Gender, Equity, and Access to Health Care: The Case of Ghana's Health Financing Reform

by

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Abstract

This dissertation examined – with a gender and equity focus – the impact of Ghana’s health financing reform on access to health care, focusing on the recent introduction of a National Health Insurance Scheme (NHIS). The research was guided by an intra-household theory of bargaining and resource allocation, and by an analytical framework for assessing access to health care that includes gender and equity dimensions. The data that informs the study were drawn from four sources: (i) survey data involving nationally representative households, (ii) a series of in-depth focus group discussions, (iii) key informant interviews, and (iv) published literature and government documentation. The results indicate that by delinking payment and utilization of health services, NHIS has led to an overall increase in the utilization of health care. However, the poorest citizens continue to face significant financial barriers, and that the gap between the rich and the very poor, as measured in terms of utilization of health services, may have in fact widened. There is evidence that the introduction of NHIS has impacted the intra-household dynamics regarding the allocation of resources for health care, by significantly reducing the frequency of negotiation and conflict among the insured, as well as by increasing women's relative independence in health care decision-making. At the same time, the results caution that lack of systematic consideration of gender issues beyond maternal health poses some risk that the initial positive outcomes may not be sustained. The results also suggest that although NHIS has, and continues to play an important—and mostly positive—role in removing financial barriers to the utilization of health

care, facilitating equitable access to health care requires more than dealing with the cost of getting care. The study concludes that policies aimed at removing only the cost of treatment will inevitably have limited success in enhancing access to health care.

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List of Acronyms

ADHA	Additional Duty Hour Allowance
CHAG	Christian Health Association of Ghana
CHO	Community Health Officer
CHPS	Community-based Health Planning and Services
CWIQ	Core Welfare Indicators Questionnaire
DFEP	Delivery Fee Exemption Policy
DFID	UK Department for International Development
DHS	Demographic Health Survey
DMHIS	District Mutual Health Insurance Schemes
DRG	Diagnostic-Related Groupings
GAR	Greater Accra Region
GDHS	Ghana Demographic Health Survey
GDP	Gross Domestic Product
GHS	Ghana Health Services
GMHS	Ghana Maternal Health Survey
GSS	Ghana Statistical Services
GLSS	Ghana Living Standard Survey
GoG	Government of Ghana
GPRS	Ghana Poverty Reduction Strategy
EEPs	Extra-Environmental Parameters
FGD	Focus Group Discussion
HIPC	Heavily Indebted Poor Countries
IGF	Internally Generated Fund
IFIs	International Financial Institutions
ILO	International Labour Organization
LEAP	Livelihood Empowerment Against Poverty
MDG	Millennium Development Goal
MOH	Ministry of Health
MTEF	Medium Term Expenditure Framework
NDC	National Democratic Congress
NDPC	National Development Planning Commission
NGO	Non-Governmental Organization
NHIA	National Health Insurance Authority
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme
NMIMR	Noguchi memorial Institute for medical research
NPP	New Patriotic Party
OECD	Organization for Economic Co-operation and Development
PE	Personal Emolument
SSNIT	Social Security and National Insurance Trust
TUC	Trade Union Council
UNDESA	United Nations Department of Economic and Social Affairs

UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
Unicef	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Chapter 1

Introduction

This chapter outlines the scope, focus and rationale for the Ph.D dissertation entitled, “Gender, Equity, and Access to Health Care: The Case of Ghana’s Health Financing Reform.” It locates the study within the context of global health financing research and policy. It also provides an overview of Ghana’s recently introduced National Health Insurance Scheme (NHIS), and situates it within the historical perspective of health financing reform in the country. The chapter concludes with a brief outline of the organization of the dissertation, including a synopsis of the ensuing chapters.

1. The Research in Brief

This dissertation examines—with a gender and equity focus—the impact of Ghana's health financing reform on access to health care. It concentrates on the most recent transformation in the health financing sphere ushered in by the introduction of a National Health Insurance Scheme (NHIS). In particular, the research addresses the following core questions:

- What impact has the NHIS had on access to health care, especially for the poor and marginalized groups?
- Does gender—and its interaction with other social identities such as class and culture—shape access to and utilization of health services, and how is this affected by the introduction of NHIS?
- What are the underlying assumptions about individual and household behaviours that underpin the NHIS, and what are the implications of these for improving or further exacerbating inequities in access to health care?

Guided by an intra-household theory of bargaining and resource allocation, and by applying an analytical framework for assessing access to health care that includes gender and equity dimensions, the research investigates the validity of three inter-related hypotheses: (i) without effective social protection mechanisms targeting the poor, health financing reforms that are market-based or rely on insurance will exacerbate or perpetuate existing inequities in access to health care in Ghana; (ii) given the prevailing asymmetrical pattern of intra-household allocation of

resources, market and insurance-based health financing reforms will have diverse impacts on access to health services for women and men, both within and across households in different socio-economic strata; and (iii) the availability of NHIS alone will not significantly alter the patterns and frequency of the utilization of health services; non-financial factors—and their interrelationship with gender—play an important role in defining who gets access to health care and how.

While the primary focus of the study is to gain a more comprehensive understanding of the micro-level impacts of health financing reform, our research also highlights: (i) the policy processes, motivations and assumptions that underpinned the introduction of the NHIS; and (ii) whether and how the NHIS has affected the generation and allocation of health sector resources. These provide a useful underlying context for the research findings, and for examining the policy potential to enhance equitable access to health care in Ghana.

The study employs a combination of qualitative and quantitative approaches to test underlying hypotheses, and to respond to the core research questions. The data that inform the study are drawn from four sources: 1) survey data involving nationally representative households; 2) a series of in-depth focus group discussions to uncover peoples' experiences as users of health care and to determine some of the intra-household dynamics that influence their access; 3) key informant interviews; and 4) published literature and government documentation.

The scope of our analysis includes both national and regional levels. In addition to the national level analysis, we concentrate on two regions within Ghana—the Greater Accra Region and the Northern Region—which represent urban and rural areas respectively. Two districts are selected within each region for a more in-depth analysis, and to explore potential intra-regional differences (detailed in Chapter 3).

It is noted at the outset that this research is primarily aimed at examining the scope of Ghana's health financing reform in terms of facilitating equitable *access to health care*. Broader analysis of equity in *health outcome*—which warrants a separate and an equally detailed analysis—is beyond the scope of this research. Further, while distributions of both the financial burden and the benefits are important measures of equity, this research focuses on the latter.

2. The Research Context

Source (map) Statistics Norway / SSB (emphasis added)
(<http://maps.gndi.no/go/graphic/poverty-mapping-study-area>)

Ghana is located along the Gulf of Guinea in western Africa, and is bordered by the Ivory Coast on the west, Burkina Faso on the north, and the Republic of Togo on the east. It was the first African nation to gain independence from British Colonial rule, in 1957. Following the overthrow of its first president (Kwame Nkrumah) in a coup in 1966, the country endured a series of military rulers, until a constitutional amendment allowing a multi-party system was passed in 1992. Ghana has since enjoyed a stable democracy.

Ghana's economy has grown steadily over the past decade, with an increase in annual growth rate from 3.7% in 2000 to 6.2% in 2008³ (World Bank 2009). This has enabled the country to make significant progress in reducing poverty. The available Ghana Living Standard Surveys record a steady decline in the proportion

³ The figures reflect real GDP growth rate adjusted for inflation.

of the Ghanaian population classified as poor. Accordingly, the incidence of poverty decreased from 52% in 1992/93 to 40% in 1998/99, and to 29% in 2005/06. Similarly, the incidence of extreme poverty⁴ fell from 37% in 1991/92 to 18% in 2005/06. Despite this marked progress, however, poverty in Ghana remains a disproportionately rural phenomenon (Government of Ghana. Ghana Statistical Service 2007). The reduction of poverty has also been paralleled by an increase in inequality, which poses a serious challenge to extending access to essential services to all Ghanaians.

In Ghana, as in many countries in sub-Saharan Africa, social policies—and the role of the state in developing policies and providing social services—have changed significantly over the past three decades. The period immediately following independence (the 1960s and early 1970s) was marked by expansion of the role of the state in providing social services based on principles of universal coverage (Sein and Uton 2002; Criel 1998). Notions of entitlement and nation building guided social policies, and the government played an active role in the provision of services to the population at large.

Historically, most African countries inherited colonial health systems which were hospital based and heavily urban biased (McIntyre 2006). While NGOs and mission-based health care providers played important roles, the role of the private for profit

⁴ Extreme poverty is defined as "those whose standard of living is insufficient to meet their basic nutritional requirements even if they devoted their entire consumption budget to food." (Government of Ghana. Ghana Statistical Service 2007:11)

sector was limited (*ibid*). Post independence saw the development of ambitious public health programs on the basis of a “free health services for all” policy, but at the same time health care facilities were weak and concentrated in urban centers (Sein and Uton 2002). In the mid 1970s and 1980s, fiscal pressures, coupled with public sector reforms, significantly redefined the role of the state in social policy, and curtailed its direct involvement in the financing and provision of social services (Brugha and Zwi 2002; Criel 1998). In tandem with this, global pressures to rely on market-based mechanisms further shifted the public-private balance, according a greater role to the latter than was previously the case. One consequence of this shift has been a gradual transformation of the role of the state from a primary service provider to that of a regulator (Holtham and Kay 1994).

