

THE PUBLIC-PRIVATE MIX HEALTH CARE RESOURCES DISTRIBUTION  
IMPLICATIONS FOR EQUITY: KAMPALA DISTRICT, UGANDA.

BY

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Declaration

This thesis in its original form is entirely mine and has never been submitted to this University or any other institution of higher learning for any award. It is a product of my original work and study done in Uganda between December 2001 and January 2002. Other sources are fully acknowledged.

Signed by candidate \_\_\_\_\_

Deiŕ Bazifa Mubangizi

Date: 26 August 2002

This thesis has been submitted for examination to the University with my full permission.

\_\_\_\_\_  
Prof. Di McIntyre

SUPERVISOR

Date: 27 August 2002

## **Dedication**

I dedicate this thesis to my parents Mr. and Mrs. Bazira who gave me an early start in life, always emphasized to me the importance of education and made it possible within their means to take me to the best schools in Uganda. I also dedicate it to my sister and best friend Dr. Lennie Sematimba Kyomuhangi, whose constant encouragement and prayers made it possible for me to finish the master's course.

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## Terms of reference

The study aimed to achieve the following objectives:

- To establish the level of resource distribution between the private and public health care sectors in Kampala district, Uganda and its implications for access to care
- To establish whether health care provider choice at a household level is affected by the way the resources are distributed between the public and private health care sectors
- To propose a mechanism for monitoring and evaluating the public-private mix in the health sector in Uganda

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## **Abstract**

While in sociology, choice and equity have always co-existed; this has not been a subject of attention in the health care market. Following promotion of the public-private mix in the health care sector, there have been concerns that the pursuit of efficiency might compromise equity in accessing health care services. The main concern for this study was that the resulting relative health care resources distribution following public-private interaction has equity implications at the household level. Kampala district in Uganda was used to investigate this concern.

Data collected from a household survey, key informant interviews and secondary data on health care resources distribution, was analyzed using STATA statistical package.

The study findings indicated that the private health care sector in Uganda has grown in size and that it caters for more people in Kampala district than the public health care sector. The findings further indicated that households use private services due to the perceived high quality of services, availability of drugs, availability of doctors and other health workers and the nearness of private providers. On the other hand, public health services were used or preferred was due primarily to availability of doctors.

Other findings indicated that there was a relationship between provider choice/use and the distribution of health care resources particularly; health workers and health care facilities. This applied both at household level and geographically. Utilization of health services also varied with distribution of the same resources. Private provider use was not solely dependent on income and hence ability to pay, but on other factors related to service characteristics such as perceived quality. The findings further show that there are inequities in financing health care services with low-income groups paying relatively more than high-income groups.

The study proposes to policy makers a monitoring mechanism of the variables and outcome measures, both at household and sectoral level, in order to minimize inequities in access to health care. The study also recommends that a comprehensive regulatory framework needs to be set up to promote and control the activities of the private health sector in Uganda.

The study was useful for it uncovered potential for inequities in access to health care and will form a basis for further research and work in this area.

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## Table of Contents

Declaration.....	2
Dedication.....	3
Acknowledgements.....	4
Terms of reference.....	6
Abstract.....	7
Chapter One.....	12
BACKGROUND TO THE STUDY.....	12
Introduction.....	12
1.1    Uganda’s Socio-economic Indicators.....	13
1.2    Key Health Sector Challenges.....	13
1.3    Private Health Care Sector in Uganda.....	14
1.4    Background to Study Area.....	15
1.5    Problem Statement.....	16
1.6    Research Question.....	16
1.7    Study Objectives.....	17
1.8    Justification and Significance of the Study.....	17
1.9    Scope and Limitations of the Study.....	18
Chapter Two.....	19
REVIEW OF LITERATURE.....	19
INTRODUCTION.....	19
EQUITY IN HEALTH CARE.....	20
THEORETICAL PERSPECTIVES ON THE PUBLIC-PRIVATE MIX.....	22
EXPERIENCE OF LOW TO MIDDLE INCOME COUNTRIES WITH INCREASING THE ROLE OF THE PRIVATE HEALTH CARE SECTOR.....	25
Why the Increasing Role of the Private Sector in the Health Care Sector?.....	25
Key Issues with the Private Health Sector.....	26
Imperfect Information.....	28
Equity Oversight.....	29
Manpower Problems.....	31
Strategies Used by Different Countries to Control the Private Sector.....	32
Chapter Three.....	36
CONCEPTUAL FRAMEWORK.....	36
Chapter Four.....	40
RESEARCH METHODOLOGY.....	40
Introduction.....	40
4.1    Study Design.....	40
4.2    The Survey Site.....	40
4.3    Sample Size.....	41
4.4    Sampling Strategy.....	42
4.5    The Survey Instrument and Data Collection Process.....	43
4.6    Data Management and Analysis.....	46
Chapter Five.....	47
RESEARCH RESULTS.....	47
Introduction.....	47

5.1	Public/Private Policy Initiatives.....	47
5.2	Distribution of health professionals.....	50
5.2.1	Distribution of medical doctors.....	50
5.2.2	Distribution of pharmacists.....	52
5.3	Distribution of health facilities (HU).....	55
5.3.1	Distribution of hospitals/clinics.....	55
5.3.2	Distribution of pharmacies.....	56
5.4	Descriptive statistics.....	58
5.4.1	Household demographics.....	58
5.4.2	Household income and expenditure.....	60
5.5	Household Usual Provider of Choice.....	65
5.6	Provider of choice for different illnesses.....	65
5.7	Health Care Seeking Behaviour.....	69
5.8	Facility Characteristics.....	71
5.9	Treatment cost.....	71
5.10	Provider of Choice and Household Demographics.....	72
5.11	Implications of Health Care Resources Distribution on Household Choices	78
	Chapter Six.....	85
	POLICY CONSIDERATIONS AND RECOMMENDATIONS.....	85
	Conclusion.....	90
	BIBLIOGRAPHY.....	92
	Appendix 1: Survey Instrument.....	98
	Appendix 2:Key Informant Guide.....	110

### List of Tables

Table 1	Distribution of Pharmacists in Kampala District
Table 2	Household Size Distribution
Table 3	Household Income Quintiles
Table 4	Household Usual Provider of Choice
Table 5	Provider of Choice and Medical Condition
Table 6	Reasons for Household Provider Preferences for Treatment of Malaria
Table 7	Reasons for Household Provider Preferences for Treatment of Diarrhoea
Table 8	Classification of Illness Suffered
Table 9	Utilization Rates by Division
Table 10	Major Determinants of an Ideal Choice of Provider at a Household Level
Table 11	Major Determinants of an Ideal Provider as Perceived at a Household Level

### List of Figures

Figure 1	Geographical Distribution of Doctors in Kampala District
Figure 2	Private Sector Pharmacists in Kampala District
Figure 3	Geographical Distribution of Health Units in Kampala District
Figure 4	Distribution of Pharmacies Compared to Population in Kampala District
Figure 5	Mean Household Monthly Income versus Household Size

Figure 12  
Figure 13

Household Provider Use according to Different Income Groups  
Monitoring Evolving Public-Private Interaction Sample Indicators

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## Chapter One

### BACKGROUND TO THE STUDY

#### Introduction

Private health care provision and financing has grown over the recent past in many countries. This growth has catapulted the public/private mix debate to the top of the agenda in many national and international discussions. While these developments are logical given the dwindling public health sector resources, the complex nature of private sector functioning makes the whole approach to the public/private mix delicate, as most governments are not well prepared to handle the change process.

The debate about increasing the role of the private sector has been prompted by international developments spearheaded by the World Bank, which has argued that there is a need to allow market forces to determine the production and allocation of health care (Bennett, 1992). In the developing world this has been part and parcel of the general reforms contained in the structural adjustment programs. A frequently stated reason for increasing the private sector role in the health sector has been the belief that the private health sector is in a position to produce most types of health care more efficiently. Additionally, it is argued that the promotion of the private sector will generate extra resources and allow the redistribution of existing government resources to the urban and rural poor. Whether this holds or not is a subject of many studies done and to be done. Juxtaposed with these two arguments in favor of privatization is the concern that it promotes inequities between different population groups.

In Uganda, while the health policy (1999) makes public-private partnership a priority, only efficiency objectives are identified. That notwithstanding, very little is known about the private sector, or the implications of its increased role for equity. It is very important to understand this, as equity is one of the national health goals and the policy states that the private sector will be integrated as part of the national Health Care System in a bid to meet the national health goals. It is therefore very relevant to consider the public/private mix and its implications for the national health goal of

equity. Apart from the foregoing, a critical understanding of the relative sizes of the two sectors is important given the different contributions they make to the health sector.

### **1.1 Uganda's Socio-economic Indicators**

Uganda is a country of roughly 20 million people (*Statistical Abstract 1997*), that is 50.9% females and 49.1% males, with an annual population growth of 2.5% and average fertility of 6.9. In 1990/91, the year of the most recent census, population was 16.67 million. The vast majority of the population (over 80%) live in rural areas. Poverty in the population remains high with real GDP per capita of \$330. Gross domestic savings make up 6.1% of GDP; the GDP growth rate is 6.5% (1990-1996 average) with a real GDP per capita for the poorest 20% (PPP\$) of 309 and 2,189 for the richest 20% (*UNDP, 1998*). The dependency ratio in the country is 103.9.

Poverty is recognized as the main underlying cause of the poor health situation in the country. Associated factors include low level of literacy, high prevalence of communicable diseases, emergence of diseases of life style, inadequate provision and inequitable distribution of social services and amenities (*National Health Policy, 1999*). The infant mortality rate per 1000 live births stood at 88 and the maternal mortality rate at 506 per 100, 000 live births (*UNDP, 1998*).

### **1.2 Key Health Sector Challenges**

According to the Burden of Disease Study in Uganda (*MOH, 1995*), over 75% of the life years lost were attributed to ten preventable diseases; including perinatal and maternal conditions (20.4%), AIDS (9.1%), malaria (15.4%), acute lower respiratory tract infections (10.5%) and diarrhea (8.4%).

Geographical access to health care is limited to about 49% of the population, i.e. population living within 5km of a health service unit (*MOFEP, 1998*). Rural communities are particularly disadvantaged when it comes to access with variations within and between districts ranging from 8.9% to 99.3%.

Other major problems in the health sector are attributed to health care organization, management and financing. There is inadequate funding of the sector with total per capita health expenditure in the range of US\$ 7 to \$12, with only US\$ 3.95 attributed to government and donor spending, the balance coming from individual out-of-pocket payments (*Background to the budget, 1998/1999*). This mostly goes towards payment for private health services. This is further aggravated by inefficient allocation of available resources within the sector. Furthermore a weak management and support/supervision system, insufficient collaboration between the public and private sectors, together with inadequate co-ordination of development partners, have resulted in worse health outcomes than would be expected from available resources (MOH, 1999). The health policy notes that the private sector which, already plays a very significant role in health care in the country and presents a great opportunity for accelerating health coverage, has yet to be harnessed.

### **1.3 Private Health Care Sector in Uganda**

The private health care sector in Uganda has come a long way. Private health practitioners of all categories existed even in the colonial era (before 1962) and mostly consisted of church organized health services started by the missionaries. Later on, a few English and Indian settlers started small practices within the capital Kampala and the then Buganda Kingdom, joined later by their African colleagues especially those who offered midwifery services (MOH, 1994). Organized private practice flourished after independence (1962) involving doctors, pharmacists, midwives and dental surgeons. However, most of the private practitioners were at the same time working for the public health services and probably this was the first form of subsidy to the private sector offered by the public sector, though informal. Government recognized the role the private sector was playing in the health sector and in 1970, The Pharmacy and Drugs Act of 1970, was enacted to regulate private pharmacy practice. The other sister professions continued without any serious regulatory framework till 1993 when the Medical and Dental Practitioners Statute 1993, The Allied Health Professionals Statute 1993 and the Nurses and Midwives Statute 1993 were enacted, thus paving the way for more comprehensive private practice by a wide range of different categories of practitioners.

The absence of documented evidence on the activities and relative size of the private health care sector makes it difficult for one to give a more definitive account of the private health care sector activities in Uganda. However the most common private care providers include doctors, who mostly operate private clinics (mostly general practices), a few dental surgeries and pharmacists who operate pharmacies. About 70% of doctor clinics, 90% of dental surgeries and 85% of all pharmacies in the country are located in the urban centers. The other types of private care practices include licensed drug sellers, midwifery clinics offering exclusive maternity services and nursing homes. Most private hospitals, about 60 in number (PPM Secretariat, 2001), are private-not-for-profit as opposed to about 10 hospitals that are private-for-profit. Most of the private-for-profit health care services offer mainly outpatient services.

A major characteristic of the Uganda private health care sector is its atomicity with no clear linkages between different levels of care. This invariably affects the quality of care offered. Generally across the private health services, out-of-pocket fee-for-service is the main form of payment for the services rendered (World Bank, 1998).

A report by the World Bank (1998) further notes that the extent to which the private sector has grown is grossly underestimated. A way forward suggested is that government should recognize the role of the private sector, legalize it, regulate it and provide it with incentives to ensure provision of priority services and to minimize inequities that could result if not properly regulated.

#### **1.4 Background to Study Area**

The health sector in Uganda is decentralized with the district as the co-ordination level for service delivery. The country is divided into 56 districts. Kampala district, which also is the administrative and commercial capital of the country, is one of these districts. It covers an area of 17,629.80 square km with a population of 1,191,753 and a population density of 68 people per sq.km. The district is divided into five administrative units called divisions namely Nakawa, Central, Makindye, Rubaga and Kawempe. The general characterization of the health situation above is also reflected in Kampala district. Kampala district also presents the widest differences between the

poor and wealthy and the healthy and non-healthy. The district also has the most developed private health care sector and houses the two national referral hospitals in the country. It is for this reason that this district has been selected as the study site to reflect the interface between the public and private health care sectors in Uganda.

### **1.5 Problem Statement**

Uganda has been under-going health sector reforms aimed at improving the performance of the health sector. The health policy of the country and the health sector strategic plan (2000-2004) have identified several priority areas targeted at improving the health status of the people in Uganda and the performance of the sector. Increasing public-private partnership is one of the priority areas.

It may be economically justified to increase the role of the private sector as the public resources for financing health care are heavily constrained. However, it is equally important to ensure that the quest for new financing and delivery options do not adversely affect access and availability of services, especially for those that need them most. Motivation for improving performance should not be at the expense of fairness.

Experiences from elsewhere indicate that when the public and private sectors interact, this is likely to result in inequities due to the distribution of resources between the two sectors relative to the population each serves, unless conditions exist that guard against that. Operational tools that will ensure such inequities are minimized should back a policy that seeks to promote an increased role for the private sector. In Uganda no such tool exists and little is known about who uses the private sector and why, its size, and how resources are shared between the two sectors.

### **1.6 Research Question**

The major research question to be answered by the study is, “how can it be ensured that the public/private mix in the health sector promotes equitable access to health care?”

## **1.7 Study Objectives**

The broad objective of the study is to examine the current interface between the public and for-profit private health sectors in Uganda, using Kampala district as the focus, and its likely implications for equitable access to health care.

More specifically the research attempts to:

- a) Establish the level of resource distribution between the private and public health sectors in Kampala District and its implications for access to care
- b) Establish whether health care provider choice at a household level is affected by the way the resources are distributed between the public and private health care sectors
- c) Propose a mechanism for monitoring and evaluating the public/private mix in the health sector in Uganda

## **1.8 Justification and Significance of the Study**

Little information exists in Uganda on the relative sizes of the public and private health sectors. At the consumer level, it is not known who in the population uses which sector and why and whether this is affected by the way the two sectors interact.

While the policy for promoting public-private partnership in health may be justified on the basis of limited availability of public resources, there are no accompanying operational tools to ensure the interface does not compromise overall national health goals, especially given that the private sector has motives that are different from the public sector. This study attempts to identify what needs to be monitored so as to ensure that the public/private mix does not compromise equity.

There is limited information on equity implications in the public/private mix especially in developing countries. This study will contribute to the information pool and will inform other studies to be done in this area.

## 1.9 Scope and Limitations of the Study

The study limits itself to the relative distribution of human resources between the public and private sectors, the geographical location of private sector facilities, the type of choices made at the household for health care providers, and what influences those choices. The other resources that are shared by the public and private health care sectors, are not considered in this study. The study has not been greatly informed by other studies given limited work that has been undertaken with regard to the public/private mix and equity.

Geographically the study limits itself to the District of Kampala. Uganda is a culturally diverse country and although Kampala embraces this diversity, it is just one area out of several in the country and therefore the findings from this study may not necessarily be used to generalize for the whole of Uganda

Cross-sectional data has been used in the study. This data type does not accurately depict the trends in people's choices with time as things change. Despite these limitations, the study makes significant discoveries about the determinants of household health care provider choice and whether this is in any way influenced by the relative distribution of health care resources between the two sectors. In this regard therefore, the study is of importance to policy makers.

## REVIEW OF LITERATURE

### INTRODUCTION

Public-private interactions in the health sector can be defined as the mechanisms by which the public and private sectors connect, combine, co-act, co-operate and conflict in the production, finance and regulation of health services. The co-action and co-operation may be in the nature of sharing tangible resources, like infrastructure and labor, or incorporating concepts and lessons from each other's experiences, like management techniques, information systems and accounting rules (HFSP<sup>1</sup>, 1993)

The 1990s brought about global realignment of the state, which, in turn affected countries with different income levels and many different sectors. While the effect this has had on industrial sectors has been well analyzed, little has been done on examining the potential impact of this change on social sectors (Bennett et al, 1997). The World Development Report identifies three general rationales for government intervention. These were identified as: the provision of public goods, the reduction of poverty and the correction of market failure (World Bank, 1993). Extrapolating for the public health care sector, its roles would be the provision of health services with public good characteristics, the public finance of an essential package of health services identified according to cost-effectiveness criteria and the regulation of health care and health insurance. The role of the private sector would be the provision of private goods that are less cost-effective than the essential package but are demanded by the population.

While it is generally agreed that the private sector has a role to play in the health care market, its role needs to be phased in to enable governments learn to manage the evolving complex relationships between the public and private sectors. The reforms therefore need to be planned. Unfortunately the reforms that have taken place in sub-Saharan African health care sectors have been more of unplanned nature rather than programmed privatization and can at best be described as the private sector growing

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<sup>1</sup> Health Financing and Sustainability Project

because of the inability of the public sector to meet the populations' expectations (Mills et al, 2001).

In this chapter, the author will critically review the arguments for and against increasing private health sector role by showing that the theoretical bases that have guided most of the discussions have limitations, especially when it comes to the uniqueness of the health care market, and that they have been largely influenced by efficiency concerns with little regard for equity.

## **EQUITY IN HEALTH CARE**

However equity is defined, all definitions contain some view of fairness of the distribution of something or other. It is also related in some way to the idea of fair distribution across different individuals and/or groups in society (Mooney, 1983).

There is a range of alternative definitions of equity, some of which are based on the principle of horizontal equity (the equal treatment of equals) and others on vertical equity (the unequal treatment of unequals).

For the purpose of this study, equity in health care is taken to mean equal access to available care for equal need.

Whitehead (1992) asserts that equal access to available care for equal need implies equal entitlement to the available services for everyone, a fair distribution throughout the country based on health care needs and ease of access in each geographical area and the removal of other barriers to access.

She goes on to say that inequities in access arise when resources and facilities are unevenly distributed around the country, clustered in urban and more prosperous areas and are scarce in deprived and rural neighborhoods. Barriers to access also include for example transport costs that fall heavily on low income groups, limiting their access to available services; inconvenient clinic hours of opening or where resources are devoted to high technology medical services which cater for a small segment of the population while little is made available for balanced health care services of benefit to the majority.

However, most studies in this area have limited themselves to the distribution of resources within the public sector. This study assesses relative distribution of health care resources between the public and private sectors and whether this results in any inequities. This is made relevant by the fact that the relative distribution of the resources between the two sectors may create barriers to entry for certain socio-economic groups. It may also lead to deterioration in quality in one sector, thus creating unequal access for equal need for similar groups seeking care in different sectors. A clear distinction that should be drawn is that the resource distribution referred to in this study is unplanned and has been purely influenced by the relative growth of the public and private health care sectors and therefore is not as a result of planned resource allocation mechanisms. It is for this reason that the author argues that resource distribution between the two sectors should be planned and monitored.

Baker and van der Gaag (1992) show that despite efforts to provide equal access to health care for everyone, there are great disparities in the care received among the population in developing countries due to resource constraints. They go on to observe that through government policies regarding the dispersion of resources and the existing distribution of welfare among the populations, patterns of inequality have emerged which favor urban-based curative care over basic preventive measures that could greatly benefit the large numbers of poor people that reside mainly in rural areas.

The inequity in government health care spending is further exacerbated by the unequal distribution of income. Private costs, rationing and higher family incomes in the cities cause the wealthy to benefit more from public services than the poor. However, little attention is paid to the inequities that exist between populations living in cities in developing countries, where the poor are probably worse off given that they face higher living costs of basic amenities than rural dwellers. Poor individuals generally must incur costs of transport to hospitals and clinics and then spend time waiting in long lines. It has been shown that differential access is largely responsible for the wide differences in medical consumption between rural and urban sectors. How about between urban wealthy and urban poor?

Evidence from studies conducted in developing countries further shows overwhelmingly that many countries have failed to obtain equity in health status and in access to health care. Despite this few studies have been conducted to establish why.

### **THEORETICAL PERSPECTIVES ON THE PUBLIC-PRIVATE MIX**

As far back as World War I, in most countries there has always been a mix of public and private interests in health affairs generally and in health care specifically (McLachlan et al, 1982). Since the Public Health movement in Western countries in the nineteenth century, it is only in more recent years with the universal attention paid to policies designed to improve the distribution and access to health care facilities, that there has been a focusing on the role of government in the provision and regulation of health services. As McLachlan et al (1982) argue, the constituents of the public/private mix varies considerably from country to country, given that they are rooted in social and economic history and progress. In the developed world, the mix was never much of a public attention issue for as long as there was sufficient elasticity in the sources of funds for both sectors. This however changed when resource constraints set in.

In response to resource constraints, several arguments were put forward for the increased role of the private sector in the health care market in order to ease the resource constraints. The motivation for these arguments in part seemed to lie in neoclassical economic theory, which, states that economic commodities are exchanged for value in a market setting where demand and supply forces are the regulators of market mechanisms including price. It is assumed that letting the market forces be the main determinant, would unleash benefits of perfect competition. The end result is that quality would improve, prices would be lowered and the consumer would end up the main beneficiary. Health care would in this sense be considered an economic commodity. This is further reinforced by conventional economics, where it is assumed that demand for health care is income elastic, and as income increases, demand grows more than proportionately. Since government services cannot keep up with the increased demand or because users demand better quality services, private sector provision of care tends to fill this gap (Bennett et al, 1997). However, questions

exist as to whether health care can be treated as any of the economic commodities and thus be left to the market forces (McGuire, Henderson and Mooney, 1987).

Health care as a commodity is unique and the health care market has characteristics that do not fit in well with perfect competition as argued under neo-classical economic theory. It is argued and rightly so that there are imperfections that lead to failures in this market (McGuire, Henderson and Mooney, 1987). The existing information imbalance between the suppliers and consumers of care plus other actors creates room for exploitation of the consumer. Secondly, the assumed sovereign consumer in the expected utility theory, who knows his own interests best in the commodities market, does not exist in the health care market given the substantial limitations in this market. In the health care market, there is not a complete separation of decision makers on the demand and supply sides of the market. Additionally, health care itself is a heterogeneous commodity and is not consumed for its own sake. The existing information asymmetry between the buyers and sellers in this market sometimes leads to supplier-induced demand (Labelle, Stoddart and Rice, 1994). The fact that the suppliers of care are the ones who also make a decision on behalf of consumers, sometimes-perverse incentives set in given the different behaviors and motivations of health care providers and consumers. Therefore intervention is needed to protect the consumers from getting exploited. In the health care market, there is an absence of a complete private annuity market due to problems of adverse selection and moral hazard.

The principal-agent relationship that exists in the health care market further calls for the state's involvement in the activities of the private health care sector to protect the interests of the weak consumer (Barnum and Kutzin, 1993). It is a known fact that the state and the private-for-profit sector can have and indeed have divergent objectives. The state aims towards equitable service provision while the private sector is driven by the desire to maximize profits. The co-existence of the two sectors therefore has to be managed in a way that promotes synergy.

Divergence in objectives can be reduced as more information becomes available about the private sector's activities and the objectives of the state. Bennett et al (1994)

observe that the challenge for policy makers is therefore to identify mechanisms and structures to enable the public sector to learn more about the private sector.

Certain forms of health care benefits go beyond the individual consumer. Such health care products fall within the public goods domain and cannot be left to individuals to provide at their own whim as failure or delay in provision could lead to negative effects for many. Above and beyond all this is the fact that there are some in society (the poor and indigent), who cannot afford to provide for themselves. As Kotlikoff (1987) argues, such groups need a social security system that gives them protection or else they would be faced with reduction in their standards of living.

Given the market failures in the health care market and the existence of public and merit goods means that this market cannot and shouldn't be left entirely to the market forces. The nature of this market dictates that an intervention takes place to protect the rights and interests of consumers. Government is best suited to intervene in this market. There is a clear government role in health care and this can be both in financing or provision and as a regulator. While government does not necessarily have to provide services, it is duty bound to finance forms of health care that qualify to be public goods such as immunization services, preventive services and provision of sanitation and to provide for the poor (McGuire, Henderson and Mooney, 1987).

The above notwithstanding, New Public Management advocates argue that the private sector can play an important role in service delivery. Theoretical substantiation is based on the fact the private sector, being profit-driven, would be motivated to be responsive to consumers and maintain efficient services (Moore, 1996). Mills et al (2001) point out that this argument which states that the growth of the private sector has spill-over effects in the form of expansion of access, reduction in administrative and financial constraints of government and the possible increase in overall sectoral efficiency, may hold as long as the growth is well planned and regulated. The World Bank and several other multilateral agencies support this argument.

## **EXPERIENCE OF LOW TO MIDDLE INCOME COUNTRIES WITH INCREASING THE ROLE OF THE PRIVATE HEALTH CARE SECTOR**

Despite the observed failures in the health care market, the private sector especially in the developing countries plays a big role and is big. Available expenditure data suggests that the private sector often accounts for 30-40% of total health sector expenditure and commonly these figures do not include out-of-pocket payments due to the difficulty of estimating such payments (Bennett, 1992). Despite the relatively large size of the private sector in developing countries, little information exists on its performance and behavior.

There are three patterns of the public/private mix, which have been identified in the developing world. According to McPake (1997) the first involves low or moderate participation of the formal private-for-profit sector, especially in medical services, but more substantial involvement of the NGO sector. The private-for-profit sector is more involved in drug sales for example in Zambia, Nepal and Bangladesh. The second pattern is that where the formal private-for-profit sector plays a much more important role in health care delivery like in Pakistan and India. Finally, the third pattern is that where insurance plays a major role, including a social security sector, with mixed public and private characteristics. Despite the lack of information on the relative size of the private sector in most countries, it is not debatable that it is significant and is growing.

### **Why the Increasing Role of the Private Sector in the Health Care Sector?**

Despite the market failures discussed above and the dangers this poses to the consumers in the health care market, the private sector still plays a big role in developing countries. Economic realities in developing countries coupled with increasing resource constraints make it impossible for governments to provide health services to all that need and demand them. Although the resolve by governments to do that has not weakened, as Cross and Levine (1990) argue, insufficient resources makes this impossible. The private sector therefore has come in to fill this gap. While this is partly true, the private sector has also grown because private practice offers many health professionals the opportunity to make money.

Secondly, the private sector has grown because of its perceived superior quality of services offered. Mills et al (2001) have established for example in the case of Asian countries, that private sector growth there was as a result of perceived poor quality of public sector care and sometimes as a result of physical inaccessibility to public hospitals. Whether this in reality is true, is a subject of debate.

Apart from the insufficiency of public resources and the perceived superiority of private sector health services, the private sector has also been promoted for efficiency reasons. Particularly development organizations including the World Bank and USAID (McPake, 1997) have consistently put developing countries under pressure to reduce their level of involvement in health care and promote the private sector. This was based on the belief that the private sector is more efficient due to its profit objectives and that the lack of property rights in the public sector leads to inadequate incentives for efficient behavior. Additionally, it is often argued that with the private health sector delivery, quality would improve and that this would lead to higher demand for health care with real income (Cross and Levine, 1990). It is also argued that expanding private health services is potentially a highly leveraged activity and can lead to large-scale long-term increases in the availability of health services. In the long run therefore, this would reduce public sector costs. Whether these benefits can actually materialize, remains to be seen. Efficiency gains resulting from private sector delivery of health services has not been proven and is still very much a subject of debate (Bennett et al, 1997).

In the case of market failure, the issue is whether the government can perform more effectively. With government failure, can the private sector do it better?

### **Key Issues with the Private Health Sector**

Apart from market failure and other imperfections in the health care market, there are other issues that need to be put into consideration if public health goals are to be pursued. In developing countries, the private health sector is heterogeneous with different types of private health care providers. These normally include non-profit private-for-profit health care providers such as private physicians, pharmacists, traditional healers, and other drug sellers. The atomicity of the private health care sector makes it even more difficult for information to be collected on the activities

and plans of the sector (Muschell, 1995). The different types of private health care providers have different objectives and this makes dealing with all of them more difficult.

Initially the state expanded publicly funded and organized health care services with the aim of improving equity in access to care especially for the poor and in some cases promoting employment (Korte et al, 1992). With the new arguments the focus seemed to have shifted to increasing efficiency and promoting greater consumer choice. This of course works in a situation where the purchasers of care are well organized and actually have the bargaining power to influence the conduct of the providers/suppliers. In developing countries, particularly those in sub-Saharan Africa, where consumers are disorganized, individualistic, uninformed and without real purchasing power (Bennett S, 1992), can this consumer choice be realistically promoted? Griffin (1989) argues that in order to achieve successful private sector participation in the health sector in developing countries, it would require the development of third-party payment mechanisms. Unfortunately, in most developing countries out-of-pocket expenditure makes up the major form of payment for private health services. Are these countries ready for a major private health care sector?

The other concern is that with little information available on the activities of the private sector, it may be difficult to evaluate whether its assumed advantages are materializing. Bennett et al (1997) argue that there are no analytical tools and strategic information required for policy making and no information on how well policies to involve the private sector work. McPake (1997) adds that while it is often assumed that the private sector serves the upper-income groups only, this seems to hold only in the initial stages for growth purposes. Afterwards, it relies on being able to capture middle and lower income group markets.

The real concerns for the increased role of the private sector according to Bennett et al (1997) include: the extent to which the efficiency gains associated with enhanced competition are likely to materialize; the ability of government to manage relationships with the private sector; the equity or distributional effects of greater private sector activity; and alternative solutions to privatization, particularly the scope for strengthening public sector activities.

Most changes in developing countries normally follow what has happened in industrialized countries. Empirical studies have focused mostly on efficiency gains following an increase of private provision of health services. Few studies have looked at the equity implications of the public/private mix both in financing and provision. Most studies have focused on public funding and private contracting arrangements for purposes of promoting efficiency in the sector despite limited evidence of actual efficiency gains. This equity oversight is one of the major concerns over the increasing role of the private sector.

Experiences with expanding the private sector role in health in developing countries have been a mixed bag of results. However, a few issues have consistently come up (Bennett et al, 1994).

The table below summarizes these issues, which have been points of concern as the private sector role increases:

Area of Concern	Impacts of Increasing Private Sector Role
Imperfect information	Manipulation of care provided; supplier-induced demand; excessive investment in technology; high health care costs
Equity oversight	Located only in urban areas and serves only the affluent; focuses only on those parts that are most profitable such as selling drugs; development of a two-tier health care system with different quality
Manpower problems	Migration of health workers from public to private sector (brain drain); conflict of interest

### **Imperfect Information**

As discussed previously, imperfect information allows the provider some scope to manipulate the type of care provided. For example in Uganda, new small private clinics and commercial pharmacies created a culture in which patients associate good care with the availability of injections and other drugs, regardless of medical appropriateness (Asiimwe and Lule, 1993). In India unsafe drugs such as steroids may be given in minor illnesses (Bennett et al, 1994). In Thailand high technology was used to attract patients and then over-used to cover costs in the private sector (Nittayaramphong and Tangcharoensathien 1993)

## Equity Oversight

Whitehead (1992) and Bennett (1992) argue that inequities arise when resources and facilities follow uneven distribution pattern which favors urban and affluent areas leaving rural and deprived areas grossly undeserved. Particularly, private health care inequities manifest in two forms: inequitable distribution and regressive financing of health care services.

Inequitable distribution can be geographical or according to socioeconomic groups. For example Baker and Van der Gaag (1992), observed that in Ghana, Coite d'Ivoire, Peru, Bolivia, Jamaica and Mauritania, public health services run by governments in most cases are under-funded, understaffed and ill-equipped offering low quality care. They found on the other hand that private services seemed to offer high quality care at very high cost and seemed to employ better human resources. However, the evaluation fell short of relating the disparities between the two sectors to implications for equity at the consumer level. These studies looked at distribution inequities on the basis of the geographical divide between rural and urban areas. This presents a bias, as not all urban dwellers in developing countries are better off socio-economically. Even within an urban setting, inequities exist. Another example is in South Africa, where Barron (1998) points out that the major difference in access to health care services occurs between the people who use predominantly the private sector through membership of medical aid schemes and those who rely predominantly on the public sector. While only 18% of South Africans belong to medical aid schemes, they have access to 85% of pharmacists and 60% of medical specialists and spend four times as much on health care as people who do not belong.

This clearly shows that when the public and private health care sectors co-exist, there is likely to result differences in quality of care offered, distribution of manpower and cost of care, which, invariably affects access to health care. Whitehead points out that if such differences are not as a result of unequal treatment of unequals, but are functions of willingness and ability to pay, then clearly inequities exist (Whitehead, 1992).

Inequities also exist as a result of escalating health care costs, which present barriers to access as less people can afford the exorbitant fees. In Bangladesh for example, Khan and Quayyum (1997) found that usually because of rapid growth of the private sector, prices of medical care services increased at a much higher rate than the overall inflation rate. It was also found out that the market-driven private sector is not contributing to equity in the delivery of primary care. This was partly attributed to failure to enforce regulations relating to registration and control of private medical care providers effectively, leading to the uneven quality of service, inappropriate physical facilities and personnel mix, a situation that is rampant throughout the developing world. As Aljunid and Zivi (1996) argue, to reap any advantages, which, may result from private sector growth while protecting consumers, policy makers need information on the distribution, form and quality of health services. However, more often than not, policy makers hardly have this information.

Financing inequities exist if the burden for financing health care is not fairly apportioned based on ability to pay. Inequities also arise depending on the progressiveness of the financing mechanism used. For example, Liaropoulos and Tragakes (1998) found that while the 1983 health reforms in Greece were aimed at increasing equity in financing by limiting the role of the private sector, the opposite resulted. They point out that the rigid application of certain measures; the failure to change health care financing mechanisms plus the growing dissatisfaction with publicly provided services were the reasons behind this. The concern was that the greatest increase resulted from out-of-pocket expenditure, which, is the most regressive form of financing health care, and hence resulted in inequity. While in Uganda the aim of the public/private mix is not to limit the private sector role, but rather to expand it, the implications from Greece are still relevant especially given that the predominant reimbursement mechanism for private providers in Uganda is that of fee-for-service and most of the expenditure is out-of-pocket. The creation of a two-tier health care system, a common feature following the creation of private health care markets, is also bound to introduce inequities in the health sector.

Many have argued that the private sector serves those with higher incomes who can afford these services, thus leaving the public sector to cater for the indigent and poor. In Vietnam, a country with many poor people, this was not the case. According to Ha

et al (2002), sector in Vietnam is responsible for up to 60% of all outpatient contacts in the country. The interesting finding in this study is that private service users did not differ significantly by education, sex and income groups, although more rich people used the private sector. Particularly children used services in the private sector and so did families with more ill members at a time. The fact that both the wealthy and non-wealthy end up using private services, if not well monitored, could result in inequities. If the choice in any way is linked to barriers to access into public services, then it is important to recognize this undesirable situation. The private sector should not merely substitute the public sector but should also seek to expand the entire health care market. Studies which reveal significant growth of the private sector should not stop at counting numbers of users but should aim to establish why the change is taking place and whether in any way it is linked to a deteriorating situation in the public sector.

In most contexts private sector facilities offer more expensive services than the public sector and will only survive if their services best meet the preferences of the population (Bennett et al, 1997). In Zambia for example it is the perceived better quality that makes private provision a choice for many who use private providers. In Kenya it is better quality for private users while cost and proximity are the major reasons given by those who use public facilities. It is also observed that there are situations where users choose higher levels of amenity and convenience in place of higher technical care (Bennett et al, 1997).

### **Manpower Problems**

The private health care sector is accused of causing a brain drain from the public sector, of health workers especially among the highly specialized cadres. Despite a shortage of physicians and other high caliber health workers in the public sector of many countries, high incomes attract local physicians to private practice (Bennett, 1992). This creates a conflict of interest between the two sectors. As an example Gray (1998), found that only 26% of pharmacists are employed in the public sector yet the same sector provides about 80% of health care services needed by the population. The rural-urban divide in the South African case is more apparent as manifested by the mal-distribution of pharmacists between different provinces. Urbanized provinces

enjoy a better pharmacist to population ratio (about 1:2000) than more rural provinces (with averages ranging from 1:7000 with the lowest at 1:16,000). The South African example shows how grave the human resources mal-distribution can be and indeed is a reflection of what happens in many sub-Saharan African countries.

Apart from migration of workers to the private sector, there is also another problem of where health workers divide their time between the two sectors. This is common in Brazil, Thailand and Uganda (Bennett, 1992; Asimwe and Lule, 1993). This creates conflict of interest.

### **Strategies Used by Different Countries to Control the Private Sector**

Putting aside the debate focusing on the comparative efficiency of public and private health care providers, it has become clear from the above discussions, that neither provider is inherently more efficient. Their performance is contingent on factors external to the provider and factors dependent on the internal organization of the provider (Bennett et al, 1994). They therefore, need to complement each other.

Different countries have used different mechanisms to control the activities of the private sector. Commonly these initiatives include regulation, information provision, use of incentives and introduction of monitoring systems. While these strategies must work, they also must be manageable to avoid overburdening of the private-for-profit sector (Bennett et al, 1994).

To guard against information asymmetry, which, may lead to market failure (as pointed out earlier), protagonists of privatization insist that this can be overcome by governments increasing their role in information provision (Mills et al, 2001). However, for governments to do this effectively, they need information on the activities of the private sector, a task that is not easy to accomplish given the limited availability of data on this sector.

It is argued that regulation can minimize to a greater extent some of the privatization concerns. However, it should be appreciated that regulatory activity in all sectors is fraught by informational problems, as government tends to be less informed about the

activities of the providers/producers. This is made worse in the private health sector given the heterogeneity and atomicity of service providers and the wide range of different services provided make informational problems acute. The lack of regulatory capacity in developing countries is another matter that needs its own consideration (Bennett et al, 1994).

Regulation of the private sector's activities usually focuses on three issues, namely, regulation of price, quantity and distribution, and quality of health services. Regulation can be carried out by government, professional bodies, financial agencies or even consumers themselves (Bennett and Ngalande-Banda, 1994). Individual actions include among others controlling location of private facilities, inspection and licensing, monitoring of quality and also through consumer action. The exact mechanism used will depend on the regulating agency. Tanzania and Pakistan have attempted these (Bennett et al, 1994). Setting price ceilings has not been extensively tried in any of the developing countries.

To curtail brain drain, governments have introduced policies that make it mandatory for health workers to complete a specified period of employment in public service before transferring to the private sector. In certain areas special financial incentives have also been offered to retain public sector staff. This is the case in Nepal, Thailand and Pakistan. There are also non-financial incentives such as training prospects and promotion structures (Bennett et al, 1994).

To avoid exploitation of consumers several governments have attempted to promote the role of consumers and community organizations. Hospital boards in NGO hospitals are a common feature in Uganda aimed at promoting accountability (Asiimwe and Lule, 1993). Ghana is preparing to do the same. Patients' charters have been introduced in Malaysia. Consumer activism is also promoted through education, information and communication campaigns. The charters primarily spell out rights of patients/consumers and make it clear that patients have the final responsibility for their health and thus should be fully involved in decisions affecting them.

Governments have also tried financial incentives aimed at encouraging private providers to offer public health services and to take their services to under served

areas. It is very apparent for example in the pharmaceutical sector where the concern is to sell drugs to those who can afford them, and incentives would thus be needed to induce them to extend their services to remote areas and to people with low purchasing power and to carry a line of low cost essential drugs. Financial incentives include tax concessions on equipment, low licensing fees and soft loans. Uganda is trying these (MOH, 2002). It is possible that financial incentives such as tax relief can be introduced and structured in a way to influence the behavior of private providers. It has been done in Mexico and Malaysia (Bennett, 1992). However, this creates problems over time in measuring government subsidies to the private sector and proper estimation of resource flows between the public and private sectors.

Regulation has met several problems in developing countries notable among which are lack of information on the private sector; professional self-interest of health providers and limited resources to generate enough capacity at government level to regulate the activities of the private sector (Bennett et al. 1994). Despite these shortfalls, however, regulation is still seen as the major mechanism and tool that governments can use to reduce the effect of market failure in the health sector.

In conclusion, the above discussion shows that there is a clear cause for both the public and private sectors to be involved in health delivery and or financing. Most importantly, the public sector must be involved to ensure that market failures and imperfections in the health care market do not lead to inequities in access to care for certain population groups. With a right mixture of incentives and regulations, the private sector can play a complementary role in promoting public health goals. Increasing interactions in the health sector may lead to an equilibrium situation where each sector concentrates on areas in which it has a natural advantage, establishing a hierarchy of services that each will offer.

The critical issue is that the public sector should identify what its and private sector failures are likely to be so that attention is directed there. Generally, however, the public sector is best suited to make policy, regulate the activities of the private sector and finance a basic package of services to ensure equity of access. The actual delivery of the services can equally be contracted out to the private sector depending on the strengths of each sector. The private sector then would be left to fill the gap left by the

public sector for those services considered to fall outside the domain of public goods.

The challenge is whether easily said, it can be done!

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## Chapter Three

### CONCEPTUAL FRAMEWORK

Most of the studies done on the public-private mix to date borrow from the conceptual approach to the public/private mix in health care financing and provision. The approach considers the possible interactions that can take place between the public and private sectors in the financing or provision of health care (Bennett, 1994). This framework is underpinned by concerns for efficiency. Empirical studies on equity have used frameworks that are tailored to the context of the study and the research question to be answered, and several have relied on data supplied by the Living Standards Project of the World Bank.

In this study the researcher examines issues that affect equity in health care from the supply side and relates them to what underlies consumer choice of a health care provider and makes a case that depending on how the public and private health sectors interact, there are likely to be implications for equity.

The theoretical argument is that when the private sector grows there will be a redistribution of resources between the public and private sectors and the pattern of geographical location of private facilities is distinct. Depending on incentives that exist there are likely adverse equity implications that will result unless a system is in place to guard against that.

On the other hand at a household level, individual consumers of health care will be faced with a choice of where to go for their care. Apart from personal factors that include demographics, facility issues such as access and perceived quality will also play a role. Given that total resources in the health sector are constrained, the public/private mix leads to relative distribution of these scarce resources. If the resource distribution favors the private sector over the public sector, the resulting perceived service may lead to a choice of type of service by the consumer that is forced. If this is the case, there are likely to be inequities at the consumer level.

The theoretical arguments of the author are based on the works of Sen and others and lie in sociology. Dreze and Sen (1989) emphasize that when it comes to enhancing basic human capabilities and in particular beating persistent hunger and deprivation, the role played by public support including the public delivery of health care and basic education, is hard to replace. They therefore, argue that policies in those two areas should be equitable, and the distributional consequences of policies should as far as possible be just and fair.

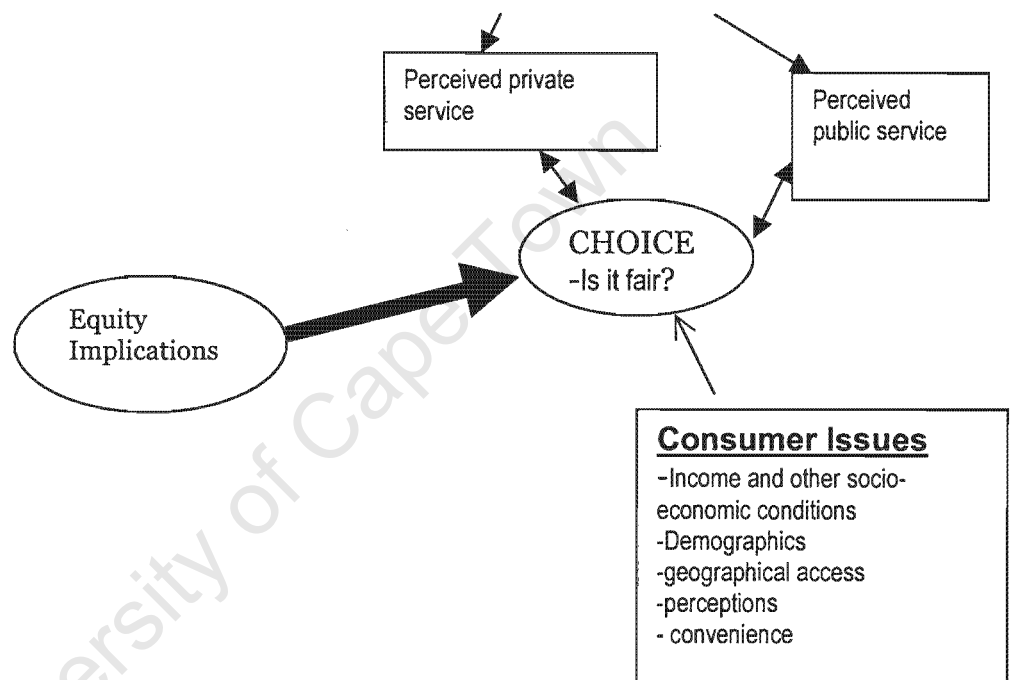
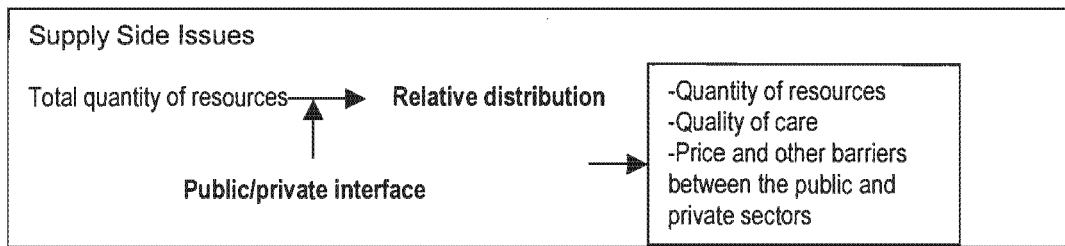
Le Grand (1991) further argues that the concept of equity is intimately related to the existence or otherwise of choice. The argument is that if people's choices are constrained, whether because of their lack of resources or because of preferences that are beyond their control, this is likely to create inequity. The challenge for policy therefore, is to move in the direction of greater equality of choices and hence greater equity, without seriously compromising other values.

From the works of Sen, Dreze and le Grand, this author argues that policies that promote the public/private mix must not impinge on the right of the citizenry to choice, if equity is to be maintained. The question asked is, "are the distributional consequences of policies promoting the role of the private sector in health fair in the sense of guaranteeing equality of consumer choice between private and public health care providers?"

The author in this study argues that in addition to other measures used to gauge equity, choice should be one of them especially when people are faced with choices that are impacted upon by other factors beyond their control.

Previous studies aimed at characterizing the public and private sectors used variables that have included cost, quality, convenience, proximity, personnel, facilities and drugs (Bennett et al, 1997). In this study personnel and facilities have been used. In terms of what influences choice at a consumer level, variables from previous studies have included perceived quality, income, level of education, cost, proximity and convenience. This study investigates the importance of these variables and others.

The conceptual framework is diagrammatically represented as below:



The cost variable used in this study included different types of costs viz: transport cost, diagnosis cost, drugs cost and other treatment related costs. Other variables measured included: numbers and type of health professionals in the district and how they are distributed; numbers and types of health facilities in the district and their geographical location; demographics of consumers (sex, age, household size, occupation, education level); household income; preferred providers; reasons for the choice of provider; other determinants of choice of health care provider at household level.

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## **Chapter Four**

### **RESEARCH METHODOLOGY**

#### **Introduction**

This chapter provides a description of how the data to be used for this study were generated. The process of study design and data collection is also described.

#### **4.1 Study Design**

This study is a cross-sectional analytical economic study. Data was collected at one point in time and attempts to describe a situation as it pertains at that particular time. Secondary data analysis, key informant interviews and a household survey were all used to collect information desired. The three sources of data were deemed critical to ensure complementarity and thus enrich the study findings.

A household survey was particularly preferred due to the richness of the data collected and the link of economic information and policy. Particular household surveys help us to collect data on initiatives that we care about and that are affected by policy. Many research questions like the one for the proposed study, concern the link between the instrument of policy or implication and the outcome variables such as equity (Deaton 1997).

#### **4.2 The Survey Site**

The data for this study is generated from three different sources. Qualitative data was collected from key informant interviews held with three officials in the Ministry of Health responsible for policy development, particularly the public/private mix policy initiatives. The second set of data on health human resources and health facilities was collected from Health Professionals Councils of the Ministry of Health (Uganda). The data on health facilities was cross-checked through a random facility survey to ascertain whether the captured data by the Councils represent what is on the ground. Finally the

last set of data was collected through a household survey conducted in Kampala district between December 2001 and January 2002.

Kampala was chosen as the survey area because it has well developed public and private health care sectors which would make it easier for individuals to exercise their choices. Secondly the area was chosen because, being the commercial capital of Uganda, it represents the diversity that exists in the country and particularly different socio-economic groups. Kampala District is in the central part of the country covering an area of 17,629.80 square km. It is divided into five administrative divisions of Nakawa, Kawempe, Makindye, Rubaga and Central. Each division is in turn divided into several villages known as local councils. The total population in the district is estimated at 1,191,753<sup>2</sup> broken into Nakawa (214,101); Rubaga (276,912); Kawempe (237,962); Makindye (297,036) and Central Division (165,741). Rubaga has 13 villages, Nakawa has 23 villages, Kawempe 22 villages, Makindye 21 villages and Central Division has 20 villages.

#### 4.3 Sample Size

All the practising and employed doctors, dental surgeons and pharmacists at the time of the data collection are included. The same goes for all the licensed private health facilities and government facilities in Kampala District.

In the household survey, sample sizes vary depending on the purpose of the study and the size of the population. For this study, out of about 198,620 households and a population of about 1,191,753 people, a ratio of 1:600, was used (national household surveys use anything from 1:500 up to 1:2500 (Deaton, 1998). About 1500 people were covered living in 330 households divided into five divisions depending on the population size as follows: Rubaga (77 households), Kawempe (66 households), Nakawa (59 households), Makindye (82 households) and Central division (46 households). Households were

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<sup>2</sup> The figures were obtained from the Kampala City Council

selected on the basis of proportions taking into account population and total number of households in each division in order to promote representativity.

#### **4.4 Sampling Strategy**

A multi-stage sampling strategy was used. For the household survey, cluster sampling was used to map Kampala district into five clusters following administrative units of divisions. Within the divisions, each Local Council (village) was included in the sampling frame. Random sampling was then used to select three villages in each division. The three villages represented 30% of all the villages in each division. Three villages in each division were selected for cost-effectiveness purposes. It would be more cost-effective to send an interviewer to one village to collect data than the whole division as long distances would have to be travelled. The next stage was the selection of households to be interviewed in each village. While a simple random sampling would have been ideal to select the households for interviewing, this would have necessitated a list of all households in the village. Under the circumstances, this wouldn't have been possible as such a list did not exist. It was for this reason that a multi-stage sampling strategy was preferred.

To select the households to be interviewed a random walk routine was used. A list of starting points was drawn for each village in the sample. House number one was then selected from the starting point. The interviewers then were instructed to proceed along the same side of the road to the 11<sup>th</sup> house which formed house sample number two by skipping nine houses. Interviewers were instructed not to cross streets unless one was in a cul-de-sac. In case the house selected at that time was closed or there was no adult available to answer the questions, it would be re-visited after 5:00 pm the same day. If again no one would be available for the interview, a final call would be made the following day. Failure to secure an interview from that household would lead to a substitution of that house with one next door.

This strategy ensured that bias was eliminated in the selection of households to interview and secondly it made it easy for return calls to collect missing information.

The apportioning of households according to population size of each division was done to increase the degree of representativity of each household in the final sample selected.

#### **4.5 Household Survey Instrument and Data Collection Process**

Qualitative and quantitative data were collected. Both primary and secondary data sources were used. Primary data was collected from the household survey and key informant interviews. Secondary data comprised the distribution of human resources and location and number of health facilities. The secondary data sources were Health Professionals Councils and the National Drug Regulatory Authority which are responsible for registration and lincensing of health professionals and health facilities in the country. Secondary data on human resources and facilities distribution was supplemented by actual verification at sites.

The main instrument for qualitative data collection was a key informant interview guide. This was used to collect data from policy makers. The interviews of the policy makers were recorded verbatim using a tape recorder which was later transcribed to identify common themes in line with the study objectives and research questions. The key informant guide is shown in Appendix 2. The key informants' interview was primarily needed to inform the reasercher on the progress of policy implementation and other policy considerations. The secretariat for promoting public/private interactions and the health policy implementation unit were considered sufficient for providing the needed information. While the number of interviews held was low, the actual amount of information collected and insight gained was significant.

A household questionnaire was the main instrument for collection of data. The questions were mainly structured with multiple options provided for the respondents. There were a few open-ended questions aimed at probing to unearth motivations of respondents for

decisions made regarding health provider choices. There was also one open-ended hypothetical question about choice of providers which did not have any underlying influence of willingness and ability to pay for a health provider. This was aimed at investigating what other mediating factors besides cost, were vital in the decision making process.

The questionnaire was divided into three different parts. The first dealt with household demographics. The second part asked questions on health care seeking behaviours. The last part addressed other household socio-economic variables which included questions on household income and expenditure. The details are shown in Appendix 1.

The household survey instrument was translated into Luganda which, besides English, is the most commonly spoken local dialect in the capital Kampala. To ensure proper interpretation of the questionnaire a two day training session was held for the interviewers who were all University graduates and were fluent in both languages. After the two days of training, the instrument was piloted among selected households to establish whether respondents would understand the questions as asked in order to ensure reliability. A final training session was held after the piloting exercise to address the problems of interpretation encountered during the instrument piloting.

Each interviewer carried questionnaires in English for information/data capture plus the Luganda version of the questionnaire for those respondents who weren't fluent in English. In addition all interviewers carried letters of introduction issued by the Ministry of Health (Uganda) which were first presented to the area Local Leaders. The Local Leaders in turn appointed local guides for the interviewers. The presence of these guides helped to re-assure the respondents that the data being collected was not for reasons that were against their individual or community interests. Additionally, the interviewers also carried consent form letters to the respondents who were expected to sign them as proof that they were willingly participating in the study. No one was interviewed without first seeking their consent.

It was generally encouraged that interviewers first develop some kind of rapport with the respondents before serious interviewing commenced. This was aimed at securing trust from the respondents for open discussions to take place. Despite this, however, some respondents still found the whole exercise uncomfortable and others were a bit guarded over some of the responses especially when it came to questions about income. The interview was conducted in most of the cases with the head of the household. In his/her absence, the spouse or the next most senior member of the household, was interviewed.

The questions on health care seeking behaviour were in two categories. There were those which related to the most recent illness experienced by household members. This referred to the last four weeks before the interview took place. The period was restricted to four weeks in order to minimize recall bias as this evidently sets in the longer the time frame is. Four weeks was considered long enough to have a significant number of reported illness episodes while at the same time short enough to minimize recall bias. The other questions referred to normal practices and choices taken in case of any illness. This category of questions also included questions on particular illness types including malaria, STIs, cough, diarrhoea, ante natal care, immunization and child delivery. These conditions were singled out because they are all included in the minimum essential health care package for Uganda that is being promoted for universal access. Additionally, these conditions are most prevalent in the country and pose the most common day-to-day health problems faced by the majority of the population in the district and elsewhere in the country. The other questions on income and expenditure were aimed at monthly averages. This approach was preferred as people are more likely to recall regular occurrences.

At the end of each interviewing day, the completed questionnaires were reviewed by the Principal Investigator to ensure that no mistakes were made. In some situations, interviewers had to return to the field to cross-check possible errors in the data captured and to collect missing information.

#### **4.6 Data Management and Analysis**

In all, 330 households covering about 1,500 individuals were interviewed. All the 330 households provided some information requested through the questionnaire and were therefore all used in the analysis phase of the study.

All the responses were coded for data management purposes. Two data bases were created; one for information on household variables and the other for information on individual members' variables. The two data bases were later pooled together to

The hypothetical question on preferred provider was answered only by 167 households and therefore this part of the analysis was done only for these households and not all the 330 households.

The data was first entered into Excel spreadsheet before importing it into STATA program for the analysis. STATA was used for obtaining the descriptive statistics and for deriving cross tabulations and correlations to show how different variables interact.

## Chapter Five

### RESEARCH RESULTS

#### Introduction

This chapter presents the findings of the study based on the three data sources. Primary data was collected from a household survey and key informant interviews. The household survey data was mainly quantitative and the key informant data was qualitative in nature. Secondary data was also collected and this was mainly on health care resource distribution.

Qualitative data findings will be presented first, followed by secondary data findings and finally household data.

#### 5.1 Public/Private Policy Initiatives

This section deals with qualitative data findings. The Government of Uganda through the HSSP<sup>3</sup> identified major areas to focus on to ensure universal access to an essential package of health care services. Among these is the public-private partnership initiative. From key informant interviews carried out during this study in the Department of Policy, Planning and Development of the Ministry of Health (Uganda), motivation for the partnership at this particular time was revealed. The mediating factors include the realization that the private sector is a major partner in the delivery of services accounting for more than 65% of the total health care expenditure in the country (HSSP, 1999). Additionally, government realized that it does not have the capacity to deliver 100% of the country's total health care requirements and the fact that there are clear advantages inherent in the private sector. According to the Ministry of Health, the private sector is better placed to procure and supply drugs more efficiently and can deliver primary curative services at a more cost-effective level as it enjoys low labor costs.

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<sup>3</sup> HSSP = Health Sector Strategic Plan (1999-2004)

According to the Directorate of Planning, Policy and Development (MoH, Uganda) the objectives for promoting public-private partnership among others are:

- To improve efficiency of the health sector in utilization of resources by avoiding duplication
- To strengthen partnership in the health sector in order to promote faster growth and development of the sector and
- To exploit synergies created out of the partnership due to existing comparative advantages between the public and private health care sectors

It was revealed that the Government of Uganda is already collaborating with the private sector especially private-not-for-profit organizations. The collaboration includes among others joint regular planning meetings convened by the Health Implementation Committee where the private sector is fully represented. In addition to this, the public sector second medical officers to major hospitals operated by the private-not-for-profit sector; government pays such officers' salaries. The government since 1999 has also started giving grants to selected NGO hospitals that can help government in its mission to offer the minimum package of basic health services. The collaboration is in the form of a memorandum of understanding that is normally signed between government and such parties. It was however, revealed that there are no set benchmarks of performance and therefore it is still not possible to determine what impact such grants have had on the performance of such facilities and whether it has in any way led to the reduction of service fees charged by these hospitals. The Directorate of Policy, Planning and Development is looking into ways of tying the financial grants with clear performance indicators.

It was revealed that government has classified the private health care sector into different groups: the private-not-for-profit (PNFP), the private-for-profit (PFP), complementary health care and traditional healers. It is in that order that collaboration will be initiated. So far, more work has been done with the PNFP

and studies have been initiated to find out more about the PFP and later on the traditional healers will be brought on board.

Asked whether the growth of the private sector has in any way impacted on the public sector, the officials all concurred that it has. They identified migration of health workers into the private sector as one of the consequences of this plus an increase in public service salaries in an attempt to match those of the private sector. However, to date on average the public sector pays about 40% of the private health care sector salaries (Planning Department, MOH, 2001).

On whether there is an evaluation and monitoring mechanism to determine the progress of the collaboration and the general growth of the private health care sector, it was revealed that at the moment no such mechanism exist apart from increased formal interactions between the two sectors. These interactions take the form of six-monthly health sector reviews where all stakeholders get together to establish how far the implementation of the health policy has gone.

When asked whether the growth of the private sector especially PFP has affected the consumers in any way, the Directorate admitted that they wouldn't be in a position to know as no studies have been carried out to this effect. There is no information available on basic issues like affordability of private care services and the kind of factors that influence pricing strategies in that sector.

Further when asked how the Department is planning to counter the likely inequities resulting out of the increased role of the private sector in health, the officials interviewed all voiced their concerns that this remains a puzzle. One noted that perhaps the growth in the economy may counteract this eventually with increased funding for the public sector services and increased ability of people to choose where they want to go for services based on their ability to pay. This remains to be seen whether it can work that easily as there are no examples of such a process from elsewhere.

One crucial issue that came out of the interviews was that the public sector recognizes the complementary role of the private sector and the need to integrate these two sectors in order to improve efficiency in the delivery of services, quality of services offered and minimize inequities in the delivery of services (though it was not clear how the latter could be achieved).

## **5.2 Distribution of health professionals**

In this section and section 5.4, secondary data findings are presented and discussed.

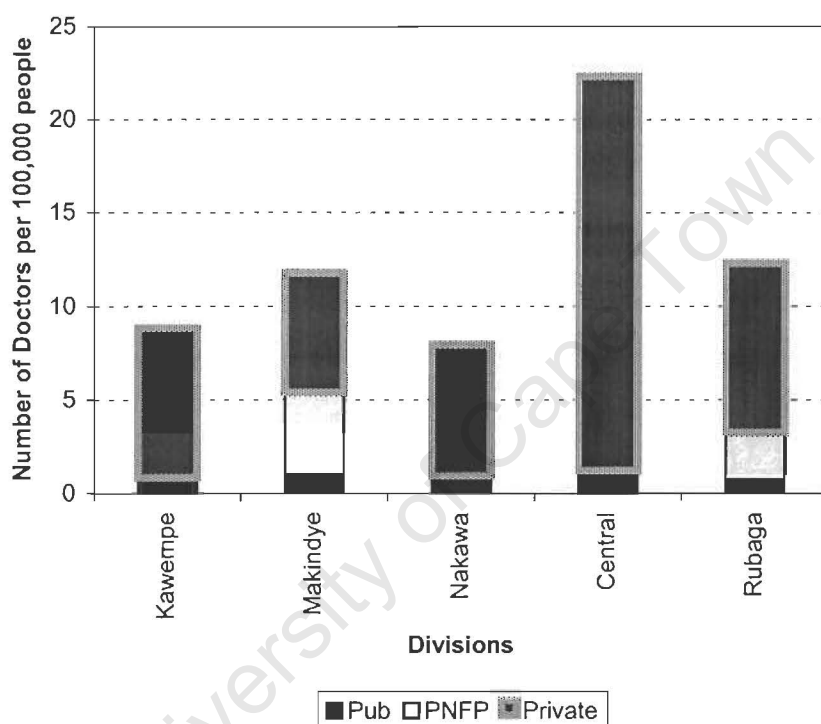
### **5.2.1 Distribution of medical doctors**

Doctors (medical officers) represent one of the most visible cadres as a reflection of type and probably quality of health services. In Uganda medical officers work in different organizations namely: government hospitals and clinics, NGO hospitals and clinics, private-for-profit hospitals and clinics, NGO organizations involved in public health programs and public administrative functions. In most NGO hospitals, government seconds medical officers to work in these institutions and these are still paid by government. The major hospitals in this category in Kampala are four namely: Kibuli (Makindye Division), Rubaga (Rubaga Division), Mengo (Rubaga Division) and Nsambya (Makindye Division). The total number of such medical officers all over the country stood at 124 at the end of 2001<sup>4</sup>. About 38.7% of these work in Kampala district and the rest in other parts of the country notwithstanding the fact that Kampala district accounts for only 7.3% of the population (1991 Census). Whereas this study is not about comparing Kampala and other districts, this finding indicates that inequities in distribution of health personnel between different geographical regions of the country are a reality.

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<sup>4</sup> Public-Private Mix Partnership Secretariat, MOH

The study aimed to investigate how some health care resources are distributed geographically in the district. The figure below shows the distribution pattern of doctors in the district according to divisions (administrative units) and the sector within which they work. The distribution is presented in terms of doctors per 100,000 people.



**Figure 1: Geographical Distribution of Doctors in Kampala (Source: MOH, 2001)**

The findings indicate that overall there are more doctors working in the private health sector in Kampala district. This excludes doctors who work for two national referral hospitals located in Kampala district but serving the whole country.

Central Division has the highest number of doctors per capita although it has the lowest population in the district. All the other divisions are clearly under supplied

with doctors although Nakawa seems to be the worst off. Rubaga and Makindye have the highest proportion of the population in the district.

At a sectoral level 79% of the doctors, work for the private-for-profit sector, 14% for the private-not-for-profit and only 7% work for the district public health services. Of those working in the private sector, 31% work in Central division which, has the least population (14%), 16% work in Kawempe (with 20% of the population), 17% work in Makindye (with 25% of the population), 13% work in Nakawa (with 18% of the population) and 22% work in Rubaga (23% of the population).

Overall there are more doctors in the private sector with the majority in Central division. While this is the central business district of the city where most people work, it does not necessarily mean that is where they seek health care services.

The interesting finding in the pattern of distribution of doctors between the public and private health sectors is that about 38% of these doctors work in both sectors. They are mostly employed in the two national referral hospitals based in the district. In Uganda, there is no part time public employment of health workers, meaning that these doctors in question are considered to be full-time employees of the public sector. The fact that they are dividing their time between the public and private sectors creates a conflict of interest and it means they are doing less work than they are being paid for in the public sector. This practice is common in many developing countries including Brazil and Thailand (Bennett, 1992).

### **5.2.2 Distribution of pharmacists**

There are about 184 pharmacists in the whole country. Of these eleven (11) work for the country's drug regulatory agency, two (2) work at the central Ministry of Health, five (5) work in the two national referral hospitals, four (4) work for regional government hospitals and the rest work for private institutions (both for-profit and not-for-profit).

Out of the total 184 pharmacists in the country, 140 are based in Kampala district working either in the public or private sectors or both. This study was concerned with the pharmacists who deal directly with patients, either working in community pharmacies or in hospitals.

Below is the table showing the distribution of these pharmacists, geographically and between the public and private sectors.

**Table 1: Distribution of Pharmacists in Kampala District (Source: PSU<sup>5</sup>, 2002)**

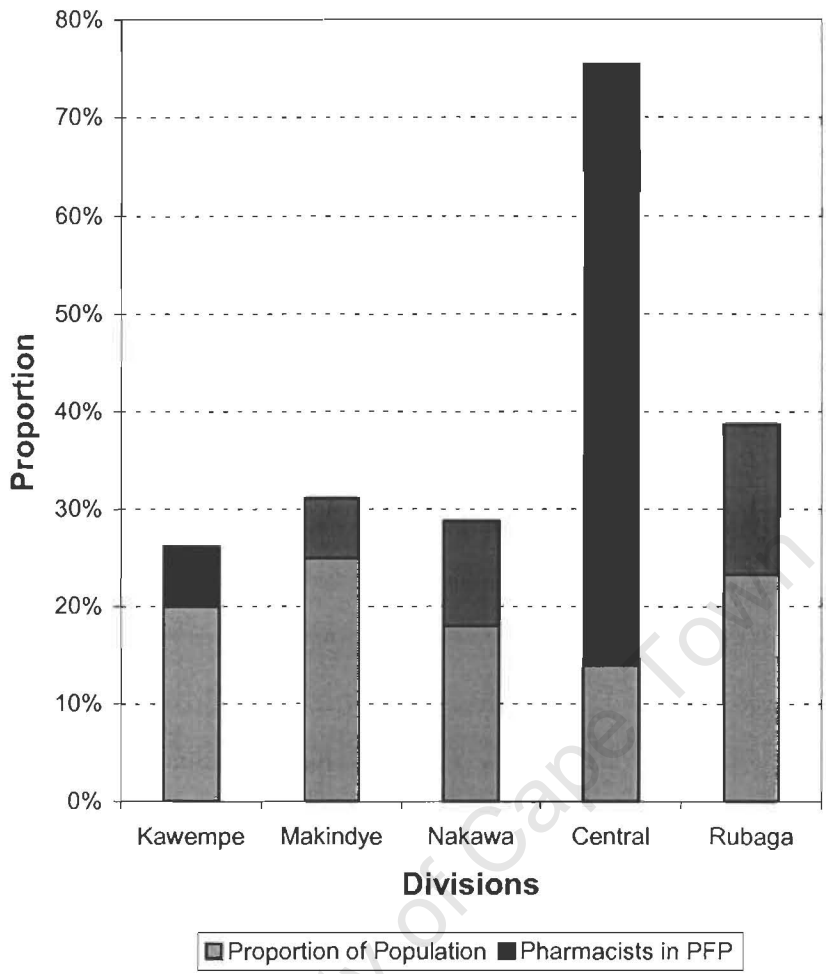
Sector	Rubaga	Kawempe	Makindye	Nakawa	Central
Public	-	8	-	1	-
PNFP	1	-	1	-	-
PFP	10	4	4	7	40
Total	11	12	5	8	40

The remaining 64 pharmacists in Kampala work in regulatory and administrative functions, in manufacturing industries and for distribution companies. All these three categories do not directly offer patient services and therefore their distribution is not included in the above table. All the nine pharmacists working for the public health services work in the national referral hospitals and are therefore excluded from the analysis of district pharmaceutical services. With only two pharmacists working for the PNFP sector, it leaves all the pharmacists working for the private-for-profit sector and the analysis only looks at these.

Fig 2 below shows their distribution pattern compared to the population.

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<sup>5</sup> PSU = Pharmaceutical Society of Uganda



**Figure 2: Private Sector Pharmacists in Kampala District by Division**

The figure above shows that Central division though with only 14% of the population has 62% of the pharmacists. Even though it is the central business district of the city, by any standard having more than half the pharmacists working there presents a skewed distribution pattern. All the other divisions are clearly under served both in number and relative distribution compared with population distribution.

### **5.3 Distribution of health facilities (HU<sup>6</sup>)**

#### **5.3.1 Distribution of hospitals/clinics**

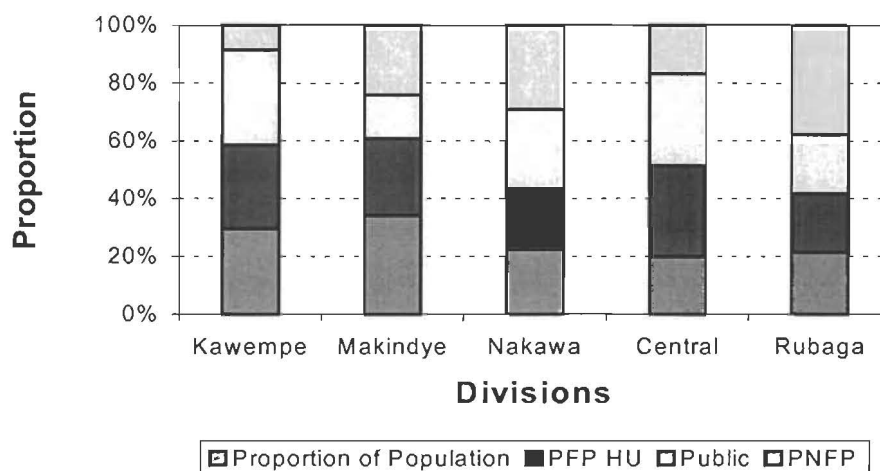
There are about 560 private health units in Kampala district, of which 543 are privately owned and 17 are NGO owned. Their distribution varies between the different divisions of the district. Rubaga division has 22.10% of the private health clinics/hospitals, followed by Central with 21.92%, Makindye 19.52%, Kawempe 19.52% and Nakawa has the least number making up 16.94%. Most of the private health clinics are small and offer mostly out-patient services while the NGO facilities are mostly hospitals offering both in-patient and out-patient services. The study did not seek to establish the number of in-patient beds available in either the private or public sector and therefore this aspect is not included in the study findings.

On the other hand there are nine (9) government owned and operated health units plus two national referral hospitals in the district of Kampala. While the referral hospitals receive patients from Kampala district, they also receive patients from all over the country and for this reason, they are not included in the analysis of the distribution of health facilities in the district.

The figure below shows the distribution of the health facilities in all the divisions of the district sub-divided into pure private (private-for-profit), private-not-for profit (NGO) and public compared with population in each division.

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<sup>6</sup> HU =Health Unit



**Figure 3: Geographical Distribution of Health Units in Kampala (Source: UMDPC, 2002)**

The findings from the figure above reveal unequal distribution of health units in divisions within the district, apart from Central division, which has a higher proportion of health units than its population. In all cases there are more private-for-profit health facilities than the public ones in each division.

Findings on distribution of health units indicate that out of the total 569 health units in the district 95.43% belong to the private-for-profit category, 2.99% are of NGO nature and only 1.58% are publicly owned and operated. However, facilities are very different in size and type of services offered.

At this stage we can only say the number and high concentration of private health facilities is an indicator of established demand for the said category of health services. (The findings from the household data should either confirm or dispute this later on).

### 5.3.2 Distribution of pharmacies

Pharmacies in Uganda represent a category of health service establishments that deal with both professional practices but are also organized as business units. A pharmacy is defined as a registered outlet under the direct supervision of a

qualified licensed pharmacist, from where classified drugs can be stored and dispensed to patients<sup>7</sup>. For purposes of this study only the category of pharmacies dealing with patients and other end-users were considered. Given a weak regulatory regime in the country most pharmacies in Uganda do not exist primarily to fill prescriptions as most clinics also dispense drugs. Thus most retail pharmacies will also treat certain ailments and will dispense drugs to end users with and without a prescription.

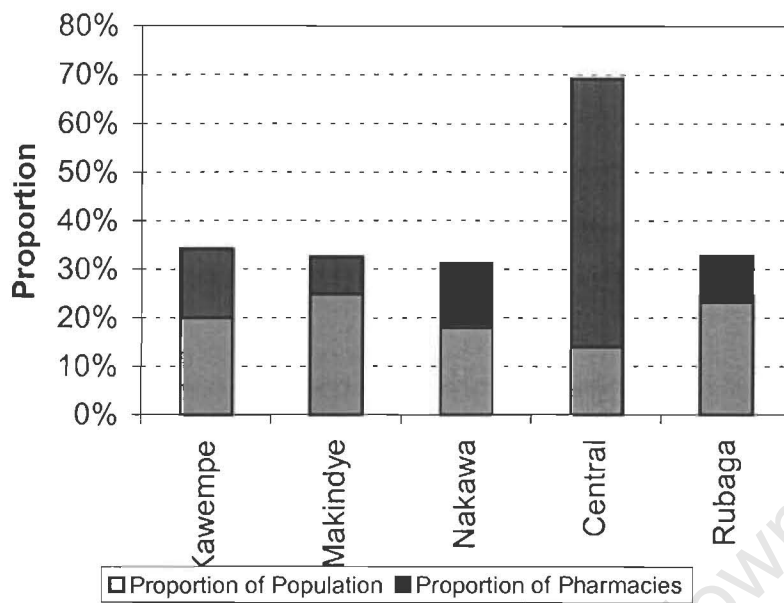
For a pharmacy to operate there must be a resident pharmacist in charge who is licensed to operate the pharmacy. The majority of all pharmacies are found in Kampala and other major urban centers. The distribution of these pharmacies seems to follow socio-economic organization of different groups but the pattern is not very clear. This is because in Uganda most facilities are found in the shopping centers of major towns areas and residential areas normally are not considered an option for the location of such facilities.

Three categories of pharmacies exist namely: distributors which primarily exist to sell drugs only to bulk purchasers and normally are the representatives of manufacturers; wholesale pharmacies that only deal with the trade aspect of business and retail (community) pharmacies that are the point of contact with end-users and patients. It is the latter category that was considered in this study.

In Kampala the retail pharmacy distribution structure looks as follows:

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<sup>7</sup> National Drug Policy and Authority Statute 1993



**Figure 4: Distribution of Pharmacies Compared to Population in Kampala District (Source: NDA<sup>8</sup>, 2001)**

All divisions seem to be under served with pharmacy services relative to the population served apart from Central Division, which has more than 50% of all the pharmacies in the district but houses less than 20% of the population.

The presentation of secondary data findings ends here and next is the presentation of findings from the household survey data.

## 5.4 Descriptive statistics

### 5.4.1 Household demographics

The average household size was 4.5 with a standard deviation of 1.96. The smallest household had one (1) member and the largest household had twelve (12). More than 50% of the households had a size less than the average household size of 4.5. Below is the summary of the household size distribution.

<sup>8</sup> NDA = National Drug Authority

**Table 2: Household Size Distribution**

<b>Household Size</b>	<b>Frequency</b>	<b>Percent</b>
1	15	4.55
2	32	9.7
3	58	17.58
4	65	19.70
5	74	22.42
6	32	9.70
7	26	7.88
8	20	6.06
9	5	1.52
10	1	0.30
11	1	0.30
12	1	0.30
<b>Total</b>	<b>330</b>	<b>100</b>

About 52.44% (n= 1495) of the household members were female and the rest male. In Uganda an adult is defined as a person aged 18 years and above (Uganda Constitution, 1995). Going by that definition, 47.95% (n= 1495) of the household members were children and 52.05% were adults. The ratio of children to adults was 0.92 with adults slightly more than children.

#### 5.4.2 Household income and expenditure

The average monthly household income of the households surveyed was Uganda Shillings<sup>9</sup> 257, 284 (equivalent to US\$ 143) with a standard deviation of Ug Shs 252,011. The minimum stated household monthly income was Ug. Shs 20,000 and the maximum Ug. Shs 1,500,000. More than 70% of the households sampled had a monthly income of less than US \$200 (Ug. Shs 360,000). About 20% of the households live on less than US\$ 1 a day, which by any standard is considered below poverty level and another 20% have an income of less than US\$ 2 per day.

Broken into five income groups (quintiles), the following shows the classification of households according to income

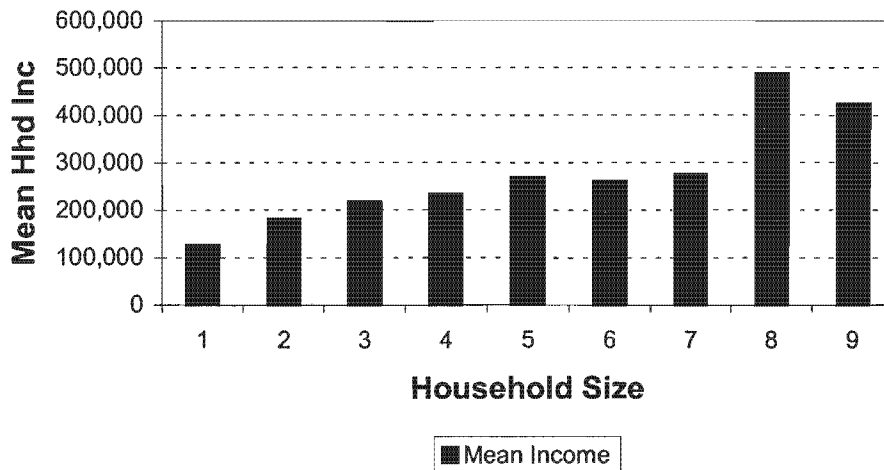
Table 3: Household Income Quintiles

Income groups	Frequency	Percentage	Monthly Household Mean Income
I	58	20.1%	52,914
II	57	19.8%	100,596
III	58	20.1%	160,862
IV	57	19.8%	298,421
V	58	20.1%	671,638

The data was also disaggregated according to household size and the figure below shows the distribution of income according to household size.

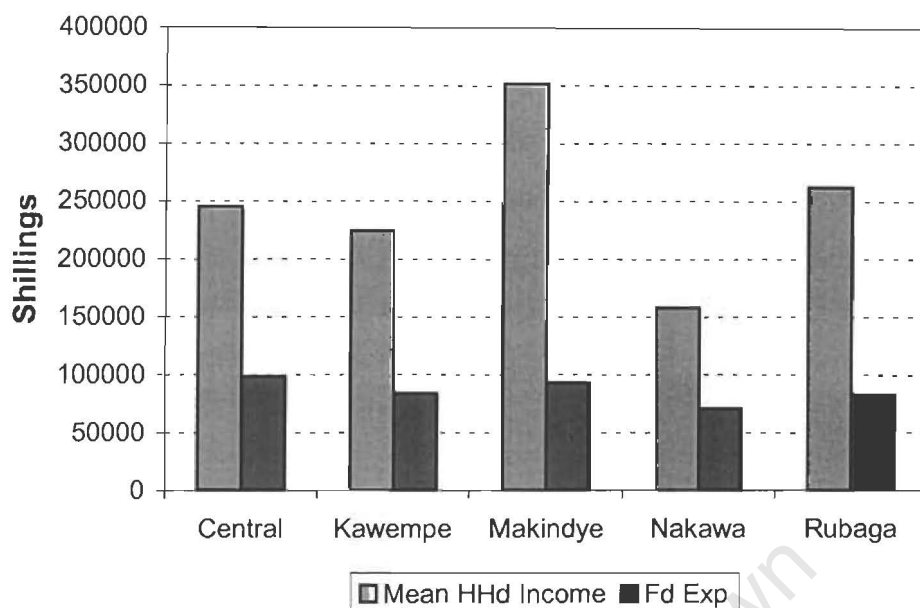
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<sup>9</sup> Uganda Shillings 1,800 = 1 US \$



**Figure 5: Mean Household Monthly Income versus Household Size in Kampala District**

Generally income of the households increased with household size. While the correlation between household size and income was positive (0.25), this relationship was not that strong. This could be because not all household members have an income and therefore an increase in number does not necessarily lead to an increase in household income. Income distribution was also considered according to different divisions and the figure below shows the distribution pattern together with expenditure on food.



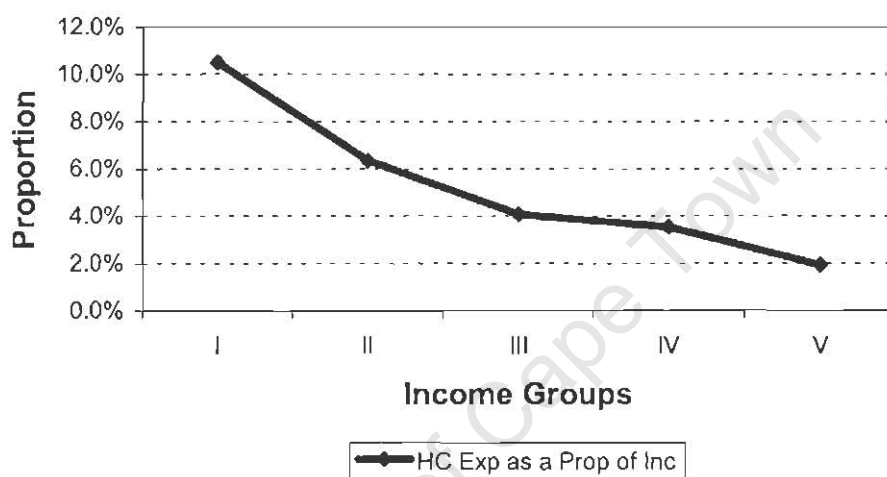
**Figure 6: Mean Household Monthly Income According to Different Divisions**

Generally households reported low incomes. This was not different from other household surveys as households generally are reluctant to give information on income.

Information was also sought about household expenditure on food. This information was needed to confirm income information and also to show how much different income groups and household sizes spent on basic necessities. The mean average household monthly expenditure on food was Uganda Shillings 85,591.64, with a standard deviation of Ug.Shs 43,039.01. The maximum monthly food expenditure was Ug. Shs. 300,000 and the minimum Ug. Shs. 6,000.

Household annual health care expenditure information was also requested to give an indication of the burden of health care costs on the households. Given that information sought was spread over the year, it is possible that the figures given may not necessarily have captured all the expenditure but it came across during the survey that households were in most cases able to recall the big health care

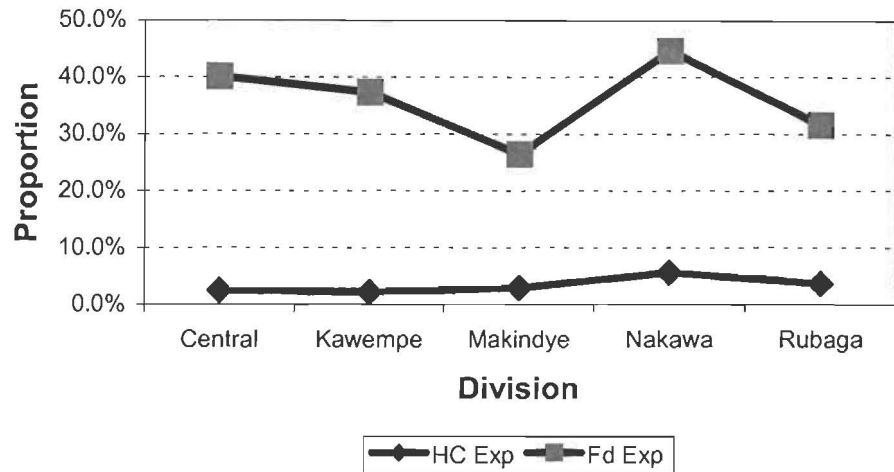
expenditures. From the information given, the annual average household health care expenditure was Uganda Shillings 98,487.76 with the minimum expenditure given as Ug. Shs.4,000 and the maximum as Ug. Shs. 770,000. The survey also sought to establish how the expenditure related to household income given that in some cases in developing countries, poor families are the ones that face the most disease burden and consequently the attendant costs. The figure below shows how household income varied with health care expenditure.



**Figure 7: Health Care Expenditure as a Proportion of Household Income According to Different Income Groups (Quintiles)**

Generally low income groups paid proportionately more for health care than the higher income groups. This mechanism for payment of health care is regressive as it favors households with higher income and disadvantages those with low incomes.

When expenditure patterns are considered according to geographical areas, the findings show some inequities. Households in Nakawa division pay a higher percentage of their incomes for health care and food yet they have the lowest household income. The other divisions relatively pay less given their income levels.



**Figure 8: Food and Health Care Household Expenditures as a Proportion of Household Income**

HC Exp = Monthly Health Care Expenditure

Fd Exp = Monthly Food Expenditure

When health care and food expenditures are compared, the analysis showed that on average households' expenditure on food compared to health care varied between the ratios 10:1 and 15:1. On average the findings indicated that households that spent more on health care, also did on food. The correlation coefficient between health care and food expenditures was 0.15 implying that although health care expenditure increases varied positively with food expenditure, the relationship was not very strong. The low proportion of health care expenditure compared to food expenditure in income could be due to the fact that health care expenditure information collected was annual while the rest was monthly. Twelve months being a long time, there is a possibility that this information was significantly understated due to recall bias.

The relationship between household food expenditure and household size was fairly strong at 0.36. This can be explained by the fact that since the study was based in the capital, food there is significantly expensive compared to the other household basic requirements as most of the food consumed in the home is

bought and also because as the number of household members increases so does the food consumed.

## 5.5 Household Usual Provider of Choice

Households were asked to state their usual health care provider of choice. The findings are indicated in the table below:

**Table 4: Household Usual Provider of Choice**

Provider	Frequency	Percent
Home	5	1.82
NGO	11	3.33
Public	127	38.48
Pharmacy	9	2.73
Private	176	53.33
Traditional Healer	1	0.30
Total	330	100

When all the private providers (*private clinics/hospitals, pharmacy and traditional healer*) are combined irrespective of category, 61.52% of households use some form of private provider for their routine health care needs. This could be because of the high numbers of private health facilities which, in turn is influenced by established demand for those services.

## 5.6 Provider of choice for different illnesses

Five medical conditions were investigated for preferred choice of provider. The conditions included malaria, sexually transmitted diseases, cough, diarrhea, antenatal care and child delivery. These conditions were singled out because they pose the greatest challenge to public health and are all included in the minimum essential package of services for Uganda. When asked who the normal provider of

choice was for each of those conditions at a household level, the following were the findings.

**Table 5: Provider of choice and medical condition**

Provider type/Condition	Delivery (n = 232)	Cough (n = 293)	Malaria (n= 326)	STDs (n = 65)	Immunization (n = 224)	Antenatal care (n = 224)	Diarrhea (n= 260)
Home	0.86%	13.99%	2.15%	-		0.89%	2.31%
NGO	29.7%	1.37%	5.21%	10.77%	29.46%	25%	3.85%
Public	52.16%	5.46%	21.17%	27.69%	42.86%	50.45%	13.46%
Private	16.81%	43.34%	61.96%	56.92%	27.23%	23.66%	63.46%
Traditional Healer	0.43%	1.37%	0.61%	3.08%			0.77%
Pharmacy	-	34.47%	8.59%	1.54%	0.45%		16.15%

The findings indicate that households in Kampala District prefer to use public services for child delivery purposes, immunization and antenatal care. This could be because the public sector in Uganda predominantly offers these services. The private sector in Uganda mostly offers curative out-patient services. On the other hand more than half in either case, prefer private providers (all categories) for malaria, cough, diarrhea and STD treatment. The high numbers of people choosing to use the private sector for malaria treatment is a bit worrying given that malaria is the number one killer disease in the country and provisional findings indicate that private sector providers do not consistently follow malaria treatment guidelines in the country (Malaria Control Program, MOH, 2001). This practice can exacerbate resistance and transmission problems.

Infective coughs, malaria, STD and diarrhea are some of the most commonly occurring illnesses in Uganda (*National Health Policy 1999*) and thus require attendant health care services. While this study did not investigate the incidence of these cases, or how many people seek/do not seek medical attention for them, it still remains relevant to observe that most households meet their basic health care requirements from their pockets. A question therefore arises as to whether people

living in Kampala district regardless of income are in a position to meet these requirements on their own unsubsidized in the absence of common health risk pools since private health care services in Uganda are paid for out-of-pocket. Even if cost is not the major determinant of their choice of health care provider, the question posed is still relevant.

It is understood why people would want to use the private providers for minor ailments such as coughs, because of convenience. Private providers could also be preferred for STDs because of anonymity and confidentiality found there.

Pressed further to reveal why they choose different providers for different types of illnesses, the following were the reasons for the three most preferred providers.

**Table 6: Reasons for Household Provider Preferences for Treatment of Malaria (n = 322)**

Provider/Reason	Distance	Drugs	Cost	Doctors and other Health Workers	Quality	Other Reasons
Private (62.11%; 200)	50.5%	9%	7%	3%	12.5%	18%
Public (21.11%; 68)	16.18%	1.47%	51.47%	13.23%	8.82%	8.83%
Pharmacy (8.7%; 28)	14.29%	53.56%	14.29%	-	-	17.86%

For those who preferred different providers for treatment of diarrhea, the following were the reasons given for the households' top three preferred providers:

**Table 7: Reasons for Household Provider Preferences for Treatment of Diarrhea**

	Cost	Availability of Drugs	Availability of Doctors	Distance	Quality	Faster Service
Private (n= 149)	6.7%	8.7%	4%	37.6%	19.5%	23.5%
Public (n= 28)	25%	3.6%	14.3%	32.1%	25%	-
Pharmacy (n= 40)	5%	67.5%	-	5%		22.5%

Distance, faster service and availability of drugs were the main reasons for the preferred provider of choice. This is understandable given the medical urgency of the condition.

Public providers were preferred for immunization services because the services are free (32% out of 96); the facilities are near (11%); the quality was deemed good (29%) and because of availability of doctors (8%). For delivery purposes, again public providers were preferred because 20% (n = 114) perceived the quality to be high; 41% chose them because of availability of doctors; 21% because the services were free and 15% because they were used to the providers. Those who chose NGO providers did so because 60% (n = 65) perceived the services to be of high quality and 23% did so because of availability of doctors. In this choice it came out that quality and availability of doctors were crucial factors in deciding which provider to use for delivery purposes.

For antenatal services, public providers were again preferred because the services are free (26% of 111); of availability of doctors (26%); the quality was deemed high (30%) and the facilities were near (9%). For those households which chose NGO providers, 64% (n=53) did so because the services were perceived to be of higher quality; 21% because the facilities are near and 15% because of availability of doctors. Regardless of type of provider chosen for these services, it came out

that availability of doctors, quality of services and distance to the facility were the most important determinants of that choice.

Overall private providers were preferred due to short distances, availability of drugs, availability of doctors and perceived high quality of services. Those preferring NGO providers did so because of availability of doctors and perceived high quality of services. On the other hand, public services were preferred for availability of doctors and the low cost associated with these services.

### 5.7 Health Care Seeking Behaviour

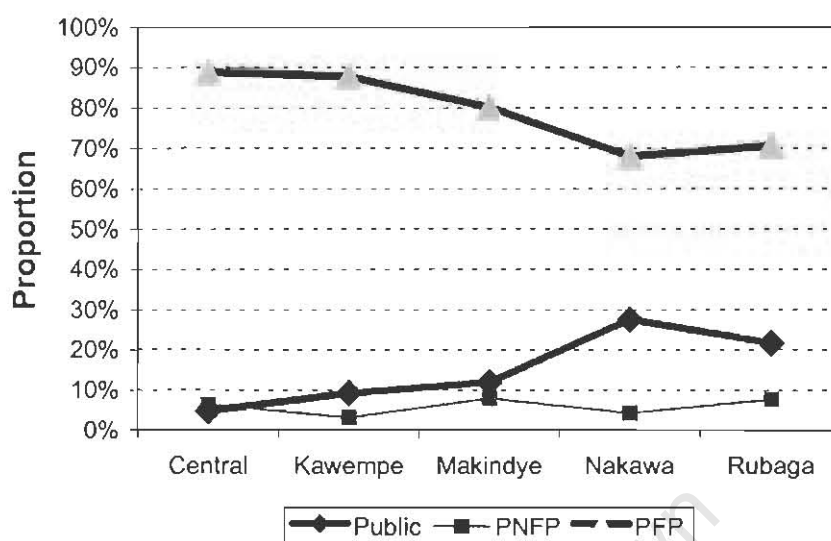
The study sought to establish whether in the previous four weeks any members in the households had suffered from any illness and where they went to seek care for such an illness. This question was asked to supplement responses on routine health care seeking behaviors of households. Particularly this would help to eliminate recall bias as the illness referred to must have occurred in the last four weeks prior to the survey. Out of the 1494 individuals surveyed in 330 households 27.51% (n= 1494) reported an illness in the last four weeks prior to the survey and 72.49% did not. The reported mean duration for the illness was 8.4 days with a standard deviation of 8.3. The shortest period of illness was one day and the maximum sixty days. The respondents categorized the reported illness as follows:

**Table 8: Classification of Illness Suffered**

Illness Type	Frequency	Percent
Mild	137	33.33%
Moderate	199	48.42%
Severe	75	18.25%
<b>Total</b>	<b>411</b>	<b>100</b>

Of those who reported an illness 95.62% sought treatment for it and only 4.38% did not seek some form of treatment.

The figure below shows providers used according to different divisions.



**Figure 9: Provider Use for the Most Recent Illness by Division**

Overall more than 70% of individuals who sought treatment went to a private provider with 64% choosing a private-for-profit provider (Private + Pharmacy). There was more private provider use in Central division which, as earlier seen had the highest proportion of health facilities, pharmacies, doctors/dental surgeons and pharmacists. Interestingly, the findings show that while overall there was more private health care services use in the district, Nakawa division had more public services use than any other division. This could be partly due to the fact that there is a referral hospital in this area which, is usually perceived to provide good quality of care. The other reason could be that Nakawa residents may not be in position to afford private services as the households there had the lowest mean income and spent a higher percentage of their income on health care.

**Table 9: Utilization Rates by Division**

Division	Sample	Reported Service Use in the last 4 weeks	Utilization (Av. No. of visits per person per year)
Central	203	63	4.0

Kawempe	289	65	2.9
Makindye	379	126	4.3
Nakawa	245	47	2.5
Rubaga	379	92	3.2

The table above shows that Central division with the highest concentration of health care services also has relatively a high utilization rate while Nakawa has the lowest utilization rate. As earlier seen, Nakawa division households also had the lowest mean monthly income, spent relatively more on health care than any other division and had the lowest number of facilities compared to its population and the other divisions. The low utilization in Nakawa could be due to low supply of services and high cost of services.

## 5.8 Facility Characteristics

Respondents were asked a number of questions about the last time they visited a health facility for their most recent illness. Overall the mean waiting time for all facilities was 56.48 minutes. The mean waiting time for NGO facilities was 61.2 minutes; for public facilities it was 83.68 minutes; for pharmacies it was 30.83 minutes and for private clinics/hospitals was 30.98 minutes. Private facilities in all cases had lower waiting times than public facilities. This could probably be one of the reasons people prefer private health care providers. Facility distance from households varied according to category of facility. On average private clinics/hospitals were located in a radius of 500 meters, pharmacies in a radius of 600 meters, public hospitals/clinics in a radius of 3 km and NGO facilities in a radius of 5 km.

## 5.9 Treatment cost

The study also sought to establish consultation fees and drug costs. In line with the common practice only 90 reported having paid consultation fees as compared to 313 who incurred drug costs. In Uganda, consultation fees is not a normal

practice as patients prefer to pay for what is tangible treatment as they do not attach much value to consultation (UPMDPA<sup>10</sup>). The average consultation fee charged by all health units visited was Uganda Shillings 5,515, with the minimum charged as 1000 and the maximum as 30,000. On the other hand, the average drug cost for all respondents who consulted a provider the last time they were ill, was Uganda Shillings 6,591 with the minimum as 400 and the maximum as 75,000. The wide range in drug prices is a very common feature in Uganda as there is no price regulation in any form (NDA, 1999). However, for these cases it could also mean different illness types.

Considering these costs according to category of providers, NGO hospitals charged the highest consultation fees at an average of Ug. Shs. 8375, followed by public clinics/hospitals at Ug. Shs 5,838 and then private clinics/hospitals charged the lowest at Ug. Shs 3,911. It should be noted that cost-sharing was still a main feature in public institutions till late 2001 and this explains the finding. When it came to drugs, pharmacies charged the lowest averaging Ug. Shs 2,800, followed by private clinics at an average of Ug. Shs 5,156. Again NGO facilities charged the highest for drugs averaging at Ug. Shs 21,460. While we cannot disaggregate this expenditure into types of drugs supplied in either case, this finding is still indicative of the different cost structures existing in different health facilities. The high cost in NGO hospitals should be a point of concern.

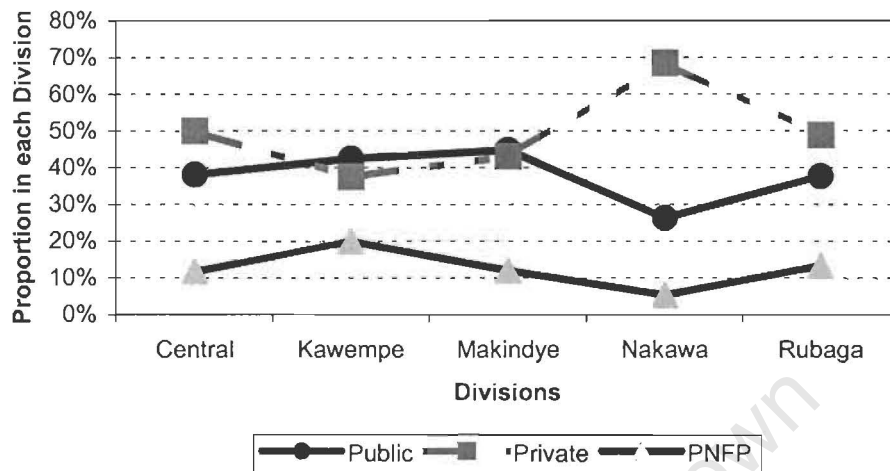
#### **5.10 Provider of Choice and Household Demographics**

The study sought to establish what the ideal choice of provider would be if there were no cost implications for the decision made. This question sought to capture the other major determinants of such a choice and inherently the perceptions of

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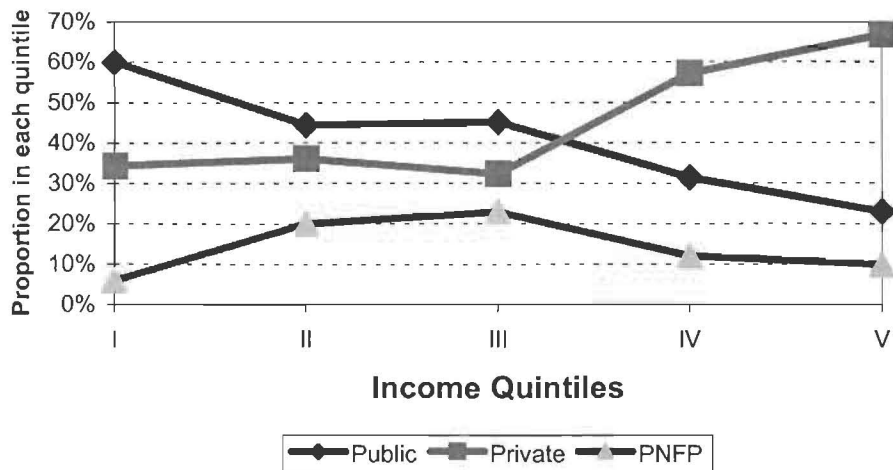
<sup>10</sup> UPMDPA = Uganda Private Medical and Dental Practitioners' Association

the household towards the state of health care services offered in their locality. The figure below summarizes these findings:



**Figure 10: Ideal Household Provider of Choice by Division**

When the responses are analyzed according to income quintiles, Fig 11 below summarizes the findings. The choice for public health services declines across income quintiles from low to high. The reverse is true for the choice of private health services. Significantly, the first three income quintiles would prefer public health services and the last two income quintiles would prefer private health services. This finding is probably in line with ability to pay and although the question asked was in a situation where households did not have to pay for the services, the findings still reflect this.



**Figure 11: Ideal Choice of Provider According to Income Quintiles**

Households in Central, Rubaga and Nakawa would prefer private-for-profit health care services while those in Kawempe would prefer public health care services. Those in Makindye were undecided between the two. Kawempe being the home of the major national referral hospital probably explains why households there prefer public health care services, as it may be perceived to provide good quality of care. Households in Rubaga and Nakawa expressed the greatest preference for private health care providers as Central division ones did. At the same time as earlier seen, households in those two divisions spend relatively more on health care and have low utilization of health care services. Additionally, households in these two divisions used more public health services. The discrepancy between what they use and what they prefer, could be an indication of constrained choices.

It was imperative for purposes of unpacking the above findings to establish what factors are at play for the above choices. Several factors came up including availability of doctors, availability of drugs, distance to the facility (how near the facility was), customer care which meant several things ranging from courteous staff, ambiance, familiarity with health workers, perceived quality of service offered judged from whether one's medical needs were satisfied from visits to

different facilities and the quickness of service (waiting time, long lines). The following tables 10 and 11 presents the findings.

**Table 10: Major Determinants of Ideal Choice of Provider at a Household Level**

<b>Factor</b>	<b>Frequency</b>	<b>Percent</b>
Availability of doctors and other health workers	76	43.68
Availability of Drugs	18	10.34
Customer Care	5	2.88
Distance	1	0.57
Perceived Quality	61	35.06
Quickness of Service	13	7.47
<b>Total</b>	<b>174</b>	<b>100</b>

The findings show that 43.68% of the households would prefer a provider of health care based on whether there were doctors and other health workers available at the facility. Contrary to what other studies from Kenya (Mwabu et al, 1996) and Nigeria (Ichoku, 2000) have shown, distance here mattered least among the factors although for current provider use, for certain illnesses such as diarrhea, distance still mattered. This could be explained by the fact that unlike those two studies, which, were carried out in rural settings, this was done in an urban setting where distances to health care facilities are within easy reach. When the findings as presented in Table 10 and Figure 11 are taken together, the household made the choice of each facility based on the following factors:

**Table 11: Major Determinants of an Ideal Provider as Perceived at a Household Level**

Why/ Ideal Provider	Availability of Doctors and other Health Workers	Availability of Drugs	Customer Care	Distance	Quickness of Service	Quali ty
NGO (n= 22; 12.7%)	33.3%	4.6%				59.1 %
Public (n= 66; 38.2%)	89.4%	1.5%	1.5%			7.6%
Private clinics/hospi tals (n= 85; 49.1%)	10.6%	18.8%	4.7%	1.2%	15.3%	51.8 %

The majority who chose private sector health care providers did so because of the perceived superiority of quality of service, availability of drugs, availability of doctors and other health workers and quickness of service. Quality of service offered is such a broad thing that sometimes from the responses it was difficult to separate it from the total sum of the service offered which includes equipment, drugs, hotel services and even health workers. Compared with the public sector, those who chose it as an ideal provider cited availability of doctors and other health workers as the single most important determinant for preferring this category of providers. NGO services were chosen for their perceived high quality of services and availability of doctors. Overall about 50% of the households in Kampala district prefer private health care providers. NGO service preference was generally low. This could be because these services are scarce in Kampala district and households don't routinely use them and thus couldn't adequately evaluate them.

It was important to relate provider choices households make with socio-economic characteristics of those households. When providers were classified into two categories namely private (comprising private clinics/hospitals, pharmacies, NGO providers and traditional healers) and public, 38.48% of households used public providers as usual providers of choice and the remaining 61.52% used private providers. When this data was disaggregated according to income groups the following were the findings.

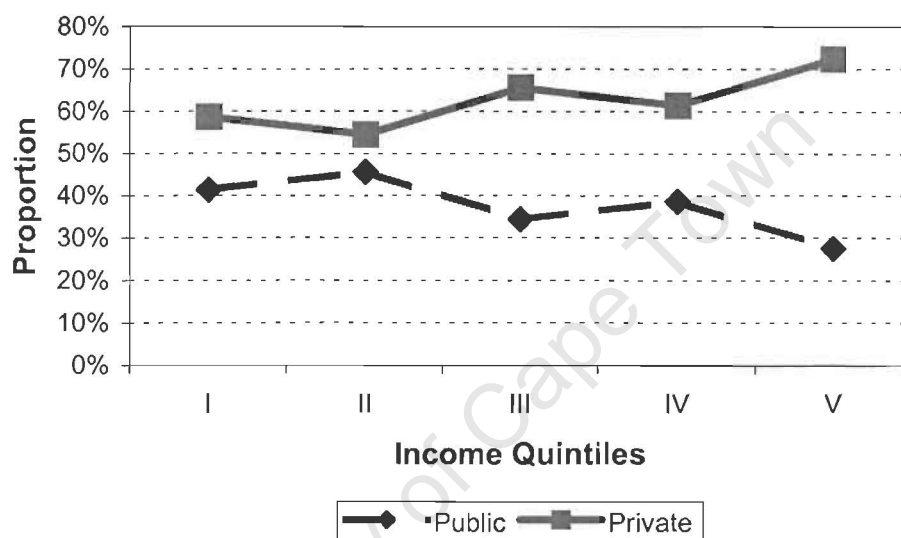


Figure 12: Household Provider Use According to Different Income Groups

Using income groups in Table 3, the above figure shows that the overall in each income group there was more private health care services use than public care services. Private health care services use increased with increase in income although this was not consistent across all income groups as Fig 12 above shows. This finding is similar to the one in Vietnam (Ha, Berman and Larsen, 2002) where it was found that all regardless of income, sex or age used private health care services. It is however, disturbing that more than 40% of the lowest income quintile uses private health care services and that about 30% of the highest income quintile uses public health services. It can be argued the higher income groups that access public health services probably displace the lowest income

group and this could be the reason why this group which, clearly cannot afford private services (they earn less than US\$ 1 a day), does use them.

### **5.11 Implications of Health Care Resources Distribution on Household Choices**

The above sections presented findings of the study based on individual and household responses from the household survey. The other sections presented findings on health care resources distribution in Kampala district and policy actions so far taken or planned for promotion of public-private partnership in the health sector. Taking the three broad categories of findings reveals interesting relationships that show they are not mutually exclusive.

There are those who argue that governments should provide social security for high cost medical events requiring hospitalization services like in Sri Lanka (McGreevey et al, 1997), and leave individuals to cater for their daily basic health care requirements as these are deemed affordable. It is also argued for the opposite based on the fact that the latter though affordable from a single event point of view, occur more often and thus involves the greatest expenditure as a whole while the former, though expensive, occurs rarely.

Whichever position one adopts, it should be remembered that for a country like Uganda where more than 40% of the population lives below poverty levels (survives on less than one dollar a day) (UNDP, 2000), such a population is not in position to meet either the basic or the high cost health care events. This coupled with the fact that from the sociology of illnesses, this same population will carry the greatest burden of diseases which are poverty linked, such a population group is likely to incur even higher economic costs for health care due to their diminished productivity.

The author argues that it is not that people cannot afford their health care costs at all, it is the fact that the timing of their illnesses and the implied financial costs do not coincide with their financial capability to meet these costs. In a country like

Uganda this is the major obstacle to private financing of health care, as out-of-pocket expenditure is the predominant payment mechanism for health care. This method is not only inconveniencing but is the most regressive form of financing for health care (Wagstaff and van Doorslater, 1992). We have seen that the majority of people in Kampala district use private sector services and would like to use private sector services regardless of socio-economic status because of the perceived advantages of private providers as earlier pointed out. If this trend continues, inequities in health are going to increase, as there are no mechanisms to protect those who are poor. Additionally, their preferences and choices are not due to ability to pay but are rather forced on them by inequitable distribution of resources between the public and private sectors leading to imperfect competition, as we will show below.

To illustrate from the above, the findings show that there is inconsistency in as far as provider use and choice is concerned across income groups and in different divisions. For example while less than 40% of households in income quintiles I, II and III expressed preference for private-for-profit health care providers, when it came to use, more than 55% of the households in the same income quintiles, use private health care providers. This is also reflected in divisions. While for example in all divisions, household private provider use was more than 70% of all households, when it came to a preferred choice, all except Nakawa had 50% or less of the households expressing their wish to use private health providers. From the findings, it can be deduced, that while households predominantly use private health services, given a choice they would choose otherwise. Le Grand (1991) as earlier discussed, argues that equity and choice are intimately related. In the presence of constrained choice, therefore, it is doubted whether there can be equity. The findings as discussed suggest that the choices households would like to make are constrained as they end up using services they wouldn't like to.

A significant proportion (61.52%) of households surveyed indicated that they routinely use private sector providers for the health care needs as opposed to only 38.48% who use the public sector. The above findings further indicated that a

startling 60+% of households whose monthly income was less than US\$ 200 used private sector health care services. This group makes up about 80% of all the households surveyed. This finding indicates that private sector use in Kampala District is not dependent on income alone and therefore ability to pay although the highest income quintile used private health services more. In addition to this, households with low income spent relatively more on health care than high-income households. For example the lowest income group spent on average 10% of monthly income on health care compared to 2% paid by the highest income group, yet the latter on average had monthly income twelve times that of the lowest income quintile. This financing mechanism is very regressive.

The findings further show that household service utilization was influenced by the way the health care resources were distributed. While in all divisions, households used predominantly private health care services, as these were dominating over public health care services, when it came to unconstrained choice, this was not the case. This could be explained by the fact there are more private health facilities and doctors in these divisions and therefore households tend to follow the distribution of resources although their preference could be different.

The study findings further indicate that Central division which, had the highest concentration of private health care services compared to the other divisions, also had low health care costs compared to say Nakawa which had the lowest proportion of private health care services with the highest health care costs. The findings also suggest that the distribution of health care resources is affecting household health care seeking behaviors and the cost structures inherent in different geographical areas. Households in Central division which, are well supplied with services, had the highest utilization rates (4 visits per person per year) compared to say Nakawa, which, had the lowest supply of services with the lowest utilization rates (2.5 visits per person per year).

The study findings also show that households made choices on health provider use based on perceived facility characteristics which, are in turn influenced by the relative distribution of health care resources. For example households that preferred private provision did so because of perceived better quality, availability of doctors and other health workers and availability of drugs. On the other hand, those that preferred public provision did so solely because of availability of doctors and other health workers. This finding suggests that households will go for provision in the sector that appears more resourced and that either way, resource distribution will impact on this choice. Yet evidence abounds that shows perceived quality is not necessarily the same as technical quality. While households are using private health services in Kampala district due to the perceived superiority of services, this may not be the case and this should be cause for concern that the care provided may not provide value for money.

The study revealed that only 7% of doctors in Kampala worked for district public health services with another 14% in the NGO facilities, compared with 79% who worked purely for the private sector. There are even more who work for the private sector if you include those who work in both sectors. Clearly this shows that when it comes to distribution of key specialist health workers in the district, the majority work for the private sector. This inequitable distribution did not stop at sectoral level but was also very apparent geographically between different divisions of the district. While it is difficult to ascertain whether people use the services in their divisions all the time, or travel to different areas, it is clear that Central Division, which is the most developed division in the district, takes up the lion's share of health care providers and specialist human resources. Even if the people had access to central division services, they would have to travel longer distances and there is thus an opportunity cost incurred which the people in central division do not incur. Even if people were to use Central division services during working hours, this would apply only to the working group.

Pharmaceutical services were the most inequitably distributed with more than 76% of all pharmacists in the country working for Kampala District, which is the capital of the country. As if that was not enough 97% of those serving the community were based in the private sector with 60% of them in the central division, which is the most economically developed division in the district. This finding confirms what Bennett (1992) observed that, in the area of pharmaceuticals, private providers are concerned with selling drugs to those who can pay. As Gray (1998) argues, such an unbalanced distribution presents probably the greatest inequity in the provision of pharmaceutical services and possibly leads to differences in quality of care offered to people who use the two sectors.

A key component of this study was to establish why certain providers are preferred over others. The study findings indicate that the households that use the private sector routinely do so because of the perceived superior quality of services, availability of doctors plus other health workers and availability of drugs among other things as opposed to those that use the public providers who do so because of availability of doctors and other health workers plus cost as public health facilities in the district are free. This finding shows that factors related to supply of services very much influence the kind of decisions made at the individual and household level when it comes to a choice of provider to use. Availability of health workers particularly doctors is critical in influencing household provider choice decisions since the findings indicate that this mattered to those who use both public and private providers. This is also because the findings indicate there is a correlation between use and availability of private providers between divisions.

Earlier on we referred to the work of Sen, le Grand and Dreze who argue that the concept of equity is intimately related to the existence or otherwise of choice (le Grand, 1991; Dreze and Sen, 1989), and from the findings of this study there are all indications that the people of Kampala District in the majority use private

providers. This decision however, is intimately related to a lopsided situation in the way the supply side of service delivery is organized as the private sector is clearly advantaged when it comes to availability of crucial health workers, availability of drugs and the perceived quality of service offered. We for example saw that households in all divisions and across all income quintiles used private services more because of perceived advantages although they would prefer otherwise. This means households made a constrained choice over which provider to use. Within the limitations of this study, the findings show that the choice households make when it comes to health care providers in Kampala district is constrained as the major determinants of that choice are outside their influence and is not a function of ability to pay.

Aside from the fact that there is inequitable distribution of some health care resources between the public and private sector, the study also showed that households use the private sector for some of the major diseases like malaria which, poses the greatest health challenge in the country and that the private sector is normally used for out-patient curative services. Preventive services such as immunization were almost exclusively offered by public services. Bennett (1992) points out that this focus of the private sector on curative services is a point of concern of most governments. In a situation where out-of-pocket expenditure is the main financing mechanism in the private sector, it is worrying that some households may fail to gain access to service providers for such major illnesses in case of inability to pay.

While this was a cross-sectional study and trend analysis would have benefited the analysis more, it is still safe for one to conclude that there are equity concerns as far as access to health care in Kampala district is concerned since most households are making similar provider choices irrespective of socio-economic characteristics. In addition to this, there is a clear case of inequitable distribution of resources between the two sectors. If this trend is not monitored and corrective

measures instituted, inequities are likely to arise if already not there and thus affect access to care.

University of Cape Town

## Chapter Six

### POLICY CONSIDERATIONS AND RECOMMENDATIONS

This study set out to achieve several objectives. First, the study sought to establish the level of resource distribution between the private and public health care sectors in Kampala district and its implications for access to care. The findings in chapter five have indicated that resource distribution between the two sectors favors the private sector and as such more people use the private sector. Given that most households surveyed had incomes below US\$1 per day and the fact they use private providers irrespective of income, and given that private health care in Uganda is paid for through out-of-pocket expenditure, one can argue that affordability of services is definitely an issue. If the health policy objective is to increase access, especially to the essential minimum health care package of services, the findings in this study show that the policy objectives may not be achieved, otherwise there may be need to reorganize the structure of service delivery. This concerns particularly those who are in most need of subsidized services.

The second objective was to establish whether health care provider choice at a household level is affected by the way the resources are distributed between the public and private health care sectors. The results of the study show that households use private sector providers. The reasons given for this preference strongly suggest that it is partly influenced by the way the resources are distributed between the two sectors. This was proved by the fact there are more doctors and pharmacists working for the private sector, there are drugs in the private sector, there are more health facilities that are privately owned and run and that the private sector was perceived to have better quality of services and these facilities are within easy reach compared to public health facilities and the availability of these resources was cited as the major factor influencing provider choice at a household level. Interestingly, households' ideal health care provider of choice differed significantly from their current service utilization patterns further showing that the choices made are constrained. The low numbers of public health services in the district could mean that households find it difficult to access them and are thus forced to go to the private sector for services.

Given the multiple factors that determine use of health services, it is vital for policy makers to have an assessment of their importance relative to one another so that the choices made at a household level are not constrained. Factors such as perceived quality, availability of drugs and availability of health workers have a significantly bigger impact on this choice even for the poor. As Hutchinson (1999) observes, price has virtually no impact even for the poor. Therefore the argument that those who use the private sector services can afford does not arise, as affordability is not the major determinant of that choice but other factors as stated before. To substantiate this, the findings indicated the majority of households with lowest income went to the private sector for services. Furthermore, the division with the lowest income still had more people in that division using the private sector and households there spent relatively more on health care. A policy implication for this finding is that perceived quality and other service characteristic differentials matter a lot to consumers and therefore instruments are needed to standardize quality of services offered in both sectors so as to protect the poor who may be forced to go to the private sector for services when they cannot afford them.

Finally the third objective of this study was to propose a mechanism for monitoring and evaluating the public/private mix in the health sector in Uganda. An effective monitoring and evaluation mechanism is one that puts into consideration the major variables that differentiate the two sectors which if not monitored would most likely promote inequities in health care access. Monitoring and evaluation are necessary to determine whether the stated public-private mix objectives are being met. Monitoring further helps to tell whether the pace of implementation needs to be delayed, hastened or maintained.

A policy maker in Uganda who is promoting public-private interactions in the health sector would be interested in knowing how the interactions are likely to impact on household use of health care services. In addition to this, public/private mix concerns (as earlier discussed from international literature), which have distributional implications for equity, would be the other interest of policy makers. This information is crucial to policy makers if they are to devise strategies that would seek to minimize negative effects of the resultant public/private interactions and at the same time promote the desirable effects.

These include the distribution of manpower between the two sectors, the cost of care, geographical distribution of services, information on the activities of the sector and the way the two sectors are integrated. Though not part of this study, the financing mechanism used in the private sector would be another key area of interest. These issues would therefore form the major objectives of the evaluation and monitoring process to assess how they are changing with time.

First and foremost, a base line audit is needed of the public-private interactions to inform the monitoring and evaluation process about the starting point for purposes of monitoring progress. This audit should cover areas such as the current relative sizes of the two sectors, the distribution of manpower between the two sectors and determine current household health services utilization patterns through a comprehensive household survey. The audit could also help policy makers to get a sense of relative size of different facilities such as bed numbers, number of in-patient days and number of out-patient visits. The evaluation should also set short-term, intermediate and long-term objectives. This study could not provide all this information as it was constrained by lack of some data such as size of facilities to enable accurate estimation of population to facility ratios.

The government needs to state in very clear terms what it wants the roles of the public and private health care sectors to be. Together with this, a situational analysis is needed to evaluate the comparative advantages of each sector with the aim of probably revising the objectives that have already been set in order to optimally harness synergies when integration takes place.

A set of indicators are needed to monitor the progress of the policy promoting public and private mix in the health care sector. The indicators needed could include those relating to structure, process and outcome in specific areas. Structure indicators should cover legislation and regulatory framework in place to spell out the standard operating procedures for the interaction of the two sectors and should further show how this legislation is being implemented. Particularly concern should be over whether the

legislation and regulations provide for equitable distribution of private services to underserved areas and what specific incentives have been put in place to make this happen.

Outcome indicators should show the impact of the public-private mix policy on availability and affordability of private health care services. This kind of information would be collected through routine household surveys or focus group discussions and should aim to show over time where people are obtaining health care and drugs and whether there are any persons failing to access any of the services due to inability to pay. The information collected should especially target the low income groups to show whether they are accessing public health services in order to determine whether government targeting is working or not. This way, it will be ensured that those using private health services are doing so out of a free choice and not because they are failing to access public health services. Information collected should also show how health care is financed according to different income groups to prevent the poor from paying relatively more as the case in this study.

Prices of private health care services especially those that relate to the essential package of services, need to be monitored over time to show whether they are escalating or are within affordable limits. To further establish affordability of services, provider payment mechanisms need to be monitored to show whether use of out-of-pocket expenditure is reducing or increasing as the study showed, this was the main source of funding health care. Though outside the realm of monitoring, an equitable financing mechanism that spreads risks and introduces cross-subsidization between different groups and discourages over or under-servicing should be introduced or at least monitoring should continuously show whether this system is evolving or not.

Manpower audits need to be routinely carried out to show the trend of human resources distribution between the two sectors in order to establish whether the mal-distribution is reducing or increasing.

The monitoring should also include status reports on the performance of the public sector in areas that are likely to cause unfair competition with the private sector. This should include salary structures in public services compared with that in the private sector especially for those cadres of staff that are highly needed in the public sector. Quality assurance audits should be done in both sectors regularly to show the progress of the two sectors and to guard against the emergence of a two-tier health care quality system in the country. General human resources conditions of service need to be reviewed to reflect competition with the private health sector. The question of dual practice needs to be addressed as a matter of priority if efficiency in the public health sector is to be improved. Entry into private practice by health professionals needs to be regulated to ensure that needed skills in the public health sector are protected. A minimum number of years in public service could be imposed for certain health professional groups before they are allowed to set up private practices.

Information systems need to be developed linking the two sectors and monitoring should show how this crucial area is developing. This information system would capture data on utilization patterns in the two sectors to ensure equity in balancing preventive and curative services in the two sectors.

Availability of essential drugs is another area that should be monitored between the two sectors to show what percentages of the recommended drugs are available particularly in public health facilities at all times. This ensures that people seeking care in the public sector are accessing these drugs like those in the private sector. Availability of drugs was cited as one of the influencing factors for choosing a provider and it is for this reason that this area should be monitored. Prices of these essential drugs also need to be assessed regularly in the private sector to ensure that the essential package of service remains affordable. The figure below summarizes the indicators to be monitored to ensure that the policy promoting public-private interactions is not exacerbating inequities in health care access.

More importantly government needs to set up a comprehensive regulatory mechanism to promote and control the activities of the private health sector. A regulatory framework needs to be set up targeting the three main areas of price of health care products, quantity and distribution of health care services and quality of health care. These regulatory mechanisms will need to be applied across all categories of health care providers.

**Figure 13: Monitoring evolving public-private interactions sample indicators**

Indicator	Private Sector	Public Sector
<b>Manpower distribution</b>		
-% of doctors and other health cadres working in either sector at any time		
<b>Affordability</b>		
-Cost of the minimum package as a %-age of household income or food expenditure		
-Number of households using either sector relative to income		
<b>Availability of drugs</b>		
-%-age of essential drugs available in public health facilities		
<b>Utilization pattern trends for major illnesses</b>		
-Number patients		
-Proportion of people receiving Preventive services from either sector		
<b>Geographical distribution</b>		
-Ratio of public and private providers and facilities relative to population		

**Conclusion**

This study investigated public-private health care resources distributional implications of equity for Kampala District and the findings strongly indicate that there are strong

reasons why this should be an issue. It was revealed that household provider choices in Kampala are strongly linked to the way resources are distributed between the public and private health care sectors. Several factors responsible for this included perceived quality of services offered, availability of doctors and other health workers and availability of drugs. The choice made at the household level were not only dependent household income, a feature that is very worrying as ability to pay in use of private services is not a major determinant but rather the need to access a satisfactory service. There was also a clear case of mal-distribution of health resources between the two sectors and within each sector between different geographical regions. In the absence of a monitoring mechanism, the policy promoting public-private interactions in Uganda may promote inequities in health care access.

Given the limitations of this study, we cannot generalize the findings of Kampala district for the entire country. However, these findings are a pointer to what could happen at a national level. This therefore calls for more extensive studies to assess the potential impact of the policy promoting the public-private mix in Uganda.

While this study did not look at regulatory mechanisms in place to regulate the activities of the private sector in health, the findings in this study make it more imperative for an assessment of such regulatory requirements and the kind of incentive structures that need to be put in place to ensure the private sector promotes public health goals.

There are also several other unanswered questions, which could help the evolving public-private interactions to promote efficiency and equity in health. Such questions include, what determines the pricing of private health care products and the kind of competition that exists in the private health care market. Studies could be designed to answer such questions.

Finally, delivery of services cannot entirely be divorced from the financing mechanism for such services. A review of the provider payment mechanism in Uganda is needed as

this may pose the greatest threat to equity in access to health care given perverse incentives that could manifest.

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## Appendix 1: Survey Instrument

### Public/private mix healthcare resources distribution implications for equity: Kampala District, Uganda

#### Survey Instrument

Name of interviewer  Code

Form Number  Cluster Number

Date of Interview

*The Interviewer to introduce himself/herself, state the purpose of the study and seek consent from the respondent prior to the interview.*

#### SECTION 1: HOUSEHOLD DEMOGRAPHICS

CODE	1.1 Name	1.2 Age (years)	1.3. Gender	1.4 Relationship with household head	1.5. What is the highest level of education level of each person?	1.6. What is the occupation of each person listed?
<i>Identifier code for household member</i>	<i>Enter first name only for each household member</i>		1 = M 2 = F	1 = head 2= spouse/wife 3=daughter/son 4= grandchild 5= parent 6= grandparent 7= brother/sister	1= no schooling 2= pre-primary 3= primary 4= vocational 5= secondary 6= Univ. degree	1= unemployed 2= student 3= 4= civil servant 5= small trader 6= housewife 7= agricultural labourer 8 skilled labourer 9= pensioner 10= other (specify)

				8= <i>other relative</i> 9= <i>other (specify)</i>	7= <i>diploma</i> 8= <i>Still at school</i> 9= <i>other (specify)</i>	
1						
2						
3						
4						
5						
6						
7						
8						

1.7 For persons enrolled in school who pays school expenses?

Code	Who pays	Tick accordingly
1	Bursary from government	
2	Household	
3	Partly household and partly government	
4	Other (specify)	

1.8 For those aged 6-24 years not in school ; Why not?

Code	Reason	Identifier CODE
1	Can't afford school expenses	
2	Expelled from school	
3	Needed to get to work	
4	No school nearby	

5	Couldn't cope with school work	
6	Other (specify)	

## 2.0 Health Seeking Behavior

Interviewer to direct questions to the household head or oldest member present

Identifier		ÿÿ	l		2.5. Where did -----
CiYÁ 7	®		z	-ê	- go for treatment?
	bjbj	ÿÿ	z z		1= public
ø i	U U		@	-ê P	hospital/clinic
	äf Ä	ÿÿ	° 0	nê	2= private
			Z Z	t at	hospital/clinic
			Σ	menÿes	3= mission
			~ -ê	2= No	hospital/clinic
	100			If NO	4=
	@H			→2.15	pharmacy/chemist
	7  7			Pg 4	store
	äf				5= treated at home
					6= traditional healer
					7= other (Specify)
1					
2					
3					
4					
5					
6					
7					
8					

Identifier CODE	2.6. Why did ----- or the household choose the provider/facility in (2.5) above? (if the space is not enough use
-----------------	--

	<i>the back of the paper)</i>
1	
2	
3	
4	
5	
6	
7	
8	

Identifier CODE	2.7. If ----- were treated at a facility, what is the distance from home to that facility? ----- -- km	2.8. By what means did the sick person get there?  1= <i>on foot</i> 2= <i>motor cycle</i> 3= <i>bicycle</i> 4= <i>bus/taxi</i> 5= <i>personal/family car</i> 6= <i>other (specify)</i>	2.9. How long did it take to get there?  1= <i>less than 30 minutes</i> 2= <i>30 min – 1 hr</i> 3= <i>more than 1 hr</i>
1			
2			
3			
4			
5			

6			
7			
8			

Identifier CODE	2.10. How much did it cost in transport to get to the facility? (Shs)	2.11. How long did it take to see a doctor or any other provider? 1= less than 30 min 2= 30 min to 1 hr 3= 1 hr to 2 hrs 4= more than 2 hrs	2.12. How much did the treatment cost? (Shs)

Identifier CODE	2.13. Were -----/you satisfied with the service? If YES why?	2.14 Were -----/you satisfied with the service? If NO, why?
1		
2		
3		
4		
5		
6		
7		
8		

Identifier CODE	2.15. If no treatment was sought, why not? 1= no money for transport 2= no money for treatment

	<i>3= facilities too far away</i> <i>4= too many people waiting at the facility always</i> <i>5= did not want to</i> <i>6= other</i>
1	
2	
3	
4	
5	
6	
7	
8	

Where do household members usually go whenever they fall sick?

Code	Facility/provider	
01	Public hospital/clinic	
02	Private hospital/clinic	
03	Mission hospital/clinic/dispensary	
04	Pharmacy/chemist store	
05	Treated at home	
06	Traditional healer	
07	Other (specify)	

2.17 Why does the household choose this type of provider/facility? -----

-----

-----

-----

-----

-----

-----

2.18 What is the distance to the nearest government facility?: ----- km

What types of facilities/services are available in your neighbourhood? (a radius of about 1 km) -----  
-----  
-----  
-----  
-----

Where do you normally seek treatment for the following?

1= *public hospital/clinic*

2= *private hospital/clinic*

3= *mission hospital/clinic*

4= *pharmacy/chemist store*

5= *traditional healer*

6= *other*

a) Malaria ----- Why? -----  
-----  
-----

b) STDs ----- Why? -----  
-----  
-----

c) Antenatal care ----- Why? -----  
-----  
-----

d) Immunisations ----- Why? -----  
-----  
-----

e) Diarrhoea ----- Why? -----  
-----  
-----

f) Cough ----- Why? -----

-----  
-----

g) Child delivery ----- Why? -----

-----  
-----

If you could choose to use any health facility located at approximately the same distance from your home as the facility you currently use, free of charge, which facility would you choose and why? -----

-----  
-----  
-----  
-----  
-----

How do you perceive the services at the facilities the household members have ever used?

1= *unsatisfactory*

2= *satisfactory*

3= *very satisfactory*

4= *other (specify)*

Facility	Level of satisfaction	Why?
Public hospital/clinic		
Private hospital/clinic		
Mission hospital/clinic		
Pharmacy/chemist store		
Traditional healer		
Other (specify)		

### 3.0 OTHER HOUSEHOLD SOCIO-ECONOMIC SERVICE INDICATORS

3.1 Interviewer to look at the house and indicate type of dwelling

Code	Type of house	
1	Mud house	
2	Maisonette	
3	Flat	
4	Part of House	
5	Other (specify)	

3.2 To establish whether the house is owned or rented:

Owned ----- Rented -----

3.3 How many rooms used for sleeping are in this house? -----

3.4 How much does this household spend on food per month? Shs -----

3.5 How much does the household or individual members spend on the following per month?

Code	Item	Shs
1	Telephone bills	
2	Electricity bills	
3	Water bills	
4	Fuel	
5	School fees	

6	Alcohol	
7	Personal care products	
8	Others (specify)	

3.6 How much did the household approximately spend on health care in the last one year

Code	Item	Shs
1	Doctors, Dentists, Nurses, Healers	
2	Hospital fees	
3	Drugs and other supplies	
4	Others	

3.7 Which of the following items does the household own?

Code	Item	
1	Vehicles	
2	Motorcycles	
3	TV	
4	Fridge	
5	Telephone	
6	Cooker	
7	Radio	
8	Others	

3.8 What is the approximate total household income from all sources including salaries, pensions, business income (for all members) per month?

Code	Income range (Shs)	
1	10,000 – 49, 999	
2	50,000 – 99,999	
3	100,000 – 199,999	
4	200,000 – 399,999	
5	400,000 – 699,999	
6	700,000 – 999,999	
7	1,000,000 +	

3.9 What is the source of water used most often in this household for things like drinking/bathing or washing clothes?

Code		
01	Piped –internal	
02	Piped –yard tap	
03	Public tap	
04	borehole	
05	Rain water tank	
06	Dam/stagnant water	
07	Flowing river/stream	
08	Protected spring	
09	Other (specify)	

3.10 What kind of toilet does the household use?

Code	Type of toilet	
01	Flush toilet	
02	Improved pit latrine with ventilation	
03	Other pit latrine	

04	Other (specify)	
----	-----------------	--

Thank the respondent for his/her time.

Signed:

-----

-----

Interviewer

Checked and certified by Principal Investigator:

-----

-----

Date:

-----

University of Cape Town

## **Appendix 2:Key Informant Guide**

### **The public/private mix health care resources distribution implications for equity: Kampala District, Uganda**

#### **Key Informant Interview Guide**

- 1 The Health Sector Strategic Plan (2000 –2004) has identified public/private partnership as one of the major priority areas to focus on in order to improve the general performance of the sector. Why at this point in time?
- 2 What are the objectives of the public/private partnership in the health sector?
- 3 What specific actions have so far been undertaken or are planned to promote these objectives?
- 4 Has the private sector experienced growth? In what way?
- 5 Has this growth impacted on the public sector? In what way?
- 6 What do you envisage the roles of the two sectors to be
- 7 The private sector has different goals from the public sector. How do you plan to reconcile the two sectors in order to promote an optimal balance between the two?
- 8 There are concerns and indeed there is evidence from other parts of the world to show that when the private sector role in the health sector increases, there is a corresponding increase in inequities particularly when it comes to access and affordability of health care. How do you plan to prevent this from happening?

- 9 In addition to the above, the differing incentive structures in the two sectors may lead to a migration of health workers from the public sector to the private sectors.
- i) How is this likely to affect service provision in the public sector?
  - ii) How do you plan to minimise staff migration among cadres of health workers that are in short supply?
- 10 How do you plan to monitor and evaluate the progress of the public/private partnership especially with the private-for-profit sector in order to ensure that the objectives of the strategic plan are achieved?

**Thank you.**