness on the part of the GOZ Joint Allocations Committee (JAC) to give MOH adequate foreign exchange. A combination of these two factors results in chronic shortages.

4.17 The fact that Government hospitals and clinics experience periodic shortages of drugs is neither equitable nor efficient: equity goals are inhibited because peripheral facilities serving lower-income families suffer the most severe shortages, while efficiency is impaired because drug shortages at primary care facilities tend to encourage referrals to higher-cost secondary and tertiary hospitals. Meanwhile, there is also the economic cost of patients remaining untreated. In addition, to deal with drug shortages, MOH is forced during the course of the year to purchase drugs in relatively small quantities on the local market from private suppliers, at significantly higher cost than if the same items were procured in bulk by GMS. This also reduces the efficiency of drug use by Government health facilities.

4.18 In order to enhance the efficiency of the drug procurement system, GOZ officials should consider several options:

- (a) MOH's drug estimation procedures could be improved, by training facility-based personnel, as well as district and provincial administrators, and developing an effective drug information system.
- (b) Procedures for allocating foreign exchange for pharmaceuticals might also be modified, to ensure that importing agents and local manufacturers under contract to GMS receive adequate foreign exchange to meet the basic epidemiological needs of the population served by Government health facilities.
- (c) Given the tightly constrained foreign exchange situation prevailing in Zimbabwe, the Government should find ways to persuade importing agents and domestic manufacturers to restrict their purchases to lower-cost generic versions of specific drugs, rather than the more expensive brand name items. In this regard, as of January 1, 1990, private sector drug purchases are supposed to be limited to generic products, although the number of such products is larger than those contained in the EDLIZ.

4.19 Some amount of wastage also occurs through over-prescribing or incorrectly prescribing drugs, or through the continued use of more expensive brand name alternatives. The ZEDAP program has made considerable strides in curbing this wastage, by limiting the number of drugs dispensed by MOH personnel and educating health care workers about their proper use, and the effects and side-effects of various drugs and combinations of them. ZEDAP staff have compiled and distributed an easy-to-use desk guide on drugs for health care workers which, while maintaining a professional level of sophistication, provides the basic simplified elements of accepted prescribing and usage. Both private and public doctors and pharmacists are being trained in better prescribing methods.

4.20 In addition to the above measures, the cost-effectiveness of drug prescribing could be further improved through several other steps which have been successfully applied in other countries. These include:

- (a) limiting the number of drugs that can be prescribed during an out-patient visit to two or three items, and for a specific time period (e.g., not more than two months supply);
- (b) at least for those who are able to pay something for their health care, charging per drug item prescribed. This approach tends to encourage patients, as well as their prescribers, to limit the number of drugs and dosages to a reasonable amount; and

- (c) monitoring doctors' prescribing practices for in-patients, at least in the major hospitals. Administrators at Parirenyatwa have apparently tried to establish such a monitoring system, by which doctors treating a similar mix of patients are studied for their prescribing habits. Actual prescriptions can be compared against one another and against an accepted norm for specific illnesses, in order to identify those doctors who deviate significantly from the others. The analytical results can then be presented to the doctors and discussed with them. This system should be extended to most of Zimbabwe's larger hospitals.

CHAPTER V

MANAGEMENT OF HEALTH EXPENDITURES

Background

5.01 The vitality and diversity of Zimbabwe's health system - comprising as it does not only significant public institutions but also a large and heterogeneous private sector, both for-profit and non-profit, modern and traditional - complicate enormously the Government's task of ensuring that financial resources are spent where they can achieve the greatest individual and social benefit. The GOZ must tap fully the resources available in the private sector, while providing incentives to promote their wise utilization and the growth of private activities which are consistent with other national objectives. It must target public funds to those households whose health needs are not, or cannot, be met adequately through private channels, and to health interventions such as immunizations, water and sanitation, and family planning, which have important social ramifications.

5.02 In the previous chapters of this report, a number of major options for reforming health care financing in Zimbabwe have been reviewed. These options would support more effective recovery of the costs of health services provided by public institutions, and would help to mobilize additional resources for better "health for all" Zimbabweans, especially the poor. Expansion of insurance mechanisms and cost-sharing schemes involving central and local government and NGOs have been discussed. Policy options have also been put forward which would shift the allocation of resources toward health activities conferring relatively higher benefits, and which would improve the technical efficiency with which resources are spent for specific health services.

5.03 To meet these challenges, a wide range of financial planning and management skills and systems will be required. While Zimbabwe is already better endowed with these skills and systems than many other developing countries, GOZ officials recognize that much more must be done to improve the management of financial resources for health in the country. This is especially true in the light of the Government's current moves to decentralize many financial responsibilities, in health as in the other sectors of the economy. The existing publicly-funded health services are highly centralized, in part for historical reasons (the pre-independence health system was based upon centralized planning, budgeting, and procurement), in part because the post-independence government used centralized methods to pursue its sweeping changes in the health system after 1980. The equity, efficiency, and long-run financial sustainability of health services in Zimbabwe can be greatly enhanced through such a policy of decentralization - but only if financial planning and management skills and systems are present at the various levels of the MOH health network (center, province, district, facility), as well as within local government institutions, NGOs, and the private sector. To achieve this, a major initiative in human resources development - training and systems design - will be needed.

5.04 In the sections below, issues and options for improving financial management in the following areas are considered: financial planning and budgeting; manpower planning; expenditure monitoring and analysis; revenue collection; procurement of equipment and pharmaceuticals; and management of donor resources.

5.05 Budgeting and Planning. The MOH annual budget, which includes nearly all recurrent expenditure but omits most foreign-assisted activities as well as major civil works projects executed by MPCNH, consists of four main "heads": Administration, Medical Care Services, Preventative Services, and Research. MOH assembles the yearly budgets for Medical Care and Preventative Services, which account for over 90% of Ministry expenditure, from estimates made by the 44 MOH "cost centers" across the country. A cost center may be equivalent to a single large hospital, but more often it covers a hospital plus a number of nearby clinics. In some cases, a cost center may have its hub at a district or provincial hospital, and extend to the clinics in several neighboring districts which do not have an MOH hospital. The person responsible for drawing up the estimates at each cost center is the senior medical officer of the facilities covered, assisted by an administrative officer where one is in post. The cost center estimates are sent forward to the MOH headquarters in October-November of each year through the respective Provincial Medical Directors' offices. MOH headquarters reviews and revises these spending proposals and submits them to the Ministry of Finance, Economic Planning, and Development (MFEPD) for further scrutiny. Eventually, they are incorporated in the Government budget which is approved by Parliament in June-July of the following year, and reflected in the actual amounts warranted for spending. The cost centers ultimately learn of the budget outcome in September-October, nearly 12 months after submitting their requests.

5.06 MOH officials acknowledge that this budgeting system exhibits a number of serious weaknesses, many of which have been alluded to in earlier chapters of this report. Budgets are not broken down in ways which permit meaningful analysis of allocative or technical efficiency - by facility (hospital, clinic, etc.), program (family planning, ante-natal, maternity services, out-patient general, etc.), or type of input. Cost center budgets do not include health workers' salaries, which accounts for about two-thirds of all expenditures: these figures are kept aggregated at the MOH head office. The person responsible for financial matters in each cost center has limited control over actual spending, since he can only authorize expenditures to be incurred for a restricted number of items or "sub-heads", e.g., travel and subsistence, transport, printing and stationery, bedding and linen, drugs, etc. Should shortages of funds occur, reallocations among sub-heads can only take place with the approval of MOH headquarters. Even for these items, procurement and payment are still handled by MOH headquarters. In addition, even though the MOH budget process begins with "bottom-up" proposals from the cost centers, the decisions on the overall shape of the budget and its relative proportions are made exclusively at the "top", with little dialogue between the head office and the periphery.

5.07 MOH policy-makers have signaled their interest in redesigning the ministry budget formats, to make them more responsive to

the needs of managers at various levels of the health care system. MFEPD have also indicated that they would have no objection to these changes, provided that the main budget sub-heads, which are used throughout Government, are left unchanged. The real issue is how to redesign the budget and phase such changes, and this is no simple matter, given the large number of potential users of budget information (headquarters accounting officers, planners, and policy-makers; provincial and district medical officers and health services administrators; and hospital and clinic managers) and the limited financial management skills currently existing within MOH. Probably the most single important step in redesigning the budget would be to discuss with these various users their financial information and related management skills needs. The revised budget and financial reporting formats, systems and technology requirements (including micro-computers), and training programs, would then flow directly from such an information needs/skills gap assessment.

5.08 Whichever way the budget is recast - and this is a job for MOH users to undertake, along with specialized consultants - it should almost certainly make it possible to analyze planned and actual Government expenditures according to:

- (a) curative versus preventive care;
- (b) major programs (family planning, malaria control, water and sanitation, etc.) and departmental functions at hospitals (maternity, surgery, etc.); and
- (c) principal inputs (salaries, drugs, transport, fuel and lighting, etc.).

Furthermore, these types of expenditure data should be available for various degrees of aggregation, including information for:

- (a) the entire MOH system;
- (b) specific geographical areas (province, district, etc.);
- (c) different levels of care (primary, secondary, tertiary); and
- (d) individual facilities.

In addition, specific facilities, particularly the larger hospitals, will no doubt wish to develop more detailed and customized financial management information systems to meet their own special needs. This should be encouraged, as long as every effort is made to ensure that these facility-based management systems are as consistent as possible with the overall MOH system, and allow comparisons to be made.

5.09 Redesign of the MOH budget should be accompanied by moves to decentralize further responsibility for preparing budgets, incurring expenditures, making payments, and procuring goods and services (see below). Such moves would be consistent with the GOZ's overall decentralization policy, and would ensure that budgeting and related financial transactions respond to local needs in a timely manner. Of

course, decentralization of financial responsibilities can only be effective when the necessary management skills and systems are in place. In this regard, financial decentralization has to be part of a larger program for strengthening the management of health services at provincial, district, and facility levels. While the ultimate objective of such a program would be to devolve some degree of responsibility down to the level of every MOH facility in the country, a first step in this direction might be to improve financial management and increase responsibility in the four central hospitals and the eight provincial medical directors' offices.

5.10 Another important element in budget reform would be to integrate into a single MOH accounting matrix those items - mainly but not exclusively capital ones - not currently included in the MOH budget, but which appear in the budgets of MPCNH and MFEPD (the Vote of Credit, for foreign-assisted projects). Until this integration takes place, MOH policy-makers will not be able to assess systematically the full range of public expenditures for the health sector. At the same time, capital outlays should be clearly separated from recurrent expenditures, with capital spending shown on both a one-year and multi-year basis. This would permit the crucial analysis of the allocation of new Government investments in the sector (to curative versus preventive care, PHC versus referral services, and by geographical area) and an estimate of the incremental recurrent costs associated with these investments. The existing three-year rolling Public Sector Investment Program (PSIP) system permits only very limited analysis of this kind. In the case of capital projects for which the incremental recurrent costs have not been specifically calculated, rough rules-of-thumb for various standard types of investments (e.g., district health training centers, new district hospitals and clinics, etc.) should be developed and applied.

5.11 Manpower Planning. Since salaries and wages absorb more than two-thirds of spending in the health sector, effective personnel information and manpower planning systems, covering MOH health facilities and the local government and NGO institutions where MOH pays staff salaries, are of critical importance to overall financial management of the sector. Mistakes in the manpower area need to be avoided, as they can have very serious financial consequences. Inappropriate staffing patterns can be very costly: for example, an additional nurse at every clinic, if not performing useful tasks, would represent an enormous waste of resources, given that there are more than 1000 such clinics in the country. Since training of medical and paramedical personnel is very expensive, training programs must also concentrate on the priority categories of health workers, while matching as closely as possible the output of graduates to the needs of health sector.

5.12 Cognizant of the importance of good manpower planning and development, MOH's Manpower Department is currently undertaking a number of major initiatives in this management domain. The Department is establishing a personnel management information system (PMIS). Manpower planning capacity is being developed, and the first plans relating ideal staffing patterns to available personnel (those currently employed minus retirees plus graduates of training institutions) should be produced by late 1989 or early 1990. The MOH Manpower Department has also signaled its intention to carry out a careful review of existing health training

institutions in Zimbabwe, including recommendations for pedagogical and management changes and other minor investments that could make these institutions more cost-effective.

5.13 All of these initiatives in manpower planning and development are to be welcomed. They will have to be implemented gradually, according to a phased plan, given the limited staff and experience of the Manpower Department itself. At the same time, however, several additional steps to strengthen health manpower management should be seriously considered by MOH. Current and future manpower scenarios should include a salary "module" which allows policy-makers to assess the salary and wage implications of these scenarios. The results can be striking. For example, using 1988 salary scales and the output of health training facilities as given in the National Investment Register, 1986-90, employing an additional 85 doctors, 167 SRN, and 73 SCN annually would cost an extra Z\$ 4.9 million or 2% of the 1988 MOH budget.

5.14 MOH also needs to continue reviewing the range of possible options for attracting and retaining adequate medical, paramedical, and administrative staff within the public sector. This is especially true of the district hospitals and rural clinics, where vacancy rates for all categories of staff are significantly higher than in the central facilities and the towns (Table V-1). The Ministry has recently taken several bold moves in this area, including revising the University of Zimbabwe Medical School curriculum to give greater emphasis to public health and community medicine, and increasing the period of compulsory Government service for graduating doctors to five years (seven including housemanship). MOH may further limit the number of young doctors who are allowed to pursue specialized training immediately upon graduation from medical school, in part as a way of ensuring that most of these graduates perform general practice. In addition, the Government should periodically review public sector salaries for health workers, to ensure that they do not move too far out of line with private sector incomes. Non-salary benefits, including housing, can help to make public sector employment more competitive with private opportunities: the construction of staff housing at district hospitals and health centers under the Family Health Project, for example, is proving to be a key factor in attracting qualified staff to the project area. In view of the large numbers of nurses shifting from Government service into the private sector, salaries and benefits and career development options for this critical category of health workers should also be reviewed.

Table V-1

ZIMBABWE
Skilled Staff Vacancy Rates
by Level of the Health-Care System,
1986-87

Level of the Health-Care Systems	Doctors	SRN	SCN
Central Hospitals	4.0%	4.0%	1.9%
Provincial Hospitals	18.8%	16.2%	6.0%
District Hospitals	29.6%	12.6%	11.5%
Mission Facilities	23.9%	28.5%	24.0%
District Council Clinics			54.0%
Rural Council Clinics		12.5%	25.1%

Source: Ministry of Health

5.15 Revenue Collection. As mentioned in Chapter III, revenue collection by MOH and council health facilities is poor. While this is partly due to lack of incentives, financial management practices in these institutions are also weak. The obvious place to begin making improvements would be the central and provincial hospitals. A combination of timely automated billing and receipt systems, more rigorous assessment of patients' ability to pay, and training for financial and accounting officers of these institutions could result in a significant increase in revenue collected.

5.16 As a second step, accounting systems in all MOH and local government facilities need to be strengthened. At many hospitals and clinics, the only accounting records currently being used are a receipt book and a one-side cash book for aggregating revenues collected. A debtors' control account for those failing to pay fees is missing from many hospitals. The stock of drugs received and utilized by the facility is usually not put through a stock ledger account. And other expenditures (for allowances, transport, vehicle running costs, maintenance, etc.) are generally not recorded. Where accounts are kept by MOH facilities, the cash method of accounting is used, rather than the accrual method. This means, for example, that debts not paid promptly may be regarded as belonging to a later period, rather than the period when they were incurred. It would be preferable if Government health institutions were to move to the accrual basis of accounting, which is actually practiced in a number of mission hospitals. Many mission hospitals have also agreed in recent years to separate their financial statements for the provision of health services from their finances connected with other (e.g. educational, religious, etc.) activities. At a minimum, MOH health facilities should expand the number of accounts maintained to the following: an income and expenditure account, a debtors' ledger, and a drug stock account.

5.17 Procurement. Goods and services required by MOH and valued at more than Z\$ 5,000 are procured by the Ministry of National Supplies (which operates GMS) on behalf of the Health Ministry. While such

centralized procurement of some goods and services for the health sector may be sensible - bulk purchase of drugs, for example (Chapter IV) - for other items a more decentralized system may be more appropriate. Some MOH officials at provincial level feel that for a range of goods including hospital linens, dressings, heating fuel, and laboratory reagents, and services including cooking, laundry, and fumigation, a decentralized approach would be less expensive and would result in timelier deliveries and better quality of services. Given that provincial tender boards already exist and function effectively, it might be worthwhile to experiment with decentralized procurement for a limited number of items and assess the results, before deciding whether to expand or curtail such a system. Items for which there are many local suppliers, or for which the need arises suddenly and urgently, might be appropriate candidates for decentralized procurement.

5.18 Health officials in a number of countries have also found that when certain hospital services such as patient feeding and laundry are contracted out to private sector suppliers, the result is lower-cost, higher-quality services than under circumstances where the hospital tries to provide all these services internally. MOH officials should carefully assess the advantages and drawbacks of "contracting out" and experiment with such arrangements in selected hospitals. The results should then be closely monitored and reviewed before deciding whether to extend "contracting out" to additional facilities.

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.01 During the nine years since independence (1980), Zimbabwe has made impressive progress in providing health care to its population. Millions of people have for the first time gained access to basic care, and a range of cost-effective preventive health programs have been launched. The service delivery and health status figures given earlier in this report attest to this rapid progress, much of it financed through an expansion of Government spending for the health sector.

6.02 But, as Zimbabwean officials widely recognize, the country is now facing a mounting crisis in the financing of health services. The central government is becoming financially overextended, especially in view of the slow growth in public spending that has prevailed for the last five years, and which is likely to continue for some time to come. The health sector already receives about 5% of the central government budget, a share typical of a middle-income developing country, and one which is not likely to change significantly over the next few years. Under these constrained fiscal circumstances, there is a real danger that the Government may not be able to meet fully its existing financial commitments for health workers' salaries, medical equipment and drugs, and a host of other recurrent costs associated with the operation and maintenance of the country's health infrastructure. Not only must all of these commitments be met, but Zimbabwe will need to make a number of additional investments in preventive and curative care, if the country's health objectives for the 1990s and the beginning of the next century are to be achieved. The issue of how to pay for existing and expanded future health services is therefore a real and pressing one.

6.03 To confront successfully this growing crisis in the financing of health care, Zimbabweans generally agree that ways must be found to mobilize additional resources for use in the sector, and to obtain more "good health" from existing expenditures. At the same time, the Government's ongoing efforts to achieve greater equity in health - both in access to care and in paying for this care - must be maintained, and even reinforced.

6.04 This will require that Zimbabweans develop bold and imaginative policies and programs, and enhance their analytical and management skills in the financing of health care. It will also require a concerted and coordinated effort between the public and private sectors, including central, local, and municipal government, church missions and other NGOs, private modern and traditional practitioners, and industry.

6.05 This report offers a number of policy and program options that could help to resolve the crisis in financing health services in Zimbabwe. The recommended measures which are summarized below are organized into three main groupings: measures to inject additional money into the health sector (Resource Mobilization); measures to help Zimbabwe

get more "value for money" in health (Allocative and Technical Efficiency); and measures to develop the systems and skills needed to support stronger health financing (Management of Health Expenditures).

Resource Mobilization

6.06 To mobilize additional resources for the public sector, the GOZ should consider pursuing a range of measures including increased user charges, and expansion of health insurance, cost-sharing between central and local government, and enhanced community participation in health activities. In particular, the GOZ should generate more income from user fees by:

- (a) raising the overall level of fees in Government health institutions and adjusting this level periodically, in line with price inflation;
- (b) increasing in-patient and other charges for private patients, who are mainly covered by medical aid, to meet the full cost of the care they receive;
- (c) imposing a nominal fee for out-patient visits at all Government health facilities; and
- (d) charging separately for each drug prescribed, both for out-patients and those hospitalized.

6.07 To make these changes in the level and structure of user fees effective, a number of procedures and management practices would also have to be improved. These include: requiring that the burden of proof of household income be placed upon the patient; strengthening billing and collection procedures substantially; and developing incentives for individual health facilities to improve their revenue collection efforts. If all of these reforms were undertaken together, the revenue impact could be substantial, with at least an additional Z\$ 40-55 million (in 1987 prices) collected annually. Reforms (a) and (b) should be relatively easy to implement, the former because fees have not even kept pace with inflation in recent years, and the latter because there can be little justification, on equity or efficiency grounds, for the Government to subsidize medical care for the highest-income groups in the country, who are also covered by health insurance. Reforms (c) and (d) may be somewhat more difficult politically to carry out, but they would also have a series of very positive effects: not only would additional resources be raised, but unnecessary use of out-patient care and of drugs would be curbed, while still ensuring that the truly poor receive the health services they deserve.

6.08 If the GOZ ultimately decides to impose a consumption tax on alcohol or tobacco to help finance Government-provided health care, channeling those funds through a National Health Development Fund (NHDF) for primary and preventive care would probably be preferable to the establishment of a National Health Insurance Scheme. Provided that such an NHDF proved to be politically acceptable, it would target additional

resources for badly-needed health services to poor rural groups - thus promoting the Government's equity objectives - and for preventive health programs which are highly cost-effective. At the same time, the NHDF approach would avoid some of the potential weaknesses of national health insurance, i.e.: the administrative costs associated with issuing membership cards and determining eligibility for free care; the loss of revenues as a result of such free care; and the increased demand for treatment with little or no benefit, in the absence of price-driven supply rationing.

6.09 The GOZ should also encourage greater decentralized financing of health services through measures that could complement increased user fees: cost-sharing between central and local government, and community support for local health facilities are both viable options that should be explored. Cost-sharing formulae which take into account local disease patterns, per capita incomes, and availability of private and NGO health services, would be equitable and would probably also improve the quality and productivity of health care delivered, by giving local government bodies a greater sense of "ownership" of hospitals, clinics, and preventive health programs. Formal agreements or "contracts" between MOH and church mission health institutions could also include provisions for cost-sharing. The cost-sharing formula explored in this report for illustrative purposes would result in more than Z\$ 10 million in additional local revenues for the health sector, thus reducing the financial burden upon central government. Other formulae could generate even more local resources. Community participation, in the form of donated labor, materials, and cash for clinic upgrading and construction of housing for rural health workers, would have similar positive effects. Drug-revolving funds, when organized on a community, council, or district basis, would be another option for expanding local financial participation in health care, especially when combined with the recommendation above to begin charging part- or full-cost for drugs (para. 6.06).

6.10 Changes introduced in 1987 to the legislation governing taxation of individual incomes reduced substantially the tax allowance permitted for medical aid contributions and private out-of-pocket payments, thus lowering the level of effective Government subsidization of private care and increasing general revenues correspondingly. However, the Z\$ 250 deductible should apply to out-of-pocket payments only, not medical aid contributions; the percentage of private expenditure allowable as a tax credit should be graduated to the level of spending; and the amount of the deductible should be further graduated to household income. More rigorous application of the tax code to the incomes of health workers (doctors, nurses, pharmacists, lab technicians, etc.), as part of a larger effort to collect taxes from private professionals, might also yield important government revenues.

6.11 Finally, expansion of existing medical aid schemes could inject a large amount of additional resources into the health sector, and improve the Government's financial position by increasing the number of medical aid patients who could be charged full cost for care in public hospitals, while eliminating some current Government outlays for free out-patient care that would then be provided by private practitioners. While it is difficult to quantify these effects precisely, a doubling of medical

aid subscribers from 0.4 million at present to 0.8 million over the coming decade, could result in an additional Z\$ 100 million (1987 prices) in health expenditures. The medical aid industry would have to play a major role in such an expansion of medical aid, by developing imaginative low-cost insurance policies and promoting greater competition among societies. The Government could also support this process in important ways, such as requiring through legislation that all firms over a certain size provide a minimum level of health benefits to their employees.

6.12 Some of the above recommendations would shift an increasing share of the burden of providing and financing health care away from the central government to local government, NGOs, and the private sector. Many of the recommendations - especially higher user charges, changes in the taxation of private health expenditures and of health workers' incomes, and creation of the NHDF - would also increase the volume of financial resources generated within the public sector, and would thus enhance the MOH's claims upon additional Government revenues. How should such incremental revenues be spent, to promote "better health for all"? As indicated elsewhere in this report, primary (PHC) and preventive health activities should be considered as the first priorities for this additional Government spending. While Zimbabwean health planners and policy-makers would have to make the detailed expenditure decisions, incremental funds for health would open up a range of possibilities: with an extra Z \$40 million, for example, MOH could build five new district hospitals, or upgrade about 200 rural clinics; train and pay the salaries of thousands of additional SRN, SCN, and community health workers; quadruple the current budget of the Zimbabwe National Family Planning Council; or some combination of these and a number of other exciting options.

6.13 Efficiency. To improve the allocative efficiency of Government expenditures for health, GOZ should continue to increase the proportion of public spending for PHC and preventive care. At present, the allocation of MOH's facility-based "patient" budget to tertiary/secondary/primary care is 50%/30%/20% (para. 2.11). Over time, MOH should strive to increase the share for primary care facilities, for example, by setting a target of 40%/30%/30% by 1995. Similarly, MOH should set targets for raising the share of the budget devoted to preventive health programs from its current level of about 28% (para. 4.06) to, for example, 35% by 1995 and 40% by the year 2000. Preventive health activities that merit additional spending include community water supply and sanitation, disease control, nutrition interventions, and family planning. Setting of these targets and monitoring progress would of course be facilitated by the changes in budgeting and cost accounting recommended elsewhere in this report (Chapter V and para. 6.17 below).

6.14 MOH and other local government health providers could also obtain greater health benefits from their current spending by increasing technical efficiency in the sector. Two prime areas for reform would be the efficiency of hospital in-patient care and of drug utilization. Regarding the efficiency of hospital services, MOH should consider the following actions:

- (a) investigating the reasons for generally low bed-occupancy rates in district and mission hospitals at present, and adopting measures to correct this situation (e.g., improving quality of services in these facilities through additional staff and drugs, adjusting the structure of fees to encourage greater use of lower-level hospitals and clinics);
- (b) developing policies to decongest those central and provincial hospitals which are overcrowded, by transferring patients to nearby "equivalent" facilities, reducing LOS, etc., so that costly investments in additional bed capacity can be postponed as long as possible. In general, Zimbabwe appears to have adequate bed capacity overall, even though some parts of the country may still be underserved;
- (c) reducing LOS in district hospitals and in selected central and provincial hospitals to acceptable norms, through improvements in facility management, patient transportation, etc., once the reasons for excessive LOS are thoroughly established and agreed to by hospital administrators; and
- (d) analyzing in detail the cost-structure of specific hospitals which appear to be spending significantly more per admission than other similar facilities, so that strategies and programs for containing, and even reducing, unit costs can be developed. Based on the very preliminary assessment contained in this report (paras. 4.12-4.14), one starting point for this analysis might be to examine per admission spending at Parirenyatwa and at provincial and district hospitals in Mashonaland Central and East and Matabeleland North.

6.15 Regarding the efficiency of drug expenditures, MOH has already made important progress under the Zimbabwe Essential Drugs Action Program. To reinforce these positive results, the GOZ should consider the following complementary measures to enhance the efficiency of drug procurement:

- (a) improving MOH's drug forecasting procedures;
- (b) modifying the rules and procedures for allocating foreign exchange for pharmaceuticals, to ensure that importers and local manufacturers under contract to GMS receive adequate foreign exchange; and
- (c) developing regulations and incentives to encourage the private sector to utilize lower-cost generic drugs.

Ongoing efforts to curb unnecessary spending for drugs which currently takes place because of inappropriate or excessive prescribing could also be strengthened if GOZ were to take further steps, including: limiting the number of drugs that can be prescribed at each out-patient visit; charging patients part or full-cost for drugs; and monitoring doctors' prescribing practices for hospital in-patients.

6.16 While the modern private medical sub-sector serving mainly higher-income groups has managed to restrain increases in costs in recent years, this may have been largely the result of Government-imposed price freezes and substantial public subsidies to private care (through underpricing of private care in Government hospitals and tax benefits), rather than efficiency gains per se. One obvious way for the GOZ to promote greater efficiency by the private sub-sector would be to reduce progressively these subsidies, so that patients - and their medical aid societies - bear the true cost of the services they receive. Another measure would be to include more deductibles and co-payments in medical aid benefit policies, as this would give patients added incentives to forgo unnecessary treatment: while the medical aid societies, under the NAMAS umbrella, have developed an effective mechanism for negotiating with private health providers, deductibles and co-payments would give them an additional tool for controlling expenditures. A move away from fee-for-service payment to a capitation (a fixed annual amount per patient) system would prevent a major escalation of prices and unnecessary private expenditures, but this is unlikely to be accepted under conditions prevailing in Zimbabwe at this time.

6.17 Management of Health Expenditures. The health financing reforms outlined above, designed to mobilize additional resources and increase efficiency, can only be effectively realized if the health sector develops the complementary analytical, planning, and management skills and systems required. In fact, the pace of reform may be limited in some cases (e.g., improved fee collection in central and provincial hospitals) by the extent and timing of these management improvements. In this regard, the GOZ should consider the following actions:

- (a) revising the MOH budget and expenditure formats, to make them more responsive to the needs of managers at various levels of the health care system, including individual facilities;
- (b) continuing to decentralize responsibility for preparing budgets, incurring expenditures, and effecting payments - starting with the four central hospitals and the eight provincial medical directors' offices;
- (c) developing an integrated MOH budget which covers all capital and recurrent items (some of which currently appear in the budgets of other ministries) and which includes estimates of recurrent spending associated with planned investments;
- (d) strengthening health manpower planning capacity in MOH, so that the salary implications of alternative manpower scenarios can be assessed;
- (e) improving accounting skills and systems in all MOH and local government health facilities, to include a basic minimum set of properly-maintained account books (para. 5.16); and

- (f) moving progressively toward decentralization of procurement of those goods and services for the health sector which can be efficiently purchased at provincial or district level.

6.18 Role of Donors. Once the Government has committed itself to a program of health financing reforms, the numerous donor agencies which have assisted Zimbabwe since independence - including the World Bank - could play a constructive role in supporting the reform effort. Donor assistance could be instrumental in three areas. First, donors should continue to focus their investment resources on PHC and preventive health services: construction and upgrading of district hospitals and clinics; rural health transport and communications; training of rural health workers; support to family planning, disease control campaigns, water and sanitation, etc. Second, donors should increasingly target funds for technical assistance, training, and equipment (e.g., micro-computers) to improve financial planning and management skills and systems. Third, as identified in this report, a number of additional studies in health financing may need to be carried out, for example, to investigate bed occupancy rates, LOS, and unit costs in selected hospitals. Donors should be prepared to provide technical assistance and funding of local costs (including use of Zimbabwean consultants) for such studies. As part of a comprehensive health financing reform effort, an action plan could be drawn up covering technical assistance, training, equipment, and other needs, and a suitable budget prepared for submission to the donor community.

ANNEX I

ZIMBABWE

POTENTIAL IMPACT OF HEALTH RESOURCE MOBILIZATION MEASURES

<u>Measure</u>	<u>Annual Incremental Revenues</u> (Z\$ millions)
<u>Adjusting current fees to match inflation</u>	7
Assumes user fees, which have not been adjusted since 1985, reflect the 88% increase in inflation over that time period. Fees collected in 1988-89 are estimated to be \$8.77 million.	
<u>Full cost pricing for private in-patients</u>	15-20
Assumes Government hospitals bill (and collect) 20% of total medical aid payout for hospitalization rather than the current 3.5%.	
<u>Standard out-patient fees</u>	10-15
Based on 5 million actual out-patient attendances at clinics (1988), charging a standard \$1.00 fee; and 4.33 million out-patient attendances at district hospitals, charging \$1.50-\$2.00 per visit.	
<u>Drug charges on a per item basis</u>	10-15
Assumes drug charges cover, on average, 50% of MOH drug expenditures (\$27.3 million in 1987).	
TOTAL	<hr/> 42-52

Source: World Bank estimates

ZIMBABWE

REGISTERED HEALTH PERSONNEL -- 1986

Medical Practitioners	1257
Dental Practitioners	124
Pharmaceutical Chemists	318
Opticians	15
Dispensing Opticians	13
Physiotherapists	88
Speech Therapists	7
Radiographers	109
Occupational Therapists	27
Prosthetists and Orthotists	16
Medical Laboratory Technologists	141
Health Inspectors	97
Cyto Technologists	5
Meat Inspectors	38
Dental Technicians	24
Dental Hygienists	13
Electroencephalograph Technicians	5
Nurses	9206
Chiropodists	14
Dieticians	13
Trauma Medical Assistants	41
Pharmaceutical Technicians	107
X-Ray Operators	26
Rehabilitation Assistants	94
Med. SCE	11
MLTA	144
Village Health Workers	1384

Source: Ministry of Health data

ZIMBABWE

FEES AND CHARGES FOR VARIOUS HEALTH CARE SERVICES

Ward Fees (per day)

I. Parirenyatwa Group of Hospitals, U.B.H., Harare, and Mpilo

Private wards	\$60
Private wards (non-resident)	\$80
General Wards (Adults)	
<u>Monthly Income</u>	
\$151 - \$300	\$ 5
\$301 - \$400	\$10
\$401 - \$500	\$15
\$501 - \$600	\$20
\$601 - \$700	\$25
\$701 - \$800	\$30
Over \$800 or with Medical Aid	\$35

General Wards (Children)	
<u>Monthly Income</u>	
\$151 - \$300	\$ 3
\$301 - \$400	\$ 6
\$401 - \$500	\$ 9
\$501 - \$600	\$12
\$601 - \$700	\$15
\$701 - \$800	\$20
Over \$800 or with Medical Aid	\$25

General Wards (Non-resident)	\$60
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II. General and District Hospitals

Private Wards	\$35
Private Wards (Non-resident)	\$50
General Wards	\$10/day for first 14 days, \$5/day thereafter
General Wards (Children)	\$3/day for first 14 days, \$1.50/day thereafter
General Wards (Non-resident)	\$30

III. Rural Hospitals

General Wards	
Adult	\$ 2
Child	\$ 1

Outpatient and Casualty Fees

I. Central Hospitals (including Harare and Mpilo)	
Public Health Consultant Attendance	
Monthly Income Under \$800	\$ 5
Monthly Income Over \$800 or	
Medical Aid	\$13
Dressings	\$ 5
Injections	
By doctor/nurse during consultation	\$ 2.50
Outside of consultation	\$ 5
Occupational therapy	\$ 5.55 - \$10
Yellow Fever Inoculation	\$ 5

II. General Hospitals	
Adult	\$ 3
Child	\$ 1.50

III. District Hospitals	
Adult	\$ 1.50
Child	\$ 1

IV. Rural Hospitals	
Adult	\$ 1
Child	\$ 0.50

Operating Theatre Fees

Central Hospitals	
Major operations	\$50
Minor operations	
general anaesthesia	\$20
local anaesthesia	\$10
without anaesthesia	\$ 8
ICU/CCU with Medical Aid	\$80/day
Hemodialysis	\$44.15/treatment
Plaster of Paris Treatments	\$10

Maternity Ward Fees (per day)

I. Central Hospitals	
Booked Cases	\$20
Unbooked Cases	\$30
Non-Residents	\$175
II. General Hospitals (including Harare and Mpilo)	
Direct Admissions	\$15
Transferred Cases	\$7 - \$12
III. District Hospitals	
Direct Admissions	\$ 7
Transferred Cases	\$0.50 - \$6
IV. Rural Hospitals	
Booked Cases	\$ 3
Unbooked cases	\$ 4

Source: Ministry of Health data

ZIMBABWE

MEDICAL AID SOCIETIES' ANNUAL SUBSCRIPTIONS, 1987-88

<u>SOCIETY</u>	<u>BENEFICIARIES</u>
Anglo American Medical Aid Fund	1,097
Bankmed	7,965
Beverley Building Society Medical Aid Scheme	360
Building Industry Medical Fund	1,238
Cement Medical Benefit Society	393
Chibuku Breweries Ltd.	910
C.I.M.A.S.	127,389
Engineering Medical Fund	12,878
Harare Municipal Medical Aid Society	6,825
Industrial Steel & Pipe Medical Fund	747
Legal & General Medical Aid Society	899
Lonrho Medical Aid Fund	3,250
Manica Medical Aid Society	910
M.A.S.C.A.	9,813
Motor Industry Medical Fund	2,065
Municipality of Bulawayo Medical Aid Society	5,740
Northern Medical Aid Society	4,767
Oxyco Group Medical Aid Society	604
Prudential Medical Aid Scheme	503
P.S.M.A.S.	101,720
Railmed	43,568
Rio Tinto Group Medical Benefit Society	1,300
Shell/BP Medical Aid Society	1,473
Triangle Ltd. Medical Aid Scheme	1,503
Turnall Medical Aid Scheme	-
Union Carbide Medical Benefit Society	2,085
Workers Compensation Insurance Fund	-
Zimbabwe Newspapers Medical Benefit Society	1,373
Zimglass Medical Aid Society	329
Zisco Medical Benefit Society	8,815
Total	369,385

Source: N.A.M.A.S. data

GOVERNMENT HOSPITALS ACTIVITY ANALYSIS SUMMARY 1987

	Bed Establishment	Bed Occupancy	Bed Occupancy Rate	Admissions	Discharges	Inpatients Daily Average	Average Stay (Days)	Out Patient Cases	Outpatient and Clinic Attendance
Manicaland									
Prov/Dist/Rural hosp	1129	288243	70	42834	38452	790	6.7	291697	522202
Mashonaland Central									
Prov/Dist/Rural hosp	381	109867	57	19627	18267	301	5.6	216284	374719
Mashonaland East									
Central Hosp (Harare)	1256	437260	95	62402	60186	1198	7	129059	265006
Central Hosp (Pari)	901	285332	87	31910	30841	782	8.9	112496	171203
Sub-total	2157	722592	92	94312	91027	1980	7.7	241555	436209
Prov/Dist/Rural hosp	810	202207	68	35267	33618	554	5.7	199075	409369
Total Mash. East	2967	924799	85	129579	124645	2534	7.1	440630	845578
Mashonaland West									
Prov/Dist/Rural hosp	1135	294608	71	48235	42982	807	6.1	358935	738820
Masvingo									
Sp. Hosp Nhomakura	332	92480	76	334	229	253	277	7618	12140
Prov/Dist/Rural hosp	810	240999	81	38946	35975	660	6.2	233267	694923
Total Masvingo	1142	333479	80	39280	36204	913	8.5	240885	707063
Matabeleland North									
Central Hosp UBH	651	156800	66	18415	17406	429	8.5	43452	53564
Central Hosp Mpilo	937	341090	100	43303	41346	934	7.9	141014	319048
Sub-total	1588	497890	86	61718	58752	1363	8.1	184466	372612
Spec Hosp Ingutshini	670	235409	36	1578	692	645	149.2	2948	3369
Prov/Dist/Rural hosp	474	89184	51	14403	12499	244	6.2	119496	308349
Total Mat. North	2732	822483	82	77699	71943	2252	10.6	306910	684330
Matabeleland South									
Prov/Dist/Rural hosp	845	188527	61	24767	20630	517	7.6	158357	371151
Midlands									
Prov/Dist/Rural hosp	1288	261343	56	50658	46123	716	5.2	246813	588953
GRAND TOTAL	11619	3223349	76	432679	399246	8830	7.5	2260511	4832816

HOSPITAL ACTIVITY ANALYSIS BY PROVINCE - 1987 *
(Year Ending December 1987)

Central Hospitals	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patie and Clini Attendanc

General:								

United Bulawayo Hospitals (UBH)	589	142048	15525	14522	389.2	9.1	43452	53564
Mpilo:								
General	725	257451	28766	27091	705.3	8.9	140511	316592
TB -	120	30219	249	467	82.8	121.4	503	2456
Harare:								
General	966	338904	41067	38820	928.5	8.2	119393	254839
Psychia	110	34448	1685	1718	96.4	20.0	9666	10167
Parirenyatwa	832	264919	26864	25615	725.8	9.9	112496	171203

TOTAL	3342	1067989	114156	108233		9.4	426021	808821

Maternity:								

UBH	62	14752	2890	2884	40.4	5.1		
Mpilo	92	53420	14288	13788	146.4	3.9		
Harare	180	63908	19650	19648	175.1	3.2		
Parirenyatwa	69	20413	5046	5226	55.9	3.9		

TOTAL	403	152493	41874	41546		3.7		

Special Hospitals:								

Psychiatric:								
Ngamahuru	332	92480	334	229	253.4	384	7618	12140
Ingutheni	670	235409	1578	692	645.0	319	2948	3369

* Please note that information contained in this table is not complete i.e. one to four months may be missing or nil return has been received.

	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patient and Clinic Attendances
Province Hospitals								
- General								
Mutare	174	66169	10541	10002	181.3	6.3	85106	123580
- Maternity								
Mutare	18	11002	3009	2840	30.1	3.9		
District Hospitals:								
- General								
Rusape	257	63590	6807	6011	174.2	10.1	46116	66742
Chipinge	138	49109	6067	4707	134.5	9.8	42696	64105
Nyanga	90	23640	2522	2123	64.8	10.8	22219	38070
Seku	102	27626	2447	2267	75.7	12.1	5002	5950
SUB-	587	163965	17843	15108	110.1	8.8	116033	174867
- Maternity								
Rusape	27	7058	2414	2033	19.3	3.5		
Chipinge	30	9344	1424	1287	25.6	7.2		
Nyanga	18	2478	506	482	6.8	5.1		
SUB-TOTAL	75	18880	4344	3802	17.2	5.3		
Rural Hospitals:								
- General								
Birchenough Bridg	26	4198	937	948	11.50	4.40	18223	37611
Biri Wiri	34	6200	255	244	17.00	25.20	4859	11779
Buhera	34	2225	582	583	6.10	3.80	13146	28570
Makoni	14	917	524	479	2.50	1.90	14040	27817
Murange	34	6572	1159	985	18.00	6.70	8166	33318
Nedwedzo	30	1286	690	639	3.50	2.00	9071	20307
Nyanyadzi	25	1286	395	353	3.50	3.60	8068	28649
Weya	15	1824	844	810	5.00	2.20	14985	35704
SUB-TOTAL	212	24508	5386	5041	8.4	6.2	90558	223755
- Maternity								
Birchenough Bridg	9	533	293	279	1.5	1.9		
Biri Wiri	6	224	46	46	0.6	4.9		
Buhera	7	100	103	104	0.3	1.0		
Makoni	11	411	367	356	1.1	1.2		
Murange	9	1508	269	248	4.1	6.1		
Nedwedzo	3	216	216	216	0.6	1.0		
Nyanyadzi	8	386	69	68	1.1	5.7		
Weya	10	341	348	342	0.9	1.0		
SUB-TOTAL	63	3719	1711	1659	1.3	2.9		
Total - General	973	254642	33770	30151		8.1	291697	522202

MASHONALAND CENTRAL

	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patie and Clini Attendanc
Province Hospitals								
- General								
Bindura	102	44712	5544	5125	1225.0	8.4	37332	59114
- Maternity								
	18	9069	1345	1321	24.8	6.9		
District Hospitals:								
- General								
Concession	49	11209	2727	2773	30.7	4.0	34762	69938
Mt Darwin	42	23629	2600	2049	64.7	11.2	55486	84920
SUB-TOTAL	91	34838	5327	4822	336.3	7.63	90248	154858
- Maternity								
Concession	16	3006	880	744	8.2	4.0		
Mt Darwin	9	886	885	887	2.4	1.0		
SUB-TOTAL	25	3892	1765	1631	5.3	2.5		
Rural Hospitals:								
- General								
Guruve	39	2096	539	518	5.7	4.1	7873	14088
Mudziwa	32	1770	710	651	4.8	2.7	21379	39165
Rosa	24	1500	428	426	4.1	3.5	22456	38364
Shamva	32	9592	2240	2143	26.3	4.5	37046	69130
SUB-TOTAL	127	14958	3917	3738	10.2	3.7	88754	160747
- Maternity								
Guruve	6	178	167	167	0.5	1.1		
Mudziwa	3	1134	621	531	3.1	2.1		
Rosa	4	358	253	250	1	1.4		
Shamva	5	728	688	688	2	1.1		
SUB-TOTAL	18	2398	1729	1636	1.7	1.4		
Total - General	320	94508	14788	13679	258.9	6.8	216284	374719
Total - Maternity	61	15359	4839	4588	42.1	3.3		

MASHONALAND EAST

	Bed Establ	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patie and Clini Attendants
----- Province Hospitals -----								
- General -----								
Chitungwiza	171	50106	8932	8725	137.3	5.6	36122	55413
Marondera	164	60305	6077	6099	165.2	9.4	30679	58737
SUB-TOTAL	335	110411	15009	14824	151.3	7.5	66801	114150

- Maternity								
Chitungwiza	102	16614	5678	5557	45.5	3.0		
Marondera	16	7160	1683	1639	19.6	4.4		
SUB-TOTAL	118	23774	7361	7196	32.6	3.7		

District Hospitals:								
- General -----								
Mukumbi	64	19020	1275	1037	52.1	18.1	13666	18773
Murewa								
Mutoko	80	21440	3280	2889	58.7	7.2	25466	63897
SUB-TOTAL	144	40460	4555	3926	55.4	12.7	39132	82670

- Maternity								
Mukumbi	13	241	233	233	0.7	1.0		
Murewa								
Mutoko	12	2331	1460	1457	6.4	1.6		
SUB-TOTAL	25	2572	1693	1690	3.6	1.3		

Rural Hospitals:								
- General -----								
Beatrice	23	6708	1710	1452	18.4	4.6	27499	46651
Chikwakwa	24	5386	1182	1152	14.8	4.7	14686	61432
Chiota	31	690	244	226	1.9	3.0	6862	12983
Makosa	30	6457	915	775	17.7	8.2	13768	35991
Nyamezuwe	13	1035	269	262	2.8	3.9	15089	32042
Wedza	23	2708	570	494	7.4	5.5	16038	23450
SUB-TOTAL	144	22984	4890	4361	10.5	4.5	93942	212549

- Maternity								
Beatrice	7	341	391	391	0.9	0.9		
Chikwakwa	4	629	361	354	1.7	1.8		
Chiota	11	288	131	126	0.8	2.3		
Makosa	10	243	250	250	0.7	1.0		
Nyamezuwe	2	196	201	201	0.5	1.0		
Wedza	10	307	335	299	0.8	1.0		
SUB-TOTAL	44	2006	1669	1621	0.9	1.0		

Total - General	623	173855	24544					
Total - Maternity	187	28352	10723					

MASHONALAND WEST -----	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patient and Clinic Attendances

Province Hospitals								

- General								
Chinhoyi	156	44326	7505	5943	121.4	7.2	56868	148448
- Maternity								
Chinhoyi	19	11601	2039	1914	31.8	6.1		
District Hospitals:								

- General								
Kadoma	248	59851	6705	6020	164.0	9.5	50420	116141
Banket	47	17882	3164	2932	49.0	5.7	28900	62107
Chegutu	43	21400	3447	2726	58.6	7.6	33415	61653
Kariba	90	20676	2722	2729	56.6	7.5	17442	25673
Karoi	106	44745	5286	4704	122.6	9.1	28766	54174

SUB-TOTAL	534	164554	21324	19111	86.3	7.5	158943	319748

- Maternity								
Kadoma	24	9214	3020	2574	25.2	3.6		
Banket	5	609	610	597	1.7	1.0		
Chegutu	12	4635	1740	1569	12.7	3.0		
Kariba	10	2073	626	540	5.7	3.8		
Karoi	24	13512	1428	1547	37.0	8.7		

SUB-TOTAL	75	30043	7424	6827	16.5	4.0		

Rural Hospitals:								

- General								
Darwendale	40	4658	1091	950	12.8	4.8	17561	38725
Hurungwe	50	5210	1502	1525	14.3	3.4	24868	56250
Mhondoro	33	2427	517	508	6.6	4.7	20644	37536
Mwami	37	8706	889	907	23.9	9.6	16749	22714
Ngezi	49	3963	744	713	10.9	5.6	17426	26047
Raffingora	38	5926	1035	894	16.2	6.5	19060	35579
Zvimba	55	6164	930	708	16.9	8.6	26816	53773

SUB-TOTAL	302	37054	6708	6205	14.5	6.2	143124	270624

- Maternity								
Darwendale	10	211	167	164	0.6	1.3		
Hurungwe	2	343	371	360	0.9	1.0		
Mhondoro	10	454	387	351	1.2	1.3		
Mwami	3	197	199	199	0.5	1.0		
Ngezi	3	176	178	178	0.5	1.0		
Raffingora	6	254	269	270	0.7	0.9		
Zvimba	5	732	709	665	2.0	1.1		
Norton	10	4663	955	795	12.8	5.9		

SUB-TOTAL	49	7030	3235	2982	2.2	1.6		

Total - General	992	245934	35537	31259	673.8	7.6		
Total - Maternity	143	48674	12698	11723	133.3	4.1		

MASVINGO	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patients and Clinic Attendances
Province Hospitals								

- General								
Masvingo	199	74627	12924	12377	204.5	5.9	42011	166209
- Maternity								
Masvingo	40	18743	2708	2570	51.4	7.3		
District Hospitals:								

- General								
Chiredzi	165	74957	11030	9978	205.4	7.3	60578	173309
Ndanga	130	35456	3109	2190	97.1	15.9	16506	88751

SUB-TOTAL	295	110413	14139	12168	139.6	9.1	77084	262060

- Maternity								
Chiredzi	30	11713	3863	3717	32.1	3.1		
Rural Hospitals:								

- General								
Bikita	31	2893	643	569	7.9	5.0	12511	23532
Chichidza								
Chikuku	29	1808	421	366	5.0	4.8	10312	21359
Chingombe	24	6134	978	973	16.8	6.3	19255	39050
Chinyika	38	5502	969	817	15.1	6.7	10235	31877
Chitando	18	2135	424	406	5.8	5.2	12532	26267
Gutu	50	5238	1534	1618	14.4	3.2	25805	65449
Matibi	19	5650	1168	1061	15.5	5.3	23522	59120

SUB-TOTAL	209	29360	6137	5810	13.45	4.3	114172	266654

- Maternity								
Ndanga	22	4017	673	651	11.0	6.2		
Bikita	6	265	247	242	0.7	1.1		
Chichidza								
Chikuku	6	159	163	163	0.4	1.0		
Chingombe	6	369	160	158	1.0	2.3		
Chinyika	7	379	229	229	1.0	1.7		
Chitando	6	380	239	238	1.0	1.6		
Gutu	10	1535	675	721	4.2	2.1		
Matibi	4	752	652	648	2.1	1.2		

SUB-TOTAL	67	7856	3038	3050	0.9	2.2		

Total - General								
Total - Maternity								

MATABELELAND NORTH

	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patient and Clinic Attendance:

Province Hospitals								

None								
District Hospitals:								

- General								
Binga	57	15830	1633	1638	43.4	9.4	12302	25051
Nyamandlovu	45	6220	1108	889	17.0	7.0	10175	32197
Nyathy	73	10108	1647	1441	27.7	6.9	12750	18456

SUB-TOTAL	175	32158	4388	3968	23.7	7.8	35227	75704

- Maternity								
Binga	9	3109	660	655	8.5	4.7		
Nyamandlovu	4	419	282	276	1.1	1.5		

SUB-TOTAL	13	3528	942	931	4.8	3.1		

Rural Hospitals:								

- General								
Dakamela	27	3902	769	785	10.7	4.9	12467	21685
Lukosi	55	9413	863	486	25.8	19.1	15212	32145
Nkayi	53	13422	2221	1684	36.8	7.9	26427	60102
Siabusa	11	1320	200	156	3.6	8.5	6713	18162
Sipepa	53	9201	1419	1398	25.2	6.5	10279	69910
Tsholotsho	47	7726	1652	1395	21.2	5.5	13171	30640

SUB-TOTAL	246	44984	7124	5904	20.6	8.7	84269	232644

- Maternity								
Nyathy	6	1117	277	268	3.1	4.2		
Dakamela	4	357	225	224	1.0	1.6		
Lukosi	6	3391	244	141	9.3	26.0		
Nkayi	4	1410	617	512	3.9	2.7		
Siabusa	1	70	22	22	0.2	3.2		
Sipepa	11	1074	292	294	2.9	3.7		
Tsholotsho	8	1095	272	235	3.0	4.7		

SUB-TOTAL	40	8514	1949	1696	2.8	6.3		

Total - General	421	77142	11512	9872	211.3	7.7	119496	308348
Total - Maternity	53	12042	2891	2627	33.0	4.6		

MATABELELAND SOUTH	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patients and Clinic Attendances

Province Hospitals								
- General	-----							
Gwanda	156	36023	3900	2873	98.7	12.0	23040	34369
- Maternity	-----							
Gwanda	28	9343	1764	1920	25.6	4.9		
District Hospitals:								
- General	-----							
Antelope Mine	88	32072	2419	1427	87.9	21.9	16027	35633
Beit Bridge	36	7305	1676	1570	20.0	4.6	21138	107594
Esigodini	39	8326	1629	1593	22.8	5.2	9640	24444
Filabusi	86	20493	1318	929	56.1	21.6	11431	26089
Kezi	17	4367	444	412	12.0	10.6	7995	14246
Plumtree	84	28675	3974	2957	78.6	9.5	26628	51172

SUB-TOTAL	350	101238	11460	8888	46.2	9.8	92859	259178

- Maternity	-----							
Antelope Mine	22	5492	607	517	15.0	10.6		
Beit Bridge	8	2239	1089	1069	6.1	2.1		
Esigodini	11	2326	332	322	6.4	7.2		
Filabusi	12	3490	889	719	9.6	4.9		
Kezi	4	627	95	89	1.7	7.0		
Plumtree	6	732	728	715	2.0	1.0		

SUB-TOTAL	63	14906	3740	3431	4.0	4.1		

Rural Hospitals:								
- General	-----							
Avoca	48	4531	768	708	12.4	6.3	16568	26452
Lady Baring	53	2121	547	427	5.8	4.9	6934	19517
Lady Stanley	52	1375	414	393	3.8	3.5	6886	12312
Matobo	30	6959	851	684	19.1	10.1	4079	7241
Shangani	42	4457	527	514	12.2	8.6	7991	12082

SUB-TOTAL	225	19443	3107	2726	10.7	6.7	42458	77604

- Maternity	-----							
Avoca	6	4810	359	369	13.2	13.0		
Lady Baring	3	131	62	58	0.4	2.3		
Lady Stanley	4	50	49	47	0.1	1.1		
Matobo	6	2426	172	160	6.6	15.2		
Shangani	4	157	159	158	0.4	1.0		

SUB-TOTAL	23	7574	801	792	4.1	6.3		

Total - General	731	156704	18462	14487	429.3	10.6	158357	371151
Total - Maternity	114	31823	6305	6143	87.2	5.2		
Total	845	188527	24767	20630			158357	371151

MIDLANDS	Bed Establishment	Bed Occupancy	Admissions	Discharges	In patients Daily Average	Average Stay (Days)	Out patient Cases	Out patients and Clinic Attendances

Province Hospitals								
- General	-----							
Gweru	210	56807	10869	10600	155.6	5.2	68831	118583
- Maternity	-----							
Gweru	44	19466	3646	3700	53.3	5.3		
District Hospitals:								
- General	-----							
Chivhu	55	7501	1381	1188	20.6	6.1	5177	10627
Kwe Kwe	232	56769	9510	7903	155.5	7.0	36614	101063
Gokwe	93	38746	4694	4291	106.2	8.8	40235	125884
Mberengwa	37	2991	374	354	8.2	8.4	3803	11538
Mvuma	110	8005	1913	1700	21.9	4.7	17960	66143
Shurugwi	82	14473	1337	1180	39.7	11.6	17659	26642
Zvishavane								
SUB-TOTAL	609	128485	19209	16616	70.1	6.3	121448	341897

- Maternity	-----							
Chivhu	14	1137	306	296	3.1	3.8		
Kwe Kwe	63	13064	3312	2894	35.8	4.5		
Gokwe	8	6138	3788	3811	16.8	1.6		
Mberengwa	3	671	215	186	1.8	3.6		
Mvuma	7	977	423	396	2.7	2.5		
Shurugwi	24	7894	774	660	21.6	11.9		
Zvishavane								
SUB-TOTAL	119	29881	8818	8243	13.6	4.7		

Rural Hospitals:								
- General	-----							
Chilimanzi	48	2694	471	435	7.4	6.2	7996	15842
Lundi	56	9526	1048	831	26.1	11.4	7891	16508
Mharira Range								
Sadza	40	1791	653	623	4.9	2.8	6446	13864
Silobela	43	3597	2601	1841	9.9	1.9	24141	49800
Zvamabande	49	6256	1191	1162	17.1	5.3	10060	32459
SUB-TOTAL	236	23864	5964	4892	13.1	5.5	56534	128473

- Maternity	-----							
Chilimanzi	13	110	57	53	0.3	2.1		
Lundi	2	82	80	78	0.2	1.1		
Mharira								
Sadza	2	160	159	159	0.4	1.0		
Silobela	43	1162	998	925	3.2	1.3		
Zvamabande	10	1326	858	857	3.6	1.5		
SUB-TOTAL	70	2840	2152	2072	1.5	1.2		

Total - General	1055	209156	36042	32108	573.0	6.3		
Total - Maternity	233	52187	14616	14015	143.0	3.7		
Grand Total	1288	261343	50658	46123			246813	588953

MISSION HOSPITAL ACTIVITY ANALYSIS BY PROVINCE 1987 Table 83

PROVINCE	Bed Establishment			Admissions			Outpatient	Outpatient
	General	Maternity	Total	General	Maternity	Total	Cases	and Clinic attendances
Manicaland	1160	249	1409	24550	8302	32852	202153	609318
Mashonaland Central	468	92	560	14517	3937	18454	19401	51220
Mashonaland East	388	100	488	7738	3219	10957	50862	134080
Mashonaland West	190	28	218	8918	3017	11935	80688	183991
Masvingo	1120	190	1310	25334	12566	37900	215028	829438
Matabeleland North	376	81	457	13547	2439	15986	70856	17457
Matabeleland South	457	88	545	11166	3161	14327	68911	162691
Midlands	1209	288	1497	18915	8797	27712	134635	511632
GRAND TOTAL	5368	1116	6484	124685	45438	169983	842534	2499827

MISSION HOSPITAL ACTIVITY ANALYSIS BY PROVINCE 1987

	Bed Establishment			Admissions			:Outpatients :	
	: General :	:Maternity:	Total :	: General :	:Maternity:	Total :	:Outpatient:	and Clinic :
	:	:	:	:	:	:	: Cases :	:Attendances :

MANICALAND PROVINCE	:	:	:	:	:	:	:	:

* Avila	: 33 :	12 :	45 :	479 :	99 :	578 :	4787 :	13499 :
Bonde	: 122 :	30 :	152 :	4002 :	1280 :	5282 :	14862 :	124315 :
Elim	: 52 :	15 :	67 :	1153 :	495 :	1648 :	12245 :	38706 :
x Mt.Mellery	: 51 :	10 :	61 :	1158 :	222 :	1380 :	8544 :	18697 :
x Mt.Selinda	: 155 :	20 :	175 :	2642 :	780 :	3422 :	15858 :	28993 :
Murambinda	: 260 :	10 :	270 :	3787 :	1521 :	5308 :	30673 :	95901 :
x Mutambara	: 52 :	24 :	76 :	1599 :	611 :	2210 :	22583 :	60029 :
Old Mutare	: 39 :	27 :	66 :	2254 :	855 :	3109 :	19547 :	28169 :
Regina	: 71 :	43 :	114 :	2812 :	787 :	3599 :	14498 :	36508 :
x St.Andrew's	: 28 :	8 :	36 :	558 :	250 :	808 :	14369 :	27975 :
St Barbara's	: 55 :	15 :	70 :	217 :	58 :	275 :	4545 :	10846 :
St Joseph's	: 120 :	- :	120 :	504 :	- :	504 :	- :	- :
(Quaggas Hoek)	:	:	:	:	:	:	:	:
St Michael's	: 17 :	5 :	22 :	532 :	131 :	663 :	7809 :	19926 :
(Tanda)	:	:	:	:	:	:	:	:
St Peter's	: 30 :	3 :	33 :	1325 :	536 :	1861 :	14519 :	45842 :
(Chisumbanje)	:	:	:	:	:	:	:	:
St Theresa's	: 43 :	11 :	54 :	905 :	423 :	1328 :	8858 :	43994 :
(Rusape)	:	:	:	:	:	:	:	:
Triashill	: 32 :	16 :	48 :	623 :	254 :	877 :	8456 :	15918 :

TOTAL	: 1160 :	249 :	1409 :	24550 :	8302 :	32852 :	202153 :	609318 :
=====								

MASHONALAND CENTRAL	:	:	:	:	:	:	:	:

Chitsungo	: 44 :	6 :	50 :	2890 :	376 :	3266 :	12698 :	62058 :
Howard	: 132 :	38 :	170 :	3263 :	1222 :	4485 :	34876 :	61548 :
Karanga	: 122 :	28 :	150 :	2005 :	1063 :	3068 :	33905 :	70281 :
**Mary Mount	: 92 :	10 :	102 :	2497 :	252 :	2749 :	13517 :	25810 :
St.Albert's	: 78 :	10 :	88 :	3862 :	1024 :	4886 :	19401 :	51220 :

TOTAL	: 468 :	92 :	560 :	14517 :	3937 :	18454 :	114397 :	270917 :
=====								

** 4 or more months missing
* 2-3 months missing
x 1 month missing
- Nil

MISSION HOSPITAL ACTIVITY ANALYSIS BY PROVINCE 1987

	Bed Establishment			Admissions			Outpatients	
	General	Maternity	Total	General	Maternity	Total	Outpatient Cases	and Clinic Attendances
MASHONALAND EAST								
Luisa Guidotti	:	:	:	:	:	:	:	:
Mt. St Mary's	: 71	: 17	: 88	: 2858	: 966	: 3824	: 15414	: 49617
Nyadiri	: 200	: 50	: 250	: 2674	: 1484	: 4158	: 22665	: 45558
St Paul's	: 117	: 33	: 150	: 2206	: 769	: 2975	: 12783	: 38905
TOTAL	: 388	: 100	: 488	: 7738	: 3219	: 10957	: 50862	: 134080
MASHONALAND WEST								
Sanyati	: 80	: 20	: 100	: 4961	: 2042	: 7003	: 62670	: 131636
St Michael's (Mhondoro)	: 49	: 5	: 54	: 1882	: 700	: 2582	: 7430	: 35272
St Rupert's	: 61	: 3	: 64	: 2075	: 275	: 2350	: 10498	: 17083
TOTAL	: 190	: 28	: 218	: 8918	: 3017	: 11935	: 80598	: 183991
MASVINGO								
Berejena	: 26	: 10	: 36	: 814	: 351	: 1165	: 24903	: 62504
Bondolfi	: 24	: 5	: 29	: 662	: 157	: 819	: 9299	: 28350
Chibi	: 17	: 5	: 22	: 834	: 90	: 924	: 3711	: 27496
* Chikombedzi	: 68	: 12	: 80	: 1643	: 781	: 2424	: 15185	: 50756
Gokomere	: 30	: 4	: 34	: 674	: 233	: 907	: 10568	: 56097
Gutu	: 110	: 30	: 140	: 3570	: 1337	: 4907	: 21899	: 129454
Mashoko	: 104	: 16	: 120	: 2266	: 2730	: 4996	: 17823	: 41976
Matibi	: 98	: 8	: 106	: 1023	: 853	: 1876	: 9189	: 28992
Morgenster	: 184	: 32	: 216	: 3650	: 1719	: 5369	: 21007	: 44813
Mukaro	: 29	: 6	: 35	: 1141	: 410	: 1551	: 9572	: 67080
Musiso	: 174	: 16	: 190	: 3181	: 1837	: 5018	: 28008	: 121313
Mutero	: 29	: 7	: 36	: 1026	: 328	: 1354	: 8952	: 54186
* Serima	: 30	: 5	: 35	: 608	: 131	: 739	: 6309	: 30443
St Joseph's (Antelope)	: 21	: 10	: 31	: 147	: 143	: 290	: 8156	: 14922
Silveira	: 176	: 24	: 200	: 4095	: 1426	: 5521	: 20438	: 62056
TOTAL	: 1120	: 190	: 1310	: 25334	: 12526	: 37860	: 215019	: 820438

MISSION HOSPITAL ACTIVITY ANALYSIS BY PROVINCE 1987

	Bed Establishment			Admissions			:Outpatients :	
	General	Maternity	Total	General	Maternity	Total	Outpatient:	and Clinic :
	:	:	:	:	:	:	Cases	Attendances :

MATABELELAND SOUTH	:	:	:	:	:	:	:	:
-----	:	:	:	:	:	:	:	:
Enbakwe	: 35 :	9 :	44 :	322 :	145 :	467 :	6343 :	12845 :
x Manama	: 89 :	25 :	114 :	1884 :	1064 :	2948 :	9246 :	32947 :
Mtshabezi	: 100 :	14 :	114 :	3409 :	559 :	3968 :	14822 :	27233 :
St Anne's (Brunapeg)	: 160 :	20 :	180 :	3227 :	842 :	4069 :	29351 :	50662 :
Tshelanyemba	: 45 :	10 :	55 :	1994 :	472 :	2466 :	6557 :	32641 :
Wanezi	: 28 :	10 :	38 :	330 :	79 :	409 :	2592 :	6363 :
-----	:	:	:	:	:	:	:	:
TOTAL	: 457 :	88 :	545 :	11166 :	3161 :	14327 :	68911 :	162691 :
=====								
MATABELELAND NORTH	:	:	:	:	:	:	:	:
-----	:	:	:	:	:	:	:	:
Kariyangwe	: 34 :	12 :	46 :	2399 :	393 :	2792 :	10106 :	40513 :
Mbume	: 88 :	22 :	110 :	666 :	332 :	998 :	8414 :	21245 :
**Phumula	: 30 :	5 :	35 :	664 :	128 :	792 :	4183 :	7763 :
St Luke's	: 204 :	42 :	246 :	8016 :	1511 :	9527 :	32851 :	67748 :
St Paul's (Lupane)	: 20 :	- :	20 :	1802 :	75 :	1877 :	15302 :	37822 :
-----	:	:	:	:	:	:	:	:
TOTAL	: 376 :	81 :	457 :	13547 :	2439 :	15986 :	70856 :	175091 :
=====								
MIDLANDS	:	:	:	:	:	:	:	:
-----	:	:	:	:	:	:	:	:
Chikwingizha	: 13 :	7 :	20 :	370 :	201 :	571 :	5696 :	21833 :
**Chireya	: 24 :	4 :	28 :	1206 :	317 :	1523 :	10054 :	40976 :
x Driefontein T.B.	: 364 :	- :	364 :	733 :	- :	733 :	69 :	25 :
Gandechibvura	: 42 :	18 :	60 :	771 :	141 :	912 :	5063 :	17457 :
x Holy-Cross	: 42 :	12 :	54 :	365 :	185 :	550 :	8160 :	44271 :
x Kana	: 40 :	9 :	49 :	1055 :	389 :	1444 :	1164 :	27851 :
Masase	: 29 :	55 :	84 :	1543 :	925 :	2468 :	13254 :	82726 :
* Mnene	: 168 :	40 :	208 :	2616 :	1305 :	3921 :	13721 :	34876 :
* Mtora	: 28 :	4 :	32 :	994 :	807 :	1801 :	22120 :	62952 :
Musume	: 99 :	60 :	159 :	2404 :	2184 :	4588 :	17618 :	44016 :
Muwonde	: 140 :	17 :	157 :	2447 :	358 :	2805 :	7784 :	16399 :
St Theresa (Chilimanzi)	: 183 :	50 :	233 :	2919 :	1348 :	4267 :	17936 :	90904 :
Zhombe	: 37 :	12 :	49 :	1492 :	637 :	2129 :	11998 :	27346 :
-----	:	:	:	:	:	:	:	:
TOTAL	: 1209 :	288 :	1497 :	18915 :	8797 :	27712 :	134637 :	511632 :
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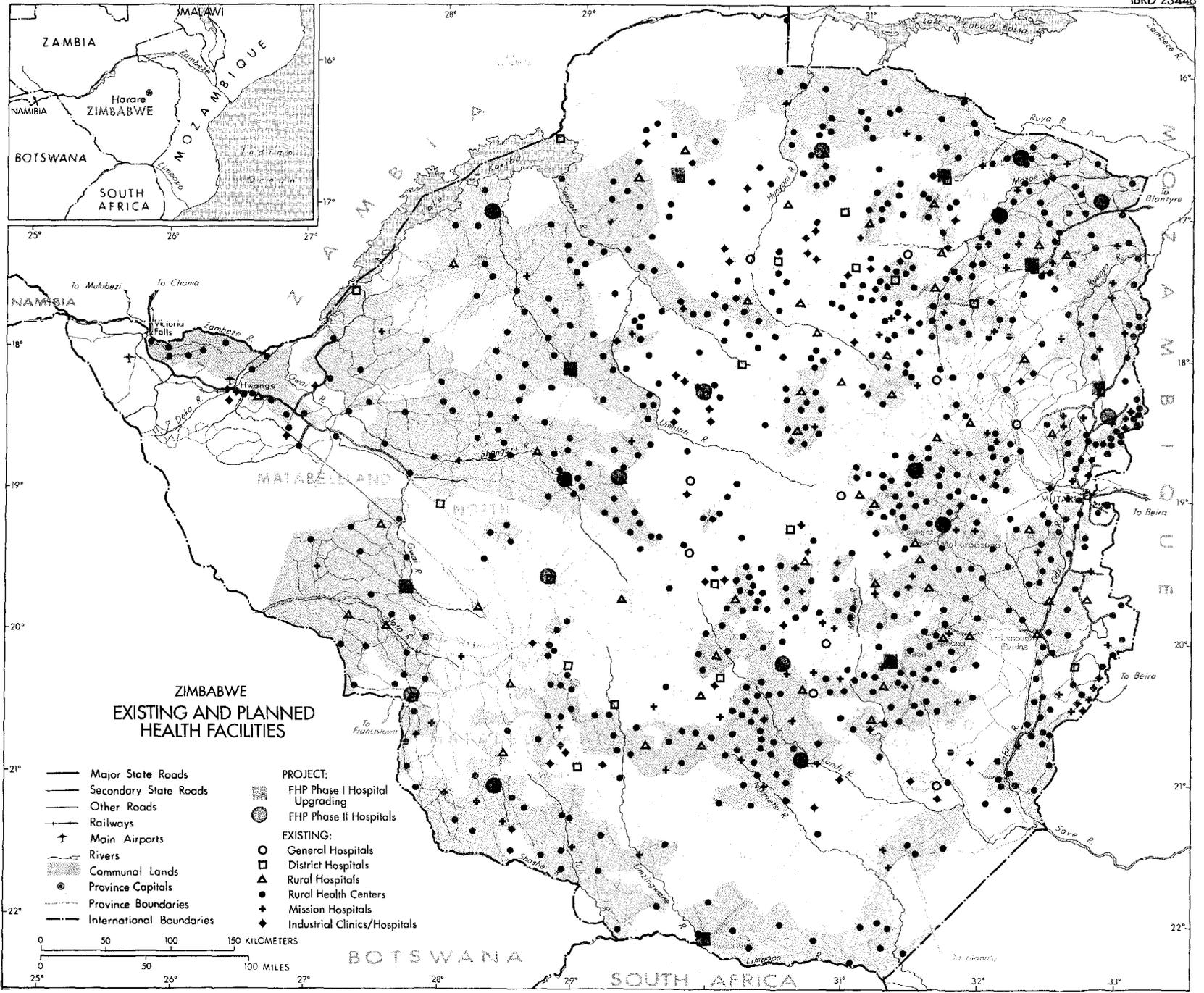
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