What this has meant for the health sector is, as governments limited their direct involvement in the provision and financing of health care, the role of the private sector—as well as reliance on individuals to finance health care costs—continued to grow. The health sector, like other social sectors, underwent a series of reforms in the 1980s and 1990s, which included privatization, introduction of cost-sharing schemes such as user fees, and contracting out of public health services to private providers (Brugha and Zwi 2002). Although the objective and extent of health sector reforms varied across countries, most common among the rationales guiding the reform agenda were improving the quality of services, controlling excessive use of health services arising from moral hazard (the “efficiency” argument), and enhancing revenue, particularly where the tax base was limited (the “finance”

argument) (Arhin-Tenkorang 2000). These reforms were consistent with those advocated by the World Bank and the IMF, as part of the neo-liberal reform package introduced as a condition for obtaining loans. The 1993 World Development Report, for example, strongly advocated privatization on the grounds of efficiency and enhanced competition⁵.

The evidence, after more than a decade of implementation of privatization and user fees, suggests that theorized benefits have not been achieved (Poletti 2004; Arhin-Tenkorang 2000). There is substantial evidence that relying on out-of-pocket payment for health services has negatively affected health seeking behaviour and utilization of health services by the poor (Gilson 1997; Save the Children 2005; Jowett 2004; Enyimayew and Waddington 1989). Although theoretically the poor were to be exempted, in practice such exemptions have by and large been unsuccessful in protecting them due to implementation challenges. Empirical evidence suggests that poor households coped by opting for self treatment, seeking alternative medicine, borrowing and/or delaying health care visits (Poletti 2004; McIntyre 2006; Jowett 2004). Over time, growing reliance on the market and the curtailed role of the state gave rise to troubling equity concerns.

Interest in finding solutions to the impoverishing impact of health financing has grown globally in recent years. In developing countries this is being pursued as part

⁵ The World Health Organization was cautious, calling for a need to examine where privatization works and where it does not and the equity implications before embarking on a large-scale privatization.

of a broader poverty reduction agenda heralded by global initiatives such as the Millennium Development Goals (MDGs). This has given impetus to finding alternatives to out-of-pocket payment for health services (McIntyre, Thiede and Birch 2005; Hsiao and Shaw 2007). In view of the disappointing experience and mounting concerns about equity and access, even former promoters of user fees such as the International Financial Institutions (IFIs) have become less supportive of them in more recent years, and are now promoting voluntary insurance (McIntyre 2006; Lloyd-Sherlock 2006). The introduction of mandatory health insurance is also gaining support from international organizations such as the World Health Organization (WHO) and the International Labour Organization (ILO). Along with this, there appears to be a shift in the central emphasis of health financing reform, from “first generation” supply side reforms (eg. cost effectiveness, privatization, decentralization) to demand centered “second generation” reforms (health as part of poverty agenda) (Standing 2000). While efficiency concerns were the key drivers of health sector reforms in the past few decades, the importance of equity concerns is now beginning to be recognized (McIntyre 2006).

The evolution of health care financing in Ghana is not markedly different than the general trend in sub-Saharan Africa portrayed above. Immediately following independence in 1957, Ghana put a health financing regime in place that relied entirely on tax revenues, and was premised upon the notion of free and equitable service to all (Asenso-Boadi and Coast 2007). As demands on the health sector continued to mount relative to public revenues, the government sought alternative

financing mechanisms. Nominal fees were introduced in the 1970s. Further changes were introduced in 1985 under the Hospital Fees Legislation, which required patients to partially pay for consultations and diagnostic procedures (Asenso-Okyere et al. 1998). Subsequently, in 1992 full cost recovery for drugs, known more widely as “cash and carry”, was introduced (*ibid*). Although measures were taken to cushion the poor through exemption policies, these proved difficult to implement.

Empirical evidence of the impact of cost recovery in Ghana focuses largely on the efficacy and effectiveness of exemption policies (for examples see Sulzbach, Garshong and Banahene 2005; Badasu 2004; Nyongator and Kutzin 1999; Government of Ghana. Ministry of Health 2006b). What emerges consistently from these studies is the ineffectiveness of exemption policies, largely due to implementation challenges, and a subsequent concern that this might have created a major access barrier to the poor. There is research, albeit limited, on the impact of the introduction of user fees on utilization of basic health services. A study by Asenso-Okyere et al. (1998) for example, found that cost recovery policies led to an increase in self-medication among the poor. Similarly, Waddington and Enyimayew (1990) found that the introduction of service charges negatively affected the utilization of health services, particularly in rural areas. A study by Nyongator and Kutzin (1999) suggested that the impact on service use was mixed, with the most decline observed in the use of public hospitals. The overall conviction among researchers, advocates and policy makers is that the “cash and carry” system had a negative impact on the health and wellbeing of Ghanaians. A report by the Ministry

of Health-Ghana (2002) estimated that by the year 2000 only 20% of the 18% of the population who require health care at any given time were able to get it.

The most credible dissatisfaction with the fee-based health financing regime came from the general public, citing concerns against escalating health care costs that, it believed, made access to health facilities increasingly difficult, particularly for the poor (Asenso-Boadi and Coast 2007). Public pressure for the removal of user charges from health care delivery brought the issue of health financing reform to the forefront of the policy debate, and continued to dominate the political agenda and election campaigns for more than a decade (more on this in Chapter 6).

As in many developing countries, the provision of quality and affordable healthcare has been a major challenge for Ghana. For decades, the health system has grappled with enormous challenges due to limited government expenditures on health⁶, heavy reliance on out-of-pocket payments at the point of care, deteriorating health indicators and the quality of public health services, and the 'brain drain' of Ghanaian nurses and doctors. With over a quarter of its population living below the national poverty line, cost recovery efforts in the health sector—coupled with a weak and urban-biased health infrastructure—have imposed significant access barriers to the vast majority of Ghanaians. A great degree of morbidity and mortality in the country is caused by diseases that are preventable and curable. Communicable diseases account for over 60% of the country's disease burden, with malaria responsible for

⁶ Government expenditure on health as a percentage of GDP stagnated at 3.3% between 1998 and 2002, accompanied by a rise in the share of private expenditure (WHO 2006).

a large majority (Government of Ghana. Ministry of Health *nd*)⁷. Reducing maternal and infant mortality has remained a persistent challenge, despite various policy interventions intended to improve the situation. The Ministry of Health recently acknowledged that Ghana will not be able to meet the target set by the Millennium Development Goals (MDGs) for curbing infant and maternal mortality⁸ (Government of Ghana. Ministry of Health 2008c).

Given the above, it is no surprise that health financing has been a prominent issue in Ghanaian politics for over a decade, and eventually became a major campaign platform for the opposition New Patriotic Party (NPP) in the 2000 election. The National Democratic Congress (NDC), and long-time ruler Jerry Rawlings, were seceded by the NPP led by John Kufuor in the 2000 presidential election, in which health financing reform was a central issue. While it was not the first time that the health agenda figured prominently in election campaigns, it was unique in that the government passed a National Health Insurance Bill (Bill 630) in 2003, setting, "... a rare example of a political party fulfilling a major campaign promise" (Wahab 2008:4). The subsequent passing of the National Health Insurance Scheme in November 2004 marked a major, and bold, transformation in health financing in the country, and indeed in the region⁹.

⁷ Malaria accounts for about 40% of out-patient attendances and 19% of deaths in the country (DANIDA 2007). The hardest hit are the three Northern provinces, which are also the poorest.

⁸ MDG targets are to reduce by three quarters, between 1990 and 2015, the maternal mortality ratio and to reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

⁹ Kufuor won a second term in the 2004 election. Health financing was once again one of the key campaign agendas in the 2008/9 election that brought NDC back to power.

A number of countries in sub-Saharan Africa, including South Africa, Nigeria, Kenya, Lesotho, Swaziland and Tanzania, are actively exploring insurance-based health sector financing as an alternative to a fee-based system. Most of these countries are considering or have recently introduced a phased approach, starting with formal workers, followed by a gradual expansion to the informal sector¹⁰. Ghana has launched a more ambitious plan which covers the entire population—to our knowledge one of only two African countries to have embarked upon such a ambitious health financing reform (the other being Rwanda). The experience in Ghana will undoubtedly provide valuable lessons regarding the scope and potential of social health insurance¹¹ to address inequities in access to health care in low income countries.

¹⁰ The informal sector refers to the economic sector that is outside the conventional government regulation and assistance. It consists of activities of the self-employed who run small-scale unregistered enterprises, as well as wage workers who work in insecure and unprotected jobs (Chen 2007). A common characteristic among informal sector employment is the lack of legal contract and social protection. Although the exact share of the Ghanaian labor force engaged in the informal sector is not known, estimates range from 70% to 90%.

¹¹ Social health insurance is defined in the context of this paper to include mandatory insurance aimed at extending access to health services, either nation- wide or to specific groups. These are usually “community rated” in that they are based on the average expected cost of health service use for an entire group covered, as opposed to based on individual risk assessment which is a typical practice in private voluntary insurance. Solidarity and risk pooling are thus key factors underlying social health insurance. We consider NHIS to be a form of social health insurance.

3. The Ghana National Health Insurance Scheme in Brief

“Ghana is a poor country straddled with many problems, all demanding priority attention. The (National Health Insurance) scheme is the solution for the health care sector and the only viable alternative to the outdated and rigid system of cash and carry”, President John Kufuor (quoted in IRIN 18 March, 2004)

The establishment of NHIS was guided by the fundamental goals of providing Ghanaians access to basic health care without having to pay at the point of service delivery, and provision of health service based on need (Government of Ghana 2003a; 2003b). This constituted a major shift in health financing toward solidarity and risk management. As such, the reform provides a mechanism for redistributing the burden of financing health care across the population. NHIS was not designed to abolish cost recovery, but to replace out-of-pocket payment at the point of service delivery with a pre-paid system. When NHIS was introduced, an estimated 80% of health financing was from government tax revenues and donor funds, and 20% from internally generated funds through the “cash and carry” system (Government of Ghana. Ministry of Health 2002:7). Health insurance was aimed at replacing the latter through the introduction of mandatory membership.

NHIS builds on Ghana’s established experience with community-based health insurance schemes¹² in rural areas that cover informal sector employees, and

¹² The term community-based (mutual) health insurance (CBMHI) generally refers to health insurance schemes that distribute the financial burdens and risks across members by pooling financial resources and providing equal benefits to members regardless of their risk profiles. They are typically initiated and managed by members at the community level, which affords them some

combines this with social insurance for formal sector employees.¹³ The basis of the NHIS is district-wide mutual health insurance schemes, whereby every district is expected to establish a scheme (with government assistance) open to all residents. Existing and new private health insurance schemes are allowed to operate together, as long as they are legally registered and provide the basic minimum package prescribed by the National Health Insurance Authority (NHIA).¹⁴

All Ghanaians above the age of 18 are expected to take up health insurance by registering at a District Mutual Health Insurance Scheme—which is now up and running in almost all districts in the country—and pay a set premium fee unless they fall in the "exempt" category which includes children under 18 years of age, pregnant women, pensioners, and indigents. As the NHIS membership is not family based, it is possible that only one spouse gets covered. For both spouses to be covered, each must pay the applicable premium. Premiums are not risk rated and are heavily subsidized by the government. Members can utilize health services from public or private health care providers accredited by the NHIA. Membership is

degree of independence and a strong sense of community ownership. While the management and administration of the NHIS is rooted in the CBMHI tradition in that it is decentralized at the district level and enjoys management autonomy, most of the schemes were set up by the government and later transferred to district mutual health insurance scheme (DMHIS) managers. The heavy reliance of the DMHIS on government transfers undermines their independence.

¹³ The use of formal employees' social security contributions to fund premiums of the NHIS had generated intense debate and controversy and was met with resistance by the Ghana Trade Union Congress. It was through a series of dialogues and intense negotiations to preserve the health insurance benefit package already enjoyed by the formal sector employees that a single national health insurance scheme became a reality.

¹⁴ NHIA is a regulatory body mandated to oversee the implementation of NHIS. It registers and licenses all health insurance schemes in the country. It also accredits health providers, assures quality control, and manages the NHI Fund.

renewable on a yearly basis. Most health insurance schemes offer flexible payment through instalments; benefits coverage is effective only after the premium dues are paid in full. Those employed in the formal sector contribute directly to the NHIS through payroll deductions. A 2.5% National Health Insurance Levy on goods and services¹⁵ was introduced to inject additional financial resources to sustain the NHIS. The funds for NHIS—which are managed by a National Health Insurance Fund (NHIF)—thus come from three main sources: (i) 2.5% of formal employees' contributions to the social security and national insurance trust (SSNIT) fund,¹⁶ deducted automatically at source; (ii) a 2.5% National Health Insurance Levy on consumption; and (iii) premium payments from those outside the formal sector. NHIS combines premium-based subscriptions with government subsidies and provides a comprehensive package of health services to its members, covering an estimated 95% of the health care needs of Ghanaians.

The national scope of NHIS has the potential to build equity in access to services. Individuals are categorized into four broad groupings, based on their expected ability to contribute to the scheme. The first category consists of "indigents", defined in the National Health Insurance Act as, "... a person who has no visible or adequate means of income or who has nobody to support him or her and by the means test qualifies as an indigent" (Government of Ghana 2003a: 35). Indigents (considered

¹⁵ Selected goods and services such as water, educational items, electricity, basic agricultural products and some medical supplies are exempted.

¹⁶ Formal employees contribute 5% of their salaries to SSNIT, matched by 12.5% employer contribution. SSNIT keeps 15% of the total contribution and gives 2.5% to NHIA.

"core poor") are to be identified by the community in which they live, and receive full subsidy from the government. The second category includes those who are unemployed, but have identifiable support from elsewhere (considered "very poor"). These are expected to contribute an agreed upon fee toward their health insurance, though at a heavily subsidized rate. The third category comprises those engaged in the informal sector, who are expected to pay based on their assessed income. And the final category consists of formal sector employees whose contributions to the NHIS are mandatory and taken at source. The set annual premiums for those outside the formal sector range from 7.2 Ghana Cedi for the "very poor" to a maximum of 48 Ghana Cedi for the well off. In practice, however, assessing the ability of those outside the formal sector to pay has been difficult. Thus, most district health insurance schemes have opted for a flat rate and charge everyone the same fee, which is often set toward the low end of the premium scale.

The NHI Act makes provision for two categories of exemptions from the payment of insurance premium: direct and indirect (Government of Ghana. Ministry of Health 2006b). The direct exemption category includes the "aged" and "indigents." In 2008, this category was expanded to include all pregnant women, for up to three months after delivery. Each district is expected to provide a list of "indigents" who will not be required to pay fees. These are provided with insurance cards to facilitate targeting. Those above 70 years of age are exempt from paying premiums. Children

under 18 whose parents or guardians are members of NHIS are under the indirect exemption group¹⁷.

NHIS combines public financing with modest individual insurance contributions. As explored further in Chapter 6, only an estimated 10% of the NHIS resources come from premium contributions; the rest are generated by the health insurance levy and SSNIT contributions. It is important to note that the NHIS is not really insurance as defined, since the premiums are not risk based. Also, although in principle the NHIS is mandatory for everyone, there are no mechanisms in place to enforce membership except for formal sector employees. Therefore it is not wholly universal either, but somewhere in between.

By the end of 2007 there were 145 district mutual health insurance schemes in place, covering eight million Ghanaians¹⁸ (NHIA 2007; Asante and Aikins 2008). By 2008, over 12 million Ghanaians had health insurance (Government of Ghana. Ministry of Health 2009b). While the overall uptake of NHIS has been impressive, the narrow definition of “indigents” is raising concern that it covers only a small segment of the core poor, as it excludes many who are in need of assistance but do not qualify as “indigents” (Grub 2007; Asante and Aikins 2008). “Indigents” currently comprise about 2.4% of all NHIS card holders (Government of Ghana.

¹⁷ This policy is currently under review. A proposal is tabled to the Parliament to exempt all children under 18 regardless of membership status of their parents/guardians.

¹⁸ Ghana has a population of 23.6 million (2008 estimates). The country is currently divided into 10 regions and 168 administrative districts.

Ministry of Health 2009b). With an estimated 29% of the population living below the national poverty line, and 18% of those living in extreme poverty, there is a growing fear that a large percentage of the Ghanaian poor continue to face financial barriers to accessing health care. Equity and redistribution concerns are beginning to surface.

4. Expected Contribution

In recent years, social health insurance has gained respect in the developing world as a means of securing additional sources of funding for the health sector, and for extending social health protection through risk pooling to safeguard poor people from catastrophic out-of-pocket expenditures in times of illness. It has been heralded as a response to critical concerns in the health sector, including the growing inequities in access to health services, the failure of user fees to reinvigorate health systems, and the need to prevent further fragmentation and disintegration of health systems throughout the developing world.

Despite growing interest in the pursuit of equity enhancing health financing policies, empirical evidence on what works and what doesn't is severely lacking outside the OECD countries. The literature on health financing reform in low income countries, in particular reforms aimed at extending access to health services through social insurance, has two important knowledge gaps:

1. The effectiveness of social health insurance to achieve the desired goals of social protection—beyond its narrowly defined function to enable the poor to manage risk and vulnerability to financial shocks, to include equitable access to health services (one of the key objectives that often underpin social health insurance).
2. The implications for gender equity. Gender is a highly neglected issue in health equity research, as household responses to health financing reforms, as well as the impact of such reforms, are generally assumed to be uniform for both males and females. Likewise, health financing research has not often considered gender issues, and when it has, it is usually anecdotal and based on generalized, untested assumptions. There is a need to unpack the social protection role of social health insurance, by looking at who bears the burden, who benefits, and why.

This Ph.D. dissertation will address the above knowledge gaps, using the experience of Ghana as a case study. The aim is to provide empirical evidence about who benefits, who loses and why; whether and how gender and its interactions with other social identifiers such as class and culture matters in assessing equity in health care access; and how gendered assumptions that underpin health sector reform can ameliorate or reproduce such inequities. As such, it is expected to make an important contribution to advancing the goal of achieving equity in access to services.

The selection of Ghana as the study site has strategic significance. First, before the recent introduction of NHIS, the Ghanaian health system suffered from immense challenges in financing, and inequity in access to services, similar to what several other sub-Saharan countries are facing today. The Ghanaian health system was not in any better shape than others in the region, so would not have had a comparative advantage to facilitate the introduction of NHIS. Second, as noted earlier, Ghana is one of two African countries to have made radical reform to its health financing, by introducing national health insurance for all citizens. Thus, examining the potential implications of such reform to facilitate equitable access to health care will provide useful insight for other countries in sub-Saharan Africa, and those beyond who are considering similar reforms.

In Ghana, given the nascent status of the NHIS, evidence on what has and has not worked is sparse. Noteworthy among the available research and evidence are, (i) a “Civil Society Assessment” of the NHIS carried out in 2005/06 by the Institute for Policy Alternatives, a Tamale-based think tank, and (ii) a study on the NHIS uptake conducted by Asante and Aikins (2008) in Asutifi District in the Brong Ahafo Region and the Kwaebibirem District in the Eastern Region. The first, carried out in the early stages of NHIS implementation, captured “community voices” and perceptions about the role of NHIS in promoting access to quality care. The second provided some evidence, albeit local, suggesting that the NHIS membership rate among the poor is significantly less than the non-poor. Although this has limited scope—being mainly focused on the extent to which the poor enrol in the NHIS and why they

enrol—it has played an important role in raising concern that the NHIS may have a non-poor bias, albeit unintended. My research will build on these findings and others by, (i) going beyond NHIS membership, and examining its impact on equity and access to health care, (ii) exploring whether and how gender—and its interaction with other social identifiers such as socio-economic status and culture—matter in shaping access to health care and the role of NHIS therein, (iii) examining both the financial and non-financial determinants of access at regional and national levels and, (iv) assessing the political economy of the NHIS, and its impact on health sector financing. As such, it would make an important contribution to the knowledge base on health financing reform in Ghana and beyond.

5. Structure of the Dissertation

The thesis is organized into seven chapters. This first, introductory chapter located the study within the context of the broad health financing research and policy environment within Ghana and beyond. It provided background information about Ghana's recently introduced National Health Insurance Scheme, and positioned it within the historical perspective of health financing reform in the country.

Chapter 2 outlines and discusses the theoretical and analytical frameworks that underpin the study. Drawing from the vast literature on intra-household resource allocation, the chapter postulates hypotheses regarding the differentiated impacts of

health financing reforms in a developing country context. It also examines the extent to which available analytical frameworks for assessing health equity capture gender dimensions, and how these can be “engendered.”

Chapter 3 provides a brief overview of the case study sites, and outlines the data sources and methodology underpinning the research.

Chapter 4 tests our research hypotheses with regard to the interaction of health sector reform with socio-economic status, gender, and intra-household resource allocation for health, and the resulting impact on utilization of health care (Hypothesis # 1 and 2). In particular, it assesses three distinct, yet related phenomena from a gender perspective: (i) whether and how access to health care varies among households of different socio-economic status; (ii) the existence of “rationing” bias within households, and how this varies across different socioeconomic strata; and (iii) whether and how NHIS changes household resource allocation behaviour. The analysis combines household survey data with key insights from focus group discussions.

Using maternal health as an example, Chapter 5 explores the multi-dimensionality of access, by examining both the cost and non-monetary determinants of access to health care that are often assumed away in health financing reform. It tests the hypothesis that the presence of NHIS alone is not sufficient to significantly alter the patterns and frequency of the utilization of health services, and that non-financial

factors play an important role in defining who gets access to health care, and how (Hypothesis # 3). Using an analytical framework that recognizes the multiple dimensions of access, the chapter determines whether and to what extent non-financial factors such as preferences, perceived or actual quality of care, appropriateness of services, transportation, waiting times and others shape health seeking behavior. The chapter also investigates whether and how these factors are mediated by gender, socio-economic status and geographic location.

Chapter 6 explores the policy processes, motivations and aspirations that underpinned Ghana's health financing reform, and whether and how this has affected the way health sector resources are generated and allocated. The chapter is guided by two overarching questions: (i) whether and how macro level policies intersect with micro variables to ameliorate, perpetuate or preserve the status quo, in terms of equity in access to health care; and (ii) whether and to what extent NHIS has altered the generation and allocation of funds to the health sector, and the implications of this to promoting equitable access to health care. The analysis draws extensively from key informant interviews, as well as official government documentation and financial reports.

Chapter 7, the final chapter, compiles the key insights from the case study and reflects on the overall experience of Ghana's health financing reform. It highlights some general lessons about the opportunities and challenges of achieving equity in access to health care.

Chapter 2: Equity, Gender, and Health Financing - Moving beyond household analysis

1. Introduction

This Ph.D. dissertation is guided by three underling premises:

1. Investigating the gendered impact of health financing reform on the access to health care requires an analytical shift away from aggregate household level analysis. It should uncover whether and how individuals within household units experience different challenges and/or opportunities that define their health seeking behaviour, whether and how these are shaped by gender relations and norms, and whether and how health sector reforms intersect with intra and extra-household dynamics to define *frontiers to health care access*. Thus, understanding intra-household dynamics and decision processes (i.e. moving beyond household level analysis) is the foundation for exploring gender based inequities. Gender refers to social relations of power. It not only shapes women and men's health, it also influences their experience as users of health care (Doyal et al. 2003).
2. Neither women nor men are a homogeneous group. Women and men in different economic status, education levels and ethnicity receive differing degrees of social advantages, or are unequally disadvantaged (Sen, Östlin and George 2007). Examining equity solely on the basis of differences between the sexes will mask important inter and intra-group differences that exist along socioeconomic and ethnic/cultural lines, among others. A combined approach that takes

account of social and economic position, culture/race and gender, and the effect of the interplay between these variables, provides a more nuanced understanding of intra and inter-group inequities (*ibid*).

3. As past research has shown, financial barriers are significant impediments to accessing health care in Ghana (Jowett 2004; Enyimayew and Waddington 1989). Examining how resources for health care are allocated within households, who makes the decisions, and who gets what, is thus an important starting point for assessing how health financing reform affects health care access. However, financial determinants alone cannot fully explain health seeking behaviour; there is also a need to examine other determinants of access.

With these considerations in mind, this chapter outlines the theoretical and conceptual underpinnings guiding the study, focusing on their application to the Ghanaian context.

2. Understanding Intra-Household Dynamics

2.1. Looking inside the “black box of household decision making”

The significance of the household as a unit of analysis has become recognised and gained acceptance over the last few decades. Indeed, the term “household” is commonly used as a unit of analysis in poverty studies, and for assessing the impact of public policies on the economic and social wellbeing of individuals.

What exactly constitutes a household? Bolt and Bird (2003) note that the household has been defined in numerous ways, and been used to mean different things by different people. Some use the term to loosely refer to the nuclear family unit (see for example Agarwal 1997). For others, it refers to a group of individuals who share a common residence or a cooking pot (the definition used in most household surveys). And yet for others, it refers to individuals who share a joint function, such as production, consumption and investment (Becker 1965). The United Nations offers a broader perspective, defining a household as a person or groups of people who live together and have made arrangements for providing themselves with food and other essentials for living (UNDESA 2004).

Establishing a common understanding of the household concept is important, because when using it as a unit of analysis implicit assumptions are made, not only about the boundaries of a household, but also about how it functions (Bolt and Bird

2003). In the African context, where the boundaries of a household are shaped by a complex web of kinship ties (Lloyd and Gage-Brandon 1993), a focus on the nuclear family can miss important aspects of household dynamics. Such households may involve the presence of multiple wives or include relatives (Bolt and Bird 2003). It is also equally important to recognise the temporal and spatial evolution of the boundaries of the household. The rapid increase in the number of families maintained by mothers alone, or by grannies and children (the latter two found mostly in countries where the impact of the HIV/AIDS pandemic has been severe) calls attention to the need for a careful assessment of how the household concept is applied in the context of a rapidly changing social, economic and demographic landscape.

Barring the need for conceptual and associated methodological clarity, the household provides a useful unit for assessing the impact of policies and programs on different groups. What has emerged as a critical area of research inquiry since Becker (1965) first introduced the microeconomics of household decision making, is the quest for deeper understanding of how individuals in "households"—however defined—function, and how important decisions such as investment, resource allocation and division of labour are made. In other words, what really happens within the, "... black box of household decision making?" (Katz 1997). It is precisely this knowledge of the intra-household dynamics that is pivotal to assessing how public policies impact individual members of the household, and conversely how the

rules governing households shape the distribution of the resulting gains and losses among its members.

We now turn to a brief critical overview of the theoretical foundations of the prevailing household and intra-household models, to provide context for the theoretical underpinnings guiding our study.

2.2. Household models

The theoretical literature on the microeconomics of household behaviour dates back to Gary Becker's extension of the conventional economic analysis of the firm and individual consumer demand to families (Thomas 1990). By introducing what has become known as the unitary household model, Becker paved the way for examining issues previously considered to fall outside the domain of economic analysis (Jose 2003).

The unitary model envisages the household as a collection of individuals who act in accord on how best to allocate resources among themselves, in order to maximize a common utility (Quisumbing and Maluccio 1999). In this model, households are depicted as sites of altruism and cooperation, where all income is pooled and allocated in a way that is beneficial to the collective unit. The household welfare function is considered to mirror its head, a benevolent dictator who ensures that resources are efficiently allocated to secure the collective well-being of members

(Jose 2003). As Bolt and Bird (2003:11) note, this approach implies that, "... either all household members share the same preferences, or that a single (presumably male) decision-maker makes decisions for the good of the entire household," hence the reference to it as the altruism model or the benevolent dictator model.

The key assumptions underpinning the unitary household model can be summed up as follows:

- households function as a single entity in relation to consumption and production (Agarwal 1997);
- members pool all their resources, which are then re-allocated by the benevolent, dictatorial head;
- household members seek to maximize utility on the basis of a set of common preferences and a common budget constraint;
- members will abide by the allocation decisions of the head; and,
- preferences are exogenously given.

One of the implications of these underlying assumptions is that whoever in the household acquires the resources does not matter for intra-household allocation decisions (Hoffmann 2008; Quisumbing and Maluccio 1999). By the same token, given the presumed income pooling, a change in the distribution of household income between the spouses is not expected to have any impact on how resources are allocated between them (*ibid*). The significance of additional income is that it enlarges the size of the household resource pool (Jose 2003).

It is important to note that the unitary model does not necessarily predict that households will allocate resources equally among their members. Rather, it envisions an efficient outcome in terms of maximizing the collective household utility. Different allocation outcomes that reflect variations among members' productivity or returns to human capital are expected, and are explained away as rational decisions for the benefit of the collective welfare (*ibid*). For example, greater expenditure for boys' health care or education can be explained as a rational decision in light of the higher future payout potential from investment in boys, than a similar investment in girls (or vice versa). Such gender (or age) biases are considered to lie outside the household, and are often explained in terms of comparative advantage (Katz 1997).

While Becker's unitary model has paved the way for the development of an analytical framework for examining the rationale underpinning the distribution of resources within households, the underlying assumptions raise serious questions regarding the model's ability to capture the complexity of intra-household dynamics. In particular, the perception of a harmonious unit has been criticized as an unrealistic assessment of what takes place within the household arena. There is a growing body of evidence suggesting that household decision-making embodies bargaining and negotiation processes, often marred by conflict, that households do not exhibit common sets of preferences, and that intra-household inequities in resource allocation abound (see for example Fapohunda 1988; Quisumbing and

Maluccio 1999; Orubuloye et al. 1991; Thomas 1997; Haddinnott and Haddad 1995).

The notion of income pooling also lacks empirical support¹⁷.

2.3. Evolution of intra-household analysis

Many economists acknowledge that Becker's unitary model is problematic, for the reasons noted above. Feminist economists have taken particular issue with the model's tendency to justify discriminatory allocation outcomes on the grounds of economic rationality, and hence its failure to recognize systematic gender-based power relations that underpin household resource allocation (Katz 1997).

This has spurred a significant development in the analysis of the household, notably the evolution of household models that include the possibility of conflict, bargaining and negotiation (Chen and Dunn 1996). The focus of empirical research has also gradually shifted from household to intra-household analysis, attempting to document and explain decision-making processes within households, and account for the variations in resource allocation outcomes. As Folbre (1986: 263) notes, "... it is no longer acceptable to ignore inequalities of power and welfare among household members, or to assume that the household itself can be treated as an undifferentiated optimizing unit."

¹⁷ In Ghana for example, Brown (1994) notes that most couples manage their income separately and that there is no evidence of the existence of a benevolent head. Findings from other developing countries echo this.

The ensuing and increasing literature on intra-household resource allocation—pioneered by feminist economists and anthropologists—has made a compelling case for the need to look beneath the household banner, since the decision-making and resource allocation processes produce different outcomes for members, and gender relations and dynamics prescribe how men and women fare within the household arena. This is supported by a growing body of evidence suggesting serious imbalances in the way resources are allocated within households (see Appendix 1).

The shift toward intra-household analysis has been accompanied by growing recognition of the vast diversity in household composition and structure, as well as by the realization that this diversity also exists between and within societies over time (Chen and Dunn 1996).

These developments have given rise to two alternative approaches to household modeling (namely, cooperative and non-cooperative bargaining models), which could be broadly classified in the category of collective models. The underlying premise of collective models is that a household consists of a group of individuals with separate budgets and distinct preferences, and among whom a collective decision takes place (Bourguignon and Chiappori 1992).

2.4. Alternative household models

Cooperative models espouse that individuals form a household if the benefit of doing so is greater than remaining single (Jose 2003). Economists would say they do so if they derive greater utility than on their own. The key question that the models attempt to address is how gains are allocated among household members. Unlike the Beckarian model outlined above that assumes a frictionless allocation process, cooperative models posit that household members engage in bargaining processes, and cooperate according to how cooperation makes them better-off than non-cooperation. Given the models' assumed state of varied and diverging preferences within households, the central focus is on how the individual's bargaining power is determined. Cooperative models hypothesize the existence of a positive relationship between an individual's intra-household bargaining power, his or her influence on household decision making, and his or her share of resources (Folbre 1986). In other words, negotiation outcomes favour those that have the least to lose if non-cooperation triggers a household break up. As Folbre notes, this does not necessarily imply the absence of altruism within a household, however, but rather suggests that self interest co-exists, and is likely to play an important role.

The individuals' negotiating power is defined in terms of their 'fall-back' position: the alternatives that are available should she or he wish to leave the household. 'Fall-back' positions—or threat points—are determined by what economists call 'extra-environmental parameters' (EEPs), which include prices of the individual's

goods, his/her wage rates and non-wage income, laws governing property rights, and other measures. Goldstein (2004) notes that EEPs affect the utility that can be attained outside of marriage. Differences in negotiating power among household members are thus considered to be exogenously driven.

Cooperative models have been criticized on a number of grounds, including:

- their implicit assumption that all members of the household bargain with full information and knowledge about each others' "threat points" (Bolt and Bird 2003)¹⁸;
- treating individuals symmetrically with regard to their roles in the bargaining process, their ability to enter into and exit the bargaining process, and the weight given to their decisions (Katz 1997);
- their assumption that all individuals have free choice as to whether they remain single or form a household (Bolt and Bird 2003);
- minimal consideration of the actual decision making process (Katz 1997); and,
- failure to incorporate what role social norms and perceptions play in the bargaining process (Agarwal 1997; Jose 2003).

Non-cooperative models attempt to address some of these criticisms by relaxing the implicit assumptions of full and symmetrical information available to all household

¹⁸ There is a growing body of empirical evidence that attests that members of the same household are often unaware of each other's earnings or assets (Katz 1997).

members, fully enforceable contracts, and Pareto-efficient allocation (Katz 1997). They acknowledge the existence of asymmetric information regarding “threat points.” They also recognize the opacity of the rules of negotiation and resource allocation, as well as problems enforcing agreements (Agarwal 1997; Katz 1997). The starting point for non-cooperative models is that individuals cannot enter into binding and enforceable contracts with each other, but rather, “. . . they exchange transfers and have a vector of commonly consumed goods” (Goldstein 2004: 4).

Although non-cooperative models go far in capturing intra-household dynamics in resource allocation and decision making, fully integrating the role social norms play in determining who gets what and why remains a challenge. Some have argued that more attention needs to be paid to the endogeneity of such norms (Katz 1997), and to gender-based inequities.

2.5. Accounting for intra-household resource allocation decisions

As Jose (2003) notes, gender biases in intra-household resource allocation can be a result of gender-based discrimination, and can reflect household allocation decisions made under constrained budgets. Gender-based discrimination within the household can mirror existing inequities in the society at large, and result from unequal intra-household bargaining capacity. As well, poverty or lack of sufficient resources necessary to meet household needs can lead to the rationing of household

resources, forcing households to, "... exhibit discriminatory practices favouring some members at the expense of others" (411).

Jose further notes that unitary models justify such discriminatory practices on the grounds that a household will rationally allocate more resources to those with higher productivity or returns to human capital. She argues that since women's wages are typically lower than men's, and given that women's unpaid work is undervalued, they are likely to receive a smaller share of resources. As noted earlier, such models rule out the possibility of intra-household conflict, assuming the presence of an altruistic head and consent among all members about the allocation decisions, as it is expected they will be in the interest of the collective household.

Conversely, collective models acknowledge the existence of negotiation and conflict in resource allocation. What they assume, however, is that all individuals within a household can bargain on a level playing field. As feminist critiques have repeatedly stated, women enter into the bargaining process less equipped to bargain than their male counterparts, due to intra and extra-household gender norms, and rules that set the parameters for bargaining in men's favour. In this regard, both models fail to account for the possibility that social norms and gender relations can permeate within the household structure, and that biases in intra-household allocation can mirror unquestioned assumptions about the rights and responsibilities societal norms can ascribe to how men and women are to conduct themselves within the household.

2.6. Feminist critique and suggestions for way forward

Bargaining models are a marked improvement from the Beckarian collective models, and offer a useful basis for analyzing intra-household gender relations. Feminist scholars have welcomed these developments. As Agarwal (1997:2) notes, "... although most do not explicitly address gender asymmetries, they can accommodate such asymmetries, and thus provide a useful approach for analyzing gender relations and point economic thinking in a new direction."

Among the suggestions put forward by feminist scholars to guide the evolution of this new economic thinking, there are three key areas:

The first is the need to recognize the role of prevailing social norms in shaping household decision making. This is particularly important as households are embedded within social and cultural structures that shape their nature and ascribe rules governing the relationship between members. For example, social norms can restrict the feasibility of "exit" and thereby reduce the credibility of a threat, such as in the case of societies that place social sanctions against women leaving their husbands, or forbid women from owning property (Katz 1997; Agarwal 1997). Similarly, gender relations and valuation of gendered roles outside the household affect bargaining positions within the household (Brown 1994; Agarwal 1997). They can weaken women's bargaining positions by restricting their opportunities for accumulating assets on their own, or by setting the boundaries for what can be

bargained for and what cannot. Norms can also affect people's valuations of their own interests¹⁹ (i.e. not all household members participating in the bargaining process are necessarily self-interested), thereby preventing them from bargaining on their own behalf in household allocation decisions. The nature and boundaries of households, their patterns of resource allocation, and the responsibilities and expectations of members are thus shaped by the prevailing cultural norms and social patterns.

The second key area that has been highlighted is the gendered nature of the household relationship itself. Whereas bargaining models treat all household members as a collection of individuals that have equal say and rights, Katz (1997) contends that the reality is that they are gendered such that "maleness" and "femaleness" influence how decisions are made and how resources are allocated. This links back to the first point about social norms.

The third area concerns the need to break the disciplinary silos, in the interest of extending the knowledge frontier on intra-household dynamics. A number of feminist scholars have pointed out that while economic arguments are important, addressing the complexities of intra-household gender dynamics in resource allocation decision-making and its interaction with social and cultural norms requires a conceptual broadening that goes beyond game-theoretic formulations and an incorporation of qualitative aspects (Agarwal 1997; Jose 2003; Katz 1997).

¹⁹ For further details see Folbre 1986; Agarwal 1997; and Katz 1997

This calls for a multi disciplinary approach—moving beyond the confines of economic reasoning to incorporate other disciplines that can shed further light on social norms and gender dynamics.

2.7. The relevance of intra-household theories for the assessment of health financing reform in Ghana

As the preceding discussions have demonstrated, gender represents an important dimension of asymmetry within the household. Asymmetrical power relations can result in inequitable allocation of such resources as food, education and health care. But despite their limitations, intra-household theories—particularly those that acknowledge the internal conflicts and bargaining processes underlying household decision-making—allow us to develop testable hypotheses regarding health expenditure decisions, and how these decisions might be impacted by the recent health financing policy reform in Ghana. Before this, however, we need to examine the prevailing household structure, characteristics, and intra-household dynamics in the country.

2.7.1. Household structure, characteristics and intra-household dynamics in Ghana

Analysis of the Ghanaian household structure and characteristics reveals two important salient features:

The first is the changing composition of the household structure. Brown (1994:2) notes that, "... the traditional household structure in most parts of Ghana was based on male-headed units of extended families, consisting of one or several wives and their children, and often extended with unmarried or elderly relatives." While this is still prevalent, the economic transformation and resulting modernization and industrialization has also prompted change in the Ghanaian social structure, affecting both the composition and socio-economic organization of households. Female-headed households have grown dramatically over the past few decades (Wrigley-Asante 2008; Brown 1994)²⁰. These include widows, de facto heads (due to absentee or unemployed husbands), and women who choose to adopt this household structure. In 1960, 25.7% of Ghanaian households were classified as headed by women. In 2003 this had increased to 35% (Wrigley-Asante 2008).

Second, the male breadwinner household prototype is no longer the norm in Ghana. There is a high rate of female participation in the labour market. According to the 2000 population census, women constituted 49.7 percent of the labour force, though the majority of them were engaged in the informal sector (Government of Ghana. Ministry of Health 2008d). Women's ability to earn income has made their contribution to the household economy visible. It also appears to have reduced their economic dependency on their spouses. Speaking of women's perception of their economic independence, Orubuloye et al. (1991:192) notes: "In Ghanaian society

²⁰ According to the 2000 Ghana population census, of the households headed by women 22.4% were divorced, 22% widowed, 9.2% never married, and 46.3% currently married (Government of Ghana. Ghana Statistical Service 2006). Lloyd and Gage-Brandon (1993) suggest the relatively large proportion of married female household heads can be partly explained by non-residential polygamy.

women themselves believe that only two types of their species suffer: the sterile—that is those who are incapable of producing children—and the foolish. And by the foolish they refer to the type of woman who depends solely on her husband for subsistence.” Yet, in spite of their active participation in the labour market and their contribution to the household economy, Ghanaian women have great disadvantages with respect to access to productive resources, education, credit and extension services compared to their male counterparts, and thus they have lower earning power (Brown 1994; Orubuloye et al. 1991; Wrigley-Asante 2008). Similarly, a number of key studies on intra-household dynamics within Ghanaian society have produced some valuable insights into the prevailing household decision processes and power dynamics. Three generally observed characteristics are particularly noteworthy, as they provide some basis for predicting how resources for health expenditure are likely to be “rationed” within Ghanaian households:

1. Available literature on Ghanaian households reveals that women have weak bargaining power in traditional Ghanaian society, which is reinforced by the socialization process, social norms, and religious beliefs (Brown 1994; Sossou 2006). While women’s bargaining power tends to be stronger in matriarchal households and households where their financial contribution is substantial (as in de facto female-headed households), there does not seem to be clear evidence as to the improvement of women’s position in decision-making in the modern Ghanaian household, even in matters of family planning and reproductive health (*ibid*).

2. There is little evidence to suggest that there is income pooling in Ghanaian households, or indeed in other West African societies. Available research suggests that spouses usually manage their income and expenditures separately (Brown 1994; Orubuloye et al. 1991; Doss 1996b; Guyer 1980). There are indications that implicit rules exist that shape the roles and responsibilities of household members. Women are known to contribute significantly to the upkeep of the household and to children's clothing and shelter, while men are usually expected to shoulder larger items and the long term needs, reflecting their more "lumpy" incomes (Ahenkora, 1991; Elabor-Idumedia, 1991; Geisler, 1992; Oduro, 1992; and Leach 1991 cited in Brown 1994). While this typifies the commonly observed behaviour within Ghanaian households, it does not provide sufficient grounds to conclude that the household dynamics and decision-making processes always embody full cooperation. On the contrary, as the empirical evidence collected for this research confirms, household decision-making is characterized by ongoing negotiations and bargaining, even in areas where the rules and responsibilities of members is implicitly known.
3. A number of studies have revealed the existence of asymmetries in household resource allocation, often resulting in a general unequal exchange and inequity within Ghanaian households (Brown 1994; Sossou 2006; Doss 1996b).

Orubuloye et. al's (1991: 189,205) study of the impact of family and budget structures on health treatment in West Africa provides a glimpse into the dynamics

of intra-household resource allocation pertaining to health care. The study found a positive correlation between divided household budgets, coupled with intra-household bargaining over resource allocation on one hand, and health outcome on the other:

“Health-treatment decisions, in much of the world, are affected by the family’s ability to meet the cost. In West Africa the situation is more complex because husbands and wives typically have separate budgets... Mothers are most likely to pay for minor illnesses but the father’s role becomes more important as the cost rises. Because the type, and even fact, of treatment depends on the ability to pay, and because the family is not a unity in these decisions, the health system may have to devise charging procedures that make both parents responsible, possibly with community involvement in securing payment...

“In this Ekiti village, and doubtless in West Africa as a whole, she [the wife] cannot rush a sick child to the hospital in the knowledge that she has a unified family budget behind her over which she has some rights and which will meet the cost. Inevitably, this means delays in treatment and discussions—even haggling—over whether treatment and the consequent expenditure, is necessary...

“The divided budgets and treatment decision making responsibilities of West Africa may be a significant determinant of continued high mortality, especially in an era of economic structural adjustment programs. Indeed, an awareness of the West African budgetary situation should make those advocating or introducing structural adjustment programs cautious about extending the ‘user pays’ principle to the health sector.”

The same study also found that women shoulder most of the financial burden of their own health expenditures, or get assistance from relatives. In only 10% of the study cases did the wife get financial support from her husband when she decided she needed treatment. This often results in delayed treatment.

2.7.2. The relevance of intra-household theories for assessing Ghana's health financing reform

The above discussion underscores the limitations of household level analysis and the mounting evidence of inequities among household members. Intra-household models provide a theoretical and analytical basis for understanding how the dynamics of resource allocation and decision-making within households have a part in shaping health seeking behaviour of individuals, by either expanding or constraining the scope of feasible options. They also offer a useful framework for examining whether and how intra-household inequities in resource allocation and bargaining power affect household responses to health policy reforms, and how these responses may be gendered in the sense of being shaped by the prevailing intra-household dynamics. Our research focuses on gender-based inequities, in that it embodies a critical aspect of asymmetry within households²¹. However, we also acknowledge that gender intersects with other social identifiers, such as class and culture, to shape distinct experiences of social advantage or disadvantage, and that these change over time and space. Thus, our analysis explores both the differences

²¹ Inequities in intra-household allocation can also be age based.

between women's and men's experiences, and the differences within each group due to the interaction of gender with other social identifiers.

When using intra-household models for assessing the gendered impact of Ghana's health financing reform, it is important to take into account the salient features of Ghanaian households, and the intra-household dynamics noted above. We draw three key underlying premises, which form the basis of our research:

The first is the inappropriateness of the unitary household model in the Ghanaian context. Why is this important? As Agarwal (1997) correctly notes, policymakers in many countries often assume a unitary household model, or that their policies would not have differential impact on individual members due to the presumed equitable sharing of resources or the benefits thereof. Such policies, premised as they are on the assumption that the household is a unified unit, and that men and women within the household are equally poor or equally rich, or that they always act in each others' best interests, will undoubtedly have unintended consequences. With little evidence of income pooling, the notion of a unified and harmonious household represented by a benevolent head is not credible in the Ghanaian context. Rather, bargaining models, particularly those based on non-cooperative models, offer better scope for accommodating the existence of intra-household dynamics marred by power asymmetries, bargaining and negotiation. As such, they provide a useful framework for analyzing the gendered impact of the recently introduced

National Health Insurance Scheme (NHIS) in Ghana, with respect to financial determinants of access.

The second issue is the need to re-cast the household concept beyond the confines of the family, in order to acknowledge the significance of kinship and the emergence of a new type of household headed by women. Within such a social context, limiting the impact of the health financing reform to a western concept of household, characterized by strong conjugal ties, will not only be misleading, but will also exclude a large segment of the population.

Finally, there is a need to recognize that the permeable boundaries of Ghanaian households, the strong kinship and weak conjugal ties, and the social and religious norms and perceptions all play an important part in mediating policy impacts. This requires looking beyond statistical analysis of what happens within the confines of the “household”—however defined—and searching for explanations of the observed behaviours. Qualitative analysis has much to offer in this regard.

2.7.3. Developing research hypotheses

At the household level, it is expected that market based²² health financing reforms or that rely on insurance, will perpetuate or exacerbate existing inequities in access

²² The use of the term "market based" here refers to the "cash and carry" or fee based system whereby individuals are responsible to pay for their health care at the point of service. Insurance

to health care, unless effective social protection mechanisms for the poor are in place. However, for the reasons detailed above, our research goes beyond household level analysis to assess why and how gender relations of power within households matter in shaping women's and men's experiences with health care.

Collective models predict that intra-household resource allocation normally favours those with more bargaining power. Given women's inferior negotiation position within Ghanaian households, this implies that the distribution of resources generally favours men. As men on average have greater earning potential than women, it is also expected that a higher premium is generally placed on ensuring men's wellbeing in a household. This is consistent with an emerging body of empirical evidence which suggests that resource allocation decisions are often biased towards primary income earners, who are in most cases men. For example, a study on intra-household allocation of food in Bangladesh revealed a strong male bias, both in terms of quantity and quality of food allocated within households (Razzaque et al. 2008). Similarly, in a study of the use of mosquito nets among Ugandan households, Hoffmann (2008) found that when the nets are purchased by men, the men are more likely to use them than other members of the household, regardless of who has the greater need. In a country like Ghana, where the incidence of poverty is acute (29% of Ghanaians are estimated to be living below the national poverty line), the stakes are high in terms of how meagre resources will be distributed among household members. As "rationing" of resources is expected to

based financing replaces this with pre-paid premiums, paid through taxes, directly by individuals or a combination of both. In the case of the NHIS, it is the latter.

be greater in poor households, women in these households are expected to be particularly disadvantaged in the share of resources they receive.

Intra-household theories explain some of the observed differences in health seeking behaviour between male and female members of a household, and allow us to predict whether the allocation of health expenditures in households is likely to change as a result of Ghana's health financing reform.

As stated previously, one of the objectives of NHIS is to enhance equity in access to health care by reducing catastrophic health expenditures, particularly for the poor. It was also previously mentioned that the policy mandates that each adult member of the household sign up for insurance (and pay membership and registration dues), and that children under 18 are only exempted from the fees if both parents become members. The introduction of NHIS will not eliminate intra-household bargaining over the allocation of health expenditures. However, given that health insurance membership is renewable on a yearly basis, the frequency of negotiation will be significantly reduced, with only the services that are outside the NHIS coverage requiring on-going bargaining and negotiation over the use of resources. The question we address is how this change affects the negotiated outcome, and whether and how it facilitates equity in access to health services.

The fact that NHIS membership is individually based implies that decisions must be made regarding whether and who within the household will be insured. There is no

reason to assume that the outcome will be the same across all household types (e.g. male vs. female-headed households) and economic categories. We expect household responses to vary depending on social strata and women's relative bargaining power.

Behavioural economics tells us that poor households tend to have a high discount rate, implying that they show strong preference for investments/expenditures that generate immediate benefits, as opposed to those that might have higher future payouts. This is not surprising, given the scarcity of available resources and the strong need to meet present requirements. Thus, the generally high discount rate among the poorest households is expected to remain unchanged in terms of allocation decisions, although the overall expectation is that NHIS will relax the "rationing" of resources within households. We predict that unless this group is exempt from paying a premium, to the extent that there is increased adoption of health insurance, men—as the primary income earners and with more negotiating power—will have priority over women. In other words, we do not anticipate that NHIS will have a gender equity enhancing effect among the poorest households in terms of household health expenditure patterns, unless the current restrictive exemption criteria are revised to include them.

Hypothesis 1:

In the absence of effective social protection mechanisms targeted toward the poor, health financing reforms that are market based or that rely on insurance will perpetuate or exacerbate existing inequities in access to health care in Ghana.

Hypothesis 2:

Given the prevailing pattern of asymmetries in intra-household allocation of resources in Ghana, market as well as insurance-based health financing reforms will have differential impact on access to health services among men and women, within as well as across households in different socio-economic strata:

- 2.1. Poorest households (poorest quintile): In both fee for service and insurance-based health financing reforms, the combined impact of “rationing” of resources, and the expected prevalence of a high discount rate, will have an adverse impact on gender equity in terms of household health expenditure patterns .*
- 2.2. Wealthiest households (richest quintile): Significant gender equity impact will not be observed, given the relative absence of gender bias in health resource allocation arising out of resource constraint.*
- 2.3. Middle income households (middle quintile): Insurance-based financing is expected to relax the “rationing” of resources, thereby reducing potential gender biases in resource allocation for health.*

Expectations:

Gender differences in access to health services are expected to prevail based on intra-household bargaining and patterns of resource allocation, which are themselves shaped by the prevailing gender norms, values and rules.

Households, particularly those in the lower socio-economic strata, are expected to “ration” (Iyer, Sen and George 2007) scarce resources. The allocation decision is expected to be biased against women, given their low earning potential and weak bargaining power.

While the introduction of NHIS is expected to relax “rationing” and promote health equity, the generally high discount rate among poor people is expected to counter this gain and perpetuate the status quo. Given that gender biases in health resource allocation are not expected to be significant among the higher income tier, the gender equity impact of NHIS is not expected to be prominent for this group. It is the middle income tier that is expected to have significant gender equity gain.

At the other extreme (i.e. the high income tier), “rationing” of resources with respect to health expenditure is expected to be least prevalent. Gender biases in resource allocation for health are not significant in this group, thus the gender equity impact of NHIS is also expected to be less prominent, though for different reasons²³. Rather, it is among the middle income tier that we expect to see significant gender equity gains in access to health services. While asymmetries in the intra-household allocation of resources for health are present among the middle income tier, the introduction of NHIS is expected to relax the “rationing” of resources, thereby reducing potential gender biases in resource allocation for health.

To this point we have postulated how NHIS will likely alter health seeking behaviour of women and men in different economic strata, using allocation of health expenditures within households as a proxy. This provides a partial, though important, response to the underlying question of our research, namely: Why isn’t everyone who needs care getting it? If we measure “access” beyond affordability, to include the availability of acceptable quality services, we must also determine whether and the extent to which extra-household variables shape the pattern and frequency of health service utilization. Therefore, the multi-dimensionality of access, and how it interacts with gender, class or locality should be examined as well. We hypothesise that, although the NHIS is expected to have an important impact in shaping patterns and frequency of utilization of health services in Ghana,

²³ This group is not a target beneficiary for NHIS.

non-financial factors, and their intersection with gender, also play an important role in defining who gets access to health care and how.

Hypothesis 3

The availability of NHIS alone is not sufficient to significantly alter the patterns and frequency of utilization of health services, and non financial factors—and their intersection with gender—play an important role in defining who gets access to health care and how.

Expectations:

Other intervening variables such as preferences, perceived or actual quality of care, appropriateness of the service, and waiting times, and others, are expected to shape health seeking behaviour. Men and women are likely to respond to and be impacted differently by these non-monetary determinants of access.

3. Analytical Framework for Assessing Gender, Equity, and Access to Health Care

The underlying premise of what has been discussed and hypothesized thus far is that public policies that affect the cost of health care and the distribution of resources within households can play a significant role in creating, reinforcing or rectifying gender biases in access to health care. We have also noted the need to consider non-monetary factors that can impact health seeking behaviour. To assess

the direction and magnitude of the policy impact in terms of equity in access to health care, we must unpack what constitutes access and equity in the context of our research, and determine how it can be evaluated. In other words, what do we mean by "access" and under what circumstances is equity considered to be attained? Similarly, our "gendered analytical lens" needs further clarity.

3.1. Unpacking equity and access

Issues of equity and access have generated heated discussion and debate in health financing and delivery literature over the past decade. While these dialogues have raised a number of issues, and highlighted some of the limitations in the approaches used in empirical research, they have not led to a consensus on the way forward, leaving many of the issues unresolved (Wagstaff and Doorslaer 2000).

What exactly does equity entail in the context of health care? There are diverging views²⁴. Some argue that it should be about ensuring minimum standards of health care for all. Others suggest it should address ensuring that health care provision corresponds to need, regardless of socioeconomic status, race or gender, and that financing it be based on ability to pay. Our research is premised on the latter concept of equity, understood to imply fairness.

²⁴ For a detailed discussion of different views on equity and access in health care finance and delivery see Wagstaff and Doorslaer 2000 and McIntyre , Thiede and Birch 2009.

A number of feminist writers have argued that equity is essential for eliminating gender-based discrimination and injustice in the provision of health care. They contend that equity implies acknowledging differences (i.e. differential treatment based on differential needs). Accordingly, it is argued that gender equity in health care is not about attaining equal treatment or health conditions, nor should it assume that women want the same things as men (Saulnier et al. 1999). Rather, it is about acknowledging differences, and about fairness. Because of the confounding influence of biology, equality in treatment between the sexes would indicate gender injustice if differences are not taken into account (Sen, Östlin and George 2007; Macintosh and Tibandebage 2004). Sen, Östlin and George (2007) note that socially induced biases also interact with biology to produce further inequities. They argue that gender equity in health calls for different treatment among women and men that is sensitive to the differential needs necessitated by their biological differences, and which rectifies socially determined discrimination.

There is diverging opinion on how equity can be assessed. A predominant view among health economists is that utilization of health care is a good indicator of equity (Culyer, van Doorslaer, and Wagstaff 1992; Culyer and Wagstaff 1993; Wagstaff, Paci and van Doorslaer 1991; van Doorslaer and Wagstaff 1992, 2001). Others have questioned what is measured, contending that it should be equity in access and not equity in use that matters and should be assessed (Mooney et al. 1991, 1992; Mooney 1996, 2009). The focus on health care utilization implicitly interprets equity in terms of receipt of care. Those who prefer access as a yardstick

conceptualize it in terms of opportunity for access. In the utilization case, equity is interpreted to mean equal treatment for equal need, or unequal, but equitable, treatment for unequal need (Wagstaff, Paci, and van Doorslaer 1991).

Proponents of using access as a measure of equity criticize the utilization based approach on the basis that it does not consider people's preferences, and that the ensuing assessment of equity/inequity may be biased based on the assumption that people with the same need ought to consume the same amount of care (Mooney 2009). Instead they suggest that access is best interpreted as equality in opportunity to use health services, which may lead to different patterns of use for equal need, and define access to mean "opportunity to use" as opposed to "use" (Mooney et al. 1992). Wagstaff, van Doorslaer and Paci (2001) counter that while this distinction is appealing on both conceptual and theoretical grounds, it poses a significant challenge when used to guide empirical research:

"... this distinction is fine in theory, but working out in practice whether people are in poor health or seem set to die at a young age because they had the necessary capabilities but chose not to avail themselves of them, or because they didn't have them in the first place, will be hard work. It is no surprise, then, that in the applied work that Sen and others have undertaken using the capabilities approach, the focus has been firmly on what people achieve in terms of life expectancy, literacy and so on, rather than on what they might have achieved." (1816-17).

Our contention is that the above views are not mutually exclusive. The underlying tenet of our research is that an assessment of equity in terms of health care

allocated according to need (i.e. persons with equal needs treated the same, and those with different needs treated differently) is an important starting point, and that utilization of health services is a fairly good indicator of accessibility of health care, though not the only one. While this approach has limitations as noted above, it is pragmatic in that, although equity in access is at the core of Ghanaian health policy reform, as Wagstaff and Doorslaer (2000) have argued, it is clear that equitable utilization of health care underlies the policy agenda. This does not imply that our analysis of access is restricted to the assessment of utilization, but that it is considered to be an important indicator of access. We believe that Mooney's argument suggesting the need to look at access more broadly, as opposed to the narrow focus on use, is valid. Indeed, as outlined below, our analysis uses a broader framework of determinants of access, including accessibility, affordability and acceptability dimensions as suggested by McIntyre (2006) and McIntyre, Thiede and Birch (2009). Further, the analysis is not limited to the use of western medicine, but also incorporates the use of alternative care, and thus attempts to capture different types of care women and men rely upon, whether out of necessity or by choice.

Our study employs a common, two dimensional approach to measuring equity: vertical equity and horizontal equity²⁵. Vertical equity implies preferential treatment for those with greater need. Horizontal equity suggests equal treatment

²⁵ This has received some criticism on the grounds that it does not leave much room to accommodate choices for non treatment. The main argument is that people need medical care only when it is believed to be able to improve their health and thus need should not be presupposed based on illness (Mooney 2009).

for equal needs. Our analysis explores whether these principles are violated, based on gender and/or income and/or geographic location.

In considering equity, we recognize that it is useful to examine not only who derives benefits from the health services, but also how the burden of paying for them is distributed across socio-economic groups (i.e. how the benefits are allocated and how the services are financed) (McIntyre , Gilson, and Mutyambizi 2005). This calls for distinct methodological approaches and research inquiries. As noted in the introductory chapter, the scope of our research is restricted to the first dimension: how the benefits are distributed from a gender and equity perspective. This limited scope is justified on two grounds: (i) examining both dimensions will not only overextend the research, but also compound the methodological complexity; and (ii) we believe there is no direct relationship between the distribution of burden and benefits, as a country might have regressive financing, but could compensate for this with an effective re-distribution policy.

3.2. Analytical framework

In assessing equity in access to health care, we adapt McIntyre (2006) and McIntyre, Thiede and Birch's (2009) multidimensional framework, based on the three "A" principle: the (i) accessibility, (ii) affordability and (iii) acceptability of care offered to different population groups. This approach provides a broader definition of access, and suggests that factors such as quality, physical access, cultural sensitivity,

level of awareness, inconvenient opening times, perceived or actual inappropriateness of services, perceived or actual treatment by health professionals and others, are significant to understanding access and equity in health care. It also provides an analytical framework for examining determinants of access that go beyond a narrow focus on costs. McIntyre, Thiede and Birch (2009) point out that although each dimension is distinct, it is the intersection between the three dimensions that determines access.

Where and how does gender come into the picture? Gender is rarely taken into account in health equity analysis and discourse. As we have already established, this is a crucial error. Gender is important, as it mediates and shapes both the supply and demand side responses of women and men, as well as their experiences as users of health care.

In assessing the impact of Ghana's health financing reform, the study builds on and further expands McIntyre et al.'s analytical framework, by examining how gender relations and social and economic stratifiers interact with access pillars to affect equity. We contend that this framework—a well recognized analytical framework for assessing equity in access to health care—needs to be expanded to include the potential impact of demand and supply variables in shaping gender equity, and conversely, how these variables might themselves be impacted by gender norms and relations, as well as by social and economic stratifiers that shape people's identities as shown in Figure 1. This analytical refinement allows us to examine

whether there are significant differences in how individuals respond to cost and non-monetary determinants of access to health care, and whether and how gender, and its intersection with other social and economic stratifiers, matters.

Figure 1. A framework for analyzing determinants of access to health care. Adapted from McIntyre (2006) and McIntyre, Thiede and Birch (2009)

Examining inequity in access to health care requires recognition of some of the key drivers of social inequality. Income/wealth is one source of social inequality, and gender, race, and religion are also key contributors (Sen, Östlin and George 2007). Much of the existing analysis of health equity focuses on equity measured in terms of income. While this provides a useful view of how the poor fare against the better off, it does not indicate whether the burden of this inequity is borne equally by different racial or religious groups among the poor. Nor does it show how the

burden of health inequity is shared by members of poor households. As well, as Sen, Östlin and George (2007:79) note, "... little attention is being paid in health research to the interaction between gender and other social stratifiers, such as socioeconomic class, race, ethnicity or sexual orientation." Our study contributes towards addressing this knowledge gap by exploring how income and culture interact with gender, and how that interaction varies across geographic locations. It is important to recognize that women, and men as well, are not homogeneous groