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Social Health Insurance Study

Final Report

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FINAL REPORT

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1. BACKGROUND

1.1 Introduction

1.1.1 Background to the Social Health Insurance Study

KPMG were commissioned in October 1995 by USAID to carry out two studies relating to the possible introduction of a Social Health Insurance (SHI) scheme in Zimbabwe. The first study related to the definition and costing of a SHI scheme. The second related to the ability and willingness of people in Zimbabwe to pay for such a scheme. This report combines the results of these two studies.

The possibility of introducing SHI in Zimbabwe has been under consideration for some time. For example *'Planning for Equity in Health - 1992 revision'* refers to the Government's intention of *broadening the financing base by ensuring that everyone in the formal salaried sector is covered by some form of Health Insurance.*

Proposals for a Social Health Insurance were made following a consultancy visit by B Abel-Smith in 1992, which attracted widespread interest, both positive and negative. This report provides detailed, research-based recommendations for the establishment of a SHI scheme in Zimbabwe.

1.1.2 Objectives and Expectations of the Social Health Insurance Study

The Government's objectives in commissioning these studies are described as follows in the Scope of Work provided to the consultants:

- to redress **inequities** in coverage;
- to improve the **quality** of health care;
- to introduce greater **transparency** in GOZ financing of health care;
- to separate the roles of **purchasers and providers.**

By drawing in additional funding to the health sector, SHI can enable the Government to focus its limited resources on the needs of the poorest and least well-served sectors of the population, thereby contributing to equity objectives and an overall improvement in quality.

A SHI fund could increase the transparency of health financing in several ways:

- ◇ by generating a source of funding which is clearly earmarked for health purposes and is independent of the pressures on the general Government budget;
- ◇ by underpinning the move from a largely 'free' health service to one where the costs of providing different services are clearly defined;
- ◇ by providing consumers of health services with a sense of ownership in these services.

An independent SHI, 'purchasing' health services on behalf of its members from government or (at least in theory) private providers could provide a powerful incentive to efficiency, by introducing incentives for high-quality and cost-effective service and penalties for poor or inefficient service.

It must be stressed however that none of these benefits will automatically come from the introduction of SHI. Much depends on the design and implementation of the scheme, the degree of consultation, implementation and training, the ability to deliver improvements in quality and capacity and the relationship between the new scheme and other health sector reforms.



1.1.3 Terms of reference for the studies

The original terms of reference provided to the consultants are summarised below.

Study 1: Identification and costing of benefits

- ◇ Identify the **benefits and services** to be covered by SHI and determine the facility level at which each would be made available;
- ◇ Calculate the **demand** for the services covered;
- ◇ Calculate the **cost** of the package and the appropriate **fee schedule**.

Study 2: Willingness and ability to pay

- ◇ Describe and assess current **health-seeking behaviour** and current **private expenditure** on modern health care services and pharmaceuticals;
- ◇ Estimate the **population size** in formal and informal labour market categories by income groups, the major sources of **income** in the informal sector and the expenditure on taxes and other mandatory contributions;
- ◇ Assess the **amount that could be collected** if 2%-5% of cash income were allocated to the SHI fund.

The following characteristics for the proposed SHI scheme were suggested in the Terms of Reference:

- a **capitation fee** system, initially subsidised by GOZ and donor funding, with participation compulsory within the formal sector and on a voluntary basis for those outside of it;
- an emphasis on **primary health care**, with higher-level services as an optional addition;
- a **choice of provider** for users with the ability to change providers every 6-12 months, and primary level providers linked to hospitals;
- providers to **deliver the specified package at no extra cost** to the client except where co-payments stipulated;
- an **autonomous insurance fund**.

The Terms of Reference were subsequently modified as a result of discussions between the consultants, the clients and the external consultant funded by USAID. The following were the main modifications:

- ◇ Enlargement of the study to research **two alternative SHI 'packages'** - one covering primary (clinic level) care, the other hospital (mainly district hospital level) care. One reason for not focusing exclusively on primary health was the concern that the level of fees necessary to provide an incentive to insure could seriously impair access by the poorest to primary health care;
- ◇ Investigation of the **attitudes to risk, insurance and free health care** amongst health service users. This provided important insight into the factors which would influence voluntary participation in a SHI scheme;
- ◇ Estimation of the **revenue currently foregone by the MOHCW** through failure to recover from Medical Aid Societies the full costs of treating patients covered by private health insurance, as well as other debts. This was included because it offers substantial scope for increasing cost-recovery which could be implemented immediately;
- ◇ Investigation of the appropriateness of the current **threshold for exemption from health service user fees**. The policy adopted towards user fees and exemptions will



influence both the uptake of a SHI scheme and its effects on equity of access to health services.

In summary, the terms of reference as amended cover:

- defining SHI packages;
- costing the packages;
- calculating contribution rates;
- assessing demand for the packages, including willingness and ability to pay;
- calculating revenue from the scheme;
- identifying additional areas for revenue recovery; and
- providing recommendations for implementation.

Original and revised Terms of Reference are reproduced in Appendix 1.

1.1.4 Sources of information and contacts

A steering group comprising the consultants, the MOHCW and the funding organisation, USAID, met regularly through the course of the study. Numerous other officials of the MOHCW, both centrally and at provincial/district level, were contacted. Discussions were also held with the Medical Aid Societies. Key information sources included MOHCW financial and epidemiological data and original research amongst health service users. The methodology is described in detail in Section 2 and a full list of contacts and sources provided as Appendix 2.

1.1.5 Structure of the report

Section 1.2 which follows the Introduction 1.1, describes the current delivery of health services in Zimbabwe, focusing on the strengths, weaknesses and problems. This is followed in Section 1.3 by a brief discussion of some of the concepts surrounding social health insurance, placing SHI in the wider context of health financing reform.

Section 2 describes the methodology used in the study and concludes with the identification of the options for SHI which were considered in the study.

The findings reported in Section 3, outline the costs of the packages, the anticipated demand and calculates the contribution rates.

Section 4 provides conclusions and recommendations and Section 5 outlines the steps towards implementation.

1.2 The Current Situation

1.2.1. Population and Employment Groups

(i) Population

At the time of the last Population Census in 1992, Zimbabwe's population was 10.4 million, of whom almost 70% lived in rural areas. A crude natural rate of increase of 3.3% p.a. brings the 1996 population to about 11.9 million, 5.3 million of whom are aged under 15.

(ii) Economic Activity

The Census provides the most comprehensive source of information on economic activity. Of the population aged 15 and over,

- ⇒ 1.6 million (27.4%) were recorded as in paid employment;
- ⇒ 0.9 million (15.1%) were 'own account workers';



- ◇ 0.3 million (5.4%) were unpaid family workers;
- ◇ 0.8 million (13.4%) were unemployed; and
- ◇ 2.2 million (38.4%) were economically inactive (students, homemakers, retired or sick).

0.8 million of these - part of the 'own account workers' and unpaid family workers' categories - were described as communal farm workers.

Average household size in 1992 was 4.8, with each household on average containing 1.1 earners (paid employees and own account workers) and 3.7 non-earners.

Knowledge of the number of regular paid employees and of their dependants, is important in assessing the potential for Social Health Insurance because it is these people who can most easily be recruited to a Social Health Insurance scheme. The Census estimates of the numbers in paid employment are broadly confirmed by the 1993 Indicator Monitoring Survey, which puts the number at 1.5 million, and by regular statistics on employment which show employment in December 1994 as 1.3 million, excluding employees of small agricultural units and small businesses in rural areas.¹

Not all of those in paid employment will be in regular jobs. Furthermore some households will have two or more workers. Therefore the number of households with at least one formal sector employee will be less than the number of employees. Simply multiplying the number of employees by average household size would therefore overestimate the potential contributors from the formal sector. Appendix 3 provides updated estimates of population and economic activity, and combines these with 'guesstimates' of the proportions in casual and seasonal work and of the distribution of earners across households, as well as incorporating assumptions about income distribution.

¹The Indicator Monitoring Survey however suggests a rather different distribution of economic activity outside paid employment, with 1.7 million (29.3%) 'own account workers', 0.8 million (14.2%) 'unpaid family workers', 0.3 million (5.9%) unemployed, and 1.4 million (24.7%) economically inactive. This reflects the difficulty of classifying the very large number of individuals whose livelihood combines erratic cash earnings with work in the home, on the farm or in other household enterprises.



Estimates of the formal and informal sectors in 1996

Defining the formal sector as those in regular paid employment, and the informal sector as those earning incomes from all other sources, gives the following estimates of the size of the sectors:

Estimates of the formal and informal sectors in 1996

Table 1.1

rural	households (thousands)		population	
permanent paid employees	364	22.8%	1 917	23.3%
temporary/casual workers	274	17.2%	1 446	17.6%
own account worker	797	50.0%	4 196	51.0%
informal sector	1 071	67.2%	5 642	68.6%
non-earners	159	10.0%	668	8.1%
all households	1 594	100.0%	8 227	100.0%
urban				
permanent paid employees	524	60.3%	2 258	62.2%
temporary/casual workers	148	17.0%	637	17.6%
own account worker	110	12.7%	473	13.0%
informal sector	258	29.7%	1 110	30.6%
non-earners	87	10.0%	261	7.2%
all households	869	100.0%	3 629	100.0%
all				
permanent paid employees	888	36.1%	4 175	35.2%
temporary/casual workers	422	17.1%	2 083	17.6%
own account worker	907	36.8%	4 669	39.4%
informal sector	1 329	54.0%	6 752	57.0%
non-earners	246	10.0%	929	7.8%
all households	2 463	100.0%	11 856	100.0%

Source: Calculated from 1992 Census using assumptions outlined in Appendix 3.

Based on fairly conservative assumptions, these figures suggest that 35% of the population are households with formal sector earners, with the remainder classified as informal sector, including workers on communal farms.

(iii) Incomes

What percentage of the population are living at a level of poverty which will preclude contributing to a SHI, and how many would be exempted under different policies regarding threshold levels for payment of fees, are key questions. There is a dearth of current information on income distribution. Although this will be remedied to a degree when two major surveys now in the field are completed, at present the only comprehensive sources of information are the 1990/1 Income Consumption and Expenditure Survey (ICES) and the 1993 Indicator Monitoring Survey (IMS). The former provides the following estimates of average incomes, and the equivalent in today's prices is shown for comparison, although as real earnings have fallen by 27% since 1991 these are undoubtedly overestimates.



Average monthly household income (\$)

Table 1.2

	1990/91		equivalent in mid-1996 prices	
	cash income	total income	cash income	total income
LSC Farms	306.8	386.8	1 137.8	1 434.8
SSC Farms	284.5	478.2	1 055.2	1 733.6
Communal Lands	129.6	241.8	480.6	897.0
Resettlement Schemes	80.8	214.5	299.8	795.6
All Rural	163.6	271.5	606.7	1 007.0
Urban	734.6	915.4	2724.6	3 395.4
Total Zimbabwe	369.8	504.1	1 371.7	1 869.7

Source: Income Consumption and Expenditure Survey

Although no information on the distribution of income was published in the report on this survey, analysis by the World Bank based on the ICES, defined poverty datum lines (PDL - the income necessary to provide a basic standard of living) as \$46 per person per month in urban areas, \$28 per person in rural areas. (Roughly \$170 and \$104 in today's prices). Using these, and unpublished data from the survey, the analysis suggests that, in 1990/1, 31% of the rural population and 10% of the urban population were 'poor' (World Bank, 1995). A recent study however (Mundy 1995) set the urban PDL at more than twice this level, suggesting that the proportion in poverty is significantly higher.^{2,3}

A rough idea of income distribution can be gained from the 1993 Indicator Monitoring Survey, though since real incomes have fallen the numbers in the lower income bands will be higher. Using the income bands updated to current prices suggests that around three-quarters of rural households and perhaps 25% of urban households have incomes below the current threshold for free health care of \$400 a month.

Distribution of households by income, 1993

Table 1.3

Income band (Z\$ per month 1993 prices)	Equivalent in 1996 prices (Z\$ per month)	Percentage of Households		
		all	urban	rural
<150	<285	50.25	14.54	67.82
150 - 499	285 - 950	29.10	40.85	23.32
500 - 1499	950 - 2 848	15.60	33.05	7.02
1 500 - 2 999	2 848 - 5 411	3.24	6.85	1.47
3 000 - 5 000	5 411 - 9 500	1.16	3.02	0.25
5 000+	9 500+	0.64	1.7	0.12

Source: Indicator Monitoring Survey

1.2.2 The Current Health Environment

Between Independence and the late 1980s Zimbabwe achieved tremendous progress in the provision of health services as a result of major investment in primary health care. Between 1980 and 1988:

²\$1 084 per month for a family of 4, equals \$271 per person, updated for inflation since November 1994 is approximately \$380 per person or \$1 520 for a household of 4. (Mundy, 1995)

³The preliminary report of the 1995 Poverty Assessment Study Survey was published after this report was substantially completed and therefore was not considered in detail. This establishes the national PDL at \$184 per person, per month. Urban and rural PDL's are \$213 and \$160 respectively. Overall, 62% (72% in rural areas and 46% in urban) are calculated to be 'poor' i.e. unable to meet basic needs.

- the infant mortality rate per 1000 live births fell from nearly 100 to 53
- the under 5 mortality rate fell from over 100 per 1 000 to 87
- child immunisation coverage increased from 25% to 80%
- life expectancy increased from 56 to 64 years.

Zimbabwe's health services, which includes the accessibility of these services, and the health status of its people, by most indicators, are among the best in sub-Saharan Africa.

During the 1990s however, Zimbabwe experienced major difficulties in sustaining this progress. The young and rapidly growing population and the growing burden of AIDS has placed ever-increasing demands on health services. The economic and financial problems brought about by drought and the impact of structural adjustment have also strained the resources available for health care in the public sector and at household level. Basic health indicators have started to show a marked deterioration and the health services today are widely regarded as being in a state of crisis. This crisis has been evidenced by (for example) widespread shortages of basic drugs, hospitals running out of food and the grounding of ambulances. Our own research (Section 3.2) underlined the existence of low morale within the health services and widespread disillusionment with the quality of public health care services by consumers.

1.2.3 Structure of the Health Sector

Health services in Zimbabwe are provided by:

- ◇ **The Government:** Rural Health Centres (primary level); District Hospitals (secondary level) Provincial Hospitals (tertiary level) and Central Hospitals (quaternary level);
- ◇ **Municipalities and Rural District Councils** (primary level clinics, also maternity hospitals);
- ◇ **Missions** (primary level clinics, also secondary level hospitals in some areas);
- ◇ **The private sector:** general practitioners, clinics, hospitals and specialist practices, mainly but not exclusively in urban areas; and
- ◇ **Employers:** notably mines and major industrial undertakings, but also some public sector undertakings e.g. the armed services.

The distribution of facilities in 1995 was as follows:

Distribution of Facilities in 1995

Table 1.4

<u>Hospitals</u>		
Central hospitals	6	
Provincial hospitals	7	
Maternity hospitals	3	
District hospitals	37	
Rural hospitals	58	
Mission hospitals	80	
Special hospitals	11	
Other hospitals and Clinics	22	(includes industrial, mines private hospitals)
<u>Clinics</u>		
Government	370	
Council	451	
Mission	46	
Municipal	105	
Other and	182	(includes industrial, mines private clinics)

The MOHCW plays both funding and supervisory roles with respect to facilities operated by the Municipalities, Missions and Rural District Councils ('public health care facilities'). It plays a minimal regulatory role with respect to services operated by the private sector and employers.

1.2.4 Staffing of the Health Sector

The Ministry of Health and Child Welfare has an establishment of 23 000, which has remained roughly constant over recent years.

Total registered health manpower in the country, as of March 1995, numbered 29 625, key categories including:

Key Registered Health Manpower - Zimbabwe 1995

Table 1.5

Medical practitioners:	1 572
Dental practitioners:	139
Medical laboratory technicians:	299
Environmental health officers:	188
General nurses:	7 185
Midwives:	3 038
State Certified nurses	8 548
State Certified maternity nurses	4 617
Environmental Health technicians	1 050

The MOHCW Health Human Resource Master Plan, covering the period from 1993 to 1997, compared the number of actual posts within the Ministry with the ideal, and identified the need for, inter alia:

- 1219 additional doctors;
- 6328 additional nurses (all grades and types);

- 139 pharmacists and 247 pharmacy technicians;
- 294 scientists/lab technicians and 122 laboratory technologists.

Serious problems are experienced with the 'brain drain' of doctors and nurses to neighbouring countries which offer better pay and conditions, while many medical personnel are reluctant to work in rural areas.

A recent survey of health facilities found that one third of facilities had at least one post vacant, with almost half the facilities with doctors' posts having at least one doctors' post vacant. 26% of total doctors' posts were vacant, with lower rates amongst other health personnel. (5th Sentinel Survey, MPSLSW 1995).

1.2.5 Financing of the Health Sector

The main sources of health sector financing are:

- ⊕ The Ministry of Health and Child Welfare;
- ⊕ Other government departments;
- ⊕ Local Government (Municipalities and Rural District Councils);
- ⊕ Donors and voluntary organisations, including the members of the Zimbabwe Association of Church Related Hospitals (ZACH);
- ⊕ Employers; and
- ⊕ Individuals, through out-of-pocket payments and through private health insurance (Medical Aid Societies).

(i) Total health spending

Estimates of total expenditure on health care for the financial year 1994 are shown below.

Estimates of total expenditure on health care - financial year 1994 **Table 1.6**

	Z\$ million
<u>Public sector</u>	
MOHCW	1067
Other ministries	171
Local government	194
Donors	450
Total Public Sector	1882
<u>Private sector</u>	
Individual direct payments	1119
Health Insurance benefits	432
Employer based care	208
Missions and other NGOs	33
Total Private Sector	1792
Total Health Spending	3674

(Source: Schwartz and Zwizwai 1995)

If these estimates are broadly correct, then MOHCW spending comprises around 30% of total health sector spending. Individual direct spending (on private medical care, pharmaceuticals and user fees) is identified as the largest single category of expenditure.⁴

⁴The authors point out however that this is likely to be an over-estimate, since it is based on the 1990/1 Income Consumption and Expenditure Survey, and therefore does not take into account the probably negative effects of ESAP and the 1994/5 drought on private incomes and expenditure.



(ii) The 1995/6 MOHCW allocation

The 1995/6 budget for MOHCW is Z\$1354.9 million, divided as follows

	Z\$ million
Administration and general	32.1
Medical care services	1 160.8
Preventive services	156.1
Research	5.9

The medical care services line of \$1160 million covers all funding of health care facilities, both direct funding of government hospitals and clinics, and grant funding to missions and councils (the latter comprising \$230 million of the total). The preventive services line covers the salaries and other employment costs of the provincial medical directorate, together with the operational costs of disease control, health promotion, nutrition and other programmes.

The MOHCW budget is largely for recurrent items although it does include some spending on equipment and the grants to missions which contain a small capital element. The budget does not include donor funding, anticipated to be around \$368 million of recurrent and capital expenditure in 1995/6. A further \$37.1 million is allocated under the Public Sector Investment Programme for construction work on health facilities by the Ministry of Public Construction and National Housing. Donor funding brings the total capital spending allocation for MOHCW to about \$241 million. An additional \$3 million of capital funds spent is allocated through the Ministry of Local Government to municipal facilities. In addition, there is substantial spending across a number of Ministries on rural water supplies and sanitation, which can be regarded as part of the Government's public health expenditure. A detailed breakdown of the 1995/96 budget is shown in Appendix 4a.

(iii) Spending by level of service

Identifying Government spending by level of service is difficult because, firstly, salaries are allocated en bloc rather than by institution; secondly, the grant funding item is not broken down; thirdly, the lowest level cost centre is the district which covers both the district hospital and the associated clinics.

The 1995 Public Expenditure Review carried out by the World Bank and Government provides estimates of the share of spending at different levels, which combined with the current budget estimates provide an indication of spending per head by level of service.

Approximate MOHCW spending by level of service, 1995/6

Table 1.7

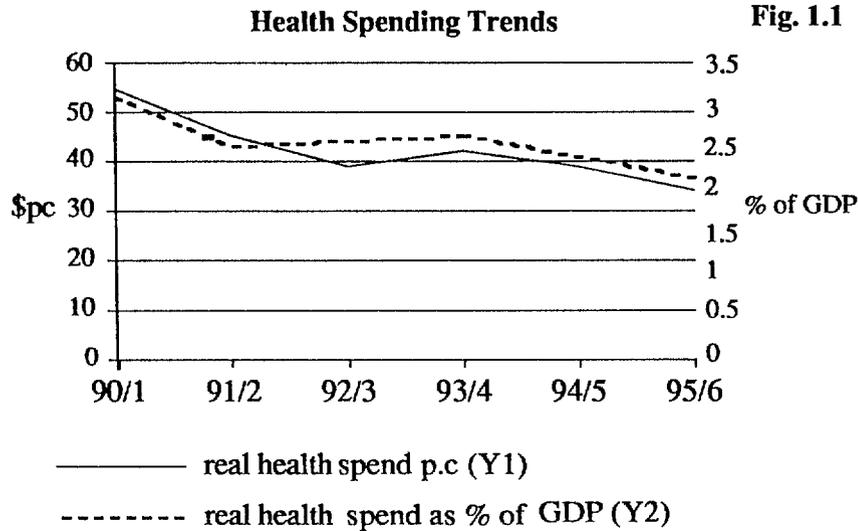
	Approximate 1994/5 share	Approximate spend \$ per head	Approximate spend (\$m)
Parirenyatwa Hospital	9.4%	10.7	127
Central Hospitals	24.2%	27.6	328
Provincial Hospitals	11.2%	12.8	152
District/General Hospitals	20.0%	22.8	271
Rural Hospitals and Clinics	9.5%	10.8	128
Councils and Voluntary Organisations	7.2%	8.2	98
Preventive Services	11.2%	12.8	152
Other	7.3%	8.3	99
Total	100%	114.2	1 355

Source: Budget shares taken from Public Expenditure Review 1995 (Draft)

Of the \$114.2 per head budgeted for the Ministry of Health, about \$74 is going towards hospital level care, and \$51 of this towards provincial and central hospitals.

(iv) Recent trends in health spending

Between 1979/80 and 1987/8 Ministry of Health expenditure grew by 94% in real terms, and 48% in real per capita terms. Real per capita spending peaked in 1990/1 at about \$55 per head, roughly \$200 in today's prices. It fell 30% over the next two years, turned briefly upwards in 1994 as a result of drought relief expenditure administered by the MOHCW, and over the past two years, fell again. MOHCW spending fell from 3.1% of GDP in 1990/91 to 2.1% in 1995/6.



(v) Cost recovery

Whilst procedures for charging for health services have been in place since before Independence, these have been vigorously enforced only since 1991. In revenue terms, user fees play a very minor role, accounting for no more than 1-2% of MOHCW expenditure. The present charging structure is set out below. Also shown are the recently announced new fees. Children's' rates are shown in brackets.

	existing fee	proposed fee
Out-patients		
Rural RHCs/mission clinics	no charge	no charge
Municipal clinics	\$16 (\$8)	\$24-\$40 (\$12-\$20)
District hospitals	\$17 (\$8.50)	\$24 (\$12)
General hospitals	\$20 (\$10)	\$30 (\$15)
Provincial hospitals	\$26 (\$13)	\$38 (\$19)
Parirenyatwa Hospital	\$42 (\$21)	\$64 (\$32)
Other central hospitals	\$34 (\$17)	\$52 (\$26)
In-patients (ward fees)		
District Hospitals	\$50 (\$25)	\$60 (\$30)
General hospitals	\$60 (\$30)	\$90 (\$45)
Provincial hospitals	\$65 (\$35)	\$100 (\$50)
Parirenyatwa (general ward)	\$200 (\$100)	\$375 (\$170)
Other central hospitals	\$80 (\$40)	\$120 (\$60)
Ante natal		
Rural Health Centres & Rural District Council Clinics	\$10	No charge
Local Authorities/municipalities	\$50 - \$120	\$60 - \$200
District hospitals	\$60	\$80
Provincial hospitals	\$80	\$120
Central hospitals	\$185	\$250

The clinic fees in rural areas were abolished in April 1995. Fees are not charged to those who can provide documentary evidence of earning less than \$400 a month. Those referred upwards from clinics do not pay consultation costs at higher levels, though in theory they should pay additional costs for items such as drugs and tests. Normally rural patients do not pay at all for health services, while those entering the system at urban clinics may pay only at the first contact. All fees collected by government institutions revert to Treasury. Partly because of this, collection of fees is not generally enforced rigorously.

The role of user fees is discussed in more detail in Section 1.3.2, and the numerous problems presented by the exemption system in Section 3.2.

1.2.6 The Role of Medical Aid Societies

In July 1995, 750,000 Zimbabweans (members plus dependants) were covered by private health insurance through the 25 main Medical Aid Societies. This figure has risen steeply in recent years, from 245,000 in 1982 to 526,000 in 1990. If this rate of growth has continued, the number of beneficiaries probably stands at about 780,000, or **six to seven percent of the population**. Factors influencing the recent growth probably include active marketing by the Medical Aid Societies and the introduction of new packages tapping new markets, especially towards the lower end of the income spectrum. Disenchantment with public health services may also have been a factor.

The total number of Medical Aid members (as distinct from beneficiaries) is not known exactly but in one major Society there are two additional beneficiaries per member. Assuming this is typical, there are about 260,000 Medical Aid Society members, virtually all of whom are in formal employment. This represents about **17% of those in paid employment**, and about 30% of those employed outside the agriculture, domestic services



and very small business sectors where coverage is minimal. About **one-third of public sector employees** belong to the Public Services Medical Aid Society, with the Government contributing \$1.75 per \$1 of employee contribution. (64%). Amongst parastatals, the Forestry Commission and ZESA contribute 100% of employee subscriptions, the Agricultural Finance Corporation and the Cold Storage Company 80%.

The combined turnover of the four largest Medical Aid Societies (covering 97% of total members) in 1994/5 was \$654.3 million. Approximately \$60 million of this covered administration costs, the remainder covering benefits to beneficiaries. Thus average total medical expenditure for those covered by Medical Aid is approximately **\$793 per head**. During the 1994/5 financial year, Medical Aid Societies paid out claims totalling \$343.3 million to medical practitioners). Major categories of claim were as follows:

Medical Aid payments to beneficiaries

Table 1.9

	\$ million
General practitioners	136.7
Dentists	45.8
Pathologists	32.4
Radiologists	21.4
Gynaecologists	20.9
Physicians	14.9
General Surgeons	11.5

There are 27 Medical Aid Societies in Zimbabwe, and all except two are members of the National Association of Medical Aid Societies, a national organisation representing and protecting the interests of Medical Aid Societies. There is no legislation covering Medical Aid, but to be affiliated to NAMAS a Medical Aid Society must:

- have at least 1000 members;
- ensure that the members (or members and their employees) pay contributions into a non-profit making fund from which is paid all or part of the medical, dental and associated expenses of members or their dependants;
- ensure that assets and/or management are not controlled by members' employers;
- provide for financial reserves to meet current and future claim liabilities;
- operate in the interests of members.

Medical Aid Societies are not permitted to venture into any other business.



NAMAS negotiates a scale of fees annually with the members of the medical, dental and allied professions. At the time of writing, examples of such rates are as follows:

Specialist physician	Initial consultation	\$237.45
	Subsequent consultation	\$87.00
General practitioner	Initial consultation	\$63.65
	Subsequent consultation	\$63.65
General Surgeon	Initial consultation	\$122.20
	Subsequent consultation (if surgery is done the consultations are included in the fee charged)	\$62.75

The coverage provided varies between societies, with the larger societies offering a range of packages aimed at different income groups. CIMAS, the largest, offers the following packages:

- ◇ **Basic Package** (\$13.20 per month per member/beneficiary): covers services at public (government, mission and local government) facilities only but, in the case of Parirenyatwa Hospital, which has higher fees, only a portion of the costs are paid;
- ◇ **Primary Care Package** (\$39.10 per member/beneficiary): covers services provided in the private sector by GPs, radiologists and pathologists; but covers specialist treatment, dentistry and ante-natal/postnatal care only in public facilities;
- ◇ **General Package** (rates vary according to earnings with reductions for pensioners and rural members): covers services provided in the private sector by GPs and specialists, and in-patient treatment only at public facilities;
- ◇ **Private Hospital Scheme** (varying rates as above): as with the General Package but covers private hospitals;
- ◇ **Medexec Package** (\$347.80 each per month for members and spouses, children \$207.50, other dependants \$330.40): comprehensive benefits with higher limits.

Typically, packages do not involve any deductibles or co-payments except for certain drugs. In most cases however, an annual limit on benefits is applied. Certain packages are available only through employers, while others are available only with a minimum of four members at one address, and in some cases higher rates are charged for individual membership.

Where Medical Aid Society members receive treatment at public facilities, the facilities bill the Society for the flat "public" fee as quoted in Section 1.2.5 rather than for the actual costs. Thus public facilities do not recover the full cost of treating such patients.

In addition, members receive tax relief of 20% of subscriptions, together with tax rebates where shortfalls exceed \$250 within one tax year.

Furthermore, major difficulties and delays have been experienced in regard to issuing bills, so that in practice treatment is often provided 'free'. At the time of writing this report, the latest figure quoted for outstanding debts in Government hospitals is \$68 million as at 30 June 1995. This figure includes Medical Aid Society debts recorded but not yet billed to the societies. The majority of debts owed by Medical Aid Societies are likely to be owed to the Central and Provincial hospitals, as Parirenyatwa Hospital has since 1994, substantially reduced its Medical Aid Society debts by adopting a manual billing system. The outdated

accounting records at Parirenyatwa are due primarily to problems with the centralised computer system and programmes.

1.2.7 Conclusions: Strengths, Weaknesses and Problems in the Health Sector

- ◇ Zimbabwe has in place a very good health infrastructure in both physical and institutional terms;
- ◇ Substantial geographic inequalities in access to health care still exist, and some further investment in the provision of rural health centres is still required if the target of a "clinic within 8km for all", is to be met;
- ◇ There are also major inequalities in access between the 'rich', who enjoy sophisticated levels of services, largely financed through medical aid, and the 'poor' who receive much more basic services;
- ◇ In view of the government's expressed commitment to primary health care, a disproportionate amount of public spending is directed towards tertiary and higher level care which, firstly benefits disproportionately a minority of the population (largely the urban and better-off groups) and, secondly provides less cost-effective treatment in terms of the lives saved per dollar spent;
- ◇ Subsidies towards those covered by private insurance exacerbate this distortion. These subsidies include tax relief and the treatment of insured patients in public facilities for free or at reduced cost;
- ◇ At present the resources of the health services are grossly over-stretched because the Government is essentially seeking to provide free health care for the majority of the people while the financing base is too small to support such a system. This is leading to a deterioration in quality and to very poor staff morale, to the point where many observers consider that public health services are nearing a point of no return;
- ◇ Public spending on health has declined sharply in the last five years and the effects of this are now apparent in basic health indicators;
- ◇ There is therefore a need, firstly to bring in new sources of financing and, secondly to reconsider how the limited funds available for subsidised health care can most effectively be 'rationed' to meet the Government's overall health and equity objectives;
- ◇ There is scope however for efficiency gains through better management information, and improved incentives and staff morale.

1.3 Social Health Insurance and Health Financing Concepts

This section sets out some of the theoretical issues associated with the introduction of SHI. The recent interest in health insurance shown by many developing countries forms part of the wider agenda of health financing reform, defined as 'alternative arrangements for paying for, allocating, organising and managing health resources' (HHRAA, 1995). Such reforms can be grouped into three types of actions:

- raising revenue through cost recovery;
- improving the efficiency with which existing resources are allocated and managed; efficiency in the sense of both allocative efficiency (allocating resources to those uses with the highest return) and technical efficiency (increasing the output from given resources);

- 
- increasing the role of the private sector in predominantly government-based health systems.

1.3.1 Definitions and Concepts

Health Insurance

The rationale for health insurance is risk-sharing. Shaw (1995) provides the example of an individual with a 1 in 10,000 chance, in a given year, of experiencing a severe illness or injury which would result in a hospital bill of \$3 000. If this risk were spread over 10,000 people then each person's expected annual cost would be \$0.30. This, together with the administrative costs, is the premium an individual would pay. Thus, insurance converts a low probability of a large loss into a small but certain loss. Saving against such an eventuality is not a substitute for insurance - at a saving rate of \$60 a year it would take 50 years to save for such an occurrence.

Health services which are financed by general taxation and provided free at the point of delivery provide the most comprehensive form of risk sharing, but even in those countries with a broad tax base, present policy-makers are experiencing major dilemmas concerning the 'rationing' of health care in an environment of limited resources and unlimited demands.

There are many types of health insurance scheme and some quite complex classification systems have been developed. WHO (1994) identifies four main types:

- ◇ **Social health insurance:** generally compulsory and organised by government with premiums paid partly by employees and partly by employers. Social health insurance may be "stand-alone", or part of a wider system of social benefits;
- ◇ **Community based health insurance:** (often referred to as community financing, rural insurance) organised locally by the community, normally characterised by voluntary participation and flexible payment methods, entitling users to free or reduced cost treatment at local institutions, but not normally providing 'catastrophic cover' against major illnesses or injuries which cannot be dealt with at the level concerned;
- ◇ **Employer based schemes:** group insurance established around employers;
- ◇ **Private health insurance:** voluntary, sometimes taken out by individuals and sometimes through employers.

The proposed scheme outlined in the Terms of Reference of this study contains characteristics of those in the first two categories above. To our knowledge, no scheme which fully integrates these two has yet been developed. The last two categories are well developed in Zimbabwe, as already discussed under Section 1.2.6, but they cover a very small segment of the population.

In financing terms, the main advantage of insurance schemes is that - because the healthy as well as the sick pay - the insured can be made to pay the whole cost of the services that they use, not just a small proportion through user charges. Compulsory insurance minimises the problems of adverse selection (the sick rather than the healthy choosing to insure themselves) and, within the insured group, tends to promote equity, as contributions are linked to income whilst benefits are linked to need. There are severe difficulties however in introducing compulsory SHI outside the formal sector. Hence the interest in community financing schemes.

1.3.2 The role of user fees and equity issues

The issue of user fees is inextricably linked with any form of voluntary health insurance, for without user fees there would be no incentive to insure.⁵ The higher the user fees, the greater will be the financial incentive to insure. Conversely, with user fees set close to the real cost of providing services, some form of insurance is vital if individuals are to be protected against the costs of major illnesses or injury.

Potentially, user fees play at least four roles in the health sector:

- ◇ The most obvious role is **cost recovery**. As discussed in Section 1.2.5 above however, user fees play little part in current cost recovery in Zimbabwe;
- ◇ User fees set **price signals** thus user fees which are low at primary level, reflecting the (normally) much lower costs at this level compared with secondary and tertiary level, will encourage clients to seek treatment at the appropriate level;
- ◇ User fees which approximate the real costs of services are required to **stimulate private competition**;
- ◇ Finally, user fees can allow the government to pursue **equity** goals, by making those who can afford it pay for treatment at or near the full costs. Health subsidies can be directed towards certain groups, by directly granting exemptions to the poor, or by waiving (or reducing) the fees paid at facilities used mainly by the poor or other target groups, such as the chronically sick. There are, however, many problems associated with defining a workable exemption system, discussed below in Section 3.2.2.

With limited resources available for the subsidy of health care, it is important that Government investment in health is directed towards those services with the highest return.

Typically these encompass:

- **public health interventions** such as the provision of safe drinking water and health information;
- services with **high externalities** (benefits which go beyond the person treated) such as immunisation and the control of communicable diseases, mother and child health;
- treatments which are highly **cost-effective** in terms of the lives saved per dollar spent, such as malaria, pneumonia, diarrheal diseases.

It is often argued that the state should bear only the costs of the first two categories, leaving individuals to pay the full cost of those treatments where only the individual benefits. This view however may conflict with the policy objective of basic health care as a right for all, irrespective of income. Thus the concept of a voluntary SHI whose benefits emphasise primary care presents a policy dilemma:

How to set fees at a level high enough to provide individuals with an incentive to insure, whilst not denying access to the poorest?

This dilemma explains why two alternative SHI packages were investigated. Increased resources at primary level need not necessarily be raised wholly at that level. For example,

⁵ Preferential treatment for insured patients - e.g. better 'hotel care' in hospitals or shorter waiting times may also provide an incentive to insure - however there is little scope for introducing such differentials at primary level.



based on the figures outlined in Section 1.2.5 recovering 20% of the current expenditure on hospitals would permit a 50% increase in expenditure at primary level. The table below shows how the Social Health models investigated could be integrated with wider health sector policy.

Table 1.10

Type of Service	Policy Directions	Relationship to SHI
Management	Maintain public spending but emphasise efficiency improvements	outside
Preventive	Maintain or increase public spending but fund quality improvements through reallocation of resources from secondary/tertiary care	Model 1
Curative - primary	Maintain public spending but fund quality improvements through modest user fees and reallocation of resources from secondary/tertiary care	Model 1
Curative - secondary	Maintain or reduce public spending but maintain/improve quality through user fees/SHI	Model 2
Curative - tertiary and quaternary	Reduce public spending through vigorous implementation of user fees/SHI	Model 2

1.3.3 Efficiency issues

As insurance reduces or eliminates the cost to the consumer of each episode of treatment, it may lead to a misallocation of resources unless steps are taken to guard against it:

- ◇ **Adverse selection** refers to the tendency for the sick to be more likely to take out insurance than the healthy, thus loading the costs and reducing the benefits of risk-pooling. Adverse selection can be corrected by making participation compulsory for certain groups (for example all formal employees) or by using the household rather than the individual as the unit for insurance. Alternatively, individuals may be made to pay risk-rated contributions, for example by age, gender, lifestyle or past sickness record. Such differentials however, would not be appropriate within a Social Health Insurance scheme as they would undermine the basic concepts of solidarity and risk-sharing;
- ◇ **Moral hazard** refers to the tendency for those covered by health insurance to seek treatment more frequently than they would otherwise or to seek more expensive forms of treatment. It can be reduced by making the insured person pay for part of the costs of treatment, in the form of a deductible (the patient pays a certain flat fee before they can claim on insurance), or a co-payment (a percentage of the fee);
- ◇ **Cost escalation** can occur where neither consumers nor providers face incentives to limit the cost of treatment - the consumers because they do not pay directly, the providers because claims are paid without question by a third party;

- ⇒ **Adverse effects on the referral system** could result if a SHI scheme gave universal access to hospital treatment, free at the point of delivery. The role of primary health facilities as 'gatekeepers' to higher level facilities will therefore need to continue.

1.3.4 Other Social Health Insurance Schemes

A review of social security systems world-wide undertaken in 1991 (Nolan and Turbat 1993, quoted in Shaw, 1995) showed that, of 47 African countries:

- seven (Cape Verde, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea, Kenya, Senegal) had formal social security systems providing direct medical benefits or reimbursement of medical expenses;
- fifteen (Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Ghana, Mali, Mauritania, Niger, Rwanda, Togo, Zaire) had an employer mandate that obliged some or all employers to pay for certain health services;
- seventeen had no formal system, although some of these, notably Zimbabwe and South Africa, had well-developed voluntary employer based systems. (No information was available on the other eight).

Some of these schemes are reviewed below. Coverage ranges from a few percent of the population to about 25% in Kenya. Several other countries are proposing schemes, that in Zambia paralleling most closely the proposals for Zimbabwe.

National Social Health Insurance Schemes in Africa

Table 1.11

Country	Coverage	Characteristics
Burkina Faso	Formal sector employees (0.9% pop).	
Burundi	Civil servants and parastatals (10 - 15% pop).	
Cameroon (since 1956)	Formal sector employees and dependants (60% of formal workforce and dependants).	Comprehensive benefit package as part of wider Social Insurance Fund. Contribution of 12.5 - 19% of salaries is split between employer and employee. Fund provides health services direct - high quality but poor access/capability.
Ghana (proposed)	Up to 2.5m formal sector employees and dependants and cocoa farmers	Administration through independent body; benefit package is comprehensive excluding Aids, TB public health. Contributions paid entirely by employers or Cocoa Marketing Board. Delivery of services is indirect by public and private providers with retrospective billing.
Kenya (since 1966)	Compulsory for public sector employees, voluntary for others.	Administered by parastatal. Covers hospitalisation at public or private facilities. Employee contributions only (approx. 3% of salary) - plans to introduce employer contribution. Costs are reimbursed in full for public providers and in part for private.
Mali	Employees (about 3% of population).	
Mozambique (proposed)	Employees of firms with more than 10 employees.	To be administered by existing Social Security Institute; benefit package to cover in-patient stays of more than 3 days, possibly at special clinics. Payment to providers by capitation. Contributions 4% employer, 3% employee.
Nigeria (proposed)		To be administered by proposed National Health Board. Capitation payment to providers - NHI Board covers costs of in-patient stay after first 10 days.
Zambia (proposed)	Formal sector employees (about 4% of population).	Comprehensive benefit package covering public and private providers. Contributions % of salary for formal, flat rate for informal.

Source: adapted from WHO (1995) and Shaw (1995)

Efforts to widen the coverage of insurance beyond the formal sector, where it is relatively easy to compel coverage, to the majority of the population who are rural and earn their livelihood from peasant farming and/or from the informal sector, have led to a growth in interest in community based insurance schemes.⁶ The Francophone countries of Guinea-Bissau, Zaire and Burundi have well established examples of such schemes although in none of these is the whole country covered. Proposals exist for pilot schemes in Tanzania and Zambia. Unlike the more formal schemes which tend to be cost-covering at least in theory, most of these schemes are used for specific purposes (e.g. drugs) or to supplement the existing health budget. Typically, individuals buy a card which allows free treatment for themselves or their families. Payment can be made in a lump sum at harvest time, sometimes in cash or kind. Funds may be retained at the local level or, as in the proposals for Tanzania, pooled at a higher level to allow for a greater degree of risk-spreading.

The proposals for Tanzania are of interest for several reasons, as discussed below:

- ◇ Autonomous Community Health Funds (CHF) are proposed at district level. At village level, CHF agents who will be trusted community members will 'sell' membership at a small commission. 10% of funds will be retained at village level for community managed public health projects. The remainder will be held at district level, allowing a larger risk pool with which to cover the costs of major illnesses and injuries. Thus there is a balance between community ownership and economies of scale;
- ◇ Those considered by the Village Council to be too poor to pay the flat-rate subscription will receive a card for free health care (with the costs reimbursed by the Government). The local retention element, however, will serve as this incentive to the grant of such exemptions. Those choosing not to join will pay user fees;
- ◇ CHF members will be able to choose providers, in the form of local dispensaries linked to a first-referral hospital, and to change providers every 6 months or so. Payment from the fund to providers will be in the form of a capitation grant covering both preventive and curative treatment. Any savings out of the capitation grant may be used for their own purposes such as improvements to facilities or staff bonuses, thereby providing an incentive to cost-containment;
- ◇ The problems of adverse selection are to be minimised by the stipulation that if one household member joins, all must.

Pilot implementation of the CHF will introduce critical supply-side improvements, including the availability of drugs, the standards of facilities, equipment and transport, and staff training concurrently. A high degree of subsidy is planned and it is proposed to set the annual premium at approximately the cost of one prescription for drugs.

⁶These are often described as pre-payment schemes, to distinguish them from more formal schemes where the size of the fund is actuarially determined. However in this report, the term pre-payment is reserved for schemes which allow individuals to pay in advance against specific user fees.

	Guinea Bissau	Bwamanda, Zaire	Burundi	Zambia (proposed)	Tanzania (proposed)
Coverage	Voluntary - 200 000 (20% pop.) covered by 1988	Voluntary - approx. 65 000 covered (1990). Scheme operative in one health zone only	Voluntary - unknown. In one are 22% covered	Voluntary	Rural - voluntary but if one household member joins all must
Benefit package	Comprehensive	Hospital care only	Comprehensive	Comprehensive throughout country	Minimal package of preventive and curative care at dispensary and associated referral hospital
Administration	Village health committee	Government health provider	Commune (local administrative body)	Local communities	Autonomous Community Health Funds
Health Service Delivery	CHWs and referral to other government facilities	Direct by public providers	Indirect by public providers	Public providers	Dispensaries and 1st level referral hospitals
Provider payment	Revenue used only to purchase drugs	Revenue supplements zone's health budget	Revenue used to purchase drugs	Funds retained locally with payments to district hospital for referrals	Capitation contract with providers; funds pooled at District level
Finance	Initially voluntary contribution by adults	Individual flat rate, plus employer contributions for formal sector	Flat rate per household	Flat rate per household, cash or kind	Flat rate per member - proposed level to equal cost of drugs

Source: adapted from WHO (1995) and Government of Tanzania (1995)

2. METHODOLOGY

2.1 Areas addressed in this study

The following tasks were carried out by the team:

- ◇ A review of the literature on health service reform, health insurance and the health sector in Zimbabwe;
- ◇ Analysis of existing Census and survey data on population, economic activity, incomes and expenditure;
- ◇ Analysis of existing financial data from the MOHCW and Medical Aid Societies and from the series of costing studies undertaken by MOHCW/UNICEF at District level;
- ◇ Analysis of epidemiological data from the MOHCW, supplemented by data on claims from the Medical Aid Societies;
- ◇ Four pieces of original fieldwork, as follows:
 - Study 1: Attitudes to risk, insurance and free health care;
 - Study 2: Income and health care expenditure;
 - Study 3: Ability and willingness to pay for SHI;
 - Study 4: Exit survey to investigate under-claiming for medical aid patients⁷;
- ◇ Extensive interviews and discussions with individuals in the MOHCW and the Medical Aid Societies.

These addressed the basic issues in the amended Terms of Reference, which were:

- ◇ Defining SHI packages;
- ◇ Costing the packages;
- ◇ Calculating contribution rates;
- ◇ Assessing demand for the packages (willingness and ability to pay);
- ◇ Calculating revenue to the scheme;
- ◇ Identifying additional areas for revenue recovery.

2.2 Approach

2.2.1 Defining the packages

Both the primary package and the district hospital component of the hospital package are based on the standards and services outlined in the MOHCW document *District Core Health Services in Zimbabwe*. These were examined in the light of epidemiological data to derive two core packages. The packages are outlined in the next section.

2.2.2 Costing the packages

The cost of each package was calculated in two ways. Firstly, **empirical** estimates were made based on the unit costs of services and expected utilisation. Secondly, a **hypothetical** costing exercise was undertaken at clinic and district hospital levels.

In making **empirical estimates**, data on unit costs at clinic and district hospital level was drawn from the series of costing studies undertaken by MOHCW and UNICEF in four districts. Allowances were included for capital costs, for the cost of necessary improvements and for administration/supervision. Because of the degree of variability, median costs were used. Data on utilisation was drawn from the MOHCW/UNICEF studies (facility level), the Health Information System within MOHCW (aggregate level), and smaller scale studies (household level), and converted to usage per 1 000 population. The unit cost for each element multiplied by the utilisation gives the total cost of delivering the package. Divided by the number of users, this gives the cost per user.

⁷As the results of this survey neither proved nor disproved the existence of significant under-claiming for Medical Aid patients, its results have not been included in the main text but are reported in Appendix 6.



Under the **hypothetical** approach, the costs were calculated for a clinic serving a typical ward population of 6 000 and a typical district hospital serving a population of 200 000 equipped as outlined in District Core Health Services in Zimbabwe. These costs included staff, drugs and other medical equipment, sundries, utilities and maintenance, annualised capital costs and the costs of administration and supervision from higher levels.

For the hospital package, rough estimates were made of the costs per person of care at provincial and central levels, based on existing MOHCW expenditure.

2.2.3 Calculating contribution rates

Total costs were calculated as the sum of these health care costs plus administration costs. These were taken as the contribution rates required to cover the full cost, and alternative levels of government subsidy assumed on the basis of comparison with current MOHCW spending. Contribution rates were also calculated as a percentage of earnings for those in the formal sector.

2.2.4 Assessing demand

Willingness and ability to pay, at given contribution rates, were tested explicitly through a survey of 277 individuals in two urban and two rural areas, stratified by income. Households were presented with a scenario of improved quality of service at primary level coupled with increased user fees. They were asked whether they would prefer:

- to pay on usage;
- to pre-pay through a form of health savings scheme;
- to take out social health insurance; or
- not to use the service.

Cost levels were then adjusted downwards (for those households who expressed interest but could not afford the SHI rate) or upwards (for those households who indicated that they would subscribe to SHI). This exercise was then repeated for the hospital package.

Focus group discussions (27 in total, involving 290 participants) formed an important input into the design of the packages. The topics covered by these groups included attitudes to insurance, ability to assess risk, willingness and ability to plan for the future, reactions and attitudes to 'tempting fate' and attitudes to free health care. Analogies with burial societies were drawn.

In addition, an **income and health care expenditure** survey was carried out amongst 323 households in 2 urban and 2 rural areas. This survey gathered data on existing health service usage and expenditure in the context of household income and other characteristics. An important objective of this study was to assess the appropriateness of the current threshold for health service user fees (\$400 per month). The sample for the study was drawn from those who had recently incurred clinic or hospital fees, and the means of payment, together with the effects on the household at different income levels, were explored.

2.2.5 Calculating the revenue to the scheme

Estimates of the number of households in different income groups within the formal and informal sectors were made using secondary sources. The results of the willingness and ability to pay survey were used to calculate likely uptake from the informal sector. Different assumptions were made about exemption levels.

2.3 Health Insurance Options

The following options were considered.

Table 2.1

Option	Option/Benefits	Comments
Primary scheme	Curative care at public clinic facilities. Nurse-based care. Package as per MOHCW recommendations but with essential quality improvements built in. Curative services to include deliveries, childhood diseases, nutrition rehabilitation, relief of local infection, minor injuries, pain, treatment of STD/HIV, maintenance of register and supply of medication for chronic diseases, minor surgical procedures, rehabilitation procedures	To be delivered in tandem with health promotion, personal preventive care, environmental health and liaison with community based care activities.
Hospital scheme	Curative care at public hospitals where referred from clinic level	Costs based on detailed analysis at district level together with indicative costs at higher level from secondary sources
Prepayment scheme	No specific benefits. Facility to save against future health care costs - stamps to be offset against medical expenses. Transferable to members of extended family where desired	Introduced as a possible alternative to SHI in response to negative views about insurance/risk-sharing, desire for flexibility and control etc.

Each was assessed in terms of:

- the financial viability (costs and likely revenue);
- the contribution to government health and equity objectives;
- ease of administration;
- willingness and ability to pay.



2.4 Delivery Options

The following options for scheme delivery and administration were considered:

- ◇ A new, centralised organisation;
- ◇ An existing centralised organisation (e.g. NSSA);
- ◇ Delivery by the Medical Aid Societies;
- ◇ A network of local (probably District level) organisations, centrally co-ordinated.

2.5 Medical Aid Data

It was the intention to undertake extensive analysis of Medical Aid data to provide information on utilisation and costs, comparison between public and private facilities and extent of usage of public facilities by insured patients. In the event, the relevant data sets proved difficult or impossible to access and consequently limited use has been made of this source.

3. FINDINGS

3.1 Costing the packages

3.1.1 General Considerations

The cost of operating a Social Health Insurance scheme can be divided into the costs of providing health care and the costs of administration.

The health care costs will depend on a range of factors:

- ◇ the **benefits** (services) available under the scheme;
- ◇ the **unit costs** of providing these services, itself dependent on various factors including the level of technology, the efficiency or otherwise of the facilities concerned and the extent to which capacity is being utilised;
- ◇ the amount of **health care demanded** under the scheme, dependent on such factors as the demographic structure of the population, their health status (and consequently their incomes, access to clean water and sanitation, nutritional status, the investment in public health and preventive care, the spread of HIV/AIDS....), as well as the quality, affordability and accessibility of health facilities;
- ◇ the extent to which **cost containment measures** (such as co-payments and deductibles) are built into the scheme.

The costs of administration will vary according to:

- ◇ the nature of the **organisation** concerned and its efficiency;
- ◇ the nature of the **membership**, with large groups (e.g. employees of a large firm) offering lower unit costs than individual members.

Estimating the costs of a Social Health Insurance scheme is difficult for two main reasons: firstly, the lack of reliable information on **unit costs** in public health care facilities and on current **utilisation rates** amongst known populations; secondly, the problems associated with **changing behaviour** under health insurance. Quality improvements, health care which is free/near free at the point of delivery and the desire to 'get value for money' are likely to lead to an increased demand for health care services by those insured.

Consequently, the approach has been to draw on as wide a range of data sources as possible and to provide ranges of estimates. The results are summarised briefly here with further details in Appendix 4. The health care costs are discussed first, followed by the administrative costs. Recommendations regarding cost containment measures are provided in the last section.

3.1.2. The primary package

(i) Unit costs of primary level services - the UNICEF studies

Between 1992 and 1994, a series of studies were carried out by MOHCW staff (with UNICEF support) to determine the cost of health services at District level and the implications for policy and management. A further study was carried out for Kwekwe district by the MOHCW in 1994/95. Each study was carried out using the same methodology, so that the results are comparable and provide a good illustration of the range of variation in costs. Each study covered a representative sample of health facilities including government, local authority, mission and (in some cases) private clinics, the District Hospital and other hospitals where appropriate.

The costs of personnel, drugs and other medical supplies, stationery, laundry, utilities and maintenance and, where appropriate, vehicle running and food for a 12 month period were identified and allocated to the various services: out-patients, ante-natal, post-natal, family planning and maternity, growth monitoring and immunisation, in-patients, environmental

health and, in the case of hospitals, specialist services such as X-ray, surgery and rehabilitation. These costs were then compared with the number of patients using the service to provide unit costs. In addition to examining costs, the studies looked at indicators of quality (such as appropriate drug use), efficiency (such as vaccine wastage) and resource adequacy (personnel, equipment and standards of maintenance). The studies did not include any allowance for capital costs, and the costs of administration and supervision at district level, while calculated, were not allocated to specific services. Environmental Health costs were not calculated on a unit cost basis because of the difficulty in deriving an appropriate output measure.

The following tables summarise the results of the four studies for Rural Health Centres/clinics. The total annual recurrent cost was calculated to range from a little over \$100 000 to over \$800 000 for one large municipal clinic. Curative out-patient care accounted for over half the cost, immunisation and growth monitoring and environmental health activities being the other main categories of expenditure.

Cost of services as a proportion of total recurrent cost by district: Table 3.1

	(Median Values)			
	Shurugwi	Gutu	Binga	Kwekwe
Curative out-patient care	78%	65%	55%	57%
Antenatal care	2%	1%	6%	4%
Delivery care	2%	3%	2%	4%
Post natal care	<1%	<1%	<1%	<1%
Family planning services	5%	5%	2%	7%
Immunisation/growth monitoring	10%	6%	17%	12%
Environmental health	3%	7%	18%	20%

Source: UNICEF studies

The range of unit costs for clinics (converted to constant mid-1996 costs) is shown below. See also Appendix 4b.

The degree of variation is striking:

- ◇ The cost per **out-patient visit** varied from \$4 to \$34, with a median of \$9.7;
- ◇ The cost of **ante-natal care**, per visit, ranged from under \$2 to over \$28, with a median of \$9.7;
- ◇ The cost of **post-natal care** ranged from under \$2 to over \$29, and for family planning from \$6 to \$40;
- ◇ **Deliveries**, with the costs adjusted where necessary to include the cost of the stay, ranged from under \$54 to \$500.

Unit Costs at clinic level - constant mid-1996 prices

Table 3.2

District	Clinic	Type	OPD cost per visit	ANC cost per visit	PNC cost per visit	Delivery	FP cost per visit	GM/EPI cost per visit	total re-current costs \$	total out-patient visits
Gutu	Mutema	Govt. RHC	4.7	2.5	1.5	122.7	6.1		232 906	32 677
Gutu	Nyazvidzi	RDC	5.1	2.8	3.6	132.0	11.7		142 129	14 408
Gutu	Mukaro	Mission	5.4	1.6	1.7	270.0	10.6		610 528	44 976
Gutu	Chesuro	RDC	5.9	3.7	2.4	142.6	12.0		200 556	21 527
Shurugwi	Hanke	Mission	5.9				8.8	6.1	149 557	23 631
Gutu	Zinhata	RDC	6.2	3.5	2.8	129.9	11.3		201 287	22 151
Gutu	Serima	Mission	6.4	2.1	2.1	536.4	28.2		477 841	39 165
Gutu	Soti Source	Govt RHC	7.0	4.4	8.4	141.7	11.6		201 746	17 655
Gutu	Nemashakwe	Govt RHC	7.2	2.8	3.4	130.4	6.9		206 486	20 065
Shurugwi	Pakame	Mission	8.2	7.1	6.7	85.0	10.6	13.7	128 985	13 096
Kwekwe	Malisa	RHC	8.5	8.2	5.6	54.1	5.9	7.4	214 845	17 446
	Joseph									
Binga	Slansundu	Govt RHC	9.4	11.1	5.6	127.0	10.4	9.6	315 915	13 291
Kwekwe	Msilahobe	Govt RHC	9.4	8.8	7.8	75.8	8.4	8.3	167 523	8 030
Binga	Pashu	RDC	10.0	19.9	6.8	136.2	16.3	11.6	267 462	12 451
Shurugwi	Mazibisa	RDC	11.0	10.6	10.8	129.1	10.8	10.8	179 610	6 943
Kwekwe	Mbizo	Municipal	11.0	17.0	16.4	184.7	30.4	17.3	1 005 605	46 122
Shurugwi	Makusha	Municipal	11.2		8.5		6.8	8.2	249 571	18 560
Kwekwe	Nyoni	Govt RHC	11.5	18.4	12.6	152.6	8.7	14.8	189 248	11 498
Binga	Chinego	Govt RHC	11.6	13.7	7.9	151.5	17.1	12.8	290 657	11 319
Shurugwi	Gwanza	Govt RHC	11.9	8.7	29.4	104.8	15.0	10.3	172 007	9 772
Binga	Lusulu	Govt RHC	13.2	13.8	7.6	146.9	15.6	13.1	350 717	15 343
Kwekwe	Silobela	Govt RHC	18.1	17.4	14.3		17.3	17.5	172 025	5 399
	Jackson									
Shurugwi	Ironsides	Private	19.5	12.8			16.9	14.4	196 972	9 055
Binga	Lubimbi	Govt RHC	20.1	17.7	11.6	192.8	15.5	20.5	266 926	4 761
Shurugwi	Chikato	Govt RHC	25.7	15.5	16.0	187.8	24.0	17.9	185 073	4 551
Shurugwi	Rockford	RDC	34.0	28.3	28.2	339.3	40.0	29.3	126 518	2 726
	Median - all clinics		9.7	9.7	7.7	138.9	11.7	12.9	201 525	13 850
	Average 'good practice' clinics		9.3	11.4	6.9	138.5	10.6	12.4		

There are many factors which could explain the variations in cost: throughput is an important one, with unit costs normally lower in heavily used clinics. Three of the highest cost clinics have less than 5 000 out-patient visits a year. This has important implications for the delivery of health services in sparsely populated areas. Differences in the mix of patients and in clinical practice may be important. Clinics will vary in the extent to which complicated cases are referred upwards, so that those clinics close to a hospital may deal mainly with simpler and thus cheaper cases. Low cost may, but does not necessarily, indicate efficiency. It may simply depict clinics being run on inadequate resources. Finally the fact that the four studies were undertaken at different times and, largely, by different teams mean that inconsistencies in the approach and changes in cost structures may explain some of the variation.

For all services except deliveries, median costs in mission clinics tended to be somewhat below those for Government and Rural District Councils. Although in theory all inputs even donated ones were costed there may have been some omissions (especially of volunteers' time), or it may be a genuine reflection of higher efficiency.

To allow for the high degree of variation, median unit costs for each service were used but these were checked against the costs of four clinics selected on the basis of discussions with health service staff to represent high quality care. One of these (Nyoni in Kwekwe) was visited and in other cases discussions were held with the District Nursing Officer covering the quality of care, accessibility and perceived priorities for improvement. These four are shown in bold type on the table. The lack of similarity between the cost structure of these clinics confirms the view that there is no clear link between measured cost and quality.

The median cost for each service was adjusted as follows:

- ◊ an allowance of 6% added to cover the costs of transport and supervision from the district level (including ambulance transport for patients referred upwards);

- ◊ an allowance of 12% added to cover the annualised capital costs of buildings and equipment⁸;
- ◊ an allowance of 13% added to cover the cost of improvements, specifically upgrading of staff (including training and professional development), introduction of trained relief cover, guaranteed availability of drugs and other essential items.⁹

This gives the following unit cost profile for curative and personal preventive care services:

Unit costs for primary care, June 1996 prices **Table 3.3**

	direct unit costs (\$ per visit)	capital costs	supervision/ admin.	improvements	costs of improved service (\$ per visit)
Ante-natal care	10	12%	6%	13%	13
Routine deliveries	139	12%	6%	13%	182
Post-natal care	8	12%	6%	13%	11
Family planning	12	12%	6%	13%	16
Growth monitoring/EPI	13	12%	6%	13%	17
Out patients	10	12%	6%	13%	13

(ii) Utilisation rates

Information on utilisation for curative services, was drawn from three sources: individual facilities-based data, aggregate provincial-level data (the Health Information system) and household surveys.

Facilities-based data

The following data was obtained from the MOHCW in Kwekwe District. Figures for Nyoni and Malisa Josepha were obtained by visiting the clinics, and the rest was gathered from unpublished data collected as part of the Ministry's costing of services in Kwekwe district (1994/95).

Estimates of clinic utilisation rates, Kwekwe district (Source: MOHCW) **Table 3.4**

clinic/group	1st OPD visits	total OPD visits	OPD referrals	catchment population	episodes pp per year	visits pp per year	referrals as % 1st visits
Nyoni - under 5	730	2 114	12	1 372	.532	1.541	1.6
Nyoni 5+	3 489	9 644	46	5 223	.668	1.846	1.3
Malisa Josepha - under 5	1 493	4 279	34	1 500	.995	2.853	2.3
Malisa Josepha - 5+	5 489	12 910	137	7 945	.691	1.625	2.5
Nyoni (all)	4 219	11 758	58	6 595	.640	1.783	1.4
Malisa Josepha (all)	6 982	17 189	171	9 445	.739	1.570	2.4
Msilahobe (all)	6 103	8 030	171	14 965	.408	0.537	2.8
Silobela Jackson (all)	10 689	16 663	291	12 700	.842	1.312	2.7

Source: MOHCW - raw data from Kwekwe Study

⁸Based on construction costs of \$150 000 with a life of 20 years and equipment costs of \$50 000 with a life of 10 years; real interest rate of 3%

⁹Based on a case study of Nyoni. Improvements costed in were relief nursing care (one quarter of an SRN), upgrading of one post to include midwifery, improved drug supply and improved training/communications.



The number of illnesses (episodes) ranged from 0.4 to 0.8 per person per year and for the population as a whole, the number of visits ranged from 0.5 to 1.8. At the two clinics which were visited personally to obtain information desegregated by age, the under 5's visited less frequently than the over 5's in Nyoni, but more frequently in Malisa Josefa. One reason for this could be the difference in practice of recording curative visits combined with growth monitoring/EPI visits.

Estimates of catchment population are based on ward boundaries and thus there will be a poor reflection of the real population served. On the whole, these figures will tend to underestimate the 'true' level of demand for primary care for the following reasons:

- ◇ those attending hospital without going through the referral system are not reflected;
- ◇ fees were being charged for part of the period which would have had a deterrent effect.

Aggregate Data

The following table on out-patient visits is derived from the MOHCW's Health Information System for 1994. See also Appendix 4c.

OPD rates per 1 000 population: clinics, district and provincial hospitals Table 3.5

OPD total	Manic	Mash C	Mash E	Mash W	Masv	Mat N	Mat S	Midlands	Byo	C/Gwiza	Hre	Total
under 5	2 505	2 499	2 251	2 281	3 670	2 224	1 483	2 718	3 180	2 162	3 054	2 625
over 5	2 073	1 760	2 322	1 709	3 043	1 584	1 204	1 660	1 224	949	1 002	1 807
total	2 141	1 867	2 312	1 793	3 140	1 690	1 249	1 824	1 480	1 123	1 281	1 930

Source: MOHCW

Leaving aside the main urban areas, where the presence of the central hospitals will tend to distort the pattern, the rate for under 5's varied from 1 483 visits per 1 000 (1.5 visits per person) to 3 670, and the rate for over 5's from 1 204 to 3 043. Whilst these include non-primary visits, this will be offset to some extent by the tendency to under-recording by facilities.

Household Surveys

The 1992 Indicator Monitoring Survey showed 30% of the population falling ill during the previous month, with 62% of these (18.6% of the sample) visiting a public health facility. 25% of those falling ill and not seeking treatment (2% of the sample) were deterred from seeking treatment by considerations of cost or access. Converting to annual rates, this gives 2.2 actual curative visits per person per year (.186 x 12) and 2.5 visits per person if those deterred by cost/access are included.

From the Sentinel Surveys the following rates of sickness and utilisation of health care in the under 5 group can be calculated. Round 1 found 14% of under 5's suffered from ARI in the month preceding the survey, with an annual rate of 1.7 episodes per child under 5 per year. The survey report does not indicate either the proportion seeking treatment, or how broadly/narrowly ARI was defined. If 50% of the illnesses were of a severity to merit treatment however, then 0.9 visits per under 5 would be generated from ARI alone.

Round 4 found 13% of children suffering from diarrhoea in the two weeks preceding the survey, with 42% of these seeking treatment. An annual rate of 1.4 visits per year (.13 x .42 x 26), increases to 1.8 if those deterred are included.

Combining these figures gives an annual utilisation of 2.7 visits per under 5 from these two conditions. Assuming these account for 54% of all out-patient cases in under 5's (MOHCW 1995) this would give an annual rate of 5 visits for all illnesses. As the survey was not designed to calculate utilisation rates however, this should be regarded as indicative only.

Combined Estimates

Information on utilisation of curative care from these three sources was combined with a normative estimate of personal preventive care, to give the following estimates of utilisation of primary care services. These are then converted to rates per 1 000 population. In arriving at the estimate for curative care, the facilities level data was discounted, because of the unreliability of the catchment population. The rate of 2.5 visits per person over 5, and 3.5 visits per under 5, is towards the upper end of the range of the provincial estimates and somewhat higher than the national average, despite the fact that these data include OPD visits at District and Provincial Hospital level. This reflects the team's view that the downward bias in the data caused by possible under-reporting, and visits deterred through problems of cost and access, more than compensates for the inclusion of hospital out-patient visits particularly when the likelihood of increased utilisation under SHI is taken into account. In any event, a proportion of the OPD visits now being dealt with at hospital level, undoubtedly could and should be dealt with by an improved primary health care service.

For the pregnancy-related services, the estimate of 42.7 pregnancies per 1 000 population is based on women at risk (aged 15 - 49) constituting 23.1% of the population (MOHCW) and a pregnancy rate of 185 pregnancies per 1 000 women at risk (Census).

Calculation of rates per 1 000 population group

Table 3.6

	rates per person in population group	population group as % of population	rates per 1 000 population	assumptions
Ante-natal care per pregnant woman	4	4.27	170	
Routine deliveries per pregnant woman	0.75	4.27	32	25% of deliveries referred
Post-natal care per pregnant woman	1	4.27	43	
Family planning per accepting woman	4	10.4	416	45% of women at risk are acceptors
Growth monitoring/EPI per under 5	3	15	450	
OPD visits per under 5	3.5	15	525	
OPD visits per over 5	2.5	85	2 125	

(iii) Costs Per Person

Multiplying the unit costs by the utilisation rate for each service gives the following range of costs per person covered under a Social Health Insurance package (\$ per annum). The environmental health component was not costed in detail but was calculated at 9% of the total.

Costs per person covered **Table 3.7**

Service	Unit cost - \$ per visit	No. of visits per 1 000 population per annum	Cost per member \$ per annum
Ante-natal care	13	170	2.20
Routine deliveries	182	32	5.82
Post-natal care	11	43	0.47
Family Planning	16	416	6.66
Growth monitoring/EPI	17	450	7.65
Out-patients	13	2 650	34.45
All above			57.25
Environmental health at 9% above			5.66
Total			62.91
Package Costs			
Curative only			34.40
Curative plus deliveries			40.27
curative plus deliveries and personal preventive care			57.25
All primary services			62.91

Thus the cost of the insurable component of the primary health package is estimated at \$40 and the cost of the total primary health package at \$63.

(iv) Hypothetical Costing - Primary Level

To corroborate these figures, a detailed costing exercise was carried out on a hypothetical clinic with staff, facilities and equipment outlined in the MOHCW booklet District Core Health Services for Zimbabwe. Such a clinic would ideally serve a catchment population of 6 000 and this figure was used in calculations of cost per person served, although in practice catchment populations are typically larger. The package of services outlined in the booklet was reviewed and, despite the document having received criticisms, was considered to be carefully thought out, quality oriented and appropriate. The document provides a useful checklist for associating current spending with health output, and identifying gaps that need filling to achieve quality care.

The costs included staff in the hypothetical costing covered (two SRN's, an environmental health technician, two nurse aides and a general hand), for whom time was allocated between curative and preventive care according to a typical patient workload, drugs and sundries. Annualised capital costs for buildings and equipment were built in. The costs of administration and supervision at higher level were also included by calculating these costs at district hospital level and splitting them between clinics. Variants costed were the inclusion of additional nursing staff, either an additional full-time SRN or a shared SRN providing relief cover. Other quality improvements such as the full recommended complement of equipment were "costed in", though not listed separately. Included in the cost of the primary package is an allowance for those preventive services administered from district hospital level, as well as an allowance for the costs of supervision and co-ordination at this level. The fully costed package is shown in Appendix 4d.



The costs were as follows:

Primary costs - hypothetical costing **Table 3.8**

	\$ per person served per annum
curative services (including deliveries):	34.6
preventive services	33.2
all primary services	67.8
variants (curative services only):	
with additional relief nurse (25%)	36.7
with additional full-time SRN	43.0

The hypothetical package thus suggests slightly lower costs (\$37 p.c. compared with \$40) for curative care, and substantially higher costs (\$33 as opposed to \$23) for preventive care. This is largely because of inclusion of costs of preventive care delivered from the district hospital. In the subsequent analysis of this report, the higher figure of \$40 has been used for the insurable component and an intermediate figure of \$65 for the cost of delivering the full range of primary health care services.

3.1.3. The Hospital Package

(i) Unit Costs

The table below, based on the studies of District Health Services undertaken by MOHCW/UNICEF teams in four districts, shows the estimated recurrent costs of services in each District. These have been adjusted to constant mid-1996 costs and, where appropriate, amended to reflect consistent assumptions. None of the four studies allocate the costs of administration, supervision and transport which, while calculated, were not allocated to specific services. Capital costs were not included. (See also Appendix 4e).

Unit costs of services at District Hospitals, mid-1996 prices **Table 3.9**

	\$ per visit/service				average
	Shurugwi	Gutu Mission	Binga	Kwekwe	
cost per opd visit	15.9		69.3	19.6	34.9
cost per patient day (ward costs)	166.7	33.5	61.2	158.4	104.9
cost per ANC visit	5.9	4.6	17.1	39.5	16.8
cost per delivery	930.8	112.8	489.7	633.5	541.7
cost per X ray	75.9	29.4	35.0	30.5	42.7
cost per lab test	21.2	6.7	13.4	21.2	15.6
cost per dental treatment	89.8	26.3		44.4	53.5
cost per operation	501.0	268.8	254.3	445.6	367.4
cost per rehab patient	105.8	52.6	55.1	143.2	89.2

Source: UNICEF studies

As with the corresponding information at clinic level, there was a wide range of variation in costs not necessarily reflecting differences in quality:

- ◊ The cost per visit of **out-patient treatment** varied from \$16 to \$69, the lowest-cost district hospital being Shurugwi at \$16. This figure includes drugs but not the cost of specialised services such as X-rays;



- ⊕ The cost per in-patient day, including food, ward costs and care but excluding specialised treatment, varied from \$33 to \$167, Gutu Mission being the lowest;
- ⊕ Ante-natal care ranged from \$6 to \$40;
- ⊕ Deliveries (recalculated where necessary to include the cost of the stay) ranged from a little over \$100 to over \$900. The length of stay in hospital, which is higher in the district hospitals, was an important determining factor;
- ⊕ Surgery: the cost per operation ranged from \$254 to \$501. As not all studies gave a breakdown between major and minor operations, differences in the mix of surgery may explain part of the variation;
- ⊕ The cost of X-rays varied from \$29 to \$75, Laboratory tests cost from \$6 to \$21 and Dentistry from \$26 to \$90;
- ⊕ Rehabilitation costs per patient ranged from \$53 to \$143.

District Hospital Utilisation

The following table is calculated from the utilisation figures in the four UNICEF reports, with total district population (1992 Census) as the denominator.

Utilisation figures for district hospitals (per 1000 population) Table 3.10

	Shurugwi District Hospital	Gutu Mission	Binga District Hospital	Kwekwe	average
total OPD visits	421.4		344.3	786.1	517.3
patient days (excl. maternity)	128.7	203.5	384.6	200.9	299.4
ANC visits	26.8	35.1	50.5	27.5	35.0
deliveries	7.3	8.0	11.9	16.2	10.9
X-rays	14.8	12.5	20.2	34.5	20.5
Lab tests	141.6	36.6	142.9	190.9	128.0
Dentistry	10.3	8.0		37.6	18.7
Surgery	4.6	5.6	9.1	11.7	7.8
Rehab	5.5	2.4	14.6	5.9	7.1

Costs per head of population: district hospital level

Combining unit costs and utilisation gives the following costs per 1 000 population. The estimated cost of unallocated overheads and the capital costs in a typical district hospital are based on the ratios calculated from the Kwekwe study. The total direct cost per person covered is estimated at \$56, the major elements being out-patient treatment at \$18 and in-patient treatment at \$24 (both exclusive of specialist services included separately). Including allowances for unallocated overheads and capital costs brings this up to approximately \$74 per person covered, per year.

Cost per person covered

Table 3.11

	Costs per person covered (\$ per annum)
OPD	18.1
admission costs	24.1
ANC visits	0.6
deliveries	5.9
X-rays	0.9
Lab tests	2.0
Dentistry	1.0
Surgery	2.9
Rehab	0.6
Total	56.0
unallocated overheads @8% (1)	4.5
capital costs @24% (2)	13.4
total district hospital costs	73.9

(1) Based on analysis of unpublished data from Kwekwe UNICEF/MOHCW study.

(2) Based on calculations outlined in hypothetical costing.

Hypothetical costing - hospital level

Detailed costs were calculated for a hypothetical 150 bed hospital serving a population of 200 000. The costs included the salaries of the District Health Executive, all personnel (a hospital staff of 191 and a Community Health team of 9), drugs, medical equipment and sundries, transport, food and laundry. Annualised capital costs based on construction costs of \$37.8m for buildings, \$303 000 for equipment and \$358 000 for vehicles were included. Total annual costs were estimated as \$14.7 million, of which almost 90% was allocated to curative care, and 10% to preventive. Costs relating to supervision and administration of primary care amounted to some \$108 000 and this, together with the bulk of costs relating to preventive care, was reallocated to the primary package as described above.

The estimated costs of all services incurred at district hospital level amounted to \$73 per person, and the cost of curative care only to \$65. This is slightly lower than the figure derived from utilisation and unit costs, and an intermediate figure of \$70 has been used in subsequent calculations for the cost of curative care at secondary level.

The full package is shown in Appendix 4f.

Tertiary and quaternary care

This part of the calculation is necessarily speculative, partly because of the lack of reliable unit cost calculation at this level, but also because of issues relating to access to higher level care. It is important however as a hospital package which covered the member against costs only up to District Hospital level, leaving the member exposed to large bills in the case of a genuine catastrophic illness, would hardly be an attractive proposition.

Current government expenditure of about \$13 per head of population on provincial hospitals and \$38 per head on central hospitals, including Parirenyatwa, (see Section 1.2.5) is taken as an approximation of the cost of providing specialist care not available at district hospital level. Adding 25% for capital costs to be comparable, brings the cost of this component of the hospital package to some \$64. Thus, the very high cost of tertiary and quaternary care almost doubles the cost of the hospital package, with the higher unit costs almost offsetting the lower probability of incurring these costs.

The issue of access to higher level care is illustrated by the table below. This shows that on average there is a 5.2% probability of incurring treatment at central level, and those who are treated face average costs in the order of \$728.

If access to such treatment were equal (e.g. through a rigorously enforced referral system) then a premium of \$38 plus capital costs would be a fair representation of the expected value of the individual's costs for treatment at central level. In reality however, use of such facilities is biased towards the urban, better-off and better-connected members of the community, a significant but unquantifiable proportion of whom are probably receiving treatment which could equally well be offered at lower levels.

The 'real' probability of requiring treatment at central level, however is probably closer to 1.6% assuming 25% of cases at each of primary, secondary and tertiary levels require upward referral. A 1.6% probability of incurring costs of \$728 would have an expected value of \$11.6. That is, the premium required to cover the costs of referral to central facilities would be \$11.6 rather than \$38 (both exclusive of capital costs).

Utilisation statistics for central hospitals

Table 3.12

	new OPD cases	admissions	maternity admissions	all
Parienyatwa	160 117	41 744	6 717	208 578
Harare Hospital	128 903	36 855	6 703	172 461
Mpilo Hospitals	90 635	30 654	13 762	135 051
Ingutsheni hospital	80	540	0	620
UBH	94 212	13 416	811	108 439
all central hospitals	473 947	123 209	27 993	625 149
approx. no of users	625 149			
utilisation per 1000 population	52.0	(625 149 divided by 11.9 million)		
apparent probability	5.2%			
approx. government expenditure	\$455 000 000			
approx. cost per user	\$728	(\$455 million divided by 625 149)		
approx. cost per head (total population)	\$38.0	(\$455 million divided by 11.9 million)		
theoretical probability	1.6%	(25% x 25% x 25%)		
theoretical probability multiplied by cost/user	\$11.6			

Source: based on MOHCW data

This presents a dilemma. Setting this component of the premium at \$38 is likely to result in cross-subsidisation of the wrong kind, with the poor subsidising the rich who have better access to central facilities. Setting the premium around the \$11.6 mark, however, with the government meeting the difference, would result in the same group being subsidised by government if they purchase SHI. There is no simple solution to this and undesirable distortions can be avoided only by vigorous implementation of policies designed to ensure that cases are treated as low down in the system as possible, that is by continued improvement to primary/secondary care and increasing adherence to the referral system.

3.1.4 Administration costs

Administration costs for the two largest Medical Aid Societies are shown below.

Administration costs of Medical Aid Societies

Table 3.13

	Administration costs (\$m)	Total costs (\$m)	Administration costs as % of total
PSMAS	18.8	162.3	11.5
CIMAS	37.5	375.5	11.1

Source: Medical Aid Societies



Although the two largest Medical Aid Societies have administration costs in excess of 11%, recent legislation in South Africa requiring Medical Aid Societies to keep administrative costs below 10% suggests there is some scope for reducing this, at least for the hospital package where the volume of claims will be lower and their average value higher than at primary level. Administrative costs of 12% and 10% at primary and hospital level respectively have been assumed for the purpose of calculating a premium. This does not include the initial costs of establishing a Social Health Insurance scheme.

3.1.5 Calculating contribution rates

Combining health care and administrative costs gives the following cost profile. It must be stressed that these are no more than best estimates since there is a high degree of uncertainty about some of the basic data, as well as possible changes in demand under a SHI scheme,

Estimated full costs of the packages (\$ per person covered per year) Table 3.14

	health care costs	admin. costs	total costs = contribution rate without subsidy
primary curative package	40	5	45
hospital package	134 ¹⁰	13	147

Assuming that all those buying into the scheme have to insure their immediate dependants as well as themselves, this would bring the annual cost for an average family of 5 up to \$225 for the primary package and \$735 for the hospital package. These figures are based on the estimated full costs of treatment at the respective levels. Should these costs be subsidised by Government and to what extent? In general, there are strong arguments against blanket subsidies to health insurance, as discussed above with respect to the subsidy of tertiary and quaternary care. One effect could be to encourage those already meeting most of the costs of their own care under private medical aid, to switch to Social Health Insurance. With limited resources available, it is more appropriate to focus subsidies on particular types of treatment (e.g. preventive) and on particular groups of people, such as the poorest or the under 5s. Nevertheless there are some arguments for an initial subsidy:

- ◇ The cost of the primary care package in particular assumes a quality of care which does not exist at present;
- ◇ The aim of SHI can be considered as bringing in additional revenue to the health services rather than funding particular elements in full;
- ◇ From a health financing point of view, any additional revenue which can be brought in without unduly compromising goals of equity and quality may be considered desirable.

3.1.6 Comparison with current spending

It would be possible to set the actual contribution rate at a level which covers the gap between desired spending at different levels and current spending. The cost of delivering the full range of primary services has been estimated at \$65 per head and the cost of hospital services, calculated very roughly and with a number of caveats, at \$134 (both exclusive of SHI administration costs).

Section 1.2.5 shows the following approximations of current MOHCW expenditure, based on an analysis undertaken for the 1995 Public Expenditure Review.

¹⁰\$70 for District Hospital care and \$64 for care at provincial/central facilities.

Approximate MOHCW expenditure by level of service, 1995/6

Table 3.15

	Approx. 1994/5 share	Approx. spend (\$ per head p.a.)	Approx. spend (\$m p.a.)
Parienyatwa Hospital	9.4%	10.7	127
Central hospitals	24.2%	27.6	328
Provincial hospitals	11.2%	12.8	152
District/general hospitals	20.0%	22.8	271
Rural hospitals and clinics	9.5%	10.8	128
Councils and voluntary organisations	7.2%	8.2	98
Preventive services	11.2%	12.8	152
Other	7.3%	8.3	99
Total	100%	114.2	1 355

Source: Budget shares taken from Public Expenditure Review 1995 (Draft)

A rough approximation from the above table, of the current MOHCW spending on the primary package is \$32 per head, that is, the expenditure at rural hospitals, clinics, councils and voluntary organisations, together with the "preventive services" item which substantially funds services included in the primary package. To this can be added approximately \$5 per head spent by local authorities on primary health care (source: Public Expenditure Review). To compare this with our own estimates of the cost of delivering the primary package, an allowance for capital cost and supervision needs to be included. Allowing a notional 25% brings current expenditure to approximately \$46 a head. This means that the contribution required to 'close the gap' at primary level would be in the order of \$19 per person per annum, which spread across the whole population would be \$224 million in total.

The equivalent calculation at hospital level is made difficult by the lack of firm data on current spending, and also by the fact that in practice the distinction between secondary and tertiary/quarternary levels of care is not clear-cut. The provincial and central hospitals serve as first-referral hospitals for the population of the major urban areas (about 25% of the total). If it is assumed that 25% of current spending at provincial/central level fulfils this role then \$13 per head (= 25% of \$51) can be added to the estimated spent on district hospitals (\$23) to give an estimated direct expenditure of \$36 per head on secondary level care. Adding, as before, a notional 25% to cover the cost of capital etc. met from different budgets brings estimated current expenditure on secondary care to \$45 per head, compared with the estimate of desired expenditure of \$70 per head. No allowance is made for costing of improvements at higher level, partly because examining such issues was outside the scope of the study but, more fundamentally, because improvements at lower levels of care (clinic and district hospital) combined with user fees and the referral mechanism, should allow them to operate more cost-effectively without additional funding. Thus the amount required to 'close the gap' at hospital level is taken as \$25 per person per annum, which is \$295 million in total. Cost recovery, rather than the funding of improvements, however would be the main aim of a hospital package.

Since not everyone will be contributing, calculating the subscription rate required to bring in this revenue requires assumptions about the uptake of SHI, the type of subscription (percentage or flat rate) and the policy regarding exemption levels. The latter is considered in the following section.

In testing the demand for the package (Section 3.3.3) a degree of subsidy was assumed and contribution rates of approximately \$30 per head for the primary package and \$50 for the hospital package were adopted for the willingness to pay survey.

3.2 Demand for the Packages

The demand for any Social Health Insurance package will depend on a range of factors including:

- ◇ the **size and demographic structure** of the population;
- ◇ the **level of incomes**, as well as the **source and regularity of earnings**, with a likelihood of significant differences between those in formal sector employment, those reliant on the informal sector and those dependent on agriculture;
- ◇ the **characteristics of the package** - the benefits covered, the restrictions, limits and exclusions, the quality of care expected under health insurance;
- ◇ the **price of the package and its relation to other options** (including private medical insurance and payment on presentation) - the level of user fees will provide the crucial incentive to insure;
- ◇ **institutional factors**, such as whether or not the scheme is compulsory for those in formal sector employment, whether membership of an existing medical aid scheme is an alternative, whether those choosing to insure themselves must also include their dependants and so on;
- ◇ and, importantly, **attitudinal factors** such as the perceived likelihood of illness, the willingness to 'risk-share', and the degree of trust that a system will deliver its promises.

This section, firstly, presents the results of the three studies carried out by the consultants, secondly, integrates these with information on population and employment already discussed in Section 1.2 to provide estimates of the range of demand.

3.2.1 Income and Current Medical Expenditure

This section outlines the results of the first survey carried out for this project, dealing with utilisation of health services and with household incomes. 323 households were interviewed in two urban and two rural areas. The sample was drawn from records of individuals charged for services at hospitals and clinics during the previous six months. Records were grouped by address, and the sample drawn from three locations within each area to reflect different socio-economic characteristics. Interviewers were instructed to call back three times to locate the person named.

A key objective of the study was to explore the impact of medical fees on the households in order to assess the adequacy of current exemption arrangements. The sample is not, therefore, representative of the population as a whole. The questionnaire used and additional tables are shown in Appendix 5a and 5b. The questionnaire was designed to obtain comprehensive information about households' income, outgoings and usage of health facilities.

Some difficulty was experienced however with the questions relating to income. Problems encountered included suspicion from some households that the interviewer was trying to collect debts owing to the hospital, which led to under-reporting of income. Ignorance on the respondents' part about income earned by other members of the family, especially the husband was another problem. While households giving no information about income were removed from the sample before analysis, there may be an element of under-reporting.

(i) Household characteristics

221/233 respondents were spouses in a marriage with only one wife, 13 were from polygamous marriages and 46 were female-headed households. 99% of households had at least one child under 5 and 94% at least one child in the 5-12 age group. Average household size was 7, with 48% having 5 or less members and 22% 9 or more.



(ii) Income levels and sources

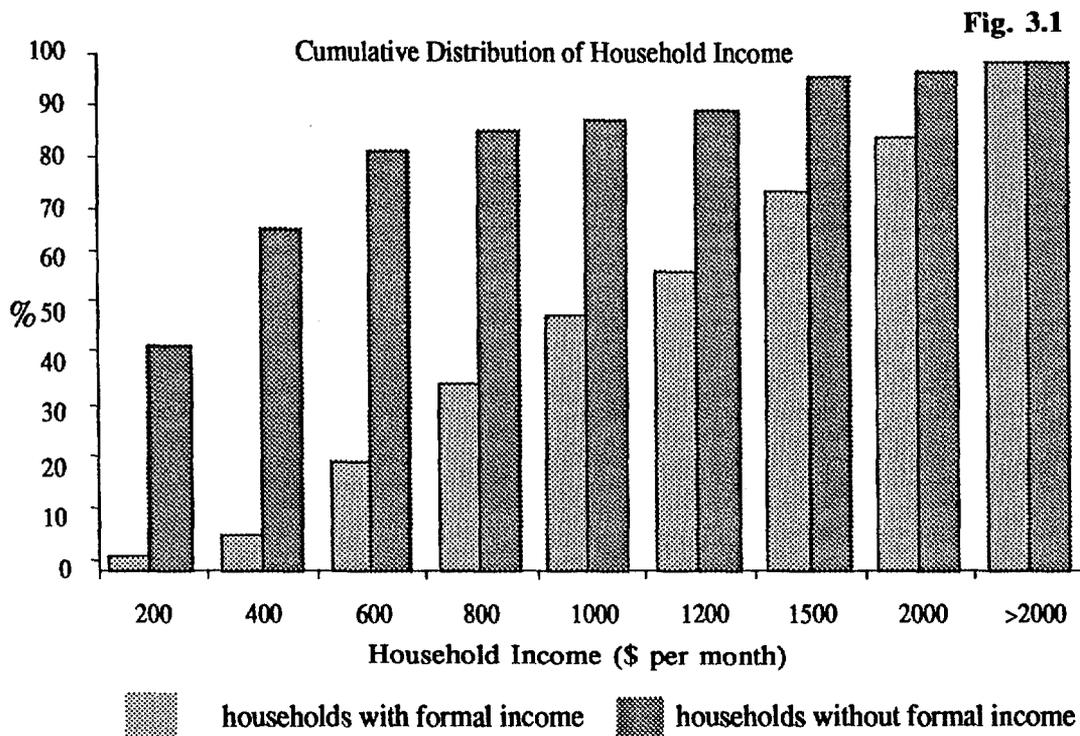
Average cash income, from all sources (formal, seasonal/temporary, informal which included a variety of household enterprises, farm sales and remittances) in sampled households was Z\$946 per month, the highest average income being in Gweru at Z\$1256 and the lowest in Gokwe at Z\$494.¹¹ The main sources of income were as follows:

- ◇ **Formal sector employment:** Three-quarters of urban households and just over half of rural households had some formal sector income. Overall 65% of income was estimated to come from formal sector employment, with the relative importance of formal sector income highest in Chirumanzu and Masvingo;
- ◇ **Informal sector employment:** 27% of households earned from informal sources such as vending and carpentry, and 46% from other sources such as handicrafts, sale of firewood and brewed beer. Overall these sources contributed about 27% of income;
- ◇ **Farm sales:** 10% of households derived income from sales of farm produce, the highest in Chirumanzu at 23%. Largely because of the drought, the proportion of income was much lower at 3%;
- ◇ **Remittances:** 13% of households received significant remittances from absent family members, which again contributed about 3% of total income.

(iii) Income distribution

Of the 323 households sampled, 5% (15) reported no income and a further 24% below Z\$400 per month. Median income was approximately Z\$735 with 19% having incomes over Z\$1500. There were significant differences between the four areas surveyed, Gweru showing the most prosperous profile and Gokwe the poorest. Chirumanzu showed an uneven distribution, with 38% having an income below Z\$400, while 48% had incomes above Z\$1000. Major differences were apparent between those households with and without income from formal employment. The graph below shows the percentage of households from each group with incomes below the top of each band.

¹¹For interest, average cash income from the 1990/1 ICES Survey expressed in mid-1996 prices would be \$1 372/month overall, \$606 in rural areas and \$2 725 in urban areas.



Amongst those households with formal employment income, only 7% reported total incomes below Z\$400 per month, with about half having incomes below Z\$1000. Amongst households without formal sector incomes, i.e. those reliant on informal earnings, farm sales and/or remittances, 66% reported incomes below Z\$400 a month, and almost 90% below Z\$1000 a month.

In about 45% of households, average income per head (total household income divided by number of household members) was below \$100.

Average household income per head **Table 3.16**

\$ per head per month	No of Households	% of Households
0	19	5.9%
1-50	62	19.0%
51-100	64	19.0%
101-200	72	22.3%
201-400	71	22.0%
401-800	29	9.0%
801-1000	1	0.3%
1001-1500	3	0.9%
1501+	2	0.6%
	323	100.0%



(iv) Use of Facilities

203 respondents (63%) had been ill and sought care during the previous six months. 218 illnesses involving health care were also reported amongst respondents' families, although as it was not possible to interview all family members this figure is almost certainly an underestimate.

536 visits were made to health institutions for curative purposes:

- 203 to clinics;
- 125 to district hospitals, 70 to provincial hospitals and 79 to mission hospitals;
- 47 to private doctors/dispensaries and 2 to private hospitals;
- 7 to traditional healers and 3 to faith healers.

Some visited more than one facility. Included in the above are 95 admissions, 89 to hospital and a further 6 to a clinic.

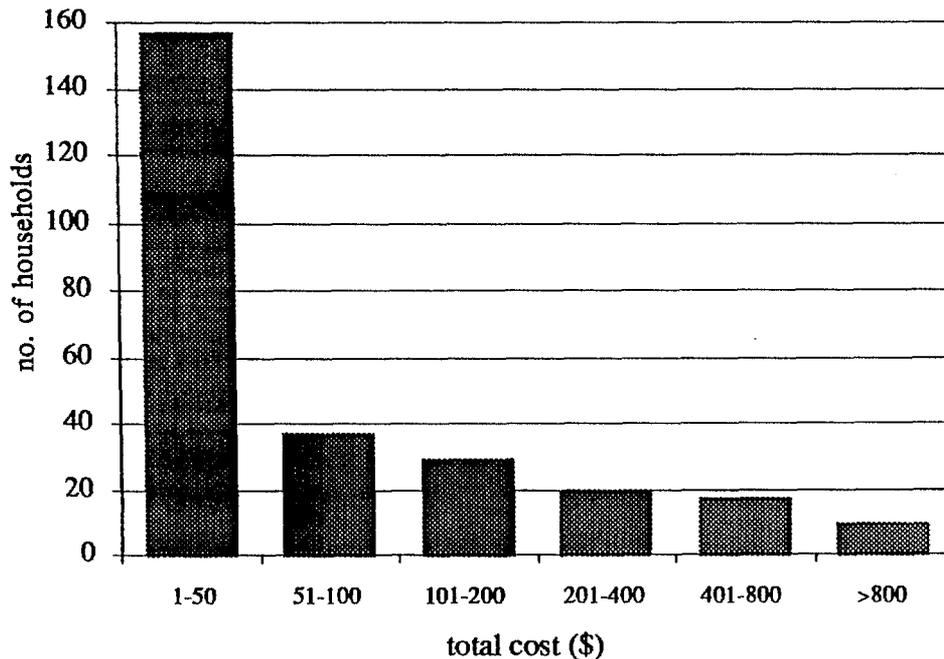
128 women had been pregnant during the period covered by the questions in the study and 124 of these had received ante-natal care. Of the 123 deliveries, 113 were at clinic or hospital and 10 at home (8 of these assisted by a midwife).

(v) Costs of health care

271 households reported paying for health care, at clinic or hospital level, and the remaining 52 were unable to recall whether their health care had been paid for or not, the majority of these being married women. The total costs incurred, including consultation/admission costs and the costs of drugs, lab tests and X rays, was distributed as shown below.

Total costs of health care per household

Fig. 3.2



Consultation and admission costs

Charges paid per consultation, at clinics, private doctors and hospital out-patients, excluding ANC visits, were as follows.

\$1-20	184	(80%)
\$21-40	26	(11%)
\$41-100	18	(8%)
\$101 +	3	(1%)
all paying consultation fees	231	(100%)

Charges paid per day for admissions were as follows.

\$1-60	31	(53%)
\$61-80	20	(35%)
\$80 +	7	(12%)
all paying	58	(100%)

The remainder were unable to recall the exact amount paid.

Other costs

6 people paid for X-rays (2 at \$20 - \$40, 2 at \$41 - \$80 and 2 at more than \$80)
 49 people paid for ambulances (19 below \$20, 23 \$21 - \$50 and 7 more than \$50). 3 did not pay and 2 owe.
 7 people paid for lab tests (2 below \$50, 5 at \$51 - \$100)
 114 people paid separately for medication (14 up to \$20, 24 at \$21 - \$50, 22 at \$51 - \$100 and 19 at more than \$101). 32 received drugs, the costs of which were included in the consultation costs. 3 could not afford to pay and ultimately got them free.

The traditional sector

8 women were delivered by traditional midwives, 4 of whom paid in kind, 2 paid less than \$50 and 2 paid between \$50 and \$100. Although only 10 people volunteered that they had sought care at a traditional or faith healer in connection with the illness under discussion, specific questioning showed that 56 visits in total had been made to traditional/faith healers, of whom 22 were not required to pay, 5 paid in kind and 29 paid cash in amounts ranging from \$20 - \$300.

(vi) The impact of paying for health care

An objective of this survey was to assess the adequacy of the current exemption limit, investigating the impact of fees at different income levels and exploring whether a clear threshold emerged between those who experienced severe difficulty in paying and those who were able to cope relatively easily. Four aspects were explored.

Means of payment

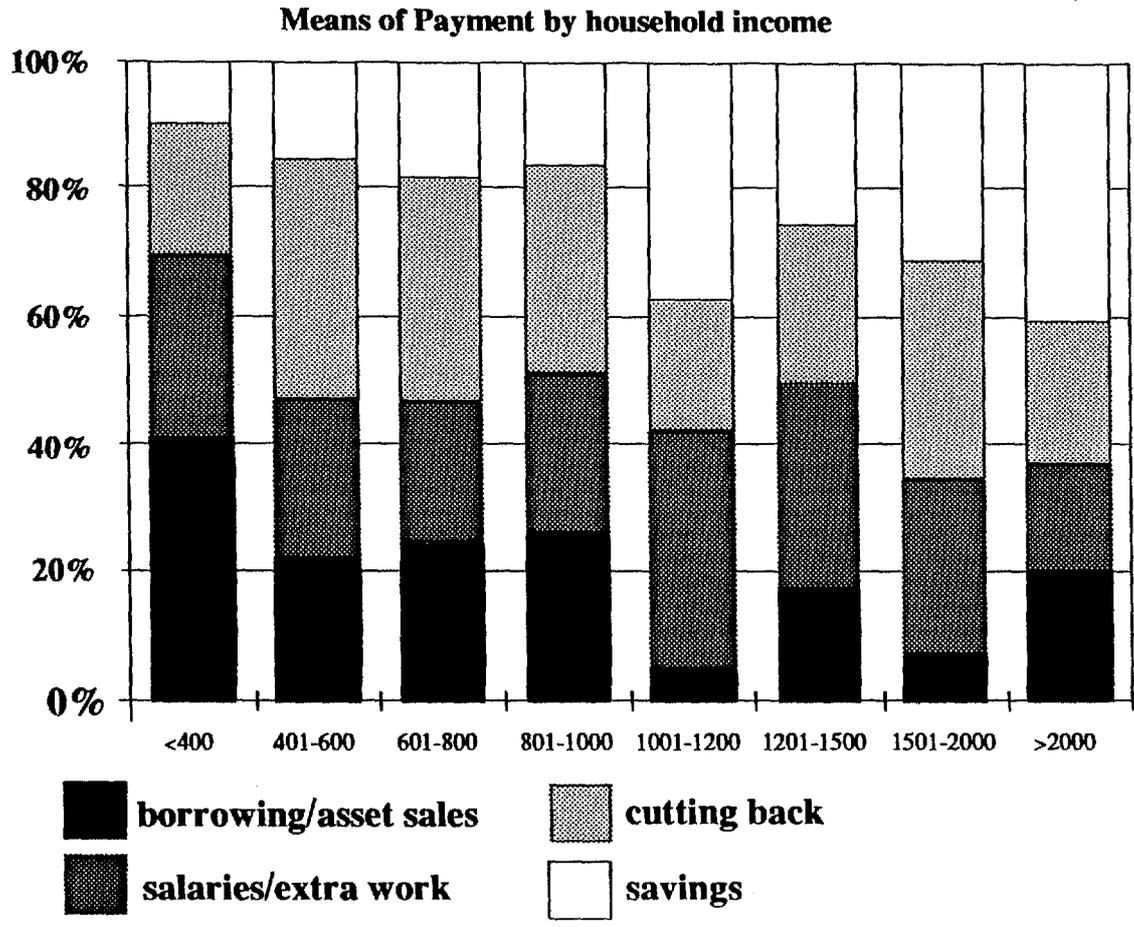
The means of paying for health care were many and varied, ranging from:

- ◇ payment from salaries to drawing on savings;
- ◇ borrowing from relatives and friends;
- ◇ undertaking extra work;
- ◇ sale of assets;
- ◇ cutting back on other expenditure.

Cutting back expenditure on food, school fees, farm or business inputs or other household expenses was the most common means of financing health care. Those with an income

above Z\$1 000 were more likely to be able to draw from savings while those with an income below Z\$400 were more likely to borrow.

Fig. 3.3



Difficulty of payment

Approximately half of those paying for health care found it "very difficult" to do so, with proportions ranging from 77% of those earning less than \$400, to approximately a third of those earning above Z\$1 000.

Date of booking for ante-natal care

The relationship between income and date of booking for ante-natal care, for those women who were required to pay for ante-natal care, was examined to see whether women from poorer households were delaying booking whilst saving the fee. Because of the relatively small numbers in each group, no clear relationship was apparent.

Inability to afford health care

Of the 323 respondents, 96 indicated that at some time they had been unable to seek health care because they could not afford the fees. Only for those with incomes above \$2 000 did the proportion fall significantly.

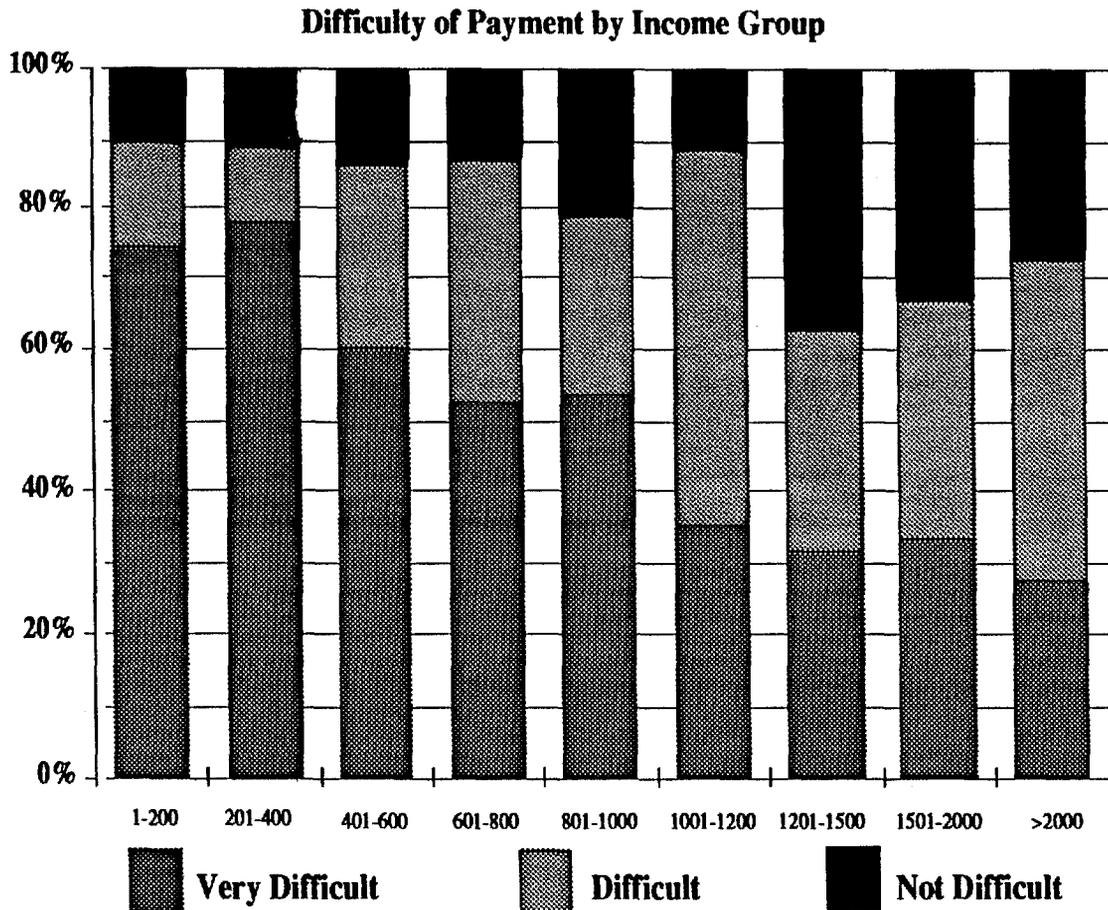
Income and means of payment for health care

Although many households at all income levels experienced difficulty in coping with health fees, the results suggest that the current exemption threshold of \$400 is too low. Less than



half of households with incomes between \$400 and \$1 000 were able to pay for health care costs from savings or salaries, and cutting back on school fees or other expenditure, together with borrowing, were the main means of payment. This suggests that the threshold for exemption should be raised to a level between \$400 and \$1 000 a month.

Fig. 3.4



3.2.2 Attitudes Towards Insurance and User Fees

People's attitudes towards insurance, ability to assess risks and take action, willingness and ability to plan for the future, reactions and attitudes to "tempting fate", attitudes to free health care and analogies between attitudes to burial societies and health insurance were investigated through 27 Focus Group discussions which involved approximately 216 people. These were held in the four study areas: two urban and two rural. Thus rural and urban people were equally involved in discussing the same topics, the results of which are discussed below. The topic guide is shown in Appendix 5c.

(i) Insurance and planning for the future

What is "valued" within a culture is provided in ways which could be described as an "insurance for the future". For example, cultural patterns such as "chipanda" (twined relationship) through which the marriage of a son (brother) is assured of access to and use of the "roora" (bride wealth), accruing to the family on the marriage of a daughter (sister), for his own marriage.

The key issue in the above example is the paramount societal value of the "perpetuation of the life of the group", made possible through marriage and procreation. Education has acquired a similar value within the society, seen as providing job security, the means to

RPMS
acquire "roora" and insurance against poverty in old age. Good health, or freedom from illness has not acquired the same value, making it difficult to envisage insuring against ill health.

The practical reality is that people can only save from surplus resources. Currently people are battling to satisfy basic needs, and such shortage of resources militates against a willingness to insure oneself against future risk.

In focus group discussions with villagers, 15 out of 27 groups indicated that they would not pay into a school "insurance" fund created to save against future possible damage to the school, for the following reasons:

- ◇ a lack of surplus resources;
- ◇ a preference to pay when the damage occurred;
- ◇ such funds invite theft and abuse.

Those who were interested in the idea made the following conditions:

- ◇ the amount must be small, preferably payable once a year;
- ◇ there must be clear accountability;
- ◇ the greater the possibility of damage, the more likely they would be to pay.

These comments are equally relevant to the idea of establishing a social health insurance fund.

(ii) The ability to assess risk and trade-offs between future risk and sacrifice

The focus group discussions indicated that attitudes to planning for the future or to insurance, differed markedly between:

- ◇ **urban and rural people** with the latter being less prepared to plan for or insure against future risk;
- ◇ **people at different income levels**, poorer people being less willing to put money aside for any possible future need, preferring to pay when needed;
- ◇ **men and women**, the latter being more aware and more concerned about possible future difficulties, but with less capacity to act unless the woman has her own income, as major financial decisions are generally made by the bread-winner.

In 18 out of 27 groups there was a consensus that paying a small amount into a medical fund to avoid large costs later, was a good idea. Most, however, indicated that this was not realistic given their dwindling resources. The majority, 22 out of 27, also articulated a disbelief that a regular payment would alter the current poor health service delivery.

(iii) Free health care

At Independence a belief was engendered in the people that they all had a right to free health care, and that the Government should be responsible for the delivery of these services.

At the same time it was interesting to hear that some of the groups noted that there was no such thing as "free medicine" - "somebody pays" was the comment. In addition, culturally, "free packages" are shunned, the people claiming that:

- ◇ no-one is ever satisfied with a free package;
- ◇ free health services are more likely to be abused;

- ◇ free health care is associated with low quality health service.

This attitude to free packages has been exacerbated to some degree by the deteriorating quality of the current health service, which the people themselves feel is the result of not paying anything.

In addition, being the recipient of free health care is regarded by many, as a stigma, an indication of poverty - a status that they do not want and which they constantly strive to rise above.

People expressed a willingness to pay for good health care delivery and indeed are currently by-passing primary and secondary level government delivery to go to private doctors. Many people also go to traditional "n'gangas" where, according to the groups people pay up to Z\$1500 (the price of an ox) for their services.

The discussions made clear that the rural people want their access to good health care to equal those in urban areas, and that they would prefer local decision-making and management of health facilities.

Professional medical personnel were interviewed within the Provincial Medical Directorate in Masvingo and Gweru, and at two provincial hospitals, two district hospitals and 3 clinics. A view widely expressed by these people was that little change would occur without the full support and active involvement of the politicians in "selling" these changes to the people. They also highlighted existing abuse of the system for exempting those earning below \$400:

- ◇ the introduction of free health services for all presenting at rural clinic level resulted in urban people, including teachers and businessmen, presenting at rural clinics for treatment; particularly serious when entry into the referral system at primary level as a non-paying patient ensures free health care to tertiary level, should it be necessary;
- ◇ the abrupt cut off point at Z\$400 for free health care and the lack of "scaled payment" replaced by proportionately fairly large flat rates for services at primary and secondary levels for those earning more than Z\$401, has created economic hardship and driven health care seekers "to find a way around the fee-paying system";
- ◇ the current economic environment has also encouraged those in authority to accept favours or money in exchange for exemption letters.

Despite the dislike of free health, many people are going out of their way to get free health care, primarily because they don't see why only some people (rural and exempt groups) should get it free. Abuse of the system by some has led to more and more abuse, resulting in an increased burden on the system.

At both primary and secondary levels there is a lack of capacity and incentive to screen people in regard to their ability to pay for health services:

- ◇ at primary level it has enabled many people who could afford to pay receiving free health care;
- ◇ at secondary level it has resulted in some people who earn less than Z\$400 having to pay while others earning more than Z\$401 have received free health services;
- ◇ In the urban areas an increasing number of people present at the hospital at night, knowing that the reduced staff numbers makes it less possible for them to screen in-coming patients adequately;

- ◇ Nurses find it hard to refuse treatment to people, consequently those who cannot justify their claims for exemption, are nevertheless treated and told to come back with their exemption letters next time;
- ◇ People who present at secondary level in an emergency are admitted and invoiced on discharge; many cannot pay and leave owing the hospital. Very little of this money is ever recovered (two-thirds of monies invoiced in the Midlands and Masvingo hospitals is owed) due to a lack of a mechanism to do so and the difficulties experienced in tracing people at fraudulent or changed addresses;
- ◇ There is no ability to identify those people making an adequate living outside the formal sector.

3.2.3 Willingness and Ability to Participate in the Social Health Insurance Scheme

(i) Study design

This section summarises the results of a survey of 277 individuals, carried out in the same areas as the first field study, namely in Masvingo, Chirumanzu, Gweru and Gokwe. Respondents in rural areas were drawn from those households sampled in the earlier survey, while those in urban areas were drawn from municipal housing waiting lists because this offered a reliable source of income data.

Clinic level

Respondents were presented with a scenario of possible health service costs at primary level (\$3 for consultation, \$6 for drugs). The implications for that household of the questionnaire were outlined. For example, a family with 3 children was faced with a likely annual cost of \$231, representing the cost of 3 episodes of diarrhoea for each child, one episode of pneumonia and one case of adult hypertension. Average respondents were then asked whether they would prefer:

- ◇ to pay on presentation;
- ◇ to pre-pay, using an individual health savings scheme. This option was included because of the generally negative attitude to risk-sharing emerging from the focus group discussions;
- ◇ to join a Social Health Insurance Scheme, with a tariff structure varying from \$96 per annum for a family with one child to \$150 with 5 children, that is \$21-\$32 a head;¹²
- ◇ not to use the service.

To investigate the sensitivity to the cost of SHI, respondents who were interested in SHI but could not afford it were questioned about a lower tariff. Conversely those who were positive about SHI were asked whether they would prefer to pay more for a higher quality of care (e.g. a doctor regularly visiting the clinic).

Hospital level

The exercise was then repeated for hospital level care. Here, the cost scenario was based on \$25 for an out-patient visit, \$25 for an X-ray, \$150 for an operation and \$100 per day for in-patient treatment. As before, the cost implications for that household were explained and

¹²This was based on the costs outlined in the previous section, assuming some degree of Government subsidy.

the same four options presented and tested for sensitivity to price. The SHI contribution ranged from \$150 with 1 child to \$220 with 5 children, that is \$31 - \$50 per head.

The questionnaire used, including the scenarios presented, appears in Appendix 5d.

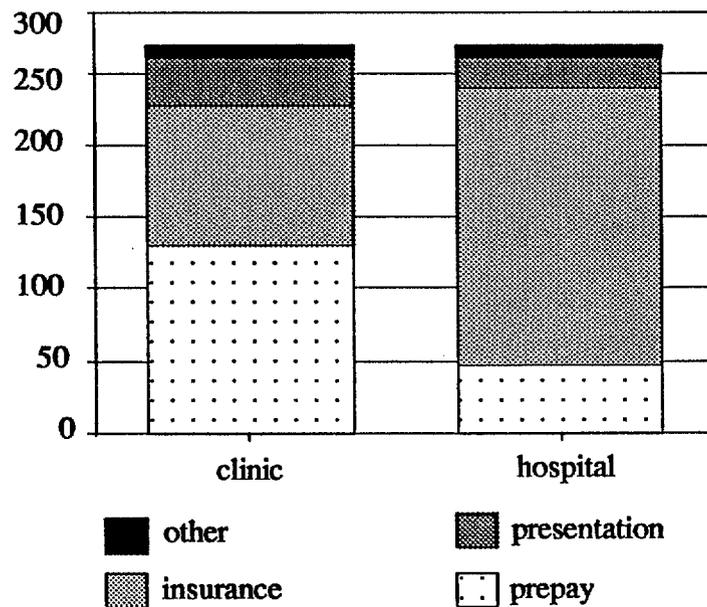
(ii) Preferences

The findings in the initial survey, such as a reluctance to save for health care, to risk share or to entrust their money to others to administer were once again articulated by the respondents at the start of the interviews. The knowledge that everyone would have to pay for health care in the future, however, and the presentation of actual costs for services linked to possible family health costs for a year, motivated people to consider the options more seriously.

Men, particularly those employed or self employed, were more easily able to respond to the option of paying into a Social Health Insurance. Many wives, whose husbands were within the house, deferred the question to their husbands. This is clearly linked to the question both of income and familial authority.

On the other hand many women, particularly rural women, chose to prepay, indicating that they could save for themselves and their children and use the money when needed, without having to wait for the permission of their husbands.

Preferences at clinic and hospital level **Fig. 3.5**



At clinic level, 48% opted to prepay, 38% to insure and 11% to pay on presentation. At hospital level, the pattern was quite different with 70% opting to insure, 18% to prepay, and 8% to pay on presentation. The following table summarises the results for different groups. A full table of results (including the numbers choosing different options) appear in Appendix 5e.

Summary of preferences for different groups

Table 3.17

	Clinic Level % choosing		Hospital Level % choosing	
	prepayment	insurance	prepayment	insurance
residence				
rural	42	41	17	70
urban	55	33	19	71
sector				
formal	45	42	18	71
informal	58	24	17	66
income				
<400	61	30	17	74
400 - 1 000	52	32	23	63
>1 000	38	49	13	77
education				
primary	45	33	19	66
secondary	50	38	16	74
tertiary	34	58	11	84

There was relatively little difference between rural and urban groups, the majority of both choosing prepayment at clinic level and insurance at hospital level. Surprisingly, rather more rural than urban people chose to insure at clinic level. This reflects the inclusion of some relatively wealthy farmers, who could fairly readily contemplate a substantial lump sum payment after harvest by contrast with many urban people whose incomes were less predictable as well as lower. There was little difference between the two groups at hospital level.

Similarly most respondents in both formal and informal sectors chose prepayment at clinic level and insurance at hospital level, although fewer informal sector respondents chose insurance as an option at both clinic and hospital levels.

Those in higher income groups were more likely to choose insurance at both levels. In fact 49%, of those earning over \$1 000 chose this option at clinic level compared with 38% choosing prepayment.

Similarly those with higher levels of education were more likely to favour insurance. Amongst the relatively small group with tertiary education, 58% chose to insure at clinic level compared with 34% choosing to prepay.

The reasons for the choice of specific options are discussed in some detail as they have implications for the design of a Health Insurance scheme.

(iii) Prepaying for health service costs

It was interesting to find that the cost factor was not the primary motivating factor for the people's choice of this option. Rather they were concerned about having the freedom to respond (not being compelled to do so), or being able to use their books/stamps to cover other relatives or even friends. Frequently mentioned was a distrust of a centralised fund or anybody else having access to their money. Of those who opted to prepay:

- ◇ 62/133 (47%) at clinic level and 22/49 (45%) at hospital level felt that this gave them greater flexibility to pay or buy stamps whenever they had the money to do so;
- ◇ at clinic level 19/133 (14%) felt it would be possible to utilise their books/stamps to cover the medical expenses of extended family members if necessary. This was a

particular concern in rural areas. At hospital level, however, this was of concern to only one respondent;

- ◇ 9 (7%) at clinic level and 16 (12%) at hospital level, felt that prepaying was their only possibility for assisting them to meet health costs. These were mostly people with low and/or irregular incomes;
- ◇ 23 (17%) of respondents at clinic level and 15 (31%) at hospital level did not wish to "risk share", feeling that prepaying allowed them to control their own money and see how much they had saved. Prepaying offered the respondents security and the assurance that their money had not been abused by others;
- ◇ 15 (11%) of those who chose prepaying at clinic level, and 2 (4%) at hospital level, did so because if they did not get sick in any one year the money could still be utilised the following year; they would not lose the benefit of their money to someone else. It was also felt that this system would allow them more geographical mobility.

(iv) Social Health Insurance

38% (104/277) of all respondents chose to pay into a Social Health Insurance scheme at clinic level, while at hospital level 194 respondents (70%) opted to pay into a SHI. Almost all these respondents saw the monthly/annual amount to be paid as small/reasonable in comparison to the large possible costs presented to them. Of the 104, 3 people chose to pay into the SHI scheme at an increased rate in order to obtain more health benefits while 2 agreed to be part of the scheme only if the rate was reduced to a more affordable amount.

Of those opting for insurance:

- ◇ 50 (48%) at clinic level and 96 (50%) were willing and felt able to pay on a regular basis to avoid paying a larger amount at any one time. 21% of these at clinic level and 23% of those at hospital level wished to pay into the SHI once a year rather than once a month. These were predominantly farmers, most from Gokwe;
- ◇ In contrast to the prepaying group who did not want to risk-share, 17% and 14% at clinic and hospital levels respectively, saw SHI as a means to obtain a greater share of health services for their families through "risk sharing";
- ◇ A small number, 5 (5%) at primary level and 14 (7%) at hospital level chose SHI because they felt it would offer them better services if they were paying i.e. more drugs, the chance to see a doctor and better nursing care;
- ◇ 6% of those who chose SHI at both clinic and hospital levels were already on Medical Aid and indicated they would be willing to change to the SHI, because it would be cheaper.

(v) Paying on presentation at health facilities

This option was predominantly chosen by people who had a low or irregular income. Many of these were women. 11% and 8% respectively of the total sample chose to pay on presentation at clinics or admittance to hospital. Of those opting to pay on presentation:

- ◇ Nine people (30%) of respondents who chose this option at clinic level, and 7 (30%) of those at hospital level, cited their meagre and irregular income as the primary reason for their choice;
- ◇ Of those who opted to pay on presentation (30%) at clinic level and 4 (17%) at hospital level, had irregular or small incomes, and were unwilling to "risk share". Many felt that the likelihood of getting ill was small, and they could cope therefore

with the situation through their own meagre resources or through borrowing from relatives;

- ◊ A further 8 people (27%) at clinic level and 12 (52%) at hospital level wished to bank their money and earn interest, and withdraw their money to pay for health care when they needed it;
- ◊ At clinic level, 2 people felt this option allowed them to choose whether to go to government or private doctors, or to go to a traditional healer.

(vi) Other options

Only 10 respondents at clinic level, and 11 at hospital level, felt unable to choose any of the options for paying for health services. Half of these felt they preferred to go to a traditional/faith healer, while the others claimed to have no money and were already being assisted by Social Welfare.

(vii) Preference for paying into a local or centralised fund

Respondents were asked whether they would prefer to pay into a local fund, or into a fund centralised in Harare, and to give reasons for this preference.

63% (165) of respondents chose to pay into a local fund in preference to a centralised fund in Harare. Of these:

- ◊ 13% did so solely on the grounds of "more corruption" at the other level;
- ◊ 43% cited more control/accountability and accessibility as their reasons;
- ◊ a further 43% of those who opted for local control stressed the additional benefits that would accrue to them in terms of facilities, drugs and services;
- ◊ one person felt that local control would give an easier and quicker response to health needs.

55 (21%) opted for centralised control, of whom:

- ◊ 40% felt that there would be less corruption at this level;
- ◊ better management was cited by 28%;
- ◊ 22% felt this would offer the possibility for greater mobility.

Of significance is the fact that 50 people (19%) did not choose either level of administration, the majority expressing distrust or a reluctance to place their money into a fund at either level while the rest felt a lack of capacity to decide such an issue.

3.2.4 Demand for the packages: conclusions

The surveys have shown considerable potential for a Social Health Insurance scheme:

- ◊ substantial amounts are currently being spent on medical care, even by those in low income groups;
- ◊ there is a general feeling that health care 'should be' paid for provided that the resources are available to do so;

- ◇ despite negative comments about the principles of insurance in general discussions, when faced with specific information about the substantial financial risks likely to be incurred without insurance, a majority of people said they would (and could) subscribe to SHI at hospital level, and a substantial minority at clinic level;
- ◇ the general preference for SHI at hospital level but not at clinic level was evident for all groups, although the better paid and better educated groups were more likely to choose insurance at both levels.

To realise this potential, however, the following factors are crucial to the design of the SHI scheme:

- ◇ absolute transparency and accountability in management and administration;
- ◇ clear explanations, high-profile commitment to improved health services, widespread consultation;
- ◇ a high degree of local ownership;
- ◇ the ability to deliver real improvements in the quality of health services;
- ◇ user fees which provide the right incentives;
- ◇ respect for people's desire for flexibility and mobility.



4. CONCLUSIONS

This section combines the results from testing demand with estimates of the population in different categories to produce indicative estimates of the potential revenue from each package under different assumptions. It then discusses some key issues and presents the recommended option.

4.1 Potential uptake and revenue from each package - flat rate contributions

The table on the following page combines assumptions about income distribution with the survey evidence to produce estimates of revenue under the two packages. Two alternative exemption levels are considered: firstly, the existing level of \$400 per household per month, secondly, \$1000 which represents the highest level likely to be feasible. (In fact, a threshold between these two points is recommended).

The assumptions about income distribution are highly stylised. As pointed out in Section 1.2.1, there is no current information on income distribution and no source which provides estimates for the formal and informal sector separately. Although the income and medical expenditure survey undertaken for this study collected extensive information on household income for different groups, the sample was drawn from those who were paying fees for health services and by design therefore will under-represent those in the lower income groups. It does not therefore present a suitable basis for extrapolation.

The estimates used are based on:

- ◇ the overall, and urban/rural income distribution from IMS, adjusted for the decline in real earnings since 1993;
- ◇ estimates of the population in formal and informal sectors derived as outlined in section 1.2.1;
- ◇ assumptions regarding the relationships between formal and informal sector incomes.

The steps are outlined in detail in Appendix 3. These estimates are plausible and consistent with the available data, but are indicative rather than precise. They are crucial to the results of the analysis and should be re-examined as soon as new evidence (from the Poverty Alleviation Study and from the new Income and Expenditure Survey) becomes available.

In estimating the numbers who would join, it is assumed that membership of SHI or an existing Medical Aid scheme will be compulsory for those in the formal sector with incomes above the threshold and for their immediate dependants. It is assumed that 90% of those within the formal sector who are newly insured will take out SHI rather than join a private scheme. However no switching from private Medical Aid is assumed.

Two subscription levels are used. For the primary package these are the estimated full costs of \$45 p.c. per annum and a subsidised rate of \$30. For the hospital package they are the estimated full costs of \$147 p.c. and a subsidised rate of \$50 which broadly equates to the costs of curative health care at district hospital level exclusive of capital costs. In each case the lower of these was used in the Willingness to Pay Survey.¹³

¹³Ideally, support for SHI across a wide range of prices (and corresponding user fee levels) should have been tested, but the questionnaire was already complex to administer and explain, and if a wide range of costs had been presented at the same time, the response would probably have been biased towards the lowest.

Indicative estimates of revenue to the SHI packages

Table 4.1

Income distribution assumptions \$ per household per month	households (thousands)			population (thousands)		
	formal	informal	all	formal	informal	all
<400	264	1 143	1 407	1 241	5 574	6 816
400 - 1 000	240	329	569	1 128	1 605	2 733
1 000+	384	102	486	1 806	497	2 303
all	888	1 574	2 462	4 175	7 676	11 852
of whom covered by Medical Aid	260			780		

Primary Package	households (thousands)			population (thousands)		
	formal	informal	all	formal	informal	all
with an exemption limit of \$400						
no's eligible (1)	364	431	795	1 712	2 102	3 814
no's choosing SHI (2)	328	103	431	1 540	504	2 045
revenue to SHI (\$m) at \$45 p.c.				\$69	\$23	\$92
revenue to SHI (\$m) at \$30 p.c.				\$46	\$15	\$61
with an exemption limit of \$1 000						
no's eligible (1)	124	102	226	583	497	1 081
no's choosing SHI (2)	112	24	136	525	119	644
revenue to SHI (\$m) at \$45 p.c.				\$24	\$5	\$29
revenue to SHI (\$m) at \$30 p.c.				\$16	\$4	\$19

Hospital Package	households (thousands)			population (thousands)		
	formal	informal	all	formal	informal	all
with an exemption limit of \$400						
no's eligible (1)	364	431	795	1 712	2 102	3 814
no's choosing SHI at \$50 p.c. (2)	328	284	612	1 540	1 387	2 928
revenue to SHI (\$m) at \$50 p.c.				\$77	\$69	\$146
no's choosing SHI at \$147 p.c.	328	142	470	1 540	694	2 234
revenue to SHI at \$147 p.c.				\$226	\$102	\$328
with an exemption limit of \$1 000						
no's eligible (1)	124	102	226	583	480	1 063
no's choosing SHI at \$50 p.c. (2)	112	67	179	525	328	853
revenue to SHI (\$m) at \$50 p.c.				\$26	\$16	\$43
no's choosing SHI at \$147 p.c.	112	33	145	525	161	688
revenue to SHI (\$m) at \$147 p.c.				\$77	\$24	\$101

Notes:

1. Numbers eligible = households within the relevant income bands, less those covered by Medical Aid - assumed for simplicity to be all households with a formal sector earner and household incomes over \$1 000 a month. Thus with an exemption limit of \$400 a month there are (240 + 384) households less 260 already covered = 364.
2. Numbers choosing SHI - within the formal sector compulsory insurance coverage for employees plus immediate dependants is assumed. It is further assumed that

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90% of those affected choose SHI rather than private medical aid. Choices for informal sector based on survey results for primary package, and for hospital package at \$50. At \$147, the demand for the hospital package from the informal sector is assumed to be half of that expressed in the survey.

For the primary package, a percentage uptake of 24% by the informal sector has been assumed for each subscription level. This is justified because the difference in price is relatively small, the survey results indicated relatively little price sensitivity and most interest from the informal sector was from those with higher incomes. For the hospital package, it has been assumed that demand from the informal sector would be halved at the higher rate - from 66% to 33%.

Based on these assumptions,

With an exemption limit of \$400 per household per month revenue of \$61-\$92 million would be generated from the primary scheme and \$146-\$328 million for the hospital package.

With an exemption limit of \$1000 per household per month revenue of \$19-\$29 million is predicted from the primary package and \$43-\$101 million from the hospital package.

Several points are relevant to both packages:

- ◇ the additional revenue is at most 24% of current health service spending and could be less than 2%;
- ◇ the revenue is more sensitive to assumptions about threshold levels than pricing or demand;
- ◇ most of the revenue will come from the formal sector, not only because it is possible to compel participation within the sector but also because if our assumptions about income distribution are correct there are far fewer households in the informal sector earning above the current threshold.

4.2 Potential revenue with percentage contributions

Analysis to this stage has been based on flat rate contributions, because such contributions can be directly linked to the cost of providing care. Most Social Health Insurance schemes however use a contribution rate based on earnings, at least within the formal sector, as this is the most equitable method.

Total earnings from employment (excluding employees on small farms and small businesses in rural areas) are estimated at \$18,286 million per annum. (Quarterly Digest of Statistics December 1995; data for quarter ending June 1995).

Employment and earnings, 2nd quarter 1995

Table 4.2

	employees no (000)	%	earnings \$m p.a.	av. per emp. \$ per month
private domestic	102.1	8.3%	190.80	155.7
*Agric, forestry, fishing	323.6	26.3%	1134.20	292.1
construction	70.3	5.7%	822.00	974.4
other	88.0	7.1%	1394.80	1320.8
public administration	77.7	6.3%	1286.40	1379.7
Mining and quarrying	59.3	4.8%	1052.40	1478.9
distribution, catering	99.7	8.1%	1940.00	1621.5
health	25.9	2.1%	558.00	1795.4
education	115.4	9.4%	2493.20	1800.4
manufacturing	186.8	15.2%	4104.40	1831.0
transport, communications	51.2	4.2%	1368.00	2226.6
electricity, water	9.6	0.8%	366.40	3180.6
Finance, insurance	22.5	1.8%	1575.60	5835.6
total	1232.1	100.0%	18286.20	1236.8

* employment and earnings in agriculture estimated from September 1994 data

Source: Quarterly Digest of Statistics, December 1995

If all employees contributed (including those with incomes below the current exemption limit and those already covered by Medical Aid) then a 2% contribution rate would bring in revenue of **\$366 million**, that is 2% of total earnings. This is substantially more than under any of the scenarios above, and is well above the amount which was estimated as necessary (Section 3.1.6) to cover the 'funding gap' at primary level. A contribution rate of approximately 1.2% would be required to cover the funding gap at primary level, and about 2.8% to cover the gap at primary and hospital levels combined.

Approximately 260,000 (21%) of the 1,232,000 employees however are already members of Medical Aid schemes. If we assume these account for 50% of employment income, and the majority prefer, (and are permitted), to remain with these schemes for the greater benefits offered, rather than join SHI, then the total employment income on which contributions for SHI is levied will be reduced to about \$9 100 million, that is, half of total earnings. In this case, the amount of revenue from a given percentage contribution will be halved.

At the other end of the earnings spectrum, if we assume, for illustrative purposes, that 90% of the employment income in private domestic service, 80% of income in agriculture, 50% in construction and 10% of income in all other sectors, accrues to those earning below the exemption limit, then the employment income on which contributions will be raised is reduced by a further \$3 000 million to about \$6 100 million. A 2% contribution from eligible employees not already covered by Medical Aid would therefore bring in only about **\$122 million**. A contribution rate of about 3.7% would be required to cover the primary care funding gap.

4.3 Assessment of the alternative packages

The prerequisites for Social Health Insurance, whether at hospital or at clinic level are:

- ◊ improved quality of service, especially in terms of drug availability and staff attitudes;
- ◊ a fee structure which will provide health service users with an incentive to insure, and which is rigorously implemented;

- ◊ very high standards of transparency, integrity and accountability to overcome the prevailing attitude of distrust and suspicion;
- ◊ fee retention and a higher degree of management autonomy at the appropriate levels.

Although the main terms of reference for the study related to a SHI scheme at primary level, and such a scheme has been costed and tested in detail, it is the consultants' view that a Social Health Insurance scheme operating primarily at this level would not meet the government's objectives of equity and efficiency. The main reason for this is that the poorest members of society, who are struggling to cover day-to-day needs, are unlikely to purchase SHI. If user fees for primary services were universal, and set at a level high enough to provide an incentive to insure, then these groups would effectively be denied access to such services. Furthermore, even amongst higher income groups and within the formal sector, less than half the people surveyed expressed interest in a SHI scheme at primary level, most households who were not deterred by the cost preferring the greater flexibility and control of paying on presentation or prepaying. This view is rational for where the probability of needing medical treatment is high, the premium will be similar to the actual outlay, and there is little welfare gain from insurance.

A hospital level scheme would be administratively simpler to operate, avoiding large numbers of small claims and making fewer demands on scarce managerial resources, and there is far more popular support for the concept of insurance at hospital level. Since hospital level treatment is already disproportionately enjoyed by the better off, and unlike primary care, offers few wider benefits to society, the effect of vigorous cost-recovery at this level will be less damaging. Savings from cost-recovery at higher levels can be directed to primary care.

It is therefore recommended that the Government moves towards introduction of a Social Health Insurance scheme at hospital level. This would serve to cover individuals against the cost of treatment at public hospitals when referred upwards. All hospital treatment would be paid for, in one of three ways:

- ◊ reimbursement from the Social Health Insurance, with contributions paid either by individuals themselves or (for those people who are exempted from payment because of low incomes) by the Government;
- ◊ reimbursement from private medical aid;
- ◊ payment of fees on presentation.

More detailed work on the costing of such a scheme and the precise benefits to be offered will need to be initiated, and the ability and willingness to pay retested in the light of the results.

The success or failure of a Social Health Insurance scheme directed mainly towards cover against hospital costs will not be directly affected by decisions regarding fees for primary level services, which are to an extent beyond the terms of reference for this study. In the light of the comments above, and the feedback obtained through the focus group discussions (Section 3.2) then, should cost recovery be desired at primary level, the recommended alternative to Social Health Insurance at this level of care is a **low universal fee for curative treatment**. This would have the advantage of providing users of the Health Services with a greater sense of ownership, and ending the current anomalies between urban and rural areas.

The high volume of usage of primary services would enable even a low fee to raise substantial amounts of revenue. The research undertaken for this study suggested that many health service users would be willing to pay fees in exchange for an improved quality of service, and experience elsewhere supports that this is frequently the case.

The universal reintroduction of fees at primary level, even low fees, would still carry the danger of impairing the access of the poorest to primary health care services and in particular the access of women and children. Because the research undertaken for this study was not comprehensive, and in particular did not reach the poorest groups, it is not possible to assess what effect reintroduction of fees at primary level would have. However, it should be possible to establish a level of fees which fulfils the requirement of providing users with a sense of ownership and value, whilst not significantly deterring usage. The administrative costs of collection would also need to be taken into consideration.

It is recommended that this is the subject of further investigation. No attempt should be made to recover fees from preventive services.

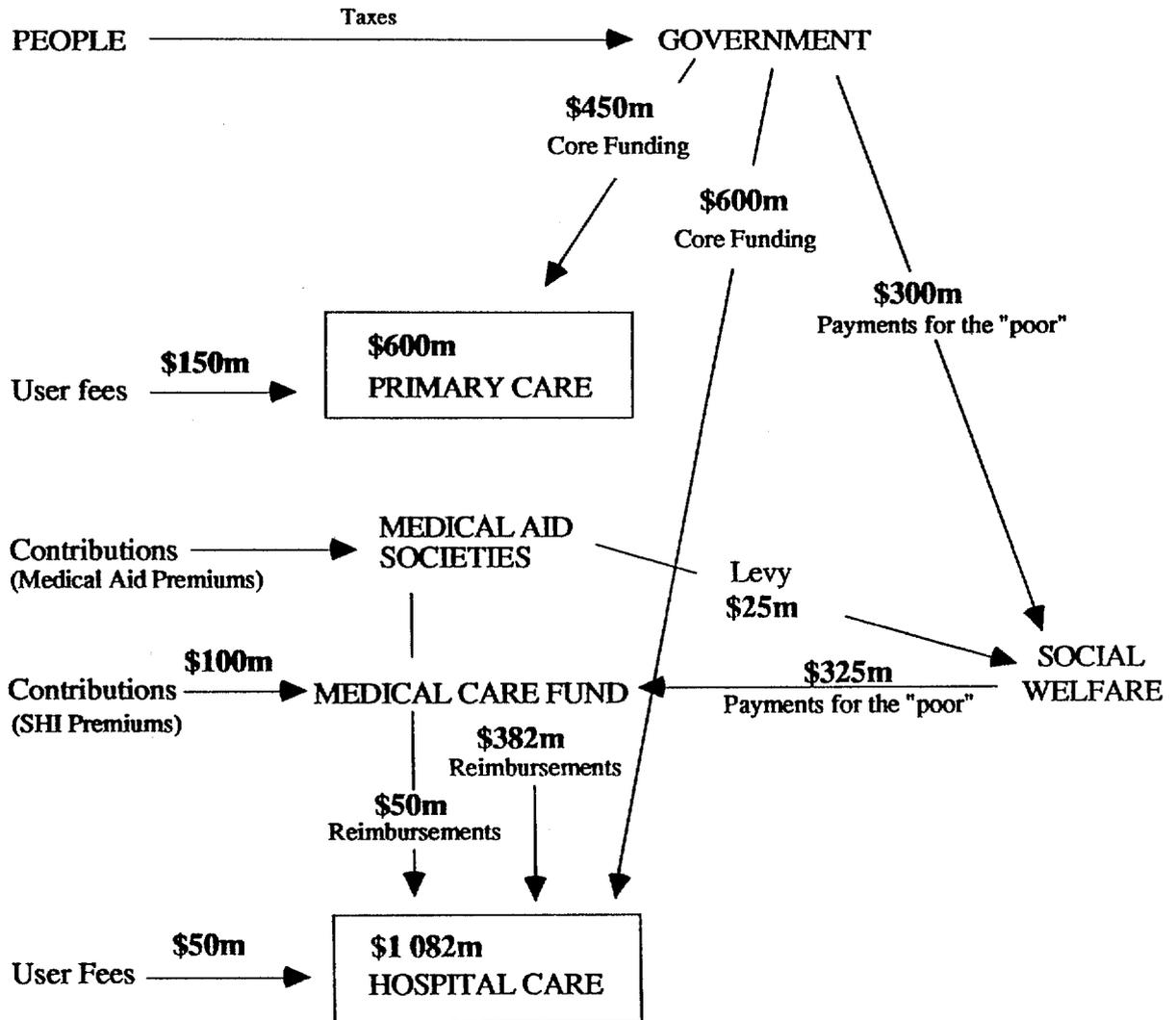
If it is decided to reintroduce universal fees for curative care at the primary level, then providing a mechanism for prepayment will allow individuals to spread the cost of treatment whilst retaining flexibility. This could be handled through individuals buying stamps, freely available at post offices and perhaps health care facilities and district offices. These would be accepted at all health care facilities and at pharmacies in exchange for prescribed drugs. The stamps themselves would be transferable, that is could be used to meet the costs of treatment for family members, extended family members or even friends. In the case of split families, the wife and children would hold their own card(s) thereby giving a degree of independence. Rather than paying interest on these "savings", the value of the stamps could be denominated in terms of primary care visits, thereby protecting the holder against increases in user fees. In addition, everyone should be issued with a "Health Card", which could take the form of a wallet containing the holder's (or family's) medical records (subject to confidentiality being preserved).

Membership of either a Social Health Insurance scheme covering hospital costs, or (subject to the discussion in 4.7 below) a Medical Aid scheme, should be compulsory for all formal sector employees above the agreed exemption limit and for their immediate (i.e. nuclear family) dependants. This will give the broadest financing base and widest risk pool. Within the informal sector, people should have the option of taking out SHI/Medical Aid unless their incomes fall below the agreed exemption threshold.

The indicative flow of funds under the recommended option is shown in the diagram on the following page. With total government spending approximately unchanged, higher (though not complete) cost recovery at hospital level coupled with universal fees at primary level, allows for total spending on primary care to be set close to the recommended level.

Indicative Flow of Funds Under Social Health Insurance

Fig. 4.1



Notes:

Population breakdown: 2m covered by SHI, 1.5m by Medical Aid, 1m pay fees to public health care facilities, 6.5m have SHI premiums paid for by Government, 0.9m are "outside the system" in that they receive employer provided care or pay privately on presentation.

Primary care: 10m people pay fees of \$6 for an average 2.5 visits per head = \$150m. Core funding from Government of \$450m brings this to \$600m - close to desired spend per head of \$65 p.c. = \$650m.

Social Health Insurance: 2m people pay an average of \$50 in contributions to Medical Care Fund = \$100m. Government funding for the poor of \$300m, supplemented by \$25m levy on Medical Aid, covers \$50 per head x 6.5m exempt patients = \$325m giving total revenue to Medical Care Fund of \$425m. 10% retained for administrative costs, \$382m reimbursed for hospital treatment.

Hospital care: Core funding of \$600m covers a little over half of expenditure. 1m people pay an average of \$50 in fees = \$50m. Reimbursements from private medical aid = \$50m and from SHI \$382m. Total hospital revenue = \$1 082m.

Total Government expenditure on health care: including that channelled through "Social Welfare" for the poor = \$1 350m (approximately the current level). Spending by local authorities, voluntary sector etc. assumed unchanged.

4.4 Exemption issues and threshold levels

The revenue estimates presented in Section 4.1 demonstrate the importance of decisions about exemption levels to the ability to raise finance, through either Social Health Insurance or user fees. Section 3.2 discussed some of the problems of exemption levels, in terms of real and perceived abuse, and also the inadequacies of screening mechanisms.

A detailed solution to the problems of exemption levels is outside the scope of this study. However, the following broad conclusions arise from the surveys and discussions undertaken in the course of the study:

- ◇ There are strong arguments that all should pay something towards health service costs, thus securing the widest ownership and the broadest financing base. Consequently (and subject to further research as discussed in Section 4.3) **it is recommended that free health services in rural areas be replaced by payment of modest fees across the country at primary level, with no exemptions;**
- ◇ If the general principle of moving towards fees reflecting the full economic costs of services above primary level is adopted, then the current exemption limit of \$400 per month (if it is taken to refer to household income), is set too low. Even with a subsidised SHI contribution rate of \$50 per person per annum, this would mean the average-sized household of 5 people with an income of \$401 would spend 5% of their income in order to protect themselves against unforeseen health care costs. Paying the user fees for an extended period in hospital would be beyond the means of such a household. Our survey suggested that households with incomes above \$1 000 were able to cope significantly better with health care costs. Setting the exemption threshold at this level however would effectively exclude about 80% of households from contributing towards health care costs above primary level. **Further examination, leading to a threshold set between \$400 and \$1000 per household per month, is recommended;**
- ◇ The practice of screening at the point of health care delivery, by clerks who normally have no training in this field, does not lead to an equitable system. It places significant strains on health personnel faced with the decision of whether to turn away sick people who claim they cannot pay. **It is recommended that screening should be done in advance, by a properly resourced organisation independent of the health services.** Users would be informed in advance that 'those not certified as exempt' would be charged the full fees on presentation. Screening could be done by a mobile team, within communities, over a 6-12 month period. Those granted exemption would then be given a Social Health Insurance card funded by Government. The Social Health organisation would be reimbursed by Government for the contributions of persons exempted, and when they received treatment their fees would be reimbursed to the facility concerned in the normal manner;
- ◇ Screening should take into account **household size and needs** as well as income - an income of \$400 for a one-person household is a very different matter from the same income for a family of six;
- ◇ **Penalties for giving false information** should be introduced;
- ◇ To make the exemption system operate more effectively, **screening should cover access to all government social programmes**, whilst taking care not to introduce very high rates of marginal taxation to those with incomes just above the threshold.
- ◇ To reduce the incentives to abuse, consideration should be given to a **sliding scale of payment** rather than an all-or-nothing system. For example, it might be decided

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that those with incomes of \$400 - \$600 paid 25% of the normal SHI rate and those with incomes of \$600-\$800 would pay 50%;

- ◇ **Exemption status should be reviewed annually and threshold limits reviewed regularly in the light of changes in the cost-of-living;**
- ◇ **Social Welfare** (or whatever organisation is charged with administering payments for people exempted) **must be properly resourced** in terms of both finances, administrative system (including computers) and personnel. Paying for exempt patients through a Social Health Insurance scheme however and agreeing exemptions in advance should facilitate planning and budgeting.

The difficulties involved in introducing an exemption system which is equitable, implementable and fairly administered must not be underestimated. It is the consultants' view however that SHI cannot be introduced without some form of exemption for the poorest. Whilst consideration was given to a system in which decisions regarding exemption were taken at the community level on a discretionary basis, it is felt that given the prevailing degree of mistrust and sensitivity such a system would not be accepted. The first step should be consultation with the Ministry of Public Service, Labour and Social Welfare and other interested parties.

4.5 Organisational issues in the health services

At the time of writing this report, many changes relating to the decentralisation of health services, the wider issues of health service financing, and the mechanisms for planning and management of health services are under discussion or under way. Consequently most of these recommendations are not new and some are already being addressed. Substantial progress, however, needs to be made before a Social Health Insurance scheme can be implemented. This is the case irrespective of the pace of transfer of responsibility for primary health care to the Rural District Councils.

4.5.1 Increased management autonomy and incentives

The separate financing mechanisms recommended for primary and hospital level care including retention of user fees and SHI payments, will need to be reflected in management structures. Effectively the role of the District Health Executive (or its equivalent) will need to be focused on the provision of high quality primary care services, with funding clearly earmarked for this purpose. Hospitals will need to be given greater management autonomy, including retention of user fees.

4.5.2 Management Information

Throughout the health services there is a need for improved management information. In particular, much clearer information is needed to answer basic questions about how much is being spent at different levels of the system, on which services, and with what results.

- ◇ The work done on unit costing at District level under the UNICEF/MOHCW studies needs to be extended to higher levels and, to the extent possible, simplified and 'built into' management processes;
- ◇ A great deal of information on the utilisation of health facilities is collected at facility level but, because it is aggregated at district level, is not readily accessible for planning and monitoring purposes at provincial or national levels. Consequently no reliable estimates of utilisation of primary care services are available. This data should be presented routinely by facility level as well as by disease classification;
- ◇ Linked to this, there is a need for more understanding of the factors which determine the facility level at which cases are currently being handled. This includes the ability to answer questions such as: what proportion of cases at hospital

are being referred in; what proportion of hospital OPD visits genuinely require specialist skills/facilities; to what extent the tertiary and quaternary institutions are duplicating the care available at secondary level;

- ◇ Primary and secondary facilities at district level need to become separate cost centres.

4.5.3 Funding of primary care and improvements to the quality of primary health care

A capitation system for the funding of primary care was suggested in the initial scope of work for this study. In principle, capitation systems are desirable because they offer incentives to cost-containment and to provision of a quality service. Whilst a SHI scheme at primary level would have provided an impetus for this, it is by no means a prerequisite. It is extremely unlikely that the management capacity exists, or could be quickly developed, at the level of individual primary facilities. A system where managers of primary care facilities are presented with incentives based on appropriate performance measures, which might include basic throughput, revenue collection, percentage of cases handled without upward referral and some measure of quality of care, might be more feasible to develop in the medium term.

The research undertaken for this study has shown a high degree of dissatisfaction with the quality of public health care services. Without demonstrated improvements, voluntary participation in SHI is likely to be low and efforts to compel participation resented. Even modest user fees are unlikely to be regarded as offering value for money. Particular aspects highlighted by health service users as unsatisfactory included staff attitudes and drug availability. Discussions with health service personnel emphasised the need for improved communications, in the broadest sense, between the clinics and the hospitals and District Health Executive. Aspects of this included reliable telephone contact for example to seek advice or offer help in emergencies. Also required are guaranteed ambulance availability, a responsive attitude to requests or to orders for drugs/equipment, and professional updating for clinic staff.

Careful planning will be needed to improve the quality of care at the same time as, or in advance of, changes in payment mechanisms.

4.5.4 Billing and revenue collection

Flat, universal fees at primary level will be straightforward to administer. Rapid and efficient billing mechanisms at hospital level, however, will be crucial as hospitals become dependent on user fees and reimbursements from SHI/ Medical Aid for a substantial portion of their operating revenue. There is likely to be a trade-off between highly detailed billing for individual treatments received, desirable in principle but costly to administer, and simplified procedures which charge at fixed rates for certain procedures. This is an issue for further investigation.

The report has drawn attention to the level of outstanding hospital debts, which at 30 June 1995 stood at over \$68 million. Attempts to obtain a breakdown of this (for example between personal debtors, Government departments and Medical Aid Societies) proved unsuccessful. Three points are important. Firstly it seems likely that this figure substantially underestimates the amount actually outstanding because it does not include those cases where delays in billing have meant that no invoice has been issued. Secondly, a high proportion of debts are unlikely to be recoverable because they relate to bills for treatment to individuals where the recipient has no capacity to pay (for example bills amounting to several thousand dollars for the treatment of road accident victims, where those victims have an income of perhaps \$500 a month). The literature also supports the view that patients seldom pay bills for care which arrive more than three months late, since the benefits of care have been forgotten and providers are not perceived to be serious about collection. Thirdly, there is at present little/no incentive for debts to be collected.



It is recommended that concurrently with improvements to current and future billing capacity, a team of specialists be brought in to examine past debts, collect those which can be collected and arrange for the writing off of those which clearly cannot be recovered. This will allow facilities to focus on the collection of new debts, while incentives can be attached to the collection of outstanding debts within rational deadlines.

4.6 Organisational issues - the administration of a SHI scheme

In principle a SHI scheme could be managed by:

- ⇨ a new, centralised organisation;
- ⇨ an existing organisation such as NSSA;
- ⇨ one or more of the Medical Aid Societies acting as agents for the Government;
- ⇨ local organisations, either set up specifically for the purpose or, possibly, developed from existing organisations.

The majority of the people surveyed in the Willingness to Pay survey held strong views in favour of local organisations, believing these to be more accountable and less prone to corruption than national bodies. Whilst delivery by the Medical Aid Societies should not be ruled out, in view of the existing expertise and experience within these organisations, the membership base would be fundamentally different and the modus operandi would also be different, because of the need to work closely in support of, rather than essentially outside, the Government's policy on health services.

The recommended option is a network of local organisations, with a central co-ordinating body, to provide common services and play a monitoring and quality control role. Such a body could help to keep down costs by (for example) providing specialist computer support, supplying stationery, forms on a pro forma basis, and contracting in specialist actuarial skills (for example) on behalf of all the organisations. A first step would be the drawing up of a pro forma constitution, which each local group would adapt to the needs of its stakeholders.

The central co-ordinating role could be played by an existing organisation - NSSA or a Medical Aid Society.

In order to keep down administrative costs, particularly when dealing with the informal sector, consideration should be given to inviting other organisations to act as agents for the SHI organisations. Examples would include the agricultural marketing organisations and ward development committees.

4.7 Relationship with the Medical Aid Societies

Although there appears to be some concern on the part of the Medical Aid Societies about the introduction of SHI, properly managed the relationship should be one which is complementary and competitive. Medical Aid plays an important role in financing the health care needs of a small but not insignificant section of the community. In deciding the relationship between Medical Aid and Social Health Insurance, the Government must decide to what extent the two should operate in competition. The main options are as follows:

- ⇨ Compulsory membership of SHI for all formal sector employees; those wishing for greater benefits (including access to private sector medical services) to subscribe to Medical Aid in addition (i.e. no competition);

- ◇ Compulsory membership for all formal sector employees of either SHI or a Medical Aid Society (i.e. complete competition);
- ◇ Compulsory membership of SHI for all formal sector employees with a lower SHI premium for those subscribing to Medical Aid;
- ◇ (a combination of the last two) compulsory membership for all formal sector employees of either SHI or a Medical Aid Society with a levy on the Medical Aid Societies to supplement SHI contributions.

Compulsory membership for all formal sector employees whether or not subscribing to medical aid would, of course, maximise revenue to the scheme, particularly if contributions are assessed as a percentage of earnings rather than as a flat rate. In the example given in Section 4.2, the estimated revenue from a contribution rate of 2% would increase from about \$122 million to about \$305 million. To the extent that Medical Aid members are 'the rich' such a move would also maximise the redistributive effects.

However, there are two dangers to this course of action:

- ◇ SHI contributions for all formal sector employees - irrespective of whether the members choose to 'buy' health services from public facilities - would effectively constitute additional income tax. Government would need to consider closely how this fitted in with its macro-economic policy objectives;
- ◇ Whilst it is unlikely that such a move would cause a mass exodus out of the Medical Aid Societies, a considerable shift to SHI could result particularly amongst the newer members who have joined in response to the new lower cost packages. Government needs to be aware of the dangers of burdening a subsidised public health care system with those who are currently meeting the majority of their own health care costs. Also members who switch from Medical Aid Societies would generally have the knowledge to claim a disproportionately large amount of care from the public health institutions.

A degree of competition between Medical Aid Societies and an efficient SHI promotes consumer choice and could form an important incentive to cost-containment on both sides, provided that there is a level playing field and incorporation of a degree of cross-subsidy. The recommended option is therefore either compulsory membership for SHI for all formal sector employees, with a reduced rate of subscription for those choosing to subscribe to Medical Aid in addition, or freedom to choose between SHI and private Medical Aid with a levy on Medical Aid Societies based on membership or turnover. The management of Medical Aid Societies and/or NAMAS should be invited to contribute their expertise to the design of the scheme.

A further change proposed, which will directly affect the Medical Aid Societies, is that it should be compulsory for members to insure their direct (nuclear family) dependants, thus encouraging more people to take responsibility for their whole families and also widening the risk pool.

Section 1.2.6 discussed subsidies to Medical Aid. These take two forms: tax benefits (tax relief on subscription and tax rebates where shortfalls exceed \$250 within any one year) and below-cost treatment in government health facilities, because societies are billed at the flat rate rather than at the cost of treatment. Whilst there is an argument to be made for continuing to provide tax relief, because it encourages individuals to meet the cost of their own health care rather than using government facilities, there is little justification for allowing tax rebates on shortfalls and it is recommended that this be removed.

Furthermore the Ministry of Health and Child Welfare should take immediate steps to ensure that patients who are covered by Medical Aid are charged in full for the services received rather than at a subsidised flat rate.

4.8 Administration, accounting and legislative framework

If the recommendations are accepted, then the funding of public health care services will be a complex mix of direct government funding, user fees, prepayments and reimbursements from Social Health Insurance and, as at present, local government and voluntary organisations. Detailed specifications of administrative procedures are outside the scope of this study and should be the subject of more detailed investigation. An important step will be the creation of a separate fund or funds into which moneys raised by the Ministry can be deposited.¹⁴ The administration of this 'Medical Care Fund' will be spelt out in its constitution, but before the Ministry can get to that stage it will need to address the following points:

- ◇ At Provincial and District level it will be necessary to examine the adequacy of existing accounting and administrative structures - which will need to be strengthened if necessary. This will entail discussions with the Public Services Commission. Such discussions might include the possibility of staff being directly employed by the Fund, in which case its constitution would have to provide for their welfare;
- ◇ Similarly at Head Office, qualified people would be needed to administer the Fund, prepare budgets on an equitable basis and ensure that the funds are administered on a proper basis;
- ◇ Discussions with other interested Ministries and Departments will be necessary to enable them to dovetail in with the requirements of the Medical Care Fund (for example discussions with the Department of Social Welfare regarding payment for those exempt from fees);
- ◇ Procedures for billing of the Medical Care Fund by health care facilities, for treatment of patients who are insured or have prepaid, will have to be established and arrangements for prompt payment made;
- ◇ Whilst revenue derived from user fees can be used immediately, arrangements will have to be made for the Social Health Insurance element of the funds to be preserved or partially preserved against future health costs. Thus appropriate arrangements for investment will need to be made.

4.9 Cost containment measures

Arrangements to keep package costs as low as possible, hence affordable to the maximum number of people, and to limit cost escalation over time will need to be built in. It is recommended that some or all of the following be designed into the scheme:

- ◇ deductibles - where the insured person has to cover an initial amount before claiming reimbursement. In particular, it might be worth considering a cheaper hospital insurance option where the insured had to pay the first (say) \$100 of any treatment;
- ◇ co-payments - where the insured has to pay a proportion of the costs of treatment;
- ◇ ceilings on the value of treatment which can be reimbursed;

¹⁴A revolving fund would be the appropriate instrument for some aspects, however such a fund would not be appropriate for Social Health contributions because of the need to maintain substantial reserves.

- ◇ some form of 'no claims bonus' where individuals not claiming for hospital treatment during one year are allowed a small reduction in premium the following year. (Though potentially this could have undesirable consequences in unduly favouring the healthy).

Where institutions are directly reimbursed for treatment there is little incentive to medical practitioners to keep down the costs of treatment, and the mechanisms for provider payment will need to be given careful consideration.

4.10 Monitoring and evaluation

It will be important to put in place, from the outset, arrangements for monitoring and evaluation. Aspects to keep under continuous review will include membership, revenue, number and cost of claims, level of administrative costs and speed of settling claims. Arrangements will also need to be put in place for review of the impact on public health facilities and on health service users.

4.11 Overall conclusions

The national policy shift from a socialist system to one of free enterprise, and the change of emphasis from group to individual responsibility, necessitates a similar approach to the delivery of, and payment for, health services. This report has identified potential for Social Health Insurance both to broaden the financing base and to encourage individuals to protect themselves against the financial consequences of illness. Social Health Insurance is inextricably linked with a range of other issues relating to health service financing and management and to the wider objectives of health policies. Consequently, the recommendations made range well beyond issues of insurance. A number of policy dilemmas have been raised, mostly to do with how much of the responsibility for health care costs can and should be carried by individuals in a society where income and access to services are very unequally distributed and where equity is a fundamental government objective. These issues require careful consideration before a Social Health Insurance scheme can be put into place. In a number of areas, a lack of information has meant that conclusions are tentative and numerical estimates indicative rather than precise. It is clear, however, that there is a great deal of preparatory work to be done before a scheme can be implemented. For all these reasons, the approach to the introduction to Social Health Insurance needs to be incremental. Whilst some of the recommendations can be acted on quickly, others will need careful and thorough research, planning and preparation. A wide range of bodies will need to be consulted, including employer groups, other parts of Government and the Medical Aid Societies. Finally, if people are to have confidence in the scheme, much consultation and explanation will need to be done at grassroots level.

5. RECOMMENDATIONS

5.1 Summary of recommendations

The overall recommendation is for an incremental approach to the introduction of Social Health Insurance, with the benefit package covering treatment at public hospitals where holders are referred upwards for such care. More detailed work will need to be done on the costs and precise benefits of such a package, as well as the appropriate measures for cost containment.

5.1.1 Social Health Insurance

- ◇ The aim should be to move ultimately towards full recovery of hospital costs from private not-for-profit Medical Aid, Social Health Insurance and user fees, with the Government through the Department of Social Welfare or a similar organisation, meeting the Social Health Insurance payments for those households deemed unable to meet contributions;
- ◇ Social Health Insurance (with or without the alternative of Medical Aid) should be compulsory for all formal sector employees above an agreed exemption limit and for their immediate dependants;
- ◇ A network of local organisations should be established to deliver Social Health Insurance with support provided by a central body. Emphasis must be placed on accountability and transparency;
- ◇ The exact arrangements for administration, including legislative and accounting requirements, should be the subject of a detailed study once broad principles are agreed.

5.1.2 Primary health care

- ◇ At primary level, preventive services should continue to be provided free of charge but consideration should be given to the universal introduction of affordable user fees for curative services;
- ◇ A prepayment option should be introduced to allow individuals to spread the cost of care. Improvements in the management and quality of primary care services will need to be undertaken concurrently.

5.1.3 Arrangements for exemption from user fees at hospital level

- ◇ The income threshold for the payment of user fees should be raised to a level between \$400 and \$1 000 (the exact level to be determined after analysing the results of the two major surveys now in the field);
- ◇ Responsibility for screening of households for exemption from health service user fees, and payment of Social Health Insurance contributions for those households classified exempt should be removed from the Ministry of Health and Child Welfare and transferred to the Department of Social Welfare (or an equivalent organisation) equipped with the necessary staff and financial resources to undertake major revisions to the exemption system.

5.1.4 Enhancement of revenue collection

- ◇ Improvements to billing procedures and the ability to collect debts will be required for Social Health Insurance to be cost-effective, but these activities will also bring about significant revenue enhancements in their own right.

5.1.5 Medical Aid Societies

- ◊ Medical Aid patients should pay the full costs of treatment in public facilities and tax incentives to membership should be reviewed. The Government needs to decide whether members of Medical Aid Societies will be required to subscribe to SHI in addition.

5.1.6 Organisational changes in the health service

- ◊ The District Health Executive (or its equivalent) should be given more autonomy in the management of primary health care services;
- ◊ More management autonomy, including revenue retention, will be required at hospital level;
- ◊ Improvements to management information systems and to management structures within the health service will be required for the detailed design and implementation of Social Health Insurance. In particular better information is required on the utilisation of services and on the unit cost of services at facility level.

5.1.7 Consultation

- ◊ The introduction of Social Health Insurance has implications which go well beyond the Ministry of Health and Child Welfare, and in consequence extensive consultation within government, with the private sector and at community level is necessary.



6. ACTION PLAN

6.1 Action Plan and Timetable

Given the degree of complexity, a three year timetable for the introduction of Social Health Insurance is proposed. Certain actions such as enhancement of revenue collection can be undertaken well in advance of this while others such as a review of the exemption levels and the commencement of consultation, and further detailed studies on Social Health Insurance, will of necessity need to begin in the near future if SHI is to be implemented by mid-1999.

An indicative timetable for implementation is shown on the following page.



Management Consultants

Social Health Insurance Study

Appendices

Submitted to

**Ministry of Health and Child
Welfare**

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APPENDIX 1
Terms of Reference

APPENDIX 1a
Original Scope of Work

SCOPE OF WORK

I. BACKGROUND AND OBJECTIVES

Zimbabwe has been hailed as having one of the most successful health systems in sub-Saharan Africa, with the health of its people markedly better than most other countries in the region. Following independence, the health care system was thoroughly reorganized in the interest of increasing coverage and equity. Substantial progress was made as a result -- high per capita expenditure on health and education during the 1980s contributed to significant decreases in child mortality and total fertility.

Unfortunately, inequities in coverage and quality of health care continue to persist and government funding for health is declining steadily. Per capita government spending for health declined from US\$ 18 (in 1990) to approximately US\$ 11 in 1994. During the same period, the Zimbabwe health system was confronted with numerous epidemics (cholera, plague, and malnutrition/diarrheal disease as a result of drought) as well as a rapid escalation in HIV/AIDS. The Ministry of Health (MOH) believes that the combination of increasing demand and decreasing financial resources are contributing to a decline in the quality and availability of health services in Zimbabwe.

Current sources for funding health services in Zimbabwe include tax revenues, not-for-profit providers (largely religious mission services), private health insurance, and out-of-pocket payments by individuals. Because user fees are in place primarily to enforce the referral system, their contribution to GOZ cost recovery is largely insignificant -- user fees have only ever accounted for 1-2 percent of the MOH budget. As part of the GOZ's efforts to alleviate poverty, all health services user fees for residents in rural areas were recently removed. Private health insurance covers only a fraction of the formal sector labor force and provides limited support to the MOH.

The Government of Zimbabwe (GOZ) is exploring the possibility of introducing social health insurance to redress inequities in coverage, to improve quality of health care, to introduce greater transparency in GOZ financing of health care, and to separate the roles of providers and purchasers of health care. The MOH is prepared to embark on a pilot scheme in one province to test the concept beginning in 1996.

The proposed social health insurance scheme may have the following characteristics:

- A capitation fee system subsidized with GOZ and donor funding in the initial years. Participation would be mandatory in the formal labor market and contributions would be wage-based. In the informal sector, participation would be voluntary and contributions would be fixed and collected during seasons of highest income.
- The benefit package would emphasize primary health care and primary-level hospital care. Extra services would be provided on a fee for service basis or through private health insurance or through an additional social health insurance package for those who would be willing and able to pay higher premiums.
- Clients would be free to choose their provider (health facility or individual) and would be

allowed to change providers every 6-12 months. Each primary-level provider (i.e. health center) would be expected to have an affiliation with a primary-level hospital so as to guarantee referrals.

- The provider will agree to provide the specified package of service at no extra cost to the client except where a co-payment arrangement is stipulated. In the case of co-payments, the provider would have the right to retain any surplus (i.e. revenue less cost).
- The insurance fund will be autonomous and will have a full complement of staff at the provincial level with representation at the district level.

To ensure the success of the scheme, the MOH health delivery system would be decentralized to the district level, giving each facility a certain degree of autonomy to foster competition between them. Such competition is expected to promote efficiency and improve quality of health services delivery.

USAID, along with other donors, has assisted the MOH in its efforts to analyze the issues of developing such a scheme. To date, USAID has supported several consultancy visits by a health economist. This scope of work for two in-country studies related to social health insurance builds on USAID's investment thus far.

The objective of this consultancy is to finance two preliminary studies for social health insurance: (A) The identification and costing of the benefit package, and (B) the willingness and ability of the population to participate in the scheme. The funding provided under this scope of work will be complemented with international technical assistance financed by USAID/Washington.

II. DUTIES, RESPONSIBILITIES AND TASKS

The contractor will conduct two studies to obtain the following information. The contractor will work closely with the designated "task force" leader of the Ministry of Health, who will be principally responsible for overseeing these two studies.

A. Identification and Costing of Benefits

Based on Ministry of Health guidelines regarding provision of an essential package of services (and other relevant policy and procedural documents), this study will:

- (i) identify the benefits and services to be covered by the Social Health Insurance Fund (e.g. health services, drugs, supplies, and hospitalization);
- (ii) determine the facility level at which each benefit or service would be made available (e.g. health center, district hospital);
- (iii) calculate overall demand for the service or commodity in the pilot area, but provide indicative figures for the country nation-wide;
- (iv) calculate the cost of the service or commodity by level of facility; and
- (v) estimate the appropriate fee schedule.

B. Ability and Willingness of the Population to Participate in the Fund

This study focuses mainly on participation issues in the pilot area. However, for each of the items listed below, the contractor will also provide indicative figures for Zimbabwe nationwide. Some field work in the pilot area will be required, but existing information for other geographic areas in Zimbabwe should be used to support all analyses.

The contractor shall:

- (i) describe and assess the health seeking behaviours of the population (numbers of visits to public and private providers, services sought, etc);
- (ii) estimate private expenditures per capita on modern health care services and pharmaceuticals (out-of-pocket payments, private insurance premiums, employer benefits, etc);
- (iii) estimate the population size in the formal labor market by income categories;
- (iv) estimate the population size in the informal labor market by income categories;
- (v) identify the major sources of income in the informal sector by category of income;
- (vi) identify the type and amount of taxes and other madatory contributions incurred by the population;
- (vii) assess the amount of fund that could be collected if households were to allocate between 2-5 percent of cash income to the social health insurance fund.

III. REPORTS AND DELIVERABLES

The studies will commence on/about September 30, 1995. Within the first 3 workdays, the contractor will submit to the MOH task force leader and USAID a brief annotated outline for the proposed final report. The contractor will undertake weekly (at a minimum) progress reports with the MOH task force and USAID/Zimbabwe.

The contractor will submit a draft report no later than 8 weeks following the start of the consultancy. A comprehensive oral briefing will be given to the Mission Strategic Objective Team two business days later. A final report will be submitted to USAID/Zimbabwe no more than 2 weeks after receipt of comments.

The final in-depth report will be required including a table of contents, executive summary, full bibliography, and detailed data. The contractor will submit a hard copy of the report along with 3.5" disks with the report on Word Perfect version 5.1 for DOS or Word Perfect 5.2 for Windows and (as required) Lotus 1-2-3 version 2 or higher for DOS.

IV. LOGISTICS

The contractor will be responsible for arranging all in-country logistics.

V. REPORTING REQUIREMENTS

The contractor will report to the the MOH task force leader and the USAID/Zimbabwe Population, Health, and Nutrition (PHN) Office who will coordinate the work of the contractor and the international consultant.

APPENDIX 1b
Revised Scope of Work

REVISED SCOPE OF WORK

I. BACKGROUND

This revised Scope of Work arises as a result of the initial visit of Dr. Max Price and Dr. Abraham Bekele (30 October - 4 November 1995) who were charged with assisting the KPMG Peat Marwick team in developing protocols for two social health insurance (SHI) studies: (1) defining and costing the SHI benefit package, and (2) determining the ability and the willingness of the population to pay for the proposed SHI benefit package.

As a result of the work which took place during Drs. Price and Bekele's visit, the scope of the two studies has expanded significantly from the SOW indicated in the original PIO/T. The changes were presented to both the Ministry of Health and USAID and were endorsed by each. The MOH in particular has indicated its interest in having more thorough analysis conducted even if it means a delay in the findings.

II. REVISED DUTIES, RESPONSIBILITIES AND TASKS

The contractor will conduct various field and desk surveys to obtain the following information. The contractor will work closely with the designated "task force" leader of the Ministry of Health, who will be principally responsible for overseeing these two studies.

A. Study 1: Identification and Costing of the SHI Benefit Package

Two SHI models will be costed: (i) a Primary Health Plan which finances the delivery of PHC services at district level, and (ii) a Hospital Plan which finances inpatient care. Based on Ministry of Health guidelines regarding provision of an essential package of services (and other relevant policy and procedural documents), this study will provide the following deliverables:

- (i) a list of core (essential) services included in four possible SHI packages: a personal preventive care package, a personal preventive and curative care package and clinic level, a clinic and district hospital care package, and hospital in-patient care package.
- (ii) a typical level of demand anticipated for each package in a standardized population -- expressed as the number of consultations or admissions per capita.
- (iii) the unit costs of components of each package and per capita costs of each package.
- (iv) an analysis of the value of revenue foregone at public hospitals as a result of not recovering costs from medical aid patients.
- (v) an analysis of the additional revenues that could be generated if a SHI hospital plan were extended to all formal sector employees.
- (vi) discussion of the issues affecting the choice between two competing models of SHI. Highlight some of the practical issues affecting implementation.

B. Study 2: Ability and Willingness of the Population to Participate in the SHI Fund

The ultimate goals of this study are to (a) determine the likely uptake of SHI within the informal

sector (where participation will be voluntary) and (b) the revenue that could be generated from the formal sector based on the required contribution rates, the size and income of the sector (given other mandatory deductions already in place). This study will provide the following deliverables:

- (i) the contribution rate for the primary care plan as a percent of income and as a dollar value for different income groups.
- (ii) threshold income levels (possibly different for primary care and hospital care) to be applied as a basis of cost recovery from patients through the health sector.
- (iii) assessment of the number of households in the formal sector that fall above threshold and would therefore join SHI; and a calculation of the revenue that would be generated.
- (iv) assessment of the number of households in the informal sector who fall above the threshold and would be likely to join voluntarily for the primary care plan and/or the hospital plan, and the revenue which would be generated by each plan.
- (v) discussion of the context in which additional contributions would be born by formal sector employees.

III. TIMELINE

Given the complexity of the revised terms of reference indicated above and the need to conduct a wide variety of field investigations and desk reviews to obtain the prescribed information, the studies will require an additional time to complete. Tentative target dates for submission of reports are as indicated below. These have been agreed to with the Ministry of Health and USAID.

Study 1

Draft Report: 16 February 1996
 Presentation to MOH and USAID: 19 February 1996
 Final Report Completed: 15 March 1996

Study 2

Draft Report: 31 March 1996
 Presentation to MOH and USAID: 3 April 1996
 Final Report Completed: 15 April 1996

IV. LEVEL OF EFFORT

Full completion of this revised SOW will now require an estimated 349 person-days. The team will ideally of skilled economists, public health specialists, sociologists/anthropologist, and researchers. Suggested levels of effort for both studies combined follow:

Project Manager	30 work days
Financial Analyst	48 work days
Physician/Public Health Economist	50 work days
Economist	50 work days

Sociologist/Antropologist	51 work days
Research Assistants	120 work days

APPENDIX 2

List of Contacts

List of Persons Consulted:**External Consultants****(USAID)**

Dr Max Price
 Dr Abe Bekele
 Dr Mukesh Chawla

World Bank

Paul Shaw
 Keith Hansen

Local Persons Consulted**Ministry of Health and Child Welfare**

Mr S Chihanga	Acting Director - Health Services Planning & Management
Dr B Piotti	National Health Information System
Dr D Dhlakama	Provincial Medical Director, Midlands
Mr C Bonga	Provincial Health Services Administrator, Midlands
Mr T Zigora	Deputy Secretary - Finance, Administration & Planning
Mr Mutema	Parirenyatwa Hospital
Mr F T Ropi	Officer - Finance, Planning & Management
Mr Weeda	Central Medical Stores
Ms V Chihambakwe	District Health Services Administrator, Kwekwe District

Medical Aid Societies

Mr R Hoare	CIMAS
Mr Chaora	General Manager, Medical Aid, CIMAS
Mr Dube	PSMAS
Mr M Jotic	PSMAS (Computer Programmer from IBM Contractor)

Masvingo Area

Provincial Medical Director
 Mr Mhlanga - Provincial Health Services Administrator
 Provincial Health Education Officer
 Provincial Hospital - Administrator
 Sister Mpande - Provincial Hospital - Deputy Matron
 Dr. Chirengwa - Provincial Hospital - Superintendant
 Sister A Breda - Rujeko Clinic - Sister in Charge
 Mucheki Rural Clinic - Sister in Charge
 Red Cross Society - Community Health Care Worker
 Private Doctors x 2
 Vuombo Secondary School - Deputy Headmistress
 Mr Mpofo - Rujeko Primary School - Headmaster
 Mucheke High School - Teacher

Chirumanzu Area

St. Theresa's Hospital - Dr. Kung - District Medical Officer
 St. Theresa's Hospital - Alexander Chazovachi - Matron
 St. Theresa's Hospital - Mr Mazhuna - Hospital Administrator
 St. Theresa's Hospital - Deputy Matron
 Hama School - Mr Mtanga - Headmaster

Gweru Area

Provincial Medical Director
Provincial Health Services Administrator
Provincial Hospital - Medical Superintendent
Provincial Hospital - Revenue Office : Records Clerk
Provincial Hospital - Matron
Provincial Hospital - Deputy Matron

Gokwe Area

District Hospital - District Medical Officer
District Hospital - Hospital Doctor
District Hospital - District Health Services Administrator
District Hospital - Matron
District Hospital - Acting District Nursing Officer
District Hospital - Community Sister Gokwe North
Chireya Mission Hospital - Sister in Charge
Chireya Mission Hospital - SRN
Chireya Mission Hospital - Village Community Worker
Gokwe Local Government - Councillor
Gokwe High School - Teacher

APPENDIX 3

Income and Employment Data

INCOME AND EMPLOYMENT DATA**Estimating the numbers of households in formal and informal sectors**

The proportion of households who have a member in formal employment is crucial because it is those individuals in formal employment who can be most easily recruited to a SHI scheme, covering their dependents as well as themselves.

'Formal' is defined here to mean regular, paid employment. Information is available from the 1992 Census on the total number of households and their average size, and on the economic activity of individuals aged 15 and over. Individuals are classified according to the following categories, referring to the usual activity over the last 12 months:

- ▶ paid employee
- ▶ employer
- ▶ own account worker
- ▶ unpaid family worker
- ▶ unemployed
- ▶ economically inactive (eg students, homemakers, the elderly and sick)

Economic Activity, 1992 Census

	Rural		Urban		All	
Paid employee	686007	18.7%	872218	43.2%	1558225	27.4%
Employer	6376	0.2%	7097	0.4%	13473	0.2%
Own Account worker	732105	20.0%	124252	6.2%	856358	15.1%
All earners	1424489	38.9%	1003567	49.7%	2428056	42.7%
Unpaid family workers	301750	8.2%	7807	0.4%	309557	5.4%
All workers	1726239	47.1%	1011374	50.1%	2737613	48.2%
Unemployed	454422	12.4%	309763	15.4%	764186	13.5%
All economically active	2180661	59.5%	1321137	65.5%	3501799.2	61.6%
Economically inactive	1483131	40.5%	696662	34.5%	2179793.8	38.4%
All 15+	3663792	100.0%	2017799	100.0%	5681593	100.0%

Thus in the country as a whole about 27% of the adult population was in paid employment, and 15% were 'own account workers' (self-employed/informal sector) - that is 43% of the adult population was earning. A further 5% was defined as 'unpaid family workers. Included in the working population is 824,000 workers on communal farms. This figure includes both own account workers and unpaid family workers.

The remainder were unemployed (seeking work) or inactive (eg students, homemakers, sick etc.).

To translate these figures into the potential subscribers to a SHI scheme requires four steps:

- ▶ updating the estimates to allow for population growth and employment change;
- ▶ assessing the proportion of those in paid employment who are in regular employment, as distinct from those in seasonal or casual work who are likely to fall outside any SHI legislation;

- ▶ converting information on the employment status of individuals to the number of households with and without formal sector employees (simply assuming an average number of dependents for each earner will over-estimate the number potentially covered since some households will have more than one worker - indeed in 1992 there were more earners than households in Zimbabwe, and more paid employees than households in urban Zimbabwe.
- ▶ estimating the proportion of formal and informal sector households in different income bands.

It must be stressed that there is very little hard data available on which to base these adjustments, particularly the last. The approach has been to make reasonable assumptions, cross-checking with other data sources wherever possible.

Updating to 1996

Table 1 shows summary information on individuals and households from the 1992 Census. The second part of the table updates this using the following assumptions.

- ▶ A crude natural rate of population increase of 3.3% per annum (source: 1992 Census);
- ▶ No change in the level of paid employment since 1992. This assumption is based on employment statistics published in the latest Quarterly Digest of Statistics. These actually show a slight (6%) decline in employment between 1992 and 1995, from 1236200 to 1232100. These figures exclude employees of small agricultural units and small businesses in rural areas and therefore are not directly comparable with the Census estimates. Static rather than falling employment has been assumed here on the basis that the smallest enterprises have probably absorbed some of the labour shed by larger organisations;
- ▶ The increase in adult population spread proportionately across other labour market categories;
- ▶ No change in average household size.

Using these assumptions, the proportion of paid employees in the total (ie adult and children) population has fallen from 15% to 13%, with households on average containing slightly more than one earner and 3.8 non-earners.

Correcting for households with two or more income sources

Some households will have two or more earners, others none. To avoid double-counting the dependents in two-earner households, it was assumed, firstly, that 10% of households would have a head with no earned income. The total number of earners was then distributed proportionately across the remaining households. Non-earners (both adult and children) were also distributed proportionately. The steps are shown in detail in table 2. If these assumptions are broadly correct, then about 40% of rural and 77% of urban households contain one or more paid employee, with these households containing about the same proportion of the total population.

Table 1 Population and economic activity 1992 and estimates for 1996

	1992		1996 estimate	
	number	%	number	%
Rural				
Paid employee	686007	9.5%	686007	8.3%
Employer	6376	0.1%	7464	0.1%
Own Account worker	732105	10.1%	857022	10.4%
All earners	1424489	19.7%	1550494	18.8%
Unpaid family worker	301750	4.2%	353237	4.3%
Unemployed	454422	6.3%	531959	6.5%
All economically active	2180661	30.2%	3986183	48.5%
Economically inactive	1483131	20.5%	1736193	21.1%
All 15+	3663792	50.7%	4171882	50.7%
total rural population	7224828	100.0%	8226758	100.0%
no. of households	1399582		1593674	
ave. household size	5.16		5.16	
ave. no. of earners per household	1.02		0.97	
ave no. of non-earners per household	4.14		4.19	
Urban				
Paid employee	872218	27.4%	872218	24.0%
Employer	7097	0.2%	7955	0.2%
Own Account worker	124252	3.9%	139268	3.8%
All earners	1003567	31.5%	1019440	28.1%
Unpaid family worker	7807	0.2%	8750	0.2%
Unemployed	309763	9.7%	347198	9.6%
All economically active	1321137	41.4%	2394829	66.0%
Economically inactive	696662	21.9%	829667	22.9%
All 15+	2017799	63.3%	2297625	63.3%
total urban population	3187720	100.0%	3629789	100.0%
no. of households	763707		869617	
ave. household size	4.17		4.17	
ave. no. of earners per household	1.31		1.17	
ave no. of non-earners per household	2.86		3.00	
All				
Paid employee	1558225	15.0%	1558225	13.1%
Employer	13473	0.1%	15419	0.1%
Own Account worker	856358	8.2%	996290	8.4%
All earners	2428055	23.3%	2569934	21.7%
Unpaid family worker	309557	3.0%	361987	3.1%
Unemployed	764186	7.3%	879157	7.4%
All economically active	3501798	33.6%	6381011	53.8%
Economically inactive	2179791	20.9%	2565860	21.6%
All 15+	5681589	54.6%	6469507	54.6%
total population	10412548	100.0%	11856548	100.0%
no. of households	2163289		2463291	
ave. household size	4.81		4.81	
ave. no. of earners per household	1.12		1.04	
ave no. of non-earners per household	3.69		3.77	

Table 2 Correcting for households with two or more income sources - 1996 estimate

1. For simplicity, assume that the small 'employers' group is split equally between the 'paid employee' category and the 'own account'

	rural		urban		all
paid employee	689739	44.5%	876195	85.9%	1565934
own account	860755	55.5%	143245	14.1%	1004000
all earners	1550494	100.0%	1019440	100.0%	2569934

2. Assume that 10% of household heads have no source of earned income, the remaining 90% of households are headed in the proportions outlined in 1

households by head	rural		urban		all
paid employee	638053	40.0%	672682	77.4%	1310735
own account	796253	50.0%	109974	12.6%	906227
all earners	1434307	90.0%	782655	90.0%	2216962
non-earners	159367	10.0%	86962	10.0%	246329
all households	1593674	100.0%	869617	100.0%	2463291

3. Assume that those earners who are not household heads (ie additional earners in dual income households) are distributed in the same proportion

no. of rural additional earners = 1550494 - 1434307 = 116187

no. of urban additional earners = 1019440 - 782655 = 236785

households by head	rural			urban		
	household heads	other earners	all earners	household heads	other earners	all earners
paid employee	638053	51686	689739	672682	203513	876195
own account	796253	64501	860755	109974	33271	143245
non-earners	159367			86962		
all households	1593674	116187	1550494	869617	236785	1019440

4. Distribute non-earners (total population less earners - see Table 1) across households proportionately

households by head	rural			urban				
	earners	non-earners	all	earners	non-earners	all		
paid employee	689739	2672950	3362689	40.9%	876195	2019204	2895399	79.8%
own account	860755	3335688	4196443	51.0%	143245	330110	473356	13.0%
non-earners	0	667626	667626	8.1%	0	261035	261035	7.2%
all households	1550494	6676265	8226758	100.0%	1019440	2610349	3629789	100.0%

5. For the country as a whole, this gives the following breakdown

population by employment of head	earners	non-earners	all	
paid employee	1565934	4692154	6258088	52.8%
own account	1004000	3665798	4669798	39.4%
non-earners	0	928661	928661	7.8%
all households	2569934	9286614	11856548	100.0%

Assessing the breakdown between formal (permanent) and seasonal/casual employment

The Census contains estimates of the occupational breakdown of the workforce (that is, paid employees, own account workers and unpaid family workers combined) for rural and urban areas. The occupations were grouped into those, such as administration and education, where a high proportion are likely to be permanent paid employees; those such as construction where there is likely to be a higher proportion of both temporary and own account work, and those largely service sectors with substantial informal activity. Agriculture is separately identified.

Table 3 Occupational classifications, 1992 (thousands of workers)

	rural	urban
mainly permanent		
social science	0	405
information	173	708
law and security	26929	59976
religion	1381	2023
clerks/secretaries	14500	82732
administration	3452	17801
machine operators	27101	35500
natural sciences	0	303
directors, managers, co.secs	6214	26094
government/senior officials	1208	1214
life science prof	11048	14665
education	52131	42984
engineers/technicians	2762	16385
	146900	300789
mixed		
mechanics	15536	50873
mining/construction	123078	108826
manufacturing	88382	155654
	226996	315353
substantial informal		
others	15708	28724
transport	13637	41872
business/finance	28655	62100
services	142239	239296
artists	1726	6372
	201966	378363
agriculture	1150342	16890
all occupations	1726204	1011395

Guessimates of the split between paid employment, own account and unpaid activity for each occupation, consistent with the overall numbers in each of these categories, were made. For those in paid employment, assumptions were then made about the likely proportion in permanent as distinct from seasonal or temporary work.

According to these assumptions an estimated 78% of those in paid employment in urban areas, and 57% in rural areas, were in permanent paid employment in 1992.

Table 4 Estimated split between permanent, seasonal/casual and other workers

	permanent	seasonal/ casual	all paid	employers	own account	unpaid	all workers
rural							
mainly permanent	114	12	126	1	20		147
mixed	120	60	180	2	45		227
substantial informal	20	10	30	1	121	50	202
agriculture	140	210	350	2	546	252	1150
all occupations	394	292	686	6	732	302	1726
	57.4%	42.6%	100.0%				
urban							
mainly permanent	268	30	298	3			301
mixed	210	70	281	2	32		315
substantial informal	200	82	282	2	88	6	378
agriculture	8	3	11		4	2	17
all occupations	686	185	872	7	124	8	1011
	78.7%	21.2%	100.0%				
all							
mainly permanent	382	42	424	4	20	0	448
mixed	330	130	461	4	77	0	542
substantial informal	220	92	312	3	209	56	580
agriculture	148	213	361	2	550	254	1167
all occupations	1080	477	1558	13	856	310	2737

These proportions were then applied to the estimated number of households by employment status in Table 2 to give the following breakdown of households and population.

Table 5 Estimates of the formal and informal sectors (thousands)

	households		population	
rural				
permanent paid employees	364	22.8%	1917	23.3%
temporary/casual workers	274	17.2%	1446	17.6%
own account worker	797	50.0%	4196	51.0%
informal sector	1071	67.2%	5642	68.6%
non-earners	159	10.0%	668	8.1%
all households	1594	100.0%	8227	100.0%
urban				
permanent paid employees	524	60.3%	2258	62.2%
temporary/casual workers	148	17.0%	637	17.6%
own account worker	110	12.7%	473	13.0%
informal sector	258	29.7%	1110	30.6%
non-earners	87	10.0%	261	7.2%
all households	869	100.0%	3629	100.0%
all				
permanent paid employees	888	36.1%	4175	35.2%
temporary/casual workers	422	17.1%	2083	17.6%
own account worker	907	36.8%	4669	39.4%
informal sector	1329	54.0%	6752	57.0%
non-earners	246	10.0%	929	7.8%
all households	2463	100.0%	11856	100.0%

Income distribution

The only significant source of income distribution data is the 1993 Indicator Monitoring Survey. This shows the following distribution of household income.

Table 6 Household Income 1993 (Indicator Monitoring Survey)

monthly household income		
rural	%	number
< 150	67.82	1051085
150-499	23.32	361417
50-1499	7.02	108797
1500-2999	1.47	22782
3000-4999	0.25	3875
5000+	0.12	1860
all rural households	100	1549815
urban	%	number
< 150	14.54	110852
150-499	40.85	311439
50-1499	33.05	251972
1500-2999	6.85	52224
3000-4999	3.02	23024
5000+	1.7	12961
all urban households	100.01	762473
< 150	50.25	1162041
150-499	29.10	672943
50-1499	15.60	360753
1500-2999	3.24	74926
3000-4999	1.16	26825
5000+	0.64	14800
all households	99.99	2312288

The data is unsatisfactory for two reasons: firstly there are likely to have been significant changes in the level and distribution of household income over the last two years; secondly it does not show distribution separately for formal and informal sector households.

The data were adjusted by:

- ▶ updating the bands to mid 1996 prices, but
- ▶ reducing the upper limit of each band to allow for reduced real earnings (the figure of 6% reflects the decline in average real earnings per employee since 1993) and
- ▶ estimating the proportions above and below \$400 and \$1000 per month to reflect current and possible exemption thresholds.

Table 7 Estimated income distribution 1996

\$ per hh per month adjusted bands		number of households (thousands)					
from	to	rural 1996 est.		urban 1996 est.		all	
<	268	1 081	67.8%	126	14.5%	1 207	49.0%
269	400	96	6.0%	104	12.0%	200	8.1%
400	891	276	17.3%	251	28.9%	527	21.4%
892	1 000	16	1.0%	27	3.1%	42	1.7%
1 000	2 677	96	6.0%	261	30.0%	357	14.5%
2 679	5 356	23	1.5%	60	6.9%	83	3.4%
5 358	8 928	4	0.3%	26	3.0%	30	1.2%
8 930+		2	0.1%	15	1.7%	17	0.7%
total		1 594	100.0%	870	100.0%	2 463	100.0%
<	400	1 176	73.8%	231	26.5%	1 407.2	57.1%
401	1 000	292	18.3%	277	31.9%	569.4	23.1%
1 001+		125	7.9%	361	41.6%	486.7	19.8%
total		1 594	100.0%	870	100.0%	2 463	100.0%

Estimated income distribution for formal and informal sectors

Finally, by combining these estimates with information on the numbers in each group, it is possible to arrive at a "best guess" at the distribution of income within and between the formal and informal sectors.

Table 8 Estimated number of households by income band and sector

income per household per month	Estimated number of households in each income band (thousands)								
	rural			urban			all		total
	formal	informal	all	formal	informal	all	formal	informal	
<400	140	1 036	1 176	124	107	231	264	1 407	1 143
400 - 1 000	140	152	292	100	177	277	240	569	329
1 000+	84	41	125	300	61	361	384	486	102
	364	1 229		524	345	361		0	0
	364	1 229	1 593	524	345	1 230	888	2 462	1 574

APPENDIX 4

Additional Data Relating to Costs

APPENDIX 4a
MOHCW Budget 1995/6

TABLE A
ESTIMATES OF EXPENDITURE 1995/96 - ALLOCATION OF FUNDS TO PROVINCES
MEDICAL CARE SERVICES : SV II

ITEM	Code	Provision 1995/96	Manicaland	Mashonaland East	Matabeleland North	Midlands	Masvingo	Mashonaland Central	Mashonaland West	Matabeleland South	Total Provinces
Salaries and wages	6102101	328 273 000	0	0	0	0	0	0	0	0	0
Allowances	6101102	127 700 000	0	0	0	0	0	0	0	0	0
Cash in lieu	6102103	5 170 000	0	0	0	0	0	0	0	0	0
Fares	6102201	200 000	20 700	11 200	10 700	19 300	17 500	10 900	17 400	9 300	117 000
Official travel in private vehicles	6102202	300 000	31 000	16 800	16 000	29 000	26 300	16 300	26 100	14 000	175 500
Subsistence	6102204	5 500 000	569 200	307 500	293 800	532 000	481 600	298 500	478 000	257 000	3 217 600
Vehicle hire	6102205	11 000 000	1 138 300	615 000	587 700	1 064 100	963 100	596 900	955 900	514 000	6 435 000
Extraneous professional services	6102301	1 000 000	0	0	0	0	0	0	0	0	0
Printing and stationery	6102302	3 500 000	362 200	195 700	187 000	338 600	306 400	189 900	304 200	163 500	2 047 500
Dental units	6102401	2 500 000	327 983	88 752	0	205 483	310 083	160 483	178 483	142 483	1 413 750
Bedding, linen, clothing etc.	6102402	10 040 000	1 039 000	561 300	536 400	971 200	879 100	544 800	872 500	469 100	5 873 400
Domestic expenses	6102403	10 000 000	1 034 800	559 100	534 300	967 300	875 600	542 700	869 000	467 200	5 850 000
Fuel, light, water and sanitary charges	6102404	22 000 000	2 276 600	1 230 000	1 175 400	2 128 100	1 926 200	1 193 900	1 911 800	1 027 900	12 869 900
Medical and surgical	6102405	195 220 000	17 462 895	16 164 765	7 952 049	18 144 227	13 780 607	14 584 114	18 116 650	8 483 393	114 203 700
Office and miscellaneous	6102406	8 000 000	827 900	447 300	427 400	773 900	700 500	434 100	695 200	373 800	4 680 100
Provisions	6102407	30 000 000	3 104 500	1 677 300	1 602 800	2 902 000	2 626 700	1 628 000	2 607 000	1 401 700	17 550 000
Laboratories	6102408	6 000 000	811 700	314 700	0	802 800	397 700	0	805 200	0	3 132 100
Laundry services	6102409	7 000 000	724 400	391 400	374 000	677 100	612 900	379 900	608 300	327 100	4 095 100
Grants : Capital	6102501	6 500 000	0	0	0	0	0	0	0	0	0
Grants : Furniture & equipment	6102502	4 800 000	0	0	0	0	0	0	0	0	0
Grants : Recurrent expenses	6102503	218 700 000	0	0	0	0	0	0	0	0	0
Other grants: Parirenyatwa	6102601	115 000 000	0	0	0	0	0	0	0	0	0
Appliances	6102701	70 000	0	0	0	0	0	0	0	0	0
Medical and surgical supplies	6102703	60 000	0	0	0	0	0	0	0	0	0
Private medical care	6102704	60 000	0	0	0	0	0	0	0	0	0
Transport of sick persons	6102705	10 000	0	0	0	0	0	0	0	0	0
Committed beds	6102801	2 000 000	0	0	0	0	0	0	0	0	0
Hospital fees	6102802	8 000 000	0	0	0	0	0	0	0	0	0
Hospitals : technical equipment	6102901	31 690 000	0	0	0	0	0	0	0	0	0
Furniture and office equipment	6102902	500 000	51 700	28 000	26 700	48 400	43 800	27 100	43 500	23 400	292 600
Total Medical Care Services (SVII)		1 160 793 000	29 782 878	22 608 817	13 724 249	29 603 510	23 948 090	20 607 597	28 489 233	13 673 876	181 953 250
Direct Medical Care Allocation/Capita (Govt.)			19	21	20	21	19	23	24	22	21
Total Medical Care Services: Missions & RDCs (SVII)			17 668 737	7 721 083	7 363 195	14 418 299	17 843 997	9 052 041	7 333 985	6 154 663	87 556 000
Direct Medical Care Allocation/Capita (Missions & RDCs)			11	7	11	10	14	10	6	10	10
Grand Total: Direct Medical Care Allocation (Govt. Missions & RDCs)			47 451 615	30 329 900	21 087 444	44 021 809	41 792 087	29 659 638	35 823 218	19 828 539	269 509 250

TABLE B
ESTIMATES OF EXPENDITURE 1995/96 - ALLOCATION OF FUNDS TO CENTRAL HOSPITALS
MEDICAL CARE SERVICES : SV II

ITEM	CODE	PROVISION						TOTAL
		1995/96	CHITUNGWIZA	UBH	HARARE	INGUTSHENI	MPILO	CENTRAL
Salaries and Wages	6102101	328 273 000	0	0	0	0	0	0
Allowances	6102102	127 700 000	0	0	0	0	0	0
Cash-in-lieu	6102103	5 170 000	0	0	0	0	0	0
Fares	6102201	200 000	5 100	11 200	20 500	6 400	19 900	63 100
Official travel in private vehicles	6102202	300 000	7 600	16 800	30 700	9 600	29 800	94 500
Subsistence	6102204	5 500 000	139 200	308 000	563 200	175 600	546 500	1 732 500
Vehicle hire	6102205	11 000 000	599 200	715 900	950 000	300 000	900 000	3 465 100
Extraneous professional services	6102301	1 000 000	0	0	0	0	0	0
Printing and stationery	6102302	3 500 000	88 600	196 000	358 400	111 800	347 800	1 102 600
Dental units	6102401	2 500 000	0	0	0	0	75 000	75 000
Bedding, linen, clothing etc.	6102402	10 040 000	254 100	562 200	1 028 100	320 600	997 700	3 162 700
Domestic expenses	6102403	10 000 000	253 100	559 900	1 024 000	319 300	993 700	3 150 000
Fuel, light, water and sanitary charges	6102404	22 000 000	556 800	1 231 800	2 252 700	702 500	2 186 100	6 929 900
Medical and surgical	6102405	195 220 000	5 940 700	10 931 000	19 989 900	5 233 800	19 399 000	61 494 400
Office and miscellaneous	6102406	8 000 000	202 500	447 900	819 200	255 500	795 000	2 520 100
Provisions	6102407	30 000 000	779 300	1 679 800	3 001 900	1 008 000	2 981 100	9 450 100
Laboratories	6102408	6 000 000	467 050	207 650	0	0	0	674 700
Laundry services	6102409	7 000 000	177 200	392 000	716 800	223 500	695 600	2 205 100
Grants : Capital	6102501	6 500 000	0	0	0	0	0	0
Grants : Furniture & Equipment	6102502	4 800 000	0	0	0	0	0	0
Grants: Recurrent Expenses	6102503	218 700 000	0	0	0	0	0	0
Other grants : Parirenyatwa	6102601	115 000 000	0	0	0	0	0	0
Appliances	6102701	70 000	0	0	0	0	0	0
Medical and surgical supplies	6102703	60 000	0	0	0	0	0	0
Private medical care	6102704	60 000	0	0	0	0	0	0
transport of sick persons	6102705	10 000	0	0	0	0	0	0
Committed beds	6102801	2 000 000	0	0	0	0	0	0
Hospital fees	6102802	8 000 000	0	0	0	0	0	0
Hospitals : technical equipment	6102901	31 690 000	0	0	0	0	0	0
Furniture and office equipment	6102902	500 000	12 700	28 000	51 200	16 000	49 700	157 600
Total Medical Care Services (SV II)		1 160 793 000	9 483 150	17 288 150	30 806 600	8 682 600	30 016 900	96 277 400

TABLE C
ESTIMATES OF EXPENDITURE 1995/96 - ALLOCATION OF FUNDS TO PROVINCES
PREVENTIVE SERVICES : SV III

ITEM	Code	Provision 1995/96	Manicaland	Mashonaland East	Matabeleland North	Midlands	Masvingo	Mashonaland Central	Mashonaland West	Matabeleland South	Total Provinces
Salaries and wages	6103101	44 191 000	0	0	0	0	0	0	0	0	0
Allowances	6103102	15 392 000	0	0	0	0	0	0	0	0	0
Cash in lieu	6103103	800 000	0	0	0	0	0	0	0	0	0
Fares	6103201	200 000	20 300	18 000	23 900	27 000	26 100	15 500	27 000	22 200	180 000
Official travel in private vehicles	6103202	500 000	59 200	52 800	32 700	78 000	65 300	45 000	68 700	48 400	450 100
Subsistence	6103204	3 560 000	421 700	375 800	232 500	555 000	465 100	320 300	489 100	344 500	3 204 000
Vehicle hire & maint. of non-CMED veh.	6103205/06	7 240 000	907 900	670 400	879 500	930 400	941 200	578 400	920 900	687 300	6 516 000
Disease Control Programme	6103301	23 000 000	2 996 800	2 114 200	1 028 400	2 555 600	2 590 100	1 509 500	1 824 000	1 081 400	15 700 000
Health Education Programme	6103302	1 500 000	0	0	0	0	0	0	0	0	0
Laboratories	6103303	1 000 000	0	0	0	0	0	0	0	0	0
Vaccines and sera	6103304	13 500 000	0	0	0	0	0	0	0	0	0
Nutrition Programme	6103305	20 000 000	0	0	0	0	0	0	0	0	0
Printing and stationery	6103306	1 000 000	133 400	116 500	69 800	144 500	140 500	90 600	114 400	90 200	899 900
Zim. National Family Planning Council	6103401	23 000 000	0	0	0	0	0	0	0	0	0
Freedom From Hunger Campaign	6103402	20 000	0	0	0	0	0	0	0	0	0
Technical equipment	6103501	350 000	0	0	0	0	0	0	0	0	0
Furniture and office equipment	6103502	80 000	9 500	8 400	5 200	12 500	10 500	7 200	11 000	7 700	72 000
Temporary field accommodation	6103503	820 000	121 700	104 500	60 800	109 200	123 300	74 900	74 900	68 700	738 000
Total Preventive Services (SVIII)		156 153 000	4 670 500	3 460 600	2 332 800	4 412 200	4 362 100	2 641 400	3 530 000	2 350 400	27 760 000
Direct Preventive Allocation/Capita (Govt.)			3	3	3	3	3	3	3	4	3

APPENDIX 4b

**Unit Cost Data for Clinics from MOHCW/
UNICEF Studies**

UNIT COST DATA FOR CLINICS FROM MOHCW/UNICEF STUDIES

Unit costs for clinics												
District	Clinic	Type	OPD cost per 1st visit	OPD cost per visit	ANC cost per 1st visit	PNC cost per visit	Delivery	FP cost per visit	GM/EPI cost per visit	total recurrent costs	total outpatient visits	1st outpatient visits
Shurugwi	Chikato	Govt RHC	16.8	12.9	34.9	8.0	94.1	12.0	9.0	\$92,718	4551	3486
Shurugwi	Gwanza	Govt RHC	9.9	6.0	15.7	14.7	52.5	7.5	5.2	\$86,172	9772	5900
Shurugwi	Mazibisa	RDC	8.7	5.5	21.8	5.4	64.7	5.4	5.4	\$89,981	6943	4416
Shurugwi	Rockford	RDC	22.2	17.0	43.9	14.2	170.0	20.0	14.7	\$63,383	2726	2090
Shurugwi	Hanke	Mission	6.5	3.0				4.4	3.0	\$74,925	23631	10755
Shurugwi	Pakame	Mission	9.6	4.1	9.6	3.4	42.6	5.3	6.9	\$64,619	13096	565
Shurugwi	Makusha	Municipal	8.3	5.6		4.3		3.4	4.1	\$125,030	18560	12586
Shurugwi	Ironsides	Private	15.1	9.8	35.2			8.5	7.2	\$98,679	9055	5855
Gutu	Mutema	Govt RHC	7.4	2.5	7.6	0.8	66.3	3.3		\$125,929	32677	11297
Gutu	Nemashakwe	Govt RHC	11.0	3.9	5.0	1.9	70.5	3.7		\$111,644	20065	7163
Gutu	Soti Source	Govt RHC	7.9	3.8	6.9	4.5	76.6	6.3		\$109,091	17655	8474
Gutu	Cheshuro	RDC	7.7	3.2	6.6	1.3	77.1	6.5		\$108,438	21527	8826
Gutu	Nyazvidzi	RDC	7.2	2.7	6.1	1.9	71.4	6.3		\$76,847	14408	5497
Gutu	Zinhata	RDC	10.4	3.4	7.3	1.5	70.2	6.1		\$108,833	22151	7147
Gutu	Mukaro	Mission	7.9	2.9	4.2	0.9	146.0	5.7		\$330,104	44976	16634
Gutu	Serima	Mission	19.6	3.5	3.3	1.2	290.0	15.3		\$258,362	39165	6936
Binga	Chinego	Govt RHC	12.0	7.6	27.7	5.2	99.0	11.2	8.4	\$157,154	11319	7166
Binga	Lubimbi	Govt RHC	17.3	13.2	43.9	7.6	126.0	10.2	13.4	\$144,323	4761	3627
Binga	Lusulu	Govt RHC	15.0	8.6	19.9	5.0	96.0	10.2	8.5	\$189,628	15343	8816
Binga	Pashu	RDC	18.2	6.5	40.2	4.4	89.0	10.7	7.6	\$144,613	12451	4466
Binga	Siansundu	Govt RHC	11.9	6.1	27.6	3.7	83.0	6.8	6.3	\$170,811	13291	6837
Kwekwe	Nyoni	Govt RHC	20.1	8.3	34.5	9.1	109.8	6.3	10.6	\$136,231	11498	4750
Kwekwe	Msilahobe	Govt RHC	8.9	6.8	20.3	5.6	54.6	6.0	6.0	\$120,592	8030	6100
Kwekwe	Silobela Jackson	Govt RHC	16.3	13.1	37.6	10.3		12.5	12.6	\$123,833	5399	4316
Kwekwe	Malisa Josepha	RDC	15.1	6.1	22.3	4.0	38.9	4.3	5.3	\$154,657	17446	7077
Kwekwe	Mbizo	Municipal	13.0	7.9	63.7	11.8	133.0	21.9	12.4	\$723,888	46122	27977

Source: UNICEF/MOHCW reports

Notes

Unit cost per visit for OPD calculated from data in the reports. Unit cost of ANC visits calculated using ratio repeat: 1st ANC visits

Unit costs for Gutu calculated from data in the reports.

Unit costs for clinics -constant mid 1996 costs

District	Clinic	Type	OPD cost per 1st visit	OPD cost per visit	ANC cost per 1st visit	PNC cost per visit	Delivery	FP cost per visit	GM/EPI cost per visit	total recurrent costs	total outpatient visits	1st outpatient visits
Shurugwi	Chikato	Govt RHC	33.5	25.7	69.6	16.0	187.8	24.0	17.9	\$185,073	4551	3486
Shurugwi	Gwanza	Govt RHC	19.8	11.9	31.3	29.4	104.8	15.0	10.3	\$172,007	9772	5900
Shurugwi	Mazibisa	RDC	17.3	11.0	43.6	10.8	129.1	10.8	10.8	\$179,610	6943	4416
Shurugwi	Rockford	RDC	44.3	34.0	87.6	28.2	339.3	40.0	29.3	\$126,518	2726	2090
Shurugwi	Hanke	Mission	13.0	5.9	0.0	0.0	0.0	8.8	6.1	\$149,557	23631	10755
Shurugwi	Pakame	Mission	19.1	8.2	19.1	6.7	85.0	10.6	13.7	\$128,985	13096	565
Shurugwi	Makusha	Municipal	16.6	11.2	0.0	8.5	0.0	6.8	8.2	\$249,571	18560	12586
Shurugwi	Ironsides	Private	30.1	19.5	70.3	0.0	0.0	16.9	14.4	\$196,972	9055	5855
Gutu	Mutema	Govt RHC	13.6	4.7	14.0	1.5	122.7	6.1		\$232,906	32677	11297
Gutu	Nemashakwe	Govt RHC	20.3	7.2	9.2	3.4	130.4	6.9		\$206,486	20065	7163
Gutu	Soti Source	Govt RHC	14.6	7.0	12.7	8.4	141.7	11.6		\$201,764	17655	8474
Gutu	Cheshuro	RDC	14.3	5.9	12.2	2.4	142.6	12.0		\$200,556	21527	8826
Gutu	Nyazvidzi	RDC	13.2	5.1	11.2	3.6	132.0	11.7		\$142,129	14408	5497
Gutu	Zinhata	RDC	19.2	6.2	13.6	2.8	129.9	11.3		\$201,287	22151	7147
Gutu	Mukaro	Mission	14.7	5.4	7.7	1.7	270.0	10.6		\$610,528	44976	16634
Gutu	Serima	Mission	36.3	6.4	6.2	2.1	536.4	28.2		\$477,841	39165	6936
Binga	Chinego	Govt RHC	18.3	11.6	42.4	7.9	151.5	17.1	12.8	\$290,657	11319	7166
Binga	Lubimbi	Govt RHC	26.4	20.1	67.1	11.6	192.8	15.5	20.5	\$266,926	4761	3627
Binga	Lusulu	Govt RHC	23.0	13.2	30.4	7.6	146.9	15.6	13.1	\$350,717	15343	8816
Binga	Pashu	RDC	27.9	10.0	61.6	6.8	136.2	16.3	11.6	\$267,462	12451	4466
Binga	Siansundu	Govt RHC	18.2	9.4	42.2	5.6	127.0	10.4	9.6	\$315,915	13291	6837
Kwekwe	Nyoni	Govt RHC	27.9	11.5	47.9	12.6	152.6	8.7	14.8	\$189,248	11498	4750
Kwekwe	Msilahobe	Govt RHC	12.4	9.4	28.2	7.8	75.8	8.4	8.3	\$167,523	8030	6100
Kwekwe	Silobela Jackson	Govt RHC	22.7	18.1	52.2	14.3	0.0	17.3	17.5	\$172,025	5399	4316
Kwekwe	Malisa Josepha	RDC	20.9	8.5	31.0	5.6	54.1	5.9	7.4	\$214,845	17446	7077
Kwekwe	Mbizo	Municipal	18.1	11.0	88.5	16.4	184.7	30.4	17.3	\$1,005,605	46122	27977

APPENDIX 4c

Annual 1994 Utilisation Rates

ANNUAL 1994 UTILISATION RATES

	Clinics, District and Provincial hospitals											Central hospitals				Total central	All levels			
	Manic	Mash C	Mash E	Mash W	Masv	Mat N	Mat S	Midlands	Bul	Chit	Harare	total	Harare	Mpilo	Ingutshen UBH					
OPD<5																				
new	377337	221611	209124	243882	342176	152816	101969	390626	143927	56563	352820	2592851	21671	13880	4	13930	49485	2642336		
repeat	266555	130960	149108	156425	404811	101162	50784	200813	143134	34783	187794	1826329	2562	5759	0	9233	17554	1843883		
total	643892	352571	358232	400307	746987	253978	152753	591439	287061	91346	540614	4419180	24233	19639	4	23163	67039	4486219		
OPD 5-14																				
new	416017	208845	211652	199856	397818	141066	107004	260757	82117	45825	117258	2188215	5674	6741	0	10257	22672	2210887		
repeat	282666	122092	134088	134742	467409	91134	50436	170269	48221	17884	64347	1583288	1442	2807	0	5217	9466	1592754		
total	698683	330937	345740	334598	865227	232200	157440	431026	130338	63709	181605	3771503	7116	9548	0	15474	32138	3803641		
OPD 15+																				
new	1436100	681210	667286	841318	1184299	421671	323575	923617	293662	123291	551354	7447383	48876	21003	0	73059	142938	7590321		
repeat	748895	358828	1182956	564691	1326579	255118	155625	614564	308922	53318	393441	5962937	42082	84	0	53754	95920	6058857		
total	2184995	1040038	1850242	1406009	2510878	676789	479200	1538181	602584	176609	944795	13410320	90958	21087	0	126813	238858	13649178		
OPD 5+																				
new	1852117	890055	878938	1041174	1582117	562737	430579	1184374	375779	169116	668612	9635598	54550	27744	0	83316	165610	9801208		
repeat	1031561	480920	1317044	699433	1793988	346252	206061	784833	357143	71202	457788	7546225	43524	2891	0	58971	105386	7651611		
total	2883678	1370975	2195982	1740607	3376105	908989	636640	1969207	732922	240318	1126400	17181823	98074	30635	0	142287	270996	17452819		
OPD total																				
new	2229454	1111666	1088062	1285056	1924293	715553	532548	1575000	519706	225679	1021432	12228449	76221	41624	4	97246	215095	12443544		
repeat	1298116	611880	1466152	855858	2198799	447414	256845	985646	500277	105985	645582	9372554	46086	8650	0	68204	122940	9495494		
total	3527570	1723546	2554214	2140914	4123092	1162967	789393	2560646	1019983	331664	1667014	21601003	122307	50274	4	165450	338035	21939038		
inpatient admissions	61437	36846	42217	59576	65194	40590	29077	75606		15778		total	426321	Pari 35558	Harare 41744	Mpilo 33125	Ingutshen ubh 1165 14741	all central 126333	all levels 552654	
bed occupancy	479113	232015	295084	361024	513765	248342	252724	564810		73660		3020537	202764	268086	260044	182982	170785	1084661	4105198	
operations																				
major	3078	1949	814	2405	4062	918	681	2593		1031		17531	5914	4910	3088		2602	16514	34045	
minor	11029	9004	8976	9243	13966	3222	3614	12405		3542		75001	6944	15669	12944		4022	39579	114580	
all	14107	10953	9790	11648	18028	4140	4295	14998	0	4573	0	92532	12858	20579	16032		6624	56093	148625	
population																				
<1	54384	31382	33150	37014	38077	24080	20856	46332	19981	9454	40343	355053								
1-4	202704	112606	125970	138504	165438	90128	82160	171288	70278	32794	136647	1328517								
>5	257088	143988	159120	175518	203515	114208	103016	217620	90259	42248	176990	1683570								
5+	1390912	779012	945880	1018482	1109485	573792	528984	1186380	598741	253196	1124406	9509270								
total	1648000	923000	1105000	1194000	1313000	688000	632000	1404000	689000	295444	1301396	11192840								
rates per 1000 population																				
OPD 1st visit																				
under 5	1467.7	1539.1	1314.3	1389.5	1681.3	1338.0	989.8	1795.0	1594.6	1338.8	1993.4	1540.1						29.4	1569.5	
over 5	1331.6	1142.5	929.2	1022.3	1426.0	980.7	814.0	998.3	627.6	667.9	594.6	1013.3						17.4	1030.7	
total	1352.8	1204.4	984.7	1076.3	1465.6	1040.0	842.6	1121.8	754.3	763.9	784.9	1092.5						19.2	1111.7	
OPD total																				
under 5	2504.6	2448.6	2251.3	2280.7	3670.4	2223.8	1482.8	2717.8	3180.4	2162.1	3054.5	2624.9						39.8	2664.7	
over 5	2073.2	1759.9	2321.6	1709.0	3042.9	1584.2	1203.5	1659.8	1224.1	949.1	1001.8	1806.8						28.5	1835.3	
total	2140.5	1867.3	2311.5	1793.1	3140.2	1690.4	1249.0	1823.8	1480.4	1122.6	1280.9	1929.9						30.2	1960.1	
admissions	37.3	39.9	38.2	49.9	49.7	59.0	46.0	53.9		53.4	0.0	38.1						11.3	49.4	
bed nights	290.7	251.4	267.0	302.4	391.3	361.0	399.9	402.3		249.3	0.0	0.0						96.9	366.8	
major ops	1.9	2.1	0.7	2.0	3.1	1.3	1.1	1.8	0.0	3.5	0.0	1.6						1.5	3.0	
minor ops	6.7	9.8	8.1	7.7	10.6	4.7	5.7	8.8	0.0	12.0	0.0	6.7						3.5	10.2	
total ops	8.6	11.9	8.9	9.8	13.7	6.0	6.8	10.7	0.0	15.5	0.0	8.3						5.0	13.3	

Source: MOHCW Health Information System

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APPENDIX 4d

Primary Package - Hypothetical Costing

Primary package					
	Days per month	No.	Cost (cost per nurse day=188) cost per EHT day=140)	Preventive	Curative
4.1 Promotive & Preventive					
4.1.1 Health education on ANC, PNC, FP, GM, EPI, BF, ARI, DD & ORS STD & HIV		1	\$188	\$188	
Promotion - Life style - alcohol, Tobacco, multiple partners etc					
To individuals		included in curative/preventive interactions			
To communities - ? waiting queues - 1/20 - at meetings		1	\$188	\$188	
4.2 Preventive Services					
4.2.1 MCH Services (Supermarket) ANC, PNC, FP, GM, EPI, SFP & BF		8	\$1,504	\$1,504	
Home visits - SCN - one per HH per year. - 1/20		1	\$188	\$88	\$100
- EHT - 4 per HH per year - 4/20		4	\$560	\$543	\$17
4.2.2 Outreach - SCN - 2/20		2	\$376	\$251	\$125
Supervise TM&VCW - 1/20		1	\$188	\$125	\$63
4.2.3 Disease Surveillance (SCN) - 1/20		1	\$188	\$150	\$38
4.2.4 Environmental Health - Sanitation 20% 3/20 (By EHT) - Water 20% 3/20		3	\$420	\$420	
- Food Safety 20% - Inspection 4/20		4	\$560	\$560	
- Ix Outbreak 1/20		1	\$140	\$130	\$10
- Waste disposal 5% 1/20		1	\$140	\$140	
- Disease Control - eg. TB 5% 1/20		1	\$140	\$74	\$66
Curative					
5.1 Delivery services					
- Deliveries	1/20	1	\$188		\$188
- Referrals					
- Micronutrient					

		Cost	Preventive	Curative
5.2 Treatment Services		17		
H/O, O/E, Ix & Mx of common conditions		\$3,196		\$3,196
5.2.1 Mx Childhood Diseases				
- ARI				
- Clinical Malaria				
- CDD with ORS				
5.2.2 Nutrition Rehabilitation				
5.2.3 Rx Local infections				
5.2.4 Rx Minor injuries				
5.2.5 Rx GB Pain etc.				
apply EDLIZ to:				
5.3 STD/HIV				
5.3.1 Dx by syndrome				
5.3.2 Mx by protocols				
5.3.3 Rx HIV related infections & refer complicated cases				
5.3.4 Counselling HIV	1	\$188	\$150	\$38
5.3.5 Advice & Promotion of HBC				
5.3.6 Condoms health ed. Promotion HIV/STD control				
5.4 Chronic Diseases				
5.4.1 Keep Register	1	\$188		\$188
5.4.1 Resupply medication				
5.4.2 TB contact tracing plus other communicable diseases	1	\$188	\$150	\$38
5.5 Minor Procedures	1	\$188		\$188
5.5.1 Suture minor laceration, episiotomy etc. under Local Anesthetic				
5.5.2 Minor Abscess - access, I & D.				
5.5.3 If exodontist - extract teeth				
5.5.4 RPR, Urine analysis & HB tests				
5.5.6 If trained, insert IUD				
6 Rehabilitation Services				
6.1 Identify at risk babies at birth or ASP.				
6.2 Red Label "at risk" baby's cards				
6.3 Educate mothers on "at risk" status	1	\$188	\$188	
6.4 Keep Disabled register				

	Cost	Preventive	Curative
7 Community based care activities			
7.1 VCW/FHW	\$600	\$400	\$200
7.2 CBD	\$500	\$500	
7.3 Traditional Midwife (TM)			
7.4 Traditional Healer			
7.5 Nutrition Coordinator	\$500	\$400	\$100
8. 1 Structures for RHC			
8.1 Standard RHC as per FHP1 (\$150,000/20/12)	\$625	\$156	\$469
Maintainance - \$100 per month	\$100	\$25	\$75
Accessible year round all transport			
10,000 sqm ("Rent" - will vary by location)	\$200	\$50	\$150
Running Water (1 Cubic Meter /day @ \$10)			
- Capital(5000/5/12)	\$83	\$13	\$70
- Recurrent (30*\$10)	\$300	\$50	\$250
electricity/solar/gas light for Labour Ward &			
Consulting room (1 "unit of energy @ 10\$ perday)			
- Capital(5000/5/12)	\$83	\$13	\$70
- Recurrent (30*\$10)	\$300	\$50	\$250
Fridge			
- Capital(3000/5/12)	\$50	\$40	\$10
- Recurrent (30*\$5)	\$150	\$100	\$50
3 * F14 staff houses (3*\$100,000/20/12)	\$1,250	\$450	\$800
Maintainance - \$75 per month each	\$225	\$75	\$150
3 Blair Toilets for staff 2 for patients	\$21	\$6	\$15
(5*\$500/10/12)			
Maintainance - \$20 per month each	\$100	\$20	\$80
Ottway Pit (\$500/5/12)	\$8		\$8
Refuse Pit (included in General hand work)			
Perimeter Fence (\$500/5/12)	\$8	\$2	\$6
Maintainance - \$20 per month	\$20	\$5	\$15
8.2 Communications System			
Radio or Phone 24 hrs (\$2000/5/12)	\$33	\$8	\$25
- Recurrent (30*\$30)	\$900	\$100	\$800
Post Bag (rent \$20 per month)	\$20	\$5	\$15

		Cost	Preventive	Curative
8.3 Management Services				
Ward Health Team (WARDCO sub com.) -SCN				
Meetings monthly - SCN	1	\$188	\$38	\$150
- Transport (S&T - \$50)		\$50	\$10	\$40
DHT - meeting - monthly - SCN	1	\$188	\$38	\$150
- Transport (S&T - \$200)		\$200	\$50	\$150
Ward Health Team (WARDCO sub com.) - EHT				
Meetings monthly - EHT	1	\$140	\$130	\$10
- Transport (S&T - \$50)		\$50	\$40	\$10
DHT - meeting - monthly - EHT	1	\$140	\$130	\$10
- Transport (S&T - \$200)		\$200	\$180	\$20
8.4 Supervision				
DNO/CHN		costed in secondary package		
S&T (\$100 + 200km @ \$2 per km)		\$500	\$300	\$200
and PHT supervise with list		costed in secondary package		
S&T (\$75)		\$75	\$70	\$5
Monthly Visit from DHE (\$3800/20)		costed in secondary package		
S&T (\$100 + 200km @ \$2 per km)		\$500	\$300	\$200
ZNFPC visit (quarterly - \$3000/4)	1	\$150	\$150	
S&T (\$100 + 200km @ \$2 per km)		\$500	\$450	\$50
8.5 Staff				
1 Nurse per 28 patients per day				
minimum 2SCN one with midwifery MCH/FP training				
Both with midwifery MCH/FP training if				
120 per day or more				
8.5.2.1 EHT Per ward				
8.5 3 Nurse Aides - 2 per RHC (@ \$1195 per month each)	2	\$2,390	\$1,000	\$1,390
8.5 4 General hand (\$1100)	1	\$1,100	\$500	\$600
10.2 Equipment				
		\$500	\$50	\$450
10.3 Training Costs				
Of workers in community - each calculated by initial training cost minus value of service work during training /expected no. of working years/12 for monthly value				
VCW/FHW (1000-10)/20/12)		\$4	\$3	\$1
CBD (\$2000/20/12)		\$8	\$7	\$1
Traditional Midwife (TM) (500/10/12)		\$4	\$2	\$2
Traditional Healer (Interaction costs - \$20 per month)		\$20	\$5	\$15
Nutrition Coordinator (2000/10/12)		\$8	\$6	\$2
Drugs & supplies (calculate as a one month's supply of all EDLIZ class A drugs)				
		\$2,000	\$100	\$1,900
Ambulance transport		\$600		\$600
Consumables		\$1,500	\$200	\$1,300

SUMMARY		TOTAL	PREVENTIVE	CURATIVE
MONTHLY	TOTAL COST	\$26,617	\$11,498	\$15,117
Adjustment for inflation (Mid 1995-Mid 1996) at 30% of non-staff costs		\$3,320	\$1,268	\$2,052
ADJUSTED MONTHLY	TOTAL COST	\$29,937	\$12,766	\$17,169
ANNUAL COST		\$359,220	\$153,191	\$206,029
Population served by a clinic if 1 clinic per ward = 6000				
Cost per capita		\$59.9	\$25.5	\$34.3
ADD costs incurred at secondary level attributable to primary level		\$8.0	\$7.7	\$0.3
		\$67.8	\$33.2	\$34.6
VARIANT 1 (shared SCN/SRN providing relief cover)				
ADD 25% of additional SCN/SRN to curative				\$11,250.0
plus 25% of annualised cost of F14 house				\$1,250.0
Revised total cost at clinic level				\$218,528.6
Revised cost per capita		\$70.0	\$33.2	\$36.7
VARIANT 2 (additional SCN/SRN)				
ADD cost of additional SCN/SRN to curative				\$45,000.0
plus annualised cost of F14 house				\$5,000.0
Revised total cost at clinic level				\$256,028.6
Revised cost per capita		\$76.8	\$33.8	\$43.0

APPENDIX 4e
UNICEF/MOHCW Data on
District Hospital Costs

UNICEF/MOHCW data on district hospital costs and utilisation

District hospital costs

unit cost	Shurugwi DH	Gutu Mission	Binga DH	Kwekwe DH
per 1st OPD visit	17.3	26.9	58.9	57.7
per in-patient day (1)	83.5	18.1	40.0	114.0
per 1st ANC visit	8.2	13.3	40.1	
per delivery (2)	466.3	61.0	320.0	456.0
per X-ray	38.0	15.9	22.8	22.0
per lab tests	10.6	3.6	8.7	15.3
Dentistry	45.0	14.2		32.0
per operation	251.0	145.4	166.2	320.7
per rehabilitation patient	53.0	28.5	36.0	103.1
Ratio 1st: total OPD visits	2.2		1.3	4.1
Ratio 1st: total ANC visits	2.8	5.4	3.6	3.8

(1) cost per in-patient day for Kwekwe recalculated from raw data

(2) unit cost of deliveries for Shurugwi and Kwekwe recalculated to include cost of stay

District hospital costs - amended to give cost per visit
for OPD and ANC

unit cost	Shurugwi DH	Gutu Mission	Binga DH	Kwekwe DH
per OPD visit	8.0		45.3	14.1
per in-patient day	83.5	18.1	40.0	114.0
per ANC visit	2.9	2.5	11.1	28.5
per delivery	466.3	61.0	320.0	456.0
per X-ray	38.0	15.9	22.8	22.0
per lab tests	10.6	3.6	8.7	15.3
Dentistry	45.0	14.2		32.0
per operation	251.0	145.4	166.2	320.7
per rehabilitation patient	53.0	28.5	36.0	103.1
inflation factor	1.996	1.850	1.530	1.389

District hospital costs - converted to constant mid 1996 price

unit cost	Shurugwi DH	Gutu Mission	Binga DH	Kwekwe DH	average
per OPD visit	15.9		69.3	19.6	34.9
per in-patient day	166.7	33.5	61.2	158.4	104.9
per ANC visit	5.9	4.6	17.1	39.6	16.8
per delivery	930.8	112.8	489.7	633.5	541.7
per X-ray	75.9	29.4	35.0	30.5	42.7
per lab tests	21.2	6.7	13.4	21.2	15.6
Dentistry	89.8	26.3		44.4	53.5
per operation	501.0	268.8	254.3	445.6	367.4
per rehabilitation patient	105.8	52.6	55.1	143.2	89.2

Utilisation					
	Shurugwi DH	Gutu Mission	Binga DH	Kwekwe DH	
no of visits etc					
OPD visits	36436		30095	175417	
in-patient days	11130	39847	33612	44831	
ANC visits	2319	6871	4418	6135	
deliveries	635	1571	1040	3608	
Xrays	1283	2448	1765	7692	
Lab tests	12241	7161	12491	42608	
Dentistry	893	1576		8400	
Surgery	402	1099	796	2620	
Rehab	474	468	1280	1321	
district pop 1992	86463	195802	87399	223146	592810
 Utilisation per head					
	Shurugwi DH	Gutu Mission	Binga DH	Kwekwe DH	average
OPD visits	0.421		0.344	0.786	0.517
in-patient days	0.129	0.204	0.385	0.201	0.229
ANC visits	0.027	0.035	0.051	0.027	0.035
deliveries	0.007	0.008	0.012	0.016	0.011
Xrays	0.015	0.013	0.020	0.034	0.021
Lab tests	0.142	0.037	0.143	0.191	0.128
Dentistry	0.010	0.008		0.038	0.019
Surgery	0.005	0.006	0.009	0.012	0.008
Rehab	0.005	0.002	0.015	0.006	0.007
 Utilisation per 1000 population					
	Shurugwi DH	Gutu Mission	Binga DH	Kwekwe DH	average
OPD visits	421.4		344.3	786.1	517.3
in-patient days	128.7	203.5	384.6	200.9	229.4
ANC visits	26.8	35.1	50.5	27.5	35.0
deliveries	7.3	8.0	11.9	16.2	10.9
Xrays	14.8	12.5	20.2	34.5	20.5
Lab tests	141.6	36.6	142.9	190.9	128.0
Dentistry	10.3	8.0		37.6	18.7
Surgery	4.6	5.6	9.1	11.7	7.8
Rehab	5.5	2.4	14.6	5.9	7.1
 Cost per person (unit cost x utilisation)					
	Shurugwi DH	Gutu Mission	Binga DH	Kwekwe DH	average
1st OPD	6.7		23.9	15.4	18.1
in-patient days	21.5	6.8	23.5	31.8	24.1
ANC 1st	0.2	0.2	0.9	1.1	0.6
deliveries	6.8	0.9	5.8	10.2	5.9
Xrays	1.1	0.4	0.7	1.1	0.9
Lab tests	3.0	0.2	1.9	4.0	2.0
Dentistry	0.9	0.2		1.7	1.0
Surgery	2.3	1.5	2.3	5.2	2.9
Rehab	0.6	0.1	0.8	0.8	0.6
all services					56.0

APPENDIX 4f

District Hospital Package - Hypothetical Costing

DISTRICT HOSPITAL/SECONDARY LEVEL SERVICES							
11.1.0	Function of secondary level care						
11.1.1	Manage (?Coordinate) all public & Private sector health facilities & activities						
11.1.2	Provide preventative & Promotive services						
11.1.3	Provide secondary level curative care						
11.1.4	Coordinate & monitor implementation of community based health programs						
12.0	Promotive & Preventative Services						
12.1	Maternal & Child health Services						
	Provision & organization of:-						
	ANC, PNC, FP, GM & EPI						
	by:-						
	a) district hospital						
	b) Outreach from Hospital						
	c) Mobile services						
	Coordinate, guide, monitor, supervise MCH at primary level						
	Analyze & interpret MCH data						
	Investigate & react to outbreaks & of EPI & other diseases						
	Procure, store, distribute & maintain MCH supplies &						
	Equipment						
	Train PHC workers						
12.2	Nutrition						
	Coordinate & organize:-						
	a) Coordinate community based nutrition programs						
	Improve HH food security through training in food production, processing storage & preparation						
	b) Infant & Young child Nutrition						
	promote & protect BF						
	Encourage baby friendly hospitals						
	c) Control surveillance of micronutrient disorders:-						
	Iodine, Vit A, Iron						
12.3	Environmental Health Programmes & Services						
	a) Technical support to communities on:-						
	water supplies						
	Blair Toilets						
	b) Water quality control						
	Sampling						
	Advising						
	c) Food safety						
	Inspection						
	Storage/Preservation						
	Preparation & handling						
	Handler's hygiene						
	Insect & vermin inspection						
	Ensure food handlers examinations						
	Ix food poisoning outbreaks						
	Inspect tinned food						
	Food sampling						
	d) Premises inspection						
	Interpret minimum requirements						
	Licensing inspections						
	Schools Hospitals & public places						
	e) Waste disposal						
	siting refuse dumps						
	Supervise disposal						
	f) Meat inspection						
	Meat & slaughter pole if no vets.						

	Butcheries						
12.4	Prevent & Control Communicable Diseases						
	Plan for & control outbreaks						
	Surveillance of reportable & notifiable diseases						
12.4.1	Notifiable						
	Cholera Plague etc,						
12.4.2	Reportable						
	HIV/AIDS, DD etc.						
12.5	Health Information Management						
	Implement HIS						
	Sentinel surveillance						
	Analyze data & feedback						
12.6	Health Education & Communication						
	As part of Px, Rx & Rehab programs						
	Produce local materials						
12.7	Oral Health Care Services						
	Dental checkups						
	Fluoride in water testing						
	IEC ie Px						
12.8	Outreach Services						
	Rhab						
	Psychiatric						
	Homed base Care - HIV/AIDS & chronic ill						
	School Health						
	Disease Surveillance						
	Oral Health services						
	EPI, FP, ANC & PNC						
	Environmental health Services						
13.0	Curative Care Services						
	- Above capabilities of Primary level						
13.1	Patients referrals from primary						
	referrals back from tertiary						
	Chronic ill needing review						
	Accident & emergency						
13.2	Clinical Services						
	Out & Inpatient						
13.2.1	Outpatients - nurse screens & refers if						
	necessary to Doctor (GMO)						
	a) Internal Medicine & Paediatrics						
	Dx & Rx of majority of acute & chronic conditions						
	Including Psychiatric						
	i) Common conditions in Paeds						
	Pneumonia				Malaria		
	Diarrhoea				TB		
	Marasmus				Cardiac Failure		
	Kwashiorkor				Burns		
	AIDS - definite/probable				Muti-intoxication		
	Septicemia				Failure to thrive		
	Meningitis				Measles		
	ii) Adults - common conditions						
	Malaria				Arthritis		
	CCF				Malignancy		
	Pneumonia				AIDS/HIV		
	CVA				Hypertension		

	Malnutrition		Epilepsy		
	Parasuicide		Meningitis		
	Pulmonary TB		Nephrotic syndrome		
	Extra Pulm. TB		DVT		
	Liver Disease		Typhoid		
	Renal Failure		Diabetes Mellitis		
	Gastroenteritis		Bronchial Asthma		
	Pyelonephritis				
	iii) Mental				
	Schizophrenia		Mental Handicap		
	Anxiety &/or hypochondriasis		Depressive illness		
	iv) Medical Procedures				
	LP		Ba Meal		
	Skin Biopsy		Laparoscopy		
	Blood Transfusion		Proctoscopy		
	Liver Biopsy		Sigmoidoscopy		
	Breast Biopsy		ECG		
13.2.2	Surgery				
	Minor & Major				
	i) Minor				
	I & D		Supra Pubic Catheter		
	Suture Wounds primary & Sec.		Chest Drain		
	Excise Lumps		Remove FB - ENT		
	LN Biopsy		Remove FB - Other		
	Venous Cut Down		Remove Nasal Polyp		
	Skin Grafting		Nasal packing		
	Cautery Of Warts		Circumcision		
	ii) Major Surgery				
	Laparotomy for emergency		Haemorrhoidectomy		
	Skin Graft		Appendectomy		
	Release Burns Contracture		Herniorrhaphy		
	iii) Orthopaedic				
	Minor				
	- Reduce Fractures		- Minor Amputations		
	- Apply POP +/- MUA				
	- Insert Steineman pin/K wire for traction				
	Major				
	- Major amputation				
	External fixation		Bone drilling		
	Sequestrectomy		Tendon repair		
	O&G/FP				
	i) Obstetrics				
	ANC		Deliveries	PNC	
	- "Mainly" to referred /at risk cases				
	Categories				
	- Normal deliveries??				
	Multiple pregnancy		Vacuum		
	Breach		Cesarean section		
	Deliveries with episiotomy		Induction of Labour		
	Destructive Op.				
	ii) Special Care Baby Unit				
	- Phototherapy				
	- Care of preterm & Others				
	iii) Gynaecological Services				

	General Exam						
	Minor procedures						
	- D&C				- Evac		
	- Marsupialization Of Cyst				- Pap Smear		
	- Apply Shirodkar				- Cervical Biopsy		
	Major Procedures						
	- Lap fro ectopic				- Ovarian Cystectomy		
	- Repair Ruptured Uterus						
	- laparoscopy for T/L & Dye studies						
	iv) FP Services						
	Short term		Long term	Permanent			
	- OCs		- insert IUD	Sterilization M &F			
	- Spermicides		- Injectables				
	- Condoms		- Implants				
13.2.5	Dental Services						
	- Tooth Extraction				- Scaling		
	- Fillings						
13.2.6	Rehabilitation Services						
	- Assessment & physio in hospital & at home						
	- Provide aids & equipment						
	Liase with others						
	- rehab psyc. & counseling						
	- Social welfare counseling						
13.2.7	Eye Services						
	- Treat common conditions						
	- Conjunctivitis				- Trachoma		
14.0	DIAGNOSTIC SERVICES						
	Basic Lab & X-Ray						
14.1	LABORATORY SERVICES						
	Haematology						
	Hb						
	WBC						
	Diff						
	ESR						
	Biochemistry						
	Urine						
					Glucose		
					Protein		
	Blood						
					Glucose		
					Potassium		
					Urea		
	CSF						
					Glucose		
					Protein		
	Bacteriology & Parasit.						
	sputum AAFB						
	Stool micro.						
	Occult blood in stool						
	Blood & CSF Cultures -						
	subcultures to province						
	Urine Schisto.						
	Malaria parasites						

	Blood bank							
		ABO & Rhesus gp. Cross match						
	Serology							
		RPR						
		HIV						
		Pregnancy test						
14.2	Radiological Services							
		X ray						
				Chest				
				Lungs				
				Abdomen				
				Spine (Lumbar & Cervical)				
				Skull				
				Pelvis & Hip				
		Ultrasound scan						
		Barium meal						
14.3	Pharmaceutical Services							
		Procure store stock & dispense C & B drugs						
		Preparation of Galenicals						
		Monitor RHC & Rural hospitals						
		Training staff of other institutions						
		Support peripheral centers to avoid stockouts						
15.0	FORENSIC SERVICES							
		To assist police with:-						
		Post Mortems						
		Collect blood for alcohol tests at forensic lab						
16.0	TECHNICAL AND ADMINISTRATIVE STRUCTURES							
16.1.1	Management Structures and Functions							
		The DHE						
		DMO						
		DNO						
		DEHO						
		DHSA						
		DP						
		The Matron						
		Co-opted members						
		Functions						
		Identify Health problems						
		Planning						
		Allocate & monitor resources						
		Ensure district adheres to MoH&CW policies & objectives						
		Ensure efficiency & Cost effectiveness						
		Ensure DHT is effective						
16.1.2	DHT							
		DHE members						
		RHC reps.						
		Hosp Matron						
		Health information officer						

	EO Health of District Rural Council						
	Min. of Loc. Gov. rep						
	Reps. of other Gov. Ministries						
	ZNFPC rep.						
	Chairperson of RDC						
	Rep. of Health NGOs						
	Functions						
	Planning						
	Maintain links						
	Decide on need for new facilities						
	Establish management norms						
	Implement government policy						
16.1.3	District Hospital Management Structure						
	1. Hospital Executive						
	DMO, Matron, DHSA, Pharmacist						
	2. Heads of departments						
	X-ray. Lab tech, Rehab Tech, Training School tutor						
	School Tutor, IDS, Dent Therapist, Transport officer						
	Matron, Community Sister, SI/C, Pharmacist, GMO						
	Other co-opted						
	3. Hospital Advisory Board						
	A GP, Loc. Authority Councilor, Loc. Businessman						
	Church rep, & 2 MoH appointees						
	DMO & Matron ex officio (non voting)						
	DHSA as secretary						
	Function - advisory & fund raising						
	4. General staff meetings						
	5. Departmental meetings						
16.3	District Monitoring Indicators						
	Child survival						
	Maternal Mortality						
	Immunization Coverage						
	FP Percent						
	Essential Drugs Coverage						
	Household Food Security						
	Community Water Supplies						
	Resource Management						

Staffing	Min	Optimal	Manage & coordinate	Prevent & promote	Curative	Coordinate & Manage Primary	Annual Unit Staff Costs	Annual cost per grade
District Health Executive								
DMO	1	1	\$13,000	\$13,000	\$91,000	\$13,000		
			10%	10%	70%	10%	\$130,000	\$130,000
DNO	1	1	\$10,000	\$25,000	\$5,000	\$10,000		
			20%	50%	10%	20%	\$50,000	\$50,000
DEHO	1	1	\$9,000	\$27,000	\$0	\$9,000		
			20%	60%	0%	20%	\$45,000	\$45,000
DHSA	1	1	\$12,000	\$18,000	\$18,000	\$12,000		
			20%	30%	30%	20%	\$60,000	\$60,000
DP	1	1	\$2,500	\$10,000	\$35,000	\$2,500		
			5%	20%	70%	5%	\$50,000	\$50,000
total DHE updated for inflation			\$46,500 \$51,150	\$93,000 \$102,300	\$149,000 \$163,900	\$46,500 \$51,150		\$335,000 \$368,500
Doctors								
Med Sup III	1	1	Allocated above					
GMO	3	4	\$6,000	\$12,000	\$102,000	\$0	\$40,000	\$120,000
			5%	10%	85%	0%		
Nurses								
Matron III/CO	1	1	\$2,391	\$2,391	\$40,650	\$2,391	\$47,823	\$47,823
			5%	5%	85%	5%		
Nurses (All Grades)	104	141	\$0	\$305,542	\$2,749,874	\$0	\$29,379	\$3,055,416
	0		0%	10%	90%	0%		
Nurse Aids	15	20	\$8,202	\$8,202	\$139,434	\$8,202	\$10,936	\$164,040
			5%	5%	85%	5%		
Dental								
Dentist	1	1	\$3,500	\$3,500	\$59,500	\$3,500	70000	\$70,000
			5%	5%	85%	5%		
Dental Therapist	1	2	\$1,500	\$1,500	\$25,500	\$1,500	30000	\$30,000
Dental Tech.	1	2	\$1,250	\$1,250	\$21,250	\$1,250	25000	\$25,000
Dental Assistant	1	2	\$750	\$750	\$12,750	\$750	15000	\$15,000
							SUBTOTAL	140000
							CUMTOT	\$140,000
Pharmacy								
Pharmacist	1	2						
Pharm Tech	1	2	\$0	\$0	\$33,507	\$1,764	\$35,271	\$35,271
Dispensary Assist.	1	1	\$0	\$0	\$12,136	\$639	\$12,775	\$12,775
Laboratory								
Lab Tech	1	2	\$0	\$0	\$38,000	\$2,000	\$40,000	\$40,000
Ass. Lab. Tech.	1	2	\$0	\$0	\$28,500	\$1,500	\$30,000	\$30,000
X-Ray								
Radiographer	1	2	\$1,910	\$0	\$34,376	\$1,910	\$38,196	\$38,196
X-Ray Operator	1	1	\$1,000	\$0	\$18,000	\$1,000	\$20,000	\$20,000
Dark Room Ass.	1	1	\$219	\$0	\$10,717	\$0	\$10,936	\$10,936
							SUBTOT	\$187,178
							CUMTOT	\$327,178
General Admin								
Hospital Administrator	1	1						
Executive Officer	1	1	\$1,500	\$1,500	\$25,500	\$1,500	\$30,000	\$30,000
Clerk (All grades)	4	6	\$3,479	\$3,479	\$59,150	\$3,479	\$17,397	\$69,588

Ambulance Driver	4	6	\$1,339	\$3,347	\$62,250	\$0	\$16,734	\$66,936
Telephonist	4	4	\$5,110	\$5,110	\$35,770	\$5,110	\$12,775	\$51,100
Typist Stenographer	2	3	\$3,455	\$1,727	\$27,637	\$1,727	\$17,273	\$34,546
Linen Checker	1	2	\$0	\$598	\$11,358	\$0	\$11,956	\$11,956
CSSD Packer	1	2	\$0	\$313	\$14,541	\$782	\$15,635	\$15,635
Security Guard	4	4	\$820	\$820	\$38,529	\$820	\$10,247	\$40,988
Mortuary Assistant	1	2	\$275	\$0	\$13,469	\$0	\$13,744	\$13,744
Sewing Assistant	1	1	\$208	\$0	\$9,987	\$208	\$10,403	\$10,403
Stores Orderly	1	1	\$1,044	\$1,044	\$17,749	\$1,044	\$20,881	\$20,881
General Hand (all Grades)	25	30	\$0	\$12,378	\$235,173	\$0	\$9,902	\$247,550
						SUBTOT	\$186,947	
						CUMTOT	\$514,125	
Rehabilitation								
Rehab. Ass.	1	2	\$631	\$1,261	\$10,090	\$631	\$12,612	\$12,612
Kitchen								
Inst. Domestic. Sup.	1	2	\$0	\$0	\$19,204	\$0	\$19,204	\$19,204
Cooks (All Grades)	3	4	\$0	\$0	\$32,808	\$0	\$10,936	\$32,808
TOTAL HOSPITAL STAFF	191	258	\$44,582	\$366,712	\$3,939,413	\$41,706	\$42,752	
District "Community Health Team"								
DNO (Note DHE Member)	1	1						
Community Nurse	3	3	\$6,000	\$102,000	\$6,000	\$6,000	\$40,000	\$120,000
Assistant /Librarian	1	1	\$1,000	\$17,000	\$1,000	\$1,000	\$20,000	\$20,000
Typist	1	1	\$850	\$14,450	\$850	\$850	\$17,000	\$17,000
DEHO (Note DHE Member)	1	1						
Prin. EHT	1	1	\$1,500	\$25,500	\$1,500	\$1,500	\$30,000	\$30,000
EHT III	1	1	\$1,250	\$21,250	\$1,250	\$1,250	\$25,000	\$25,000
TOTAL COMMUNITY HEALTH		9	\$10,600	\$180,200	\$10,600	\$10,600		
TOTAL (EXCLUDING DHE)			\$55,182	\$546,912	\$3,950,013	\$52,306		\$4,604,408
updated for inflation			\$60,700	\$601,603	\$4,345,014	\$57,537		\$5,064,849

Transport		Unit Cost	Cost for Units Req'd.	Depreciation Period	ANNUAL VALUE	
					Curative	Preventive
a) Two 4WD Ambulances	2	\$450,000	\$900,000	5	\$174,684	
b) One 2WD Ambulances	1	\$300,000	\$300,000	5	\$65,506	
c) One Minibus (for larger DHs)	1	\$350,000	\$350,000	5	\$76,424	\$76,424
d) Four 4WD vehicles for:	4	\$400,000	\$1,600,000	5	\$69,873	\$279,494
	Outreach					
	Supervision					
	Disease Control					
	General Purpose					
e) One Trailer	1	\$10,000	\$10,000	5	\$437	\$1,747
	TRANSPORT TOTAL		\$3,160,000	5	\$386,924	\$357,665

Equipment & Supplies		Dept	unit cost	cat no.	total cost	life span	annual value
a) Communications							
Radio or Telephone to all clinics		1	5000		\$5,000	5	\$1,092
b) Equipment & Supplies							
Amalgamator (dentist)		2 D	\$399	62/0160	\$798	5	\$174
Amputation, set		2 T	\$1,000		\$2,000	5	\$437
Anesthesia machine		4 T	\$1,129	01/3510	\$4,516	5	\$986
Anesthesthesia sundries		4 T	\$1,000		\$4,000	5	\$873
Antibiotic box, lockable		6 W	\$100		\$600	5	\$131
Apron - mortuar		4 MOR	\$30		\$120	5	\$26
Apron, lead		4 X	\$512	50/1040	\$2,048	5	\$447
Automatic processing unit, table top		1 X	\$3,000		\$3,000	5	\$655
Auxiliary crutches, Alm., tripod, pair		10 R	\$200		\$2,000	5	\$437
Baby measuring device		2 M	\$150		\$300	5	\$66
Baby warming resuscitation unit		2 N	\$800		\$1,600	5	\$349
Baby weighing scale		14 M	\$300		\$4,200	5	\$917
Balance, 20kg, (autopsy room)		2 MO	\$500		\$1,000	5	\$218
Balance, analytic		2 LA	\$600		\$1,200	5	\$262
Balkan beams		4 W	\$819	01/0160	\$3,276	5	\$715
Bassinet with Mattress		16 W	\$500		\$8,000	5	\$1,747
Bed pan, adult		24 W	\$111	01/7095	\$2,664	10	\$312
Bed screen, mobile		22 W	\$187	01/3200	\$4,114	5	\$898
Bedsheet Cradle		8 W	\$88	01/0130	\$704	10	\$83
Bedside locker (domestic)		148 E	\$319	01/3080	\$47,212	10	\$5,535
Bedside Rail, Pair, Attachable to bed		8 W	\$200		\$1,600	5	\$349
Bilirubinometer		1 LA	\$100		\$100	5	\$22
Bin storage plastic		10 K	\$30		\$300	5	\$66
Bin, pedal operated		140 W	\$50		\$7,000	5	\$1,528
Blackboard utensils (set)		1 E	\$30		\$30	5	\$7
Blanket, post operating		2 T	\$50		\$100	5	\$22
Blood Bank refridgerator		2 LA	\$3,000		\$6,000	5	\$1,310
Blood cell counter, manual		1 LA	\$50		\$50	5	\$11
Blood warmer, on stand		2 T	\$100		\$200	5	\$44
Board, chopping on stands		2 K	\$150		\$300	5	\$66
Bookcase, large		20 A	\$400		\$8,000	5	\$1,747
Bowl stand, double bowl		10 T	\$300		\$3,000	5	\$655
Bowl stand, single bowl		4 T	\$200		\$800	5	\$175
Broom stick crutches, pair		12 R	\$15	02/9214	\$180	2	\$94
Brush dispenser - low operated ??		1 K			\$0		
Brush toilet	?	1 W	\$5		\$5	1	\$5
Bucket with lid		4 T	\$30		\$120	2	\$63
Buckey stand		1 X	\$40		\$40	5	\$9
Bucky table		1 X	\$100		\$100	5	\$22
Bunsen burner		3 LA	\$50		\$150	5	\$33
Cabinet, double door		22 A	\$400		\$8,800	5	\$1,922
Cabinet, drug, double door (with alar		2 P	\$616	01/3520	\$1,232	10	\$144
Cabinet, warming sterile water bottle		1 T	\$200		\$200	5	\$44
Caesarian section set		2 T	\$1,000		\$2,000	10	\$234
Calculator		6 A	\$100		\$600	5	\$131
Cash register		2 A	\$2,000		\$4,000	5	\$873
Cassettes X-ray, gridded, set		1 X	\$622	50/0210-	\$622	5	\$136
Centrifuge		2 LA	\$2,000		\$4,000	5	\$873
Chair, easy		40 A	\$250		\$10,000	5	\$2,184
Chair, office		88 A	\$200		\$17,600	5	\$3,843

Chair, office visitor	60	A	\$175		\$10,500	5	\$2,293
Chair, plastic shell, with armrest	24	W	\$150		\$3,600	5	\$786
Chair, plastic shell, without armrest	124	W	\$130		\$16,120	5	\$3,520
Chart boards	10	W	\$21	01/8200	\$210	3	\$74
Chart, fertilization & ovum stages of	1	L	\$20		\$20	5	\$4
Chart, pregnancy stages	1	L	\$20		\$20	5	\$4
Chest Drain kit	4	T	\$100		\$400	5	\$87
Circumcision set	2	T	\$300		\$600	5	\$131
Cleaning trolley with utensils	9	K	\$300		\$2,700	5	\$590
Colony counter	1	LA	\$100		\$100	5	\$22
Computer & Printer	1	A	\$10,000		\$10,000	5	\$2,184
Conference chair	28	A	\$200		\$5,600	5	\$1,223
Container for glove wash	4	C	\$100		\$400	5	\$87
Container set - Pharmacy	2	P	\$500		\$1,000	5	\$218
Container, sharps disposal		W	\$20		\$0	5	\$0
Counter, tablet	2	P	\$60		\$120	5	\$26
Curtain, cubicle	36	W	\$50		\$1,800	5	\$393
Cut down set	2	T	\$500		\$1,000	5	\$218
Cutlery & crockery, set	2	K	\$100		\$200	5	\$44
Darkroom sundries	1	X	\$500		\$500	5	\$109
Deep freeze - Kitchen	1	K	\$4,000		\$4,000	5	\$873
Delivery bed	4	L	\$3,000		\$12,000	5	\$2,620
Delivery instruments set	12	MAT	\$200		\$2,400	5	\$524
Delivery sundries	2	MAT	\$300		\$600	5	\$131
Dental chair and unit	2	D	\$10,000		\$20,000	5	\$4,367
Dental Compressor	2	D	\$2,000		\$4,000	5	\$873
Dental examination light	2	D	\$3,000		\$6,000	5	\$1,310
Dental instruments, set	2	D	\$3,000		\$6,000	5	\$1,310
Dental Vacuum Unit	2	D	\$2,087	01/2710	\$4,174	5	\$911
Dental X-ray processing unit	1	D	\$2,000		\$2,000	5	\$437
Dental X-ray unit, wall mounted	1	D	\$10,000		\$10,000	5	\$2,184
Desk Single Pedestal, 3 Drawer	24	A	\$700		\$16,800	5	\$3,668
Desk utensils, set	30	A	\$200		\$6,000	5	\$1,310
Desk, Double Pedestal	24	A	\$600		\$14,400	5	\$3,144
Dev/fix tanks for automatic process	1	X	\$400		\$400	5	\$87
Diagnostic set (complete)	6	W	\$495	05/0300	\$2,970	3	\$1,050
Diagnostic Ultrasound	1	X	\$10,000		\$10,000	5	\$2,184
Diathermy unit	2	T	\$10,000		\$20,000	5	\$4,367
Dining set	140	K	\$30		\$4,200	5	\$917
Dressing instruments, set	80	W	\$100		\$8,000	5	\$1,747
Duplicating machine	1	A	\$4,000		\$4,000	5	\$873
D&C set	10	T	\$150		\$1,500	5	\$328
Elbow crutches, Alm., adjustable, pa	10	R	\$187	02/9245	\$1,870	3	\$661
Emergency dept. linen set	1	C	\$100		\$100	5	\$22
Emergency sundries set	2	C	\$200		\$400	5	\$87
Emergency trolley	2	T	\$1,000		\$2,000	5	\$437
Examination couch	20	O	\$500	01/3070	\$10,000	5	\$2,184
Examination couch with leg supports	6	O	\$1,000		\$6,000	5	\$1,310
Examination lamp, mobile	13	O	\$300		\$3,900	5	\$852
Examination lamp, wall mounted	2	L	\$500		\$1,000	5	\$218
Exercise equipment, physio	2	R	\$600		\$1,200	5	\$262
Fan, Desk Oscillating	34	A	\$1,000		\$34,000	5	\$7,424
Filing cabinet, four drawers	30	A	\$1,000		\$30,000	5	\$6,551
Film loading bench	1	X	\$1,000		\$1,000	5	\$218

Fixed low plinth (rehabilitation)	1	R	\$400		\$400	5	\$87
Flame photometer and & compresso	1	LA	\$4,000		\$4,000	5	\$873
Food mixer	1	K	\$2,000		\$2,000	5	\$437
Foot stool, one step, epoxy coated	60	W	\$50		\$3,000	5	\$655
Freezer	2	K	\$3,000		\$6,000	5	\$1,310
Gas Bottle Nitrous Oxide E	20	T	\$500	29/9500	\$10,000	5	\$2,184
Gas Bottle Nitrous Oxide ?	20	T	\$500		\$10,000	5	\$2,184
Gas Bottle Oxygen Size F	20	T	\$500	29/9600	\$10,000	5	\$2,184
Gas Bottle Oxygen Size J	20	T	\$500		\$10,000	5	\$2,184
General major set	2	T	\$2,500		\$5,000	5	\$1,092
General orthopaedic instrument set	1	T	\$2,500		\$2,500	5	\$546
Glass slab for ointment manufacture	1	P	\$50		\$50	5	\$11
Glassware set - Lab	2	L	\$1,000		\$2,000	5	\$437
Glassware set - Pharmacy	2	P	\$1,000		\$2,000	5	\$437
Glassware & utensils, set - Pharmac	2	P	\$1,000		\$2,000	5	\$437
Guest Bed with Mattress	38	W	\$500		\$19,000	5	\$4,149
Haemaoglobinometer	4	LA	\$200		\$800	5	\$175
Hanger brackets, set	1	X	\$280	500410-5	\$280	5	\$61
Headrest & Mattress					\$0	5	\$0
Heater Electric	54	A	\$200		\$10,800	5	\$2,358
Heater Electric Tabular	4	K	\$200		\$800	5	\$175
Hollow-ware, delivery dept, set	2	MAT	\$500		\$1,000	5	\$218
Hollow-ware, MCH dept, set	2	MCH	\$500		\$1,000	5	\$218
Hollow-ware, OPD, set	2	O	\$500		\$1,000	5	\$218
Hollow-ware, ward, set	4	W	\$500		\$2,000	5	\$437
Hospital Bed Mobile Fowler	8	W	\$1,190	010025	\$9,520	10	\$1,116
Hospital Bed, Mobile Adj.	140	W	\$791	01/0020	\$110,740	10	\$12,982
Hot air oven	1	LA	\$1,000		\$1,000	5	\$218
Hot air sterilizer, CSSD	1	C	\$1,500		\$1,500	5	\$328
Hotplate, double	4	K	\$500		\$2,000	5	\$437
Hysterectomy set	1	T	\$2,000		\$2,000	5	\$437
I & D set	10	T	\$400		\$4,000	5	\$873
Incubator - Lab	1	LA	\$4,000		\$4,000	5	\$873
Incubator, baby	8	N	\$5,000		\$40,000	5	\$8,734
Infusion Pump on mobile unit	1	W	\$4,000		\$4,000	5	\$873
Infusion rod, attachable to bed	16	W	\$150		\$2,400	5	\$524
Infusion stand mobile	34	W	\$133	01/3250	\$4,522	10	\$530
Instrument Cabinet	32	T	\$600		\$19,200	5	\$4,192
Instrument Cabinet (dental)	2	D	\$600		\$1,200	5	\$262
Instrument set, Instrument set, maj	1	T	\$2,694		\$2,694	5	\$588
Instrument set, minor/dissecting	2		\$2,925		\$5,850	5	\$1,277
Instrument Trolley, Large, Guard Rai	12	T	\$800		\$9,600	5	\$2,096
Instrument Trolley, Small, Guard Rai	10	T	\$700		\$7,000	5	\$1,528
Iron Electric - Industrial	2	L	\$300		\$600	5	\$131
IUD insertion set	1	T	\$700		\$700	5	\$153
Kettle, electric	4	K	\$150		\$600	5	\$131
Kick-bucket	12	T	\$67	01/3100	\$804	10	\$94
Lab utensils		L	\$1,000		\$0	5	\$0
Lamp, operating, mobile	2	T	\$3,000		\$6,000	5	\$1,310
Laryngoscope	4	T	\$553	29/2530/	\$2,212	10	\$259
Lifting Pole with Handgrip	8	W	\$204	01/0120	\$1,632	10	\$191
Linen set, delivery	2	T	\$100		\$200	5	\$44
Linen set, ward	4	W	\$100		\$400	5	\$87
Lockers (staff)	64	W	\$500		\$32,000	5	\$6,987

LP set		4 T	\$150		\$600	5	\$131
LP set		10 W	\$150		\$1,500	5	\$328
					\$0	5	\$0
Male gonad shields (set)		1 LX	\$150		\$150	5	\$33
Manual crash /resuscitation		2 T	\$150		\$300	5	\$66
Manual processing unit		1 X	\$500		\$500	5	\$109
Manual resuscitation unit for newborn		2 N	\$700		\$1,400	5	\$306
Mat,therapy 4ft*4ft*1inch		2 R	\$200		\$400	5	\$87
Mayo Table, Height Adjustable		6 T	\$500		\$3,000	5	\$655
MCH dept sundries, set		2 MCH	\$500		\$1,000	5	\$218
Micro-haematocrit (Lab.)		2 LA	\$2,000		\$4,000	5	\$873
Microscope		4 LA	\$3,000		\$12,000	5	\$2,620
Mincing machine, manual		1 K	\$200		\$200	5	\$44
Mini-Lap set		4 T	\$700		\$2,800	5	\$611
Minor dissections set		4 T	\$1,000		\$4,000	5	\$873
Mirror, posture, mobile		2 R	\$200		\$400	5	\$87
Mixer on stand with bowl (pharmacy)		2 P	\$1,000		\$2,000	5	\$437
Mobile dental unit		1 D	\$5,000		\$5,000	5	\$1,092
Mobile lighting unit		4 T	\$5,000		\$20,000	5	\$4,367
Mobile X-ray unit		1 X	\$10,000		\$10,000	5	\$2,184
Mother care , practical doll, flexible		1 L	\$100		\$100	5	\$22
Name printer & film marker		1 X	\$200		\$200	5	\$44
Nebulizer, electric		4 W	\$300		\$1,200	5	\$262
Nurse, Call Bell		20 W	\$100		\$2,000	5	\$437
Obstetric phantom doll		1 L	\$100		\$100	5	\$22
OPD sundries, set		2 O	\$500		\$1,000	5	\$218
Operating linen set		3	\$100		\$300	5	\$66
Ophthalmology surgery instruments		1 T	\$1,500		\$1,500	5	\$328
Operating table		2 T	\$5,000		\$10,000	5	\$2,184
Oscillating plaster saw, electric		2 T	\$2,000		\$4,000	5	\$873
Otoscope/ophthalmoscope, wall mou		10 M	\$1,000		\$10,000	5	\$2,184
Ovarian shields (set)		1 X	\$150		\$150	5	\$33
Overhead projector		1 E	\$2,000		\$2,000	5	\$437
Oxygen concentrator		8 T	\$5,000		\$40,000	5	\$8,734
Oxygen refilling device		2 T	\$500		\$1,000	5	\$218
Oxygen trolley, complete		9 T	\$231	01/3240	\$2,079	10	\$244
Pallet Truck		2 K	\$1,000		\$2,000	5	\$437
Pantry utensils, set		8 K	\$1,000		\$8,000	5	\$1,747
Paper binding machine		1 A	\$500		\$500	5	\$109
Paper roll stand, table mounted		2 C	\$100		\$200	5	\$44
Parallel bars, free standing		2 R	\$500	02/0200	\$1,000	5	\$218
Patient monitor for anesthesia		4 T	\$500		\$2,000	5	\$437
Patient poisoning unit		1 X	\$600		\$600	5	\$131
Patient roll over (recovery unit)		2 T	\$500		\$1,000	5	\$218
Patient stretcher height adjustable		6 T	\$500		\$3,000	5	\$655
Patient stretcher with detachable bar		10 T	\$968	01/3500	\$9,680	5	\$2,114
Pelvic examination set		4 MCH	\$400		\$1,600	5	\$349
Pelvis female, median section		1 L	\$150		\$150	5	\$33
Photo Camera		1 E	\$1,500		\$1,500	5	\$328
Photocopier		2 A	\$4,000		\$8,000	5	\$1,747
Phototherapy unit		2 W	\$2,000		\$4,000	5	\$873
Plaster instruments set		1 T	\$1,000		\$1,000	5	\$218
Plaster table, orthopaedic		2 T	\$4,000		\$8,000	5	\$1,747
Platform Truck		2 K	\$1,000		\$2,000	5	\$437

Post-mortem set	1	MOR	\$1,500		\$1,500	5	\$328
Projection screen	1	E	\$2,000		\$2,000	5	\$437
Protective gloves, pair	4	X	\$50		\$200	5	\$44
Pump for 200l drum, manual	2	S	\$150		\$300	5	\$66
rack, bedpan and urinals	8	W	\$400		\$3,200	5	\$699
Rail unit, 1 meter, recovery room	4	T	\$500		\$2,000	5	\$437
Refractometer	1	LA	\$200		\$200	5	\$44
Refridgerator	5	K	\$4,000		\$20,000	5	\$4,367
Refridgerator table top	6	K	\$2,000		\$12,000	5	\$2,620
Refridgerator, (Kitchen) 650 litre	2	K	\$5,000		\$10,000	5	\$2,184
Refridgerator, (Pharmacy bulk store)	1	P	\$5,000		\$5,000	5	\$1,092
Resuscitation set	4	T	\$1,188	029/1004	\$4,752	3	\$1,680
Roller mixer (Lab)	2	LA	\$1,000		\$2,000	5	\$437
Rotary mixer	1	LA	\$1,000		\$1,000	5	\$218
Rubber boots - pair	4	MOR	\$47	01/5270	\$188	3	\$66
Safe box, wall mounted	3	A	\$500		\$1,500	5	\$328
Safe, in administration	1	A	\$4,000		\$4,000	5	\$873
Scale electronic, top loading	4	LA	\$2,000		\$8,000	5	\$1,747
Scale platform wt/ht measure	6	M	\$1,500		\$9,000	5	\$1,965
Scale top loading (kitchen)	1	K	\$1,500		\$1,500	5	\$328
Scale, analytic (pharmacy)	2	P	\$3,000		\$6,000	5	\$1,310
Shelved, wire mesh, for free standin	6	K	\$500		\$3,000	5	\$655
Shower Curtain	44	B	\$50		\$2,200	5	\$480
Shower stool	20	W	\$100		\$2,000	5	\$437
Shredder, vegetable	1	K	\$1,000		\$1,000	5	\$218
Side cabinet	14	A	\$300		\$4,200	5	\$917
Slide projector	1	E	\$2,000		\$2,000	5	\$437
Slide warmer	2	LA	\$200		\$400	5	\$87
Spectrophotometer	1	LA	\$3,000		\$3,000	5	\$655
Sphygmomanometer	4	W	\$198	05/0902	\$792	2	\$414
Sphygmomanometer, aneroid	2	W	\$60	05/0900	\$120	3	\$42
Sphygmomanometer, automatic, em	2	C	\$1,000		\$2,000	5	\$437
Sphygmomanometer, mobile	8	W	\$500		\$4,000	5	\$873
Sphygmomanometer, rail mounted	8	W	\$400		\$3,200	5	\$699
Sphygmomanometer, wall mounted	14	O	\$500		\$7,000	5	\$1,528
Splints - sets, walking heels for plast	2	R	\$50		\$100	5	\$22
Split skin graft set	2	T	\$2,000		\$4,000	5	\$873
Step ladder	2	S	\$1,000		\$2,000	5	\$437
Sterilizer, table top, for dentist	1	D	\$2,000		\$2,000	5	\$437
Sternal puncture set	4	W	\$300		\$1,200	5	\$262
Stethoscope	30	O	\$100		\$3,000	5	\$655
Stool, mobile adjustable with backre	16	T	\$185	01/3310	\$2,960	5	\$646
Sterilization tape dispenser	2	C	\$20		\$40	5	\$9
Suction pump, double bottle	2	T	\$1,000		\$2,000	5	\$437
Suction pump, foot operated	6	W	\$500		\$3,000	5	\$655
Suction pump, mobile, ward type	8	W	\$1,000		\$8,000	5	\$1,747
Support for mosquito net on bassine	8	W	\$200		\$1,600	5	\$349
Surgical hollow-ware	1	T	\$1,000		\$1,000	5	\$218
Table, conference	1	A	\$2,000		\$2,000	5	\$437
Table, dining	12	K	\$1,500		\$18,000	5	\$3,930
Table, Formica top	37	K	\$1,000		\$37,000	5	\$8,079
Table, low	16	A	\$500		\$8,000	5	\$1,747
Table, writing	10	A	\$600		\$6,000	5	\$1,310
Tea machine	2	K	\$500		\$1,000	5	\$218

Tea set		2	K	\$100		\$200	5	\$44
Telephone Extension		66	A	\$50		\$3,300	5	\$721
Thermometer, Lab, wall mounted		24	L	\$50		\$1,200	5	\$262
Tin opener, wall mounted		1	K	\$100		\$100	5	\$22
Toaster		1	K	\$200		\$200	5	\$44
Toilet chair, mobile with bedpan		2	W	\$250	01/3390	\$500	5	\$109
Toilet shower		20	W	\$100		\$2,000	5	\$437
Tools for woodwork (set)		2	S	\$500		\$1,000	5	\$218
Tourniquet		2	T	\$100		\$200	5	\$44
Tracheostomy set		4	T	\$500		\$2,000	5	\$437
Traction equipment (set)		2	W	\$2,000		\$4,000	5	\$873
Tray counter, tablet		6	P	\$200		\$1,200	5	\$262
Tray, correspondence		20	A	\$100		\$2,000	5	\$437
Treatment couch, (Rehab)		2	R	\$500		\$1,000	5	\$218
Trolley for bassinet		16	W	\$200		\$3,200	5	\$699
Trolley, Clean Linen		34	L	\$200		\$6,800	5	\$1,485
Trolley, Dirty Linen		6	L	\$198	01/3125	\$1,188	5	\$259
Trolley, Dressings, with Drawers		38	W	\$644	01/3460	\$24,472	5	\$5,344
Trolley, Kitchen - Bain Marie		8	K	\$500		\$4,000	5	\$873
Trolley, Medicine Lockable		6	W	\$1,000		\$6,000	5	\$1,310
Trolley, Mortuary Covered		2	M	\$1,500		\$3,000	5	\$655
Trolley, Patient Records		6	W	\$500		\$3,000	5	\$655
Trolley, Patient Shower		4	W	\$700		\$2,800	5	\$611
Trolley, Patient Wash		4	W	\$600		\$2,400	5	\$524
Trolley, Plaster		2	T	\$500		\$1,000	5	\$218
Trolley, Utility, Two Shelves		20	A	\$649	01/3420	\$12,980	5	\$2,834
Truck, Laundry, Clean Linen		2	L	\$1,000		\$2,000	5	\$437
Truck, Laundry, Wet Linen		2	L	\$1,000		\$2,000	5	\$437
Typewriter		6	A	\$2,000		\$12,000	5	\$2,620
Urinals		32	W	\$109	01/7970	\$3,488	5	\$762
Urine test equipment		2	LA	\$500		\$1,000	5	\$218
Vacuum extractor, manual		2	L	\$1,000		\$2,000	5	\$437
Video unit		1	E	\$4,000		\$4,000	5	\$873
Walking frame (adult)		8	R	\$200	02/1800	\$1,600	5	\$349
Walking frame (child)		4	R	\$150		\$600	5	\$131
Walking frame (wheels) for rehab.		6	R	\$300		\$1,800	5	\$393
Walking stick, adjustable		4	R	\$100		\$400	5	\$87
Ward drug basket		6	W	\$100		\$600	5	\$131
Ward sundries, set		8	W	\$500		\$4,000	5	\$873
Waste container with lid - mobile		34	A	\$200		\$6,800	5	\$1,485
Waste paper basket		108	A	\$50		\$5,400	5	\$1,179
Waste paper basket, wall mounted		12	A	\$70		\$840	5	\$183
Water bath		2	LA	\$1,000		\$2,000	5	\$437
Weaving loom		1	R	\$2,000		\$2,000	5	\$437
Weighing scale platform		2	K	\$1,000		\$2,000	5	\$437
Wheel Chair, adult		8	W	\$1,176	02/3610	\$9,408	5	\$2,054
Wheel chair, child		2	W	\$1,000		\$2,000	5	\$437
Wheel chair, folding, emergency dep		4	C	\$1,176	02/3600	\$4,704	5	\$1,027
Window curtain		?	10	A		\$300	5	\$66
Wire baskets for sterile goods		8	W	\$50		\$400	5	\$87
Wound toilet & suture set		20	W	\$200		\$4,000	5	\$873
X-ray film viewer, 1 field, wall mount		8	X	\$200		\$1,600	5	\$349
X-ray film viewer, 4 field, wall mount		3	X	\$400		\$1,200	5	\$262
X-ray generator		1	X	\$2,000		\$2,000	5	\$437

X-ray, column			1 X	\$4,000		\$4,000	5	\$873
								\$303,601
						of which: curative		\$288,421
						preventive		\$15,180

Infrastructure (Buildings)			
1. Admin. Block			\$609,596
2. OPD			\$1,233,722
	OPD Toilets		\$152,329
3. Emergency /CSSD			\$1,097,824
4. Pharmacy			\$482,224
5. MCH			\$309,564
6. Standard acute wards		4	\$4,379,672
Male, Female, Paediatric & Maternity			
8. Maternity			\$446,925
9. Op. Theater/CSSD			\$2,386,536
10. X-ray			\$350,628
11. Rehab			\$328,275
12. Kitchen & dining hall			\$1,055,184
13. Laundry			\$801,244
14. CSSD			
15. Incinerator			\$274,783
16. Mortuary			\$333,983
17. Waiting mothers shelter			\$511,611
18. Lab			
19. MCH/FP training unit			\$1,136,150
20. Dental unit			
21. Central Store & Substation			\$411,481
23. Gate House			\$43,455
22. HOUSE TYPE E/21/R		1	\$294,164
23. House Type F14		1	\$213,282
24. House type (2 bed SD - Pair)		3	\$621,891
25 Flatlets (4 person)		6	\$2,816,010
	Subtotal		\$20,290,533
Covered Walkways			\$650,000
Site Building Works			\$500,000
Site Civil Works			\$180,000
Site Electrical Works			\$1,030,000
	Subtotal		\$22,650,533
Prelim & General			\$2,700,000
Insurance & Security			\$275,000
Contingency			\$1,300,000
	TOTAL		\$26,925,533
Updated for inflation November 1994-mid 1996			\$37,854,607
Annual cost			\$2,544,424
of which		curative	\$2,417,203
		preventive	\$127,221

APPENDIX 5

Additional Data Relating to Demand

APPENDIX 5a

Household Survey Questionnaires

- Healthcare usage and Expenditure Questionnaire**
- Revealed Preference Study of Healthcare Usage
(Willingness to Pay Survey)
and Manner of Payment for Service Questionnaire**

HOUSEHOLD SURVEY

HEALTH CARE USAGE AND EXPENDITURE

NAME OF INTERVIEWER: _____ DATE: _____

DISTRICT: _____ WARD/TOWN: _____

NAME OF RESPONDENT: _____ SEX: M/F: _____

VILLAGE/SUBURB/AREA: _____

I. GENERAL INFORMATION

1. Who is the household head?

Myself	1
Husband	2
Wife	3
Other (specify)	4

2. Marital status of household head

Single and never married	1
Married with one wife	2
Married and separated	3
Married and divorced	4
Widowed	5
More than one wife	6

3. Status of female-headed household

Single and never married	1
Divorced	2
Widowed	3

4. Size of household

no of adults _____

no of children under 5 years of age _____

no of children 5 - 12 years _____

no of children over 12 years _____

no of dependent adults _____

no of dependent children _____

II HEALTH RELATED DATA

What was the nature of the illness/injury

1 Have you ? _____

For how long were you sick/immobile ? _____

2. Have any other members of the household been injured/ill in the month? _____

What was the nature of the illness/injury ? _____

For how long were they sick ? _____

3. Did the sufferer seek health care at:

clinic/rural health centre	1
government district hospital	2
provincial referral hospital	3
mission hospital	4
private doctor/dispensary	5
private hospital.	6
traditional healer	7
faith healer	8

4. Was the ill person admitted to a clinic/hospital specify which ?

If so, for how many days _____

5. Was the health service rendered free of charge?
If not what was the cost of?

a consultation	\$ _____
a day's admittance	\$ _____
laboratory tests	\$ _____
X-Ray procedures	\$ _____

5.1 Does the ill person have a Min of Social Services Medical order?
If so, when was it obtained?

6 Was any medicine prescribed at the health facility
If so, where was the medicine obtained:

at the same health clinic	1
at a private dispensary	2
at a chemist outside the health facility	3
over the counter at supermarkets	4
other (specify)	

7. How much did the medicine cost?

Were there any other costs	
loss of income .	1
hiring help	2
transport.	3
other (specify)	

- 9 If patient admitted for a period, what was the total cost?
10. In regards to ANC, did the mother attend
a government ante-natal clinic 1
a private doctor and private clinic. 2
11. How many months pregnant was she when she booked for ANC?
12. Did she deliver at
home, unassisted 1
home, assisted by a traditional midwife 2
government clinic/rural health centre 3
government hospital 4
private facility 5
mission hospital 6
mission clinic 7
other (specify) _____
13. Did she pay for ANC (kuenda kuskero) _____
How much did she pay? _____
Were there any additional costs associated with the delivery?

If so what (specify) _____
14. If delivered at home, with a traditional mid-wife, was any fee paid?

How much, in cash or kind ? _____
15. In the last 16 months has the member been to a traditional
healer(ng'anga)? _____
How much did the member pay in cash or kind?

16. How far is the nearest clinic? _____
What mode of transport was used to reach the clinic? _____
What did it cost to get there? _____
- 16.1 How far is the nearest hospital? _____
What mode of transport was used to reach the hospital? _____
How much did it cost to reach the facility? _____
17. Has an ambulance been used by any member of family in the last 6
months? _____
what was the cost of the ambulance service? _____

18. How were you able to pay for your medical fees in the last 6 months (ask, and do not prompt answers initially, record exact reply)? _____

- | | |
|---------------------------------------|----|
| Did you | |
| have to draw on monies saved | 1 |
| borrow from a relative or neighbour | 2 |
| if so, (specify) | |
| undertake extra work | 3 |
| sell livestock | 4 |
| sell other capital assets | 5 |
| cut back on other things | |
| food | 6 |
| other household expenses | 7 |
| school fees | 8 |
| farm inputs such as seed, fertiliser | 9 |
| other things for your business | 10 |
| (incl. items like cotton for crochet) | 11 |

19. Was finding the money to pay for the health care

very difficult (but coped)	1
difficult (but manageable)	2
not difficult	3

20. Have you/other members of your family ever been ill and not been able to seek treatment because of fees _____
 give details _____

III. ECONOMIC ASPECTS OF HEALTH CARE

INCOME

1. Are you or any member of your family employed in the formal sector ?

Give details

1. _____
2. _____
3. _____

How much does each member take home every month?

1. _____
2. _____
3. _____

2. Are any members of your family seasonally employed, on commercial farms for example
For how many months of the year ? _____

Salary per month

1. _____
2. _____
3. _____

3. Are you or any family member involved in the informal sector (own account workers)

If so are they (TICK APPROP. RESPONSE)

carpenters
vendors
builders
metal workers
other (specify) _____

How much money do they earn each month

1. _____
2. _____
3. _____

4. Does your husband/wife or any son/daughter work in another town/area?

if so, who _____
where do they work _____

5. If your husband/wife works elsewhere (migrant labourer) does he/she send money home
regularly _____

every month (tick answer)
every three months

How much money does he/she send _____

- 5.1 If the money is sent irregularly

How often _____

How much is sent _____

6. As a farmer how much income did you realise this last year from the following:
sale of grain crops _____

sale of cotton/tobacco _____

sale of livestock _____

9. Which of the following were you able to grow for your own consumption last year?
(Interviewer to record quantity if possible, otherwise to assess what proportion of consumption was produced)

(Tick relevant crops)

Maize		
no of bags	none/some/most/all of consumption	
Sorghum		
no of bags	none/some/most/all of consumption	rapoko
no of bags	none/some/most/all of consumption	ground
nuts		
no of kgs	none/some/most/all of consumption	
Beans		
beans		
no of kgs	none/some/most/all of consumption	
Vegetables		
no of kgs	none/some/most/all of consumption	
meat/poultry		
no slaughtered	none/some/most/all of consumption	
dairy product		
e.g. milk	none/some/most/all of consumption	

other _____

CASH EXPENDITURE

10. In a typical month how much do you spend on the following items:

ITEM	MONTHLY COST
food	
accommodation	
water and electricity	
transport	
clothes	
other household expenses	

11. In a typical year how much do you spend on the following items:

ITEM	ANNUAL COST
School fees and related costs	
seeds, fertiliser	
insecticides	
other farming expenses	
transport	
labour	
replacement of capital assets	
repair of housing	
taxes/levies	
other business expenses	
other large expenses	
(give details)	

12. What assets do the family have (observation and informal discussion)
- house
 - scotch-carts
 - plough/cultivator
 - area of land cultivated
 - cattle
 - donkeys
 - small livestock
 - any savings (categorise in bands of \$20)

13. Debts

Did you have access to credit through the AFC/CMB/GMB or any bank in the last year?

If so what was it used for primarily? _____

How much credit did you obtain? _____

How are you repaying the debt? _____

Do you owe any other money on a mortgage? _____

Do you owe any to friends? _____

SOCIAL HEALTH INSURANCE ALTERNATE COSTS

1. First Scenario - Clinic Level

If the first set of costs seem to be too high/difficult for the people, adjust the costs to:

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
1 child	72	6
2 children	96	8
3 children	108	9
4 children	120	10
5 children	132	11

If the first scale does not worry them and they seem happy to pay, ask if they would prefer to pay slightly more to have a doctor come once a week and have an ambulance at the clinic.

Costs

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
1 child	150	12.50
2 children	180	15.00
3 children	200	16.67
4 children	210	17.50
5 children	220	18.33

Do not worry about the above alternatives if they are comfortable with the first option.

2. Second Scenario - Hospital Level

If the above costs seem to be too high/difficult for the people, adjust the costs to:

1 child	Z\$72 per year	Z\$6 per month
2 children	Z\$96	Z\$8
3 children	Z\$108	Z\$9
4 children	Z\$120	Z\$10
5 children	Z\$132	Z\$11

If the first scale does not worry them and they seem happy to pay, as if they would prefer to pay slightly more for better facilities.

Costs:

1 child	Z\$240 per year	Z\$20 per month
2 children	Z\$280	Z\$25
3 children	Z\$360	Z\$30
4 children	Z\$420	Z\$35
5 children	Z\$480	Z\$40

Do not worry about the above alternatives if they are comfortable with the first option.

QUESTIONNAIRE GUIDELINES

TOTAL NO. OF RESPONDENTS = 265

1. 114 urban respondents will be selected from the Municipal Housing Waiting List in Masvingo and Gweru, which are already classified according to income. 38 people will be drawn from each of the following monthly income categories:

less than Z\$400
Z\$401-1000
more than Z\$1001
2. 141 rural respondents will be selected from the respondents who participated in the previous study, based on the same income categories. 47 people will be drawn from each income category.
3. As far as possible equal numbers of men and women will be interviewed and possible the respondents will be interviewed separately i.e. not in the presence of the husband/wife.

HOUSEHOLD SURVEY 2

REVEALED PREFERENCE STUDY OF HEALTH CARE USAGE AND MANNER OF PAYMENT FOR SERVICE

NAME OF INTERVIEWER _____ DATE _____

DISTRICT _____ WARD/TOWN _____

VILLAGE/SUBURB/AREA _____ SEX: M/F _____

INCOME CATEGORY OF RESPONDENT ACCORDING TO MUNICIPAL WAITING LIST/ SELECTED FROM PREVIOUS RURAL SURVEY

the relevant category

<Z\$400

Z\$401 - 1 000

>Z\$1 000

1. GENERAL INFORMATION

- | | | |
|----|-----------------------------------|---|
| 1. | Marital status of household head | 1 |
| | married with one wife | 2 |
| | married and separated | 3 |
| | married and divorced | 4 |
| | widowed | 5 |
| | more than one wife | 6 |
| 2. | Status of female headed-household | |
| | single and never married | 1 |
| | divorced | 2 |
| | widowed | 3 |

3. Size of Household

- No. of adults _____
- No. of children under 5 _____
- No. of children 5 - 12 years _____
- No. of children over 12 _____
- No of dependent adults _____
- No. of dependent children _____

4. No. of years schooling/tertiary education _____

II. HEALTH RELATED DATA

1. Have you suffered any injury, or been ill in the last 6 months? _____

What was the nature of the illness/injury? _____

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2. Have any other members of the household been injured/ill in the last 6 months? _____
 What was the nature of the illness/injury? _____
3. Was the ill person admitted to a clinic/hospital? _____
4. What kind of health care was received? _____

5. Was the health service rendered free of charge? _____
 If so, do you have a Social Services exemption? _____
- If not, what was the total cost to you, of:
- A consultation _____
 Admittance to hospital _____
6. Was any medicine prescribed at the health facility? _____
7. Was the medicine obtained free of charge or paid for? _____
 What was the total cost of the medication? _____
8. Did you have any maternity costs : ANC (kuenda kuskero) _____
 What was the cost _____
 Were there any additional costs associated with the delivery? _____
 If so, how much _____
9. Was finding the money to pay for the health care:
- | | |
|----------------------------|---|
| Very difficult but coped) | 1 |
| Difficult (but manageable) | 2 |
| Not difficult | 3 |
10. Did you:
- | | |
|---|----|
| Have to draw on monies saved | 1 |
| Borrow from a relative or neighbour
(if so, specify) | 2 |
| Undertake extra work | 3 |
| Sell livestock | 4 |
| Sell other capital assets | 5 |
| Cut back on other things | |
| - food | 6 |
| - other household expenses | 7 |
| - school fees | 8 |
| - farm inputs such as seed, fertiliser | 9 |
| - other things for your business | 10 |
| (including items like cotton for
crochet) | 11 |

III. REVEALED PREFERENCE FOR PAYING

Interviewer to present two sets of scenarios of typical illnesses, as far as possible similar to those illnesses/injuries already experienced during the past year. Part of each scenario will focus on an improved quality of service delivery and local organisation/management. One scenario will

represent of a health care delivery/service at primary level/clinic and the other at secondary level/hospital.

The cost factor will then be introduced, stressing that the Government are still subsidising health but to a lesser degree.

The Social Health Insurance Scheme will have three price options, the second being slightly lower and the third higher.

1. FIRST SET OF SCENARIOS - CLINIC LEVEL

1.1 Clinic: Set the scene with caring, nice nurses, no waiting, plenty of drugs and locally managed clinic (money stays at District level).

Imagine it was \$3.00 a visit and a further \$6.00 for drugs and treatment.

Imagine your child/children had ARI (diarrhoea etc.) three times in the year. What would it cost?

Z\$

* If you have 1 child it would cost	27.00
* If you have 2 children it would cost	54.00
* If you have 3 children it would cost	81.00
* If you have 4 children it would cost	108.00
* If you have 5 children it would cost	135.00

One child may also get pneumonia in the year and cost Z\$30.

You/your wife may also get hypertension (BP) and have to go to the clinic every month at a total cost of Z\$120 in a year.

The total cost to the family in one year, with:

Z\$

* 1 child would amount to	177.00
* 2 children would amount to	204.00
* 3 children would amount to	231.00
* 4 children would amount to	258.00
* 5 children would amount to	285.00

Given this reality, how would you like to pay for the health service rendered? Would you:

1.1 OPTIONS FOR PAYING

- a) Prefer to prepay (pay a small amount into a prepaying scheme whenever you have available cash, thus entitling you to health care when you need it) - you would have a book like a POSB book and could buy "stamps" with your money and when ill "spend" the stamps. If you have a period of "bad luck" which mean many visits to the clinic, you may spend more stamps than you have in your book. You will then have to pay in cash for the remainder.
- b) Pay into a Social Health Insurance.

N.B. MENTION ONLY THE COST THAT RELATES TO THE FAMILY SIZE IS TO THE RESPONDENT.

You could pay a flat amount once a month or once a year, to the clinic and get a card. This would cover all your health care costs in a year. Government will continue to pay about two-thirds of costs at clinic level.

The costs would be as follows:

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
With 1 child	96	8.00
With 2 children	114	10.50
With 3 children	128	10.50
With 4 children	138	11.50
With 5 children	150	12.50

If you have "bad luck" and many visits are needed to the clinic, all your visits are paid as they will be covered by people with "good luck" who are also paying every month/year.

c. Pay on presentation at clinic.

Encourage respondents to choose one method of paying.

If the Social Health Insurance appears attractive, but the price is too high, discuss alternative prices on the attached sheet (Option 2). Conversely if they are happy with the price for the scheme, discuss a slightly higher amount to give increased benefits (Option 3).

IF NONE OF THE OPTIONS SEEM ATTRACTIVE, ASK FOR SUGGESTIONS AS TO A METHOD THEY WOULD PREFER.

d) Would you use some other way of paying?

Specify _____

e) Would you choose not to use the facility _____

1.2 Why did you choose that option?

Give reasons: _____

2. SECOND SCENARIO - HOSPITAL LEVEL

Most hospitals need to be improved with more drugs, doctors and nurses to ensure adequate health care. Hospitals also need better buildings and equipment. In order to make these improvements, people would need to pay, in one way or another to make this possible. Government will continue to pay about half the actual cost of health care at hospital level.

Imagine an OPD visit would cost Z\$25 and a day in hospital Z\$100. If you needed an operation, it might cost you another Z\$150.

If your child had pneumonia and spend 6 days in hospital, has two X-Rays (Z\$50) and drugs costing Z\$10 and Z\$50, the total cost would be Z\$780.

If you/your wife needed a Caesarean operation and spend 6 days in hospital it would cost Z\$775.

2.1 OPTIONS OF PAYING

a) Social Health Insurance

You could spread the cost of illness by paying once a year or once a month, and getting everything covered. (Stress to them that the actual costs are twice as much).

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
With 1 child	150	12.50
With 2 children	180	15.00
With 3 children	200	16.67
With 4 children	210	17.50
With 5 children	220	18.33

b) Prepaying

You could buy health stamps at the Post Office whenever you have some money. You keep the stamps in a book and when you are ill you spend the stamps. But remember as hospital costs are higher, you would need to save more to cover costs.

If you have a period of "bad luck" in the family however, and you need a serious operation, you may spend all your stamps in the book and then you would have to pay at the hospital for any further visits.

c) PAY THE FULL AMOUNT WHEN YOU HAVE TO GO TO THE HOSPITAL. Use scenario costs.

Encourage respondents to choose one method of paying. If none of them seem attractive, ask for suggestions as to a method they would prefer. Get them to explain.

2.2 Why would you choose that option?

Give reasons: _____

2.3 How do you feel about paying for health care?

Into a local fund:

Into a centralised fund in Harare:

Explain:

N.B. It is probable that the respondents will have different views on how to pay at clinic level and at hospital level. Remember costs are low at clinic, but more frequent, but higher at hospital although less frequent.

III. INCOME

1. Are you or any member of your family employed in the formal sector? _____

Give details:

1. _____
2. _____
3. _____

How much does each member take home every month?

1. _____
2. _____
3. _____

2. Are you or any family member involved in the informal sector (own account workers)?

If so, give details of source of income:

1. _____
2. _____
3. _____

How much money do they earn each month?

1. _____
2. _____
3. _____

**SOCIAL HEALTH INSURANCE
ALTERNATE COSTS**

1. First Scenario - Clinic Level

If the first set of costs seem to be too high/difficult for the people, adjust the costs to:

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
With 1 child	72	6.00
With 2 children	96	8.00
With 3 children	108	9.00
With 4 children	120	10.00
With 5 children	132	11.00

If the first scale does not worry them and they seem happy to pay, ask if they would prefer to pay slightly more to have a doctor come once a week and have an ambulance at the clinic.

Costs:

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
With 1 child	150	12.50
With 2 children	180	15.00
With 3 children	200	16.67
With 4 children	210	17.50
With 5 children	220	18.33

Do not worry about the alternatives if they are comfortable with the first option.

2. Second Scenario - Hospital Level

If the above costs seem to be too high/difficult for the people, adjust the costs to:

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
With 1 child	72	6.00
With 2 children	96	8.00
With 3 children	108	9.00
With 4 children	120	10.00
With 5 children	132	11.00

If the first scale does not worry them and they seem happy to pay, ask if they would prefer to pay slightly more for better facilities:

Costs:

	<u>Z\$ per year</u>	<u>Z\$ per month</u>
With 1 child	240	20.00
With 2 children	280	25.00
With 3 children	360	30.00
With 4 children	420	35.00
With 5 children	480	40.00

Do not worry about the above alternatives if they are comfortable with the first option.

APPENDIX 5b

**Additional Tables - Health Care Usage and
Expenditure Survey**

ADDITIONAL TABLES: INCOME AND HEALTH CARE EXPENDITURE SURVEY

ave hh income per month (\$)	means of payment for health care						
	saving	borrowing	extra wor	asset sales	cutting back	salaries	all
1-200	6	19	7	2	11	4	49
201-400	2	9	4	4	12	2	33
401-600	8	11	5	1	13	15	53
601-800	8	10	0	1	10	16	45
801-1000	6	8	2	2	10	11	39
1001-1200	7	1	0	0	7	4	19
1201-1500	10	7	2	0	13	8	40
1501-2000	9	2	0	0	8	10	29
>2000	12	5	0	1	5	7	30
	68	72	20	11	89	77	337
1-200	12.2%	38.8%	14.3%	4.1%	22.4%	8.2%	
201-400	6.1%	27.3%	12.1%	12.1%	36.4%	6.1%	
401-600	15.1%	20.8%	9.4%	1.9%	24.5%	28.3%	
601-800	17.8%	22.2%	0.0%	2.2%	22.2%	35.6%	
801-1000	15.4%	20.5%	5.1%	5.1%	25.6%	28.2%	
1001-1200	36.8%	5.3%	0.0%	0.0%	36.8%	21.1%	
1201-1500	25.0%	17.5%	5.0%	0.0%	32.5%	20.0%	
1501-2000	31.0%	6.9%	0.0%	0.0%	27.6%	34.5%	
>2000	40.0%	16.7%	0.0%	3.3%	16.7%	23.3%	
	20.2%	21.4%	5.9%	3.3%	26.4%	22.8%	

difficulty of payment for health care

ave hh income per month (\$)	very difficult	difficult	not difficult	
0	4	3	0	7
1-200	29	6	4	39
201-400	21	3	3	27
401-600	26	11	6	43
601-800	20	13	5	38
801-1000	15	7	6	28
1001-1200	6	9	2	17
1201-1500	10	10	12	32
1501-2000	8	8	8	24
>2000	8	13	8	29
	147	83	54	284

1-200	74.4%	15.4%	10.3%
201-400	77.8%	11.1%	11.1%
401-600	60.5%	25.6%	14.0%
601-800	52.6%	34.2%	13.2%
801-1000	53.6%	25.0%	21.4%
1001-1200	35.3%	52.9%	11.8%
1201-1500	31.3%	31.3%	37.5%
1501-2000	33.3%	33.3%	33.3%
>2000	27.6%	44.8%	27.6%
	51.8%	29.2%	19.0%

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date of booking for ante-natal care

ave hh income per month (\$)	1-3 months	4-6 months	7-9 month	never booked	
0	0	0	1	0	1
1-200	2	2	0	0	4
201-400	1	4	1	1	7
401-600	1	4	1	0	6
601-800	4	2	2	0	8
801-1000	1	2	0	0	3
1001-1200	0	5	3	0	8
1201-1500	4	2	1	0	7
1501-2000	3	3	0	0	6
>2000	5	7	0	0	12
	21	31	9	1	62

	1-3 months	4-6 months	7-9 month	never booked
0	0.0%	0.0%	100.0%	0.0%
1-200	50.0%	50.0%	0.0%	0.0%
201-400	14.3%	57.1%	14.3%	14.3%
401-600	16.7%	66.7%	16.7%	0.0%
601-800	50.0%	25.0%	25.0%	0.0%
801-1000	33.3%	66.7%	0.0%	0.0%
1001-1200	0.0%	62.5%	37.5%	0.0%
1201-1500	57.1%	28.6%	14.3%	0.0%
1501-2000	50.0%	50.0%	0.0%	0.0%
>2000	41.7%	58.3%	0.0%	0.0%
	33.9%	50.0%	14.5%	1.6%

155

average hh income per head	means of payment for health care							
	saving	borrowing	extra wor	asset sales	cutting back	salaries		
0	2	4	0	1	0	3	10	
1-50	4	19	8	4	19	4	58	
51-100	12	14	7	3	16	17	69	
101-200	16	14	2	1	25	19	77	
201-400	19	19	2	2	24	18	84	
401-800	13	2	1	0	5	13	34	
801+	2	0	0	0	0	3	5	
	68	72	20	11	89	77	337	

	saving	borrowing	extra wor	asset sales	cutting back	salaries	no.
0	20.0%	40.0%	0.0%	10.0%	0.0%	30.0%	10
1-50	6.9%	32.8%	13.8%	6.9%	32.8%	6.9%	58
51-100	17.4%	20.3%	10.1%	4.3%	23.2%	24.6%	69
101-200	20.8%	18.2%	2.6%	1.3%	32.5%	24.7%	77
201-400	22.6%	22.6%	2.4%	2.4%	28.6%	21.4%	84
401-800	38.2%	5.9%	2.9%	0.0%	14.7%	38.2%	34
801+	40.0%	0.0%	0.0%	0.0%	0.0%	60.0%	5
	20.2%	21.4%	5.9%	3.3%	26.4%	22.8%	337

APPENDIX 5c

Topic Guide - Focus Group Discussions



Focus Group Discussion Guidelines

Under each section heading are a series of questions, which could be used to stimulate discussions around the issue stated. Choose the questions best suited to the urban or rural situation.

1. Attitudes to insurance, ability to assess risk, trade-offs between future risk and sacrifice.

- ** Do you think that the community would pay into a school development fund regularly, to cover possible future damage to school building windows or roofs?
- ** Would a family with four sons put aside cattle or money against the future "roora" payments?
- ** Do families set aside enough seed from the crop harvested every year to ensure the next year's crop?
- * Multi-partnering leads to AIDS. Do you think that people are prepared to stick to one partner?
- * Would people be prepared to pay a small fee if they could be guaranteed that they would not have to wait for more than an hour at a health facility?
- ** How would people feel about paying for drugs/medicines if they were always available?
- ** What do you feel about NSSA? Do you think it is a good idea?
- ** Explore the reasons why people do not put lightning conductors onto their roofs?

2. Willingness and ability to plan for the future.

- ** Do people "winter plough" or wait for the DDF tractor?
- ** What would people choose to do - buy a mombe (or car) or pay for schooling for a child?
- ** Are people prepared to give up spare time and entertainment in order to study for a diploma?
- ** What is preferable: to build a pole and dagga house and have money to spend or to build a core house of brick and invest spare money in building materials?
- ** What do you feel about families who plan to have only four children, so that they can afford to educate them?
- ** Would people like to pay into a savings scheme for the education of their children?

3. Concerns about "tempting fate"

- ** What fears are connected with planning a future event?
- ** Would these same fears be connected to saving money for a future activity?
- ** Why do people not buy any clothing for a baby prior to its birth?
- ** Would people regard setting aside "money" for future possible illness as "tempting fate"?
- ** Do people fear that saving for unpleasant events such as illness or death would be linked to "bearing a grudge against another"?

KPMG

4. **Decision-making within households**

- ** Who decides when to take a sick person to hospital?
- ** Who decides whether to take an ill person to hospital or to a nganga?
- ** If the ill person is a woman, can she decide herself to go to a private doctor?
- ** Who decides what food the family will eat?
- ** Who decides whether a child should be immunised?
- ** Who decides what capital assets such as ploughs should be bought?
- ** Can a husband or wife decide whether to sell a mombe/goat (or furniture)?
- ** Who decides on the division of labour in the lands?

5. **Attitudes to "free care", - is it seen as an entitlement, or is care that is paid for valued more highly**

- ** Who do the people feel should be responsible for health care?
- ** If people get "health care" free, are they satisfied that they receive the best care?
- ** People very often bypass clinics and go to private doctors, why do you think they do this?
- ** Although condoms can be obtained free of charge, many people buy them in the chemist shops - why?
- ** Would people use health services frivolously if they were free?
- ** Would people be interested in spreading the cost of health care, through paying a small monthly fee to a local hospital?

6. **Analogies with burial societies - would people see this as similar to SHI and be willing to contribute.**

- ** Why are people willing to pay regularly into burial societies? What do they perceive they are paying for?
- ** Is there any difference between this type of paying a "little now to avoid huge costs later", and paying regularly into a health benefit scheme?

KPMG

General Comments for Research Assistants

In each town/area try to select patients from different socio-economic areas - so as to include a cross section from middle level income to the poorest.

Masvingo to urban, peri-urban & commercial farms x 2.

Gweru - urban and peri-urban.

Gokwe - peri-urban and communal area, Government and Mission hospital.

Chirumanzu - communal area, mission hospital and rural health clinics.

Interview people like Matrons, Teachers, Ministers, Doctors as to their feelings on:

- ** The income level which will constitute exemption from payment
- ** How this could be monitored - suggestions for a mechanism
- ** Whether people abuse free medicine
- ** The willingness of the people to pay a small amount proportionate to their income towards a Primary Health Care package
- ** Would people pay a small amount into a hospital package (free hospitalisation at the time of illness against a regular payment)
- ** How could this be collected

APPENDIX 5d

Results of Focus Group Discussions



RESULTS OF FOCUS GROUP DISCUSSIONS

1. Attitudes to insurance, ability to assess risk, trade-offs between future risk and sacrifice:

a) **Attitude to Insurance.**

Q: Pay into a school development fund?

R:	Yes/cond	No
	12	15

Reasons

Gweru/Urban

Yes: If the use of the money is clearly explained.
If the parents are consulted.

No: People do not have money (4 replies).
Because people already pay into a development fund for a school built before independence, and nothing has changed - our money is abused.

Gokwe

Group of teachers: would only pay if they perceived that the danger of possible damage was great - the greater the possibility, the more likelihood of paying.

People would need to be assured of the accountability and accounting system before they would be willing to pay.

People would pay if they had the money, and if they could pay once a year through the GMB/CMB.

If the fund was administered by people locally.

Masvingo/Chirumanzu

No: Because people are battling already to pay school fees (3 replies).

Would rather pay for something when it has happened, not in advance (4 replies).

Because money collected invites theft and misuse (3 replies).

Yes: Good to pay a little regularly because it could happen anytime (3 replies).

If it's affordable (4 replies).

Q. Put aside cattle for roora?

R:	Yes	No
	4	23

Reasons

Gweru/Urban

No: Cannot afford it (5 replies).

KPMG

If you have no money, you cross the bridge when it comes.

Age of majority act: allows children to do what they like, so there is no arranging things anymore and you will encourage laziness in sons (2 replies).

Gokwe

No: Because of the drought we have no cattle and therefore cannot save cattle (3 replies).

Would rather save for education (3 replies).

Education seen as a means of saving for roora.

Sometime sons get land on which to produce their own roora.

Masvingo/Chirumanzu

No: Better to educate them and let them pay for their marriages (6 replies).

Sons may not marry, and when they marry they are adults and pay for their own.

Family members help each other when the time comes (3 replies).

Drought kills cattle.

Yes: Try to help sons through chipanda (3 replies).

Q: Is seed set aside each year for the next (Rural response mainly).

Yes: Some saved, but in small quantities (3 replies).

In terms of other crops for home consumption - sorghum, pumpkin etc. (13 replies).

It is felt to be a good idea to save seed if you can (3 replies).

Save seed but do not tell your children (1 reply).

But if the year is bad, then no seed and we look for it only when the rains come.

No: In terms of cotton and maize due to extension advice (10 replies).

Can't save because of droughts (2 replies).

N.B. No because Government give them seed every year (3 replies).

Q: Attitude to NSSA.

R:	Ignorance	Mixed	Positive	Negative
	6	5	3	13

Comments**Gweru/Chirumanzu**

Only those who have no pension scheme should pay into this (4 replies).

On a voluntary basis (4 replies).

Our money is being abused by NSSA people who buy houses etc. and used for other things (4 replies).

KPMG

When you try to get your money, you will spend more money trying to get it out, than the money you will get (3 replies).

We have to think about our children needs (1 reply).

Gokwe

N.B. People generally distrust NSSA. The manner in which it was imposed on people, makes them blind to any benefits. In addition, the lack of statements regarding the amount paid into the scheme, makes them even more suspicious.

Some agree it is an important scheme for those who had no pensions, but it should have been optional for those who did have.

Only those formally employed benefit - beneficiaries can lose out if they are not aware of the benefits.

Masvingo/Chirumanzu

Good idea if you have money, and the money can be protected, not abused (2 replies).

Ignorance about NSSA and as unemployed people, felt strongly about money being deducted from salaries (3 replies).

N.B. Would prefer to pay for something community based and avoid bureaucracy (3 replies).

Should not be compulsory - people do not want to pay into anything they won't benefit from in their lives.

b). Ability to Assess Risk

Q: Multi-partnering leads to AIDS - is there a behaviour change?

R: Yes No
6 21

Comments**Gweru**

Some out of fear, but Government will have to address the young.

Men naturally promiscuous (3 replies).

Alcohol increases promiscuity (2 replies).

Men work away from home, and if they wanted to have one partner it is not possible (3 replies).

The Government is responsible for AIDS through encouraging condoms.

Because of condoms, boys of 13 are now men.

Girls no longer have their aunts to teach them.

Because of poverty/hunger, children need to go out with older men for money.

Age of Majority Act - parents can no longer control their children and are afraid of being accused of child abuse.

Being and dying is so uncertain, so why change?

KPMG**Gokwe/Masvingo**

Most men have many partners, and are expected to do so, even though women had one partner and were happy to have only one (3 replies).

Group of teachers admitted to both having wives and girlfriends with children, and seemed not to be at all keen to change. In fact they said, "It's traditional and habit and the scare of AIDS is not going to change anything".

Men are not concerned about AIDS.

There are people who still want one partner, but ESAP victims, born and brought up in cities have many partners (2 replies).

Chirumanzu

People are prepared because of the rampant spreading of AIDS (3 replies).

Especially the younger ones (2 replies).

Some older people are prepared to have one partner, others still want polygamy, others never see the dangers (5 replies).

Q. Lightning conductors on roofs?

R. Urban: no need, earthen by ZESA, but attitude that lightning is the concern of God.

Rural: lightning is to do with traditional beliefs (3 replies) e.g. if you put lightning conductors you'll be inviting the lightning (4 replies).

People are ignorant about protection (10 replies).

No money to buy them (2 replies)

c) Trade-offs between future risk and sacrifice.

Q. Would you pay into a medical fund monthly to avoid large payments?

R.	Yes/cond.	No
	18	9

Conditions**Gweru/Chirumanzu:**

If fee was small enough, but it depends on income (7 replies).

People not going to clinic/hospital as can't afford it (4 replies), some even dying at home.

The Government should have asked us before, through people like you.

People can't afford to live let alone pay regularly into a medical fund - only for those formally employed (5 replies).

Those who pay at clinics get no medicines, so why should we pay.

Our money would be abused (4 replies).

Gokwe

Agree, but afraid that in bad years wouldn't be able to pay regularly, especially as school fees must be paid first.

KPMG

People would be interested in this scheme, but felt that many people would not be able to pay into any such scheme on a monthly basis (3 replies).

Would be interested but cannot afford it.

Would pay but insecurity about handling of the money.

Masvingo/Chirumanzu

Good idea but resources limited (4 replies).

People could only afford to pay a small amount when sick, not in advance (9 replies).

Q. Pay if they didn't have to wait?

Conditions/reasons

See it operating like a tip (2 replies).

Can't believe it would help due to attitude of nurses, people pay and still have to wait (11 replies).

NB: Felt that if you paid, those who didn't would die in the queue waiting for help.

Stressed the rudeness, poor treatment and uncaring attitude of nurses (4 replies).

Everybody has to wait because the nurses don't worry.

Quality would not improve (2 replies).

Couldn't afford to pay (5 replies).

Q. Pay for drugs if available?

Conditions/reasons

Yes: then we would have access to drugs (7 replies).

People should be told they are not free and they would value them if they pay (3 replies).

People are willing to pay, they know Government can't get them free (5 replies).

If they could always get the drugs, but now we pay and there are no drugs (3 replies).

The issue is not paying, it's how much (4 replies):

Q. If you buy malaria drugs at the chemist, they cost \$3.50, if you go to the hospital it'll cost \$17.50, why pay the extra?

Couldn't afford to pay

2. Willingness and ability to plan for the future.

General

Gokwe/Masvingo

felt it was good to plan, but only feasible if you have money/resources.

Q. Winter plough/wait for DDF?



Gokwe

No.: draught power, forced to wait for DDF (3 replies).

Lost cattle during drought and are desperate as tractors don't come.

Yes: do it, but forced by DDF employees to accept service and pay for what should be free.

DDF favour a few at the expense of the majority.

Masvingo/Chirumanzu

People winter plough if they have cattle (4 replies), but if not and can't afford to hire cattle are forced to wait for DDF or make do with zero tillage (10 replies).

But DDF so unreliable - don't come (3 replies).

b). Buy a mombe/car or save for future schooling

Reasons

Gweru

Yes: children are my future/my pension (2 replies)

sending children to school is a future investment (2 replies)

mothers of Ministers go hungry, but are happy because their children are leaders

save for schooling, but only if I can afford it

Gokwe

half of the group would invest in a cow, the other in education as drought might kill off the cow, and an educated child would be an investment for the future (3 replies)

invest in a cow and the calves will pay for the education

a child's education is a priority for many people and buying cattle that may die in a drought wouldn't ensure education (6 replies).

Masvingo/Chirumanzu

buy a mombe (is the same as saving for schooling) and generate money for schooling later (5 replies)

schooling because the son will take care of the parents when he's older (2 replies)

General

Education is a priority, and unfortunately the dilemma is being able to stay in school long enough to be held in the education of younger brothers. Problem of education seen as one of rising school fees, rather than too many children.

c). Give up spare time to study

Yes.	No.
------	-----

17	10
----	----

Comments

KPMG
Gweru

most adults are working for their children they don't have time to study (2 replies)
people will not give up entertainment, even children miss school and
homework for entertainment to make it possible

Masvingo/Chirumanzu

not much interest in studying as adults (5 replies)
keen to study, but often jobs offer on possibility to do so
keen to study as salaries are in keeping with qualifications
young especially keen to study (3 replies)

d). Build a temp house and spend/core house and save

Yes.	No.
------	-----

7	20
---	----

building of brick houses is not a choice, they can't afford it (6 replies)

saving money for a house better than your neighbours may invite witchcraft
(CHIRUMANZU)

Yes: its obvious if you can afford to save (8 replies)

better to build for investment and have lodgers (6 replies)

brick houses last and do not fall down in the rain (4 replies)

e). Plan family to educate them

Yes.	No.
------	-----

16	9.2%
----	------

Gweru

many children was traditional, but now its difficult to support them (Chirumanzu)
(6 replies)

with AIDS now its important to have many children so that 1 or 2 will survive
men are fewer, because of AIDS so we should have more children

Gokwe/Chirumanzu

women keen to plan families, but its totally outside their control (2 replies)
men both wanted as many children as possible and some had two
wives with many children (2 replies)
economic hardships make it necessary to limit families (4 replies)
ignorance is one of the main reasons why people have too many children (2 replies)

Masvingo/Chirumanzu

good idea as rising cost of living makes it important to plan (5 replies)
economic issues even lead to people choosing to have no children (2 replies)
many children make it impossible to break out of the cycle of poverty (6 replies)
if I could go back I would not have any children at all, its too hard to day (1 reply)

KPMG

older people feel that as long as one can feed and clothe them they should not plan (2 replies)

No: the tribe will die out (4 replies)

f). Save to educate child

Yes.	No.
20	7

Conditions

if you can afford to do so (15 replies)
 education is so expensive we have to plan now (5 replies)
 we do not know what is the future, so why save (5 replies)
 sell a mambe and pay fees - no saving (2 replies)

3. Concerns about tempting fate

General-Gokwe/Gweru, people saw few situation "as tempting fate."
 Such things belong to the past (teachers).
 Culture is seen as dynamic and constantly changing.
 The consequences of innocence is the only real thing the people fear and many rural people fear breaking "chisi" days.

Chirumanzu

Death is the obvious thing which people fear to plan for the future.
 Also fear of accidents or failure militate (4 replies)

NB: To plan for the future is tempting fate.

a). Fears about planning future events

people divided about whether future planning brought bad luck or not, but felt that saving may be a waste if something negative happens in between

Masvingo/Chirumanzu

With AIDS people are afraid of planning because they are not assured of a long life.

none anymore

people think its useless to plan because of interim change (2 replies)

people seemed to want to plan and prepare for ill health, but poverty made it very difficult (4 replies)

rural people are afraid to plan for the future they fear witchcraft (9 replies)

b). Connected to saving for future events?

no people should save a little to avoid shocks later
 people save for future events by trying to have cattle, which they can sell in the event of a problem
 nothing to stop people saving
 premature death may deprive one of enjoying saved money
 declining value of money makes nonsense out of saving
 if it benefits the family its good

KPMG

- c). for rural people saving has the same problems as planning (10 replies)
Buying cloths for a baby before birth

Comments**Gweru**

these days they are buying/knitting/budgeting (6 replies)
today still birth/miscarriages are accepted so there is no problem
people used to fear witchcraft so hide things, now do not mind

Chirumanzu

some do it, but still hide them (2 replies)
also some do not because if its not born alive money is wasted
fear of bewitch meant causing complications during birth or death,
so do not draw attention to pregnancy by preparing.(6 replies)

Yes: some do save a bit and buy some clothes (2 replies)

Gokwe/Masvingo

most people do prepare for the baby as the hospital expects them
to bring clothes
no problem anymore (5 replies)

- d). Putting aside money for future possible illness

Comments**Gweru**

No: problem, its like Medical Aid (urban) (3 replies)
but some are superstitious (2 replies)

Gokwe/Masvingo

people were not unwilling, just felt that they did not have the money
for such schemes (8 replies)
did not think it invited illness, but scarcity of resources made it
impossible.

Chirumanzu

Yes: its like inviting unpleasant events (3 replies)
but would like it to be kept confidential

No: not tempting fate (3 replies)
resources do not allow (3 replies)

- e). Saving for unpleasant events (death) linked to bearing grudge? or Burial Society?

Yes	No.
6	21

Comments

KPMG

Gweru

Many people have insurance policies now
so many of us belong to burial societies that we do all be dead if this was true

Gokwe/Masvingo

generally no negative feelings re saving for unpleasant events, but in rural area still have
extended families and neighbours

Chirumanzu

savings for illness/death is linked to having a grudge against another (5 replies)
people would not link saving for health to ill-health but for deaths yes (4 replies)

4. **Who decides?**

Gokwe

interesting to note that opinion of teachers (male and female & a rural mixed group were
the same)

General Masvingo

Decision making always been the same men articulate decisions made together by
husband and wife. There are however male and female responsibilities, about which
husband or wife decide.

Thus issues about a child, including the nagging the mother decides.

Decision making varies from household to household, but where only men earn money,
or earn more than women, they generally make the decisions. It means they are in
control of the economic resources. However, it was agreed that women usually
"nurture" the decisions and agreement reached in private.

Many husbands and wives are separated geographically, which gives the women more
scope to make decisions independently.

Men in rural areas generally decide.

Chirumanzu

Whoever is the most senior person in authority in the house at the time decides (3 replies)

father and mother both play role (3 replies)

the one who pays when to take a sick person to hospital

Gweru

as life is valued either can decide in urban areas
is generally the mother if the children are sick as the husband is at work (6 replies)
or drunkard (2 replies)
if male answered he said husband, women said "mothers)

Gokwe/Chirumanzu

where male at home he decided, though in consultation with wife (13 replies)
the mother (4 replies)

NB: *It was noted that women know how the decision-making is done,
and know how to operate within the limitations. In his absence she
knows how to manage alone.*



Masvingo

H & W decide together about household issues after discussions (4 replies)
 women usually decide issues in regard to children's health (5 replies)

Hospital or n'ange

it depends on the seriousness of the illness, but generally in rural areas its the husband/father (7 replies)
 there is need for the H & W to discuss and agree together as this is something big (16 replies)
 definitely decision of male - Gokwe (3 replies)
 Masvingo in regard to children
 the mother decides to immunise a child
 generally the mother (27 replies)

that a woman can go to a doctor
 if she is working and can afford it can decide (3 replies)
 if its sudden and he is not around she can go (3 replies)
 if she has to ask for money, bit more difficult.

Gokwe

needs husband's agreement (2 replies)
 can go on own, but usually notifies him (2 replies)
 deaths in hospital were attributed to the mother not being able to sign theatre form for child

Masvingo

very often when the mother is ill, its the father who pushes her to go to the private doctor, as usually mothers just accept it
 she can decide (8 replies)
 but must notify him CHIRUMANZU
 she has to be consulted if she wishes to go/attend a private doctor and pay (8 replies)

Chirumanzu

Q. what the family will eat?

R. generally the mother decides (27 replies)
 urban areas both father and mother can decide, because he now contributes to the food (4 replies)
 or even the children(2 replies)

Q. what capital assets will be bought?

husband generally decides : rural definitely (3 replies)
 even if the cow is hers, he has to agree (1 reply)
 women decides because she works in the fields (1 reply)
 generally there is discussion and agreement between husband and wife,
 because she plays a significant role in the buying of farming implements (19 replies)

Whether to sell livestock/furniture

cattle and furniture have collective value so there's need to consult (2 replies)
 cattle and furniture have collective value so there is need to consult (2 replies)
 cattle are for the whole family
 if wife sells without husband's consent she is divorced but he can sell without her concern and keep the money

KPMG**Gokwe/Chirumanzu**

husband decides (3 replies)
 discuss together (13 replies)

Masvingo

decide together (6 replies)
 division of labour in the fields
 women decide (14 replies)
 if men at home decide together (13 replies)

5. ATTITUDES TO FREE CARE**GENERAL**

People have always shunned free packages no one is ever content with a free package.
 People take pride in what in they paid for or bought with their own money. People
 associate health care with low quality health service.

a). Who is responsible for health care?

R.	Government/Employer	7
	Individual	5
	Both	15

COMMENT**Gweru/Gokwe**

Government/Council should provide facility and drugs, but people should pay
 (11 replies)
 Gokwe - in bad years Council should assist event with paying for service
 more preventative education needed

Gokwe/Chirumanzu

*NB: those who were meant to benefit by the "free health scheme" are
 grateful for it, but its being abused by those who should be paying
 (5 replies)*
 rural people see the Government as being responsible (4 replies)
 but some feel that if it would improve they would pay something (3 replies)
 people would also take their medicine properly if they paid (3 replies)

b). Is free health care regarded as the best?

Yes.	No.
4	23

COMMENT**Gweru**

there can not be free health care, somebody was paying
 free health care has damaged our economy
 people should pay, Ministry in shambles
 only those who pay get good care
 we think they add water to the medicine if its free (2 replies)

Gokwe

very appreciative of free health care, especially related to malaria and deaths resulting from malaria

teachers: poor expertise and staff associate with free health care

only treatment in the Mission hospitals is satisfactory

even if you pay the service does not match the fees, and if you don't, it is worse.

Maternity conditions squalid. No supervision

NB: service the same whether you pay or not which militates against any scheme to pay.

Masvingo/Chirumanzu

the people do not like free services because they are poor, but when you don't have money it's better than nothing (7 replies)

anything free is shunned, because it symbolised poverty, and low quality (3 replies)

people only ask for free health services because half a loaf is better than none

can't get medicines if it's free, because someone has to pay for them, and nurses and

doctors have to be paid

free health services is placing a strain on the tax payers

think pills are useless

free medicine means poor manpower and drugs (5 replies)

c). **Why do people go to private clinics ?**

if people have money they go to private doctor/hospital especially Mission hospitals because the treatment is better, the nurses are not rude, and you don't have to wait so long and there are drugs (18 replies)(drugs key issue) feel they get value for their money.

NB: People are prepared to pay for services

because they can get injections, and they believe that even its water it will heal them they may have an illness which they feel ashamed to disclose, a clinic often does not offer privacy (5 replies)

at government clinics you can not see a doctor (5 replies)

doctors in government clinics reluctant to help, because they will be rushing to their private surgeries where they make money

d). **Why do people buy condoms ?****Gweru/Masvingo/Chirumanzu**

because they think the bought ones are effective, and the others are faulty (11 replies)

they think the free ones are expired and therefore not good (5 replies)

condoms bought in chemists have expiry dates stamped on them

because they can do so in privacy (CHIRUMANZU) (9 replies)

Gokwe: there are no Chemist shops, and the VHWs sometimes have them, but they are rarely sought

free things are distrusted generally (3 replies)

it was also noted that at no cost the demand is limitless, and this the Government cannot afford

because they have an STD

Chirumanzu

condoms can be found lying everywhere, indicating the lack of value placed on free ones (3 replies)

e). Would people abuse free health care ?

Yes.	No.
19	7

Comment

if its free there is an element of irresponsibility,
 people e.g. just throw free drugs around (6 replies)
 like drought relief everyone abused it because it was free, unlike the new scheme where
 people take care
 but today few people go to clinics because they cannot afford it
 people had free health before and did not abuse it, nurses should administer drugs more
 carefully and educate people (4 replies)
 people go for anything if its free to get medicine to keep (4 replies)
 free health care should only be for the old and the chronically ill
 exemption letters cannot be from Councillors but people in real authority.

f) Would people pay small monthly fee to a local hospital ?

Yes.	No.	Maybe
7	11	8

Yes: if the amount was affordable x 7 (especial if Mission hospital) (replies)
 people agreed that they could pay a fee, like the "card fee" they currently pay, but would
 like to pay once

NB: *year when they harvest; on a monthly basis some would die in their
 homes, for lack of the money*

if they could be sure the money would not be abused/used by those in authority for
 other things (7 replies)

No: do not have the resources (9 replies)

Yes if they could be assured of getting a bed and service

General comment Masvingo

That people require free or low cost services, because they cannot afford to pay today's
 fees. The chronically ill however should pay as they use the clinics regularly.

6. ANALOGY WITH BURIAL SOCIETIES

NB: Death is important and sensitive to African people and BS ensure decent burial and
 conformity to needs of mourners

a) Why are they willing to pay?

its cheaper than Doves, and better no bureaucracy
 it helps those who do not have much money (5 replies)
 there is emotional support from other members (3 replies)
 its like African customs, and centres on neighbours (2 replies)
 they hold celebrations every year and people ge support (2 replies)
 they support you even when you are sick (3 replies)

Gokwe/Masvingo/Chirumanzu

the money pays for the provisions for the burial, and for transport and coffin (6 replies)
 hey can borrow money, and repay without interest (3 replies)
 its a good idea, but would need regular income to pay

KPMG

b) What do they perceive they are getting ?

Gweru

funeral expenses, but members can agree on amount to pay
members personally keen in touch with their money, and see short term benefits e.g.
celebrations, support
not like health scheme at all which only pays for health (3 replies)

NB: people with AIDS even if they have Medical Aid do not get good treatment from the clinics, but with burial societies, everybody knows each other and they all offer support accountability in BS

Gokwe/Masvingo

when people die far from home, the society pay for the body to be brought home and to feed the people who come for the burial

Chirumanzu

can get support for funeral expenses (5 replies)
but regular payments leads to misuse of money by those in authority
would prefer to pay for health care (2 replies)

General Comment

Gweru

People not very keen:
think they would rather take care of their own money
do not trust those in authority
Government not open with the people on the use of the money employees are corrupt
think it will be too expensive to pay every month

Gokwe

Burial societies unlike Medical schemes, respond immediately and provide money for burial (there is no cheating because its local), Medical scheme would need you to prove and claim etc.
not many burial association, some related to church organisations, but those who do contribute see enormous benefits same in Chirumanzu

c) Is there any difference between this and paying into a health scheme ?

NB: Masvingo - Yes BS are formed around some form of belongingness or relationship, such as clan (mutupo) village or church. An SHI would lack common ground between its members. It would lack group cohesiveness as it would include people from all areas and walks of life.

BS are also small enough to allow democratic decision making. SHI decisions may not be made in the interests of people contributing people do not like decisions that are dictated to them.

NB: SHI - you can pay in for years and die without ever using it

Yes: BS more important, resources lacking for a good SHI

Yes: death is once and guaranteed and his monies will be used. Sickness is not and could pay for years and not use it (CHIRU) (3 replies)
It may not occur, or it may occur many times. Also different illness cost different amounts (3 replies)



Yes: one is related specifically to health, the other encompasses relationships and on going practical support

No:: if you have money, because both require regular payments (2 replies)
People however felt that a Health scheme would be a good idea, but only those irregular employment felt they would join, for the others where income is not assured they would prefer not to pay into anything on a regular basis. (3 replies)
(CHIRUMANZU)

NB: paying for BS means for oneself - SHI scheme means for everyone else as well (4 replies)

SUMMARY

Focus group discussions were held within sampling areas in all four study areas. The discussions included some people who had completed the interview questionnaires and others who has not. Twenty seven such focus group discussions were held.

Each group consisted of between 6 - 12 participants, with the average number being 8. Thus approximately 219 people participated in the discussions which focused on issues such as attitudes to insurance, ability to assess risks and take action, willingness and ability to plan for the future, reactions and attitudes to "free health care and analogies between attitudes to burial societies and social health insurance. Each section is summarised separately in this interim report.



FOCUS GROUP DISCUSSIONS NOTES

OBSERVE COMMUNITY APPROACH GUIDELINES

Approach leaders first - headman, VIDCO chairperson, catchiest and explain that we are not from the tax people etc., but trying to find a way to help the people through improving their health services.

Try not to let them think that the poor will get it free - otherwise everyone will claim to be poor.

Definition of Household:

All those who eat together on a day to day basis.

General

1. Where the husband is a migrant labourer the "wife" would be regarded as the household head, on a day to day basis which involves decisions related to minor health care issues
- 2 - 4 are self explanatory.

Health related data

It is not possible to divulge the information that we are aware that a member of the family has both been to a hospital and paid for a service - this would be viewed very negatively, and militate against obtaining any further information therefore the necessity to ask questions 1-6.

- 1 - 9 self explanatory
5. Relates to people belief that medicines paid for are "better"
- 10 - 14 will not apply except where delivery has been identified within the hospital records.
11. Booking late is an indication of not being able to afford the fee
15. Is considerable importance in all instances, as many people go both to a doctor and na'nga, and very often get free health care and pay to go to na'nga.
16. Transport costs to the nearest health centre or hospital which are often excessive are part of the cost of health care.
18. Ask the question first and allow time for the person to answer, before prompting with other questions.
19. Is really a summary of 18, but just to gauge the degree of difficulty.

ECONOMMIC DATA

These questions may be sensitive, so the interviewer should try to assess how true the replies are from the readiness/reluctance to answer, and not this against the questionnaire for the household.

Definition of Formal sector:

Regular income or salary related to job activity:

Definition of informal sector:

Varied income derived irregularly from economic activities:

APPENDIX 5e

Additional Tables - Willingness to Pay Survey

ADDITIONAL TABLES: WILLINGNESS TO PAY SURVEY

preferences by sector and income group

	households with formal sector income				all	households without formal sector income				all	income not specified	all
	<400	401-500	>1000	n/s		<400	401-500	>1000	n/s			
clinic												
prepay	10	32	35	1	78	29	11	4	0	44	11	133
insurance	5	20	48	0	73	9	6	2	1	18	13	104
presentation	1	9	11	0	21	2	3	2	1	8	1	30
other/dk/no pref	1	1	1	0	3	2	1	0	3	6	1	10
all	17	62	95	1	175	42	21	8	5	76	26	277
hospital												
prepay	1	16	13	1	31	11	1	1	0	13	5	49
insurance	15	36	74	0	125	26	18	5	1	50	19	194
presentation	0	8	7	0	15	3	1	2	1	7	1	23
other	1	2	1	0	4	2	1	0	3	6	1	11
all	17	62	95	1	175	42	21	8	5	76	26	277
clinic												
prepay	58.8%	51.6%	36.8%	100.0%	44.6%	69.0%	52.4%	50.0%	0.0%	57.9%	42.3%	48.0%
insurance	29.4%	32.3%	50.5%	0.0%	41.7%	21.4%	28.6%	25.0%	20.0%	23.7%	50.0%	37.5%
presentation	5.9%	14.5%	11.6%	0.0%	12.0%	4.8%	14.3%	25.0%	20.0%	10.5%	3.8%	10.8%
other	5.9%	1.6%	1.1%	0.0%	1.7%	4.8%	4.8%	0.0%	60.0%	7.9%	3.8%	3.6%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
hospital												
prepay	5.9%	25.8%	13.7%	100.0%	17.7%	26.2%	4.8%	12.5%	0.0%	17.1%	19.2%	17.7%
insurance	88.2%	58.1%	77.9%	0.0%	71.4%	61.9%	85.7%	62.5%	20.0%	65.8%	73.1%	70.0%
presentation	0.0%	12.9%	7.4%	0.0%	8.6%	7.1%	4.8%	25.0%	20.0%	9.2%	3.8%	8.3%
other	5.9%	3.2%	1.1%	0.0%	2.3%	4.8%	4.8%	0.0%	60.0%	7.9%	3.8%	4.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix 5e.

preferences by level of education of respondent

	primary	secondary	tertiary	none	n/s	total	
clinic							
prepay	46	58	13	6		10	133
insurance	34	44	22	2		2	104
presentation	14	13	2	0		1	30
other/dk/no pref	8	0	1	1		0	10
all	102	115	38	9		13	277
hospital							
prepay	19	18	4	4		4	49
insurance	67	85	32	4		6	194
presentation	8	11	1	0		3	23
other/dk/no pref	8	1	1	1		0	11
all	102	115	38	9		13	277
percentages							
clinic							
prepay	45.1%	50.4%	34.2%	66.7%		76.9%	48.0%
insurance	33.3%	38.3%	57.9%	22.2%		15.4%	37.5%
presentation	13.7%	11.3%	5.3%	0.0%		7.7%	10.8%
other/dk/no pref	7.8%	0.0%	2.6%	11.1%		0.0%	3.6%
all	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%
hospital							
prepay	18.6%	15.7%	10.5%	44.4%		30.8%	17.7%
insurance	65.7%	73.9%	84.2%	44.4%		46.2%	70.0%
presentation	7.8%	9.6%	2.6%	0.0%		23.1%	8.3%
other/dk/no pref	7.8%	0.9%	2.6%	11.1%		0.0%	4.0%

preferences by area

	rural	urban	total	
clinic				
prepay	67	66		133
insurance	65	39		104
presentation	16	14		30
other/dk/no pr	10	0		10
all	158	119		277
hospital				
prepay	27	22		49
insurance	110	84		194
presentation	10	13		23
other/dk/no pr	11	0		11
all	158	119		277
percentages				
clinic				
prepay	42.4%	55.5%		48.0%
insurance	41.1%	32.8%		37.5%
presentation	10.1%	11.8%		10.8%
other/dk/no pr	6.3%	0.0%		3.6%
all	100.0%	100.0%		100.0%
hospital				
prepay	17.1%	18.5%		17.7%
insurance	69.6%	70.6%		70.0%
presentation	6.3%	10.9%		8.3%
other/dk/no pr	7.0%	0.0%		4.0%
all	100.0%	100.0%		100.0%

preferences by sector

	formal	informal	n/s	total
clinic				
prepay	78	44	11	133
insurance	73	18	13	104
presentati	21	8	1	30
other/dk/n	3	6	1	10
all	175	76	26	277
hospital				
prepay	31	13	5	49
insurance	125	50	19	194
presentati	15	7	1	23
other/dk/n	4	6	1	11
all	175	76	26	277
percentages				
clinic				
prepay	44.6%	57.9%	42.3%	48.0%
insurance	41.7%	23.7%	50.0%	37.5%
presentati	12.0%	10.5%	3.8%	10.8%
other/dk/n	1.7%	7.9%	3.8%	3.6%
all	100.0%	100.0%	100.0%	100.0%
hospital				
prepay	17.7%	17.1%	19.2%	17.7%
insurance	71.4%	65.8%	73.1%	70.0%
presentati	8.6%	9.2%	3.8%	8.3%
other/dk/n	2.3%	7.9%	3.8%	4.0%
all	100.0%	100.0%	100.0%	100.0%

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APPENDIX 6
Kwekwe District Hospital Survey

Kwekwe District Hospital Survey

The survey had two aims: firstly, to establish what proportion of patients were covered by Medical Aid and to what extent the costs for these patients were being recovered from Medical Aid Societies; secondly, to find out what proportion of patients were in formal employment (or had a spouse or parent in formal employment) and were therefore part of the first target group for Social Health Insurance. In addition the survey investigated whether patients had paid for the treatment received.

60 out-patients, and 16 in-patients at the time of discharge, were interviewed on 15 December 1995. The total number of out-patients seen that day was 227, and the number of in-patients discharged 19. The survey thus covered 26% of out-patients, and 84% of discharges. Whilst the respondents were anonymous and the purpose of the survey, including the fact that it was not linked in any way to fee recovery, was explained in some detail, not all respondents were willing to discuss payment.

The District Health Services Administrator explained the hospital's charging policy as follows. The main aim was to reinforce the referral system, not to recover costs. If patients were referred by a clinic then treatment was free and patients were not questioned at the hospital about incomes, nor as to whether they were covered by medical aid. If patients came direct to the hospital then the clerks were instructed to charge patients irrespective of income level. Thus rural patients and low-income urban patients should pay nothing provided they attended a clinic first; higher-income urban patients attending a clinic first should pay the initial clinic fee and nothing thereafter. The basic fees charged are \$20 for out-patient treatment (\$10 for children) and \$60 per day for in-patients. These fees are (in theory) inclusive of tests, drugs etc although wherever possible the hospital is cutting costs by giving prescriptions to be paid for at private pharmacies.

On the day concerned, according to the records,

- 25 out of 227 out-patients (11%) were fee-paying
- 1 out of 19 discharged in-patients (5%) was fee-paying

Medical Aid- survey data

The survey found that two out-patients (3%) were covered by Medical Aid (both CIMAS). In addition, one was covered by Workers' Compensation and one held a card for free payment as a ZNA dependent. Two in-patients (12.5%) were also covered by CIMAS bringing overall coverage up to 5.2%. All patients on medical aid (or their spouses) were in formal employment.

Medical Aid - hospital records

Records show that 21 of the 227 out-patients were described as on Medical Aid, however 14 of these cases were members of the forces receiving free treatment. Actual Medical Aid cases were 7 (3%) :

- MASCA: 2 cases



- PSMAS: 3 cases
- CIMAS: 1 case
- RAILMED: 1 case

This proportion corresponds closely to the survey data, suggesting that there is no large-scale under-reporting of medical aid. However the fact that only one CIMAS claimant was recorded does point to a need to tighten up procedures.

All Medical Aid societies were being billed at the standard fee rate of \$20/10 per out-patient and \$60 per in-patient day. We were told that it had been practice to bill for tests, drugs etc on top of this but that the Medical Aid societies had refused to pay.

It was not possible to identify in-patients covered by medical aid for a specific day as bills were prepared on a monthly basis.

Payment

Excluding those patients on medical aid, 10 out-patients (16.6%) and 3 in-patients (18.8%) were paying for the treatment. (There is a discrepancy here with the records which showed only one patient paying). These were principally patients who had come direct to the hospital. In most cases this appeared to be accepted although one maternity case was resentful because, having paid in another area she had been made to pay again after moving to Kwekwe and some paying patients said they should not be paying because their income was below the exemption level. Two patients expressed interest in medical aid, one of these saying that they 'did not know where to go'.

40 out-patients (66.7%) and 7 in-patients (44%) said explicitly that they had not paid. In the remaining cases the patients did not say whether they had paid although it is probable that the treatment was free. Of those patients not paying, at least 8 were exempt because they suffered from chronic illnesses. Many explained that they were carrying referral letters from clinics and/or letters from employers, councillors or Social Welfare.

Employment (see table 1)

About 40% of patients were in formal employment, or had a spouse/parent who was formally employed. However the majority were in relatively low paying occupations. About one quarter were engaged in informal activity, principally farming and/or trading. 35% stated no form of employment although a proportion of these may also be engaged in some informal activity.

Conclusions

Scope for recovering revenue from medical aid: the survey has not identified major under-claiming of medical aid although it does suggest a need to tighten procedures, firstly, to make sure that referred patients with medical aid cover do not slip through the net, secondly to ensure that cases are not overlooked. More crucially the MOHCW needs to firmly establish the principle that Medical Aid societies are billed for the full cost of treatment.



Existing charging procedures: At present, non-exempt patients going through the system pay only for the initial clinic visit. It is not clear whether this is the intention, and procedures need to be examined in this light.

Scope for additional formal sector coverage: Costs would be recovered for around 40% of patients if social health insurance were extended to the entire formal sector and their immediate dependents. The majority of these are likely, however, to be below the current exemption level, and putting in place arrangements for domestic workers and farm workers will be crucial.



Table 1: Employment status of respondents

	out-patients		in-patients		all patients	
	number	%	number	%	number	%
formal employment						
domestic workers	4	6.7			4	5.3
mine workers	3	5.0	1	6.2	4	5.3
farm workers	3	5.0	2	12.5	5	6.6
other/not stated	13	21.7	4	25	17	22.4
all formal employment	23	38.3	7	43.8	30	39.5
informal employment						
farmers	6	10.0	2	12.5	8	10.5
vendors/traders	8	13.3	1	6.2	9	11.8
other	2	18.8			2	2.6
all informal employment	16	26.7	3	18.8	19	25.0
not in employment	21	35.0	6	37.5	38	35.5
total	60	100%	16	100%	76	100%

APPENDIX 7

**Treatment costs of a Sample of
Medical Aid Patients**

DATA ON TREATMENT COSTS FOR A SAMPLE OF MEDICAL AID PATIENT

1. Random sample of 9 patients receiving treatment

	No. of episodes	Average cost per episode	Annual cost of care
Patient 1	9	\$145	\$1,302
Patient 2	8	\$571	\$4,568
Patient 3	6	\$173	\$1,040
Patient 4	2	\$57	\$114
Patient 5	9	\$123	\$1,109
Patient 6	12	\$114	\$1,378
Patient 7	5	\$161	\$804
Patient 8	7	\$260	\$1,822
Patient 9	1	\$275	\$275
Average	6.6	\$209	\$1,379

2. Random sample of 10 members

	No. of episodes	Average cost per episode	Annual cost of care
Patient 1	0		
Patient 2	0		
Patient 3	0		
Patient 4	6	\$100	\$600
Patient 5	12	\$112	\$1,355
Patient 6	0		
Patient 7	8	\$154	\$1,230
Patient 8	3	\$130	\$386
Patient 9	0		
Patient 10	2	\$97	\$194
Average: members receiving treatment		\$119	\$753
Average: all members			\$753

APPENDIX 8

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APPENDIX 9

SHI Workshop Questions/Discussion Points



Ministry of Health

SHI Workshop Questions/Discussion Points

Section 1 - Costs

- Q1. "In the informal sector - who is included? Where is the cut-off point"?**
- R1. The informal sector is all those not receiving a regular salary/wage, this includes the communal farmers.
- Q2. How do we define the poor? We need to accommodate those without income.**
- R2. Further analysis is needed from the Poverty Survey etc. but we estimate that the cut-off should be above \$400 and below \$1 000 per household, per month (the Poverty Survey suggests \$848).
- Q3. The procedure of direct fees for service - will this be addressed?**
- R3. Yes. That is what we call user fees. We need user fees as an incentive to insure.
- Q4. What is your target market?**
- R4. The target is the whole population, people above the exemption threshold will insure themselves, while government will pay premiums for the poor through a special fund.
- Q5. How did you come up with actual premium figures. Did you use an actuarial approach?**
- R5. Premiums were calculated as the predicted cost of the service plus the administrative costs of the SHI system divided by the number of people covered. However, actuarial calculations were not used in this preliminary study. More work is required to set exact premiums.
- Q6. Is this a short or long term solution?**
- R6. The UNICEF studies represent costs in the recent past, but updated to 1996 prices. The Hypothetical costing is the ideal for the near future but further study will be needed to project costs further into the future since SHI is seen as a long term solution.
- Q7. How do you determine who shall pay and who shall be paid for by government?**
- R7. Those exempted by the professional exemption mechanism will have their premiums paid by government.
- Q8. You mentioned that you used UNICEF, other studies and Government figures to arrive at your conclusions. What other sources of cost data were used?**
- R8. The Ministry of Health provided us with all the sources of data they were aware of, while we added other sources.
- Q9. Was costing of the packages assuming the current Ministry of Health inefficiencies and lack of quality?**
- R9. The figures were adjusted to allow for the improved quality that will be expected.

Q10. Will the Hospital Package include primary care?

R10. We propose that the Hospital Package should not include primary care. The latter will be financed by other mechanisms. Money saved at hospital level by Government due to SHI will be redirected to support primary level of care. Strict gate keeping between the primary care clinics and the hospitals will have to be put in place so that only appropriate patients are referred to hospitals where they will be covered by SHI.

Q11. User fees - what is the Report's recommendation?

R11. Our hope is that hardly anyone will pay user fees on presentation because most people will be insured for hospital costs.

Section 2 - Demand

Q1. Is there a bias towards those who are already paying? What about those who are not?

R1. For the qualitative research, we asked only those who had paid for care since we were interested in attitudes to paying for care. However focus groups included non paying clients.

Q2. I thought most people would rather prepay to ensure they get their money's worth?

R2. For Primary Level more people did prefer to have their payments recorded in a book like a Post Office Savings book so that they had control. Fewer had this view for hospital care since, for this service, SHI was preferred by the majority.

Q3. It seems that you only sampled people who had paid?

R3. No. There were people who had not paid for care in the focus groups. We feel there is a need to consult further with poorer people.

Section 3 - Financial Analysis

Q1. What is the revenue potential?

R1. The revenue we calculated did not include employer contributions. Revenue would be higher or worker's contributions lower if this is included.

Q2. Will contributions be compulsory?

R2. We assume that contributions to either SHI or medical aid societies will be compulsory in the formal sector and voluntary in the informal sector, with user fees providing the incentive to insure.

Q3. What is the projected split in terms of revenues to private providers and public providers?

R3. The revenue from Social Health Insurance will be used to fund public health services.

Q4. Is the Hospital Package going to include the Primary Care package?

R4. No. It will allow redirecting of Government funding to Primary Care.

Q5. How will core funding flow through to primary care providers?

R5. Through central government taxation, via local government, if/when decentralisation occurs.

- Q6. Screening for exemption - will it be universal?**
- R6. Yes, those who feel they should be exempt will have to go for screening. It will be made known that this exemption is available but those applying must prove that they should be exempt. It will however not be easy for ineligible people to find loopholes to get illegal exemptions.
- Q7. Accountability mechanism regarding institutional fee retention. In other countries money is stolen. How can you ensure this does not happen?**
- R7. By implementing the prepaying option (stamps) and by building in a capacity to prevent this. We must build up trust by putting clear systems in place, encouraging transparency, giving people a sense of ownership which will encourage them to ask questions, and by education amongst users.
- Q8. Can you enforce referral from primary to hospital/secondary care?**
- R8. This will have to be regulated. The incentive must be to keep patients at primary level.
- Q9. Is the medical care fund not going to pay for those who can get private care?**
- R9. Social Health Insurance represents choice. Quality is the key so Social Health Insurance. Government hospitals will be able to compete with private hospitals. People will naturally make choices however, SHI will only pay for care in public hospitals.
- Q10. Health Centres - retention of fees?**
- R10. The Ministry of Finance has agreed to the Ministry of Health retaining fees and collections are to be improved. The aforementioned are a prerequisite to Social Health Insurance.
- Q11. Once this scheme is approved, how will it be launched?**
- R11. There are other studies following on from this one. This study lays the groundwork for a more in-depth look at Social Health Insurance.
- Q12. At primary level, can priority diseases to be covered under SHI be identified for purposes of ensuring that there is a limit on what can be treated (i.e. haemodialysis may be too expensive and not cost effective for hospital under SHI)?**
- R12. Such treatments will have to be referred to higher level care within SHI and will have to be rationalised. Currently we are only able to offer dialysis to 100 out of the 1 000 who need it each year. If anything, SHI should improve on this by allowing central hospitals to stick to their core business.
- Q13. What diseases are priority under SHI?**
- R13. Money is scarce and must be allocated prudently. This will be open for discussion. All the current initiatives to improve cost effectiveness of care such as cost per Disability Adjusted Life Year (DALY) will be used to further tailor the SHI package.
- Q14. Will people be able to find the money?**
- R14. Yes. People are currently paying for ngangas and faith healers etc.

- Q15. Were the administration costs taken into account when arriving at the figures to be collected.**
- R15. Yes. Everyone must pay the actual cost of providing the service so that there is real revenue being generated, revenue retention, no exemptions and a better service at the primary level. People are prepared to pay for good care. Many people are currently cutting out clinics and going to private doctors to ensure they receive proper care.
- Q16. Who is going to administer the fund transparently?**
- R16. Who ever is most competent. NSSA, or one or more Medical Aid Societies or some new fund - this needs more careful thought once the decision has been made in principal to go for SHI.
- Q17. Is SHI not a contradiction of the current Government approach to move away from subsidies?**
- R17. No. It is promoting self reliance and so in line with current Government policy.
- Q18. The sequence of funding must be clearly broken down step by step. Explain risk sharing in detail.**
- R18. The healthy will share risk with, and therefore subsidise, the sick. This issue should be explained to the population.
- Q19. How do Medical Aid Societies fit into the scheme?**
- R19. Our view is that Medical Aid Societies will be part of the overall solution. They will continue to provide for the financing of private care, but will come under increasing competition from SHI as public care quality improves. Competition will be good for both SHI and the Societies. The inequity caused by Government subsidy of Medical Aid Societies should be removed.
- Q20. Is the fund for the poor and the rich go elsewhere?**
- R20. Medical Aid Society premiums are higher than SHI premiums. We will need to be careful of the signals sent to politicians. There must be equity.
- Q21. Is SHI seen as a subsidy from the rich?**
- R21. The rich will probably still wish to use private medicine as long as this is seen to offer better quality. The loss of subsidy via tax relief to the societies' members will increase equity. All countries in reality have multi-tiered health systems: Here SHI could reduce the gap in quality between the two systems by improving the quality of public care.
- Q22. SHI and psychiatric services. What are the implications?**
- R22. Quality care will be given under SHI. On the whole, this should benefit psychiatric services.
- Q23. What about chronic psychiatric care?**
- R23. Good quality out patient care will keep these patients at home and out of the hospitals. Hospitals will realise that it makes good economic sense to keep the patient stable at home than have to carry the high cost of hospital care. The hospitals will carry the cost of home care that is supervised by their doctors which will be the case for the more severe and chronic psychiatric cases.

Q24. How will you get people to join SHI?

R24. By implementing a transparent marketing plan that is open and honest. We will try to get people to join SHI voluntarily. They will also be attracted by the improved quality of care available under SHI and deterred from relying on user fees which will be more vigorously collected from the uninsured. The formal sector will be required by law to join either SHI or a Medical Aid Society.

Q25. How about access to Rural Health Centres?

R25. Ideally, there should be a clinic or health centre within 8km walking distance of everyone. By removing much of the huge burden of hospital care from government, tax and donor money will be more easily available to develop the primary level of care, such as by filling in the gaps in the system with new clinics.

Next Steps:

Q1. At primary level, can we identify diseases to be covered?

R1. The World Bank Study introduced a "cost per DALY (disability adjusted life year)" system in 1993. Currently a study is being carried out to tailor the DALYs to Zimbabwe's disease and cost situation since the World Bank DALYs generalise over the whole of Sub-Saharan Africa. These sorts of studies will feed in to mould the SHI packages towards the most cost effective disease interventions when the results become available.

Q2. Are we spending what we have got on the right things?

R2. Currently we are not spending enough on primary care, including prevention. We are not using what is spent on hospitals efficiently. Poor management of the health care system is much more of a problem than not choosing the right things to do. The incentives built into SHI and the other reforms we have suggested will all lead to more efficient management of care.

Q3. Why are we wanting SHI and what is wrong with the current system.

R3. Because there is insufficient money available from the current financing systems to provide the quality of care required by Zimbabwe's population. SHI and the other changes will both provide more money in the right places and have incentives for better management.

Q4. Does this sound the death knell to Medical Aid Societies? They may be out competed at lower level scheme area.

R4. No. If being a member of either SHI or a Medical Aid Society becomes compulsory in the formal sector (where currently only about 17% have medical aid cover) the Societies will get many more members until the public system is perceived by people to have considerably improved its quality of care. Some wealthy people will continue to use the Societies as they will not want to go via a nurse based clinic for screening before being able to see a doctor. We believe these factors will more than compensate for the loss of tax relief and the solidarity levy. Competition will be healthy. Societies may well not be able to compete in the low premium/cover schemes but will win the competition for high cost/cover schemes.

Q5. Who will administer SHI?

R5. We insist that the most competent (and most cost effective) organisation available should administer the scheme. This could be either NSSA, one or more Medical Aid Society or a new central organisation or a network of local funds or a combination of these.

- Q6. User fees - other countries are phasing out.**
- R6. Not true. As many as are phasing out others are implementing them, the latter particularly in West Africa and other parts of Francophone Africa. In the SHI dominated system we propose they will remain in the background as an incentive to insure.
- Q7. How will equity be addressed?**
- R7. i) Tax funding by GOZ for core funding of Primary and Hospital services.
ii) The rich (being generally healthy) subsidise the poor (being generally more ill) due to both groups sharing the same risk pool.
iii) Tax subsidy to the rich through Medical Aid Societies being phased out or reduced.
iv) The solidarity levy from the Medical Aid Societies' members to SHI.
v) With more money in the system, there will be less severe rationing of care, (the poor always being at the back of the ration queue).
- Q8. Would tax exemption be substituted by levy?**
- R8. This needs further consultation.
- Q9. Legislation - MAS/GOZ - subsidy?**
- R9. Dr. Stamps issued a directive in 1995. This requires further consultation. We believe that the Ministry commissioned this study and proposes others because it wishes to review past policies and directives in the light of a careful investigation of the available options to improve financing and care.
- Q10. Need a study on levels of income of poor to establish subsidies as per agriculture.**
- R10. Yes. Studies such as the poverty alleviation study done recently feed vital data into what we have proposed for SHI, for example by suggesting the income level where the exemption threshold should be set.
- Q11. Psychiatric services and how they fit into SHI - element of chronic care versus SHI.**
- R11. The incentives will be for hospitals to keep chronic patients, including those on home based care for psychiatric conditions and for other conditions such as AIDS, stable at home. If they are not discharged sufficiently fit, and to a capable, resourced system, they will bounce back on hospitals putting up their costs. Acute patients should not burden central hospitals since they can be effectively treated at district hospitals. The district hospitals will earn income from treating them and will therefore want these (often low cost) patients. The hospitals should not be allowed to keep patients as inpatients who could be more cost effectively cared for at a clinic as an outpatient.
- Q12. Was there an insurance specialist in the KPMG team?**
- R12. J Hilligan was the Medical Aid Society expert. There were questions about this originally but the Terms of Reference did not include an insurance specialist. Other studies will address this.
- Q13. Quality care. Can this be expanded upon?**
- R13. Another study must be made to reassess quality from all angles. We need to define and measure quality.
- Q14. Medical Aid Society Levy. Is this not a tax of sorts?**
- R14. This is a concept rather than a definitive recommendation.

Q15. If the poor subsidise the poor - SHI will not work.

R15. There is a two-tier system at present which is unlikely to go away since it exists everywhere. SHI will reduce the gap between the tiers by improving the care for the lower tier, while many observations in this study reveal places where hidden subsidies to the rich can be found and removed.

Q16 Will all people be required to join SHI even if they are currently on a private scheme?

R16. There are implications if this is adopted. One is that the rich will go for the cheaper SHI scheme, once the standard is comparable to the private schemes, at the expense of the poor. However, if a levy is applied to Medical Aid Societies, to be paid over to SHI to assist in funding the scheme, this will help to ensure it is not a scheme where the poor subsidise the poor.

Please Note

We must stress that an overall comment made in relation to many questions was that this was a preliminary study which served to raise most of the important issues in SHI. It could not be expected to have all the answers, but rather to answer some and point in the direction where further study and consultation should be targeted. Health financing reform is complex and requires careful study in order to ensure that care and management efficiency improves.

APPENDIX 10

Feedback on Draft Report

- Oscar Picazo, Nairobi, Kenya
- Dr Max Price, University of Witwaterstrand,
Pretoria, RSA
- Keith Hansen, World Bank, Washington DC, USA

To: Mary Selvaggio@PHN@HARARE
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Forwarded by:

So sorry for the delay of this response. I actually started something as early as July when I was in Madagascar, but... Truth to tell, this report is MUCH, MUCH BETTER than most reports I see, that's the reason for the lack of urgency in my response. (There's a lot of other fires that need to be put out, if you get my drift!)

Peat Marwick did a great job of summarizing the issues, and I couldn't find any major recommendation that I'd disagree with (except with one minor item, below). I read the report again today and I'd just like to reiterate the issues that are closest to my heart:

a. The implicit government subsidy to the Medical Aid Societies need to be stopped, now! This is urgent. Parirenyatwa has to revamp its physician payment schedule and improve its billing system. It's time to send in the Marines! Couldn't Parirenyatwa give a contract to an accounting or management consulting firm to dun nonpaying medical aid societies? There's an arrangement called "factoring" where the hospital can give a certain fraction of any amount collected by the accounting/management firm from "deadbeat doctors" and intransigent insurance firms. My fear is that if GOZ decides to institute a national health insurance scheme - without corresponding payment and systems changes in hospitals - providers and MAS's will just fleece them off.

b. I disagree with any notion of "no claims bonus" or "rebate" as a member incentive for nonexcessive use (paragraph #31), as it ruins the notion of social solidarity. If they are really serious about conferring "awards" to healthy lifestyles, they should consider a "Medical Savings Account" scheme - a la Singapore. Savings from a member's nonuse of hospital or other services are deposited into a savings account which accumulates like a pension, and which the member can draw from in the future.

c. The report dwells only on cost-containment features on the "demand" (or patient) side, i.e., deductibles, copayments, inner and outer limits, "no claims" bonuses. But there's a whole range of cost-containment features on the "supply" (or provider) side that the proposed health insurance program can consider, e.g., physician/hospital profiling and monitoring for overtesting and overprescription, use of generics-only drugs, reforms in the formulary to reduce the number of drugs, annual negotiation between providers and the insurance program, gatekeeper for referrals, a "second opinion" for expensive invasive (elective) procedures, etc. I thought the cost-containment section of the report was weak, but this is a whole caboodle of issues that need threshing out...

d. I completely agree with the report's caveat on setting up another mega-institution for health insurance. There ought to be a way of using already existing institutions (NSSA, MASS). It is possible to assign each MAS to a region or province, develop a contract between the national or local

government (acting on behalf of health insurance program) and MAS, and legally agree on deliverables (no. of members to be enrolled by such and such a date, systems to be installed, payments, etc.)

e. If the program decides on capitating its providers, it may be worth sponsoring a study tour to Thailand and get some policymakers have a feel of how a national health insurance program negotiates payment with providers and monitors quality of care. I did a trip report on the Thai system a few years back, but I need to locate it.

I really cannot comment on the financial details as I have no "feel" of the cost of living in Zimbabwe. The administrative cost assumed seems reasonable (12%).

I hope these comments are useful. Please let us know how things proceed, and how we can be of help.

To: "HPN" <maselvaggio@usaid.gov>
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I appreciate the invitation. I'm sorry i am in Swaziland on 10th/11th - and just too overworked to make it. Good luck with the presentation. I skimmed through the draft report - not in enough detail to offer editorial critique - but enough to feel the job has been reasonably well done and draws sound conclusions. I would be very interested to get feedback onthe Friday meeting.
Max

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Certify: N
Forwarded by:

Dear Mary Pat--

I wrote you several days ago, but since I haven't heard back, I suspect it didn't reach you. I know the Peat Marwick meeting is imminent, so let me try again with some brief comments.

This is a very impressive piece of work. The consultants have delivered much more than I had expected at the outset, and have provided a wealth of highly valuable data on key aspects of health finance and household expenditure decisions. In the main, I strongly support the direction of the analysis and the conclusions the consultants have drawn. I concur that the context seems promising for social health insurance, subject to all the caveats the paper has duly noted.

I would highlight as particular strengths:

- the paper's insistence on quality improvements concurrent with introduction of new payment schemes
- the paper's candor in underscoring the areas where data are incomplete or unavailable (including data on Medical Aid schemes) and the importance of further study
- the emphasis on getting improved and more current expenditure data from the forthcoming ICES and other sources
- the repeated emphasis given to the need for ongoing consultation as a new system is introduced
- the paper's strong recommendation that any new system be introduced incrementally

The only place I might differ is on some of the discussion of user fees at the primary level. I strongly agree with the paper that "SHI cannot be introduced without some form of exemption for the poorest" (p. 62), and I think the paper does a good job of highlighting all the current problems with the fee/exemption system, particularly in the behavior it induces. But I think we will need more analysis before we can conclude: that everyone should pay a small fee; that a sliding scale would be appropriate; and that independent screening for exemption eligibility is advisable. All of these could pose significant administrative costs with unforeseeable effects on equity if they were introduced before we know more.

On the whole, however, this paper is a major step forward to understanding the costs, content and likely acceptance of health insurance options. In the process, it has also documented some of the most nettlesome problems the health system will need to

resolve before any system can hope to succeed. Its timing should dovetail perfectly with the Ministry's preparation of the National Health Strategic Plan, and all of us in the donor community should be grateful to have the benefit of its insights.

I greatly look forward to hearing the Ministry's views on the paper and assisting, if need be, in the next steps.

Best,

Keith

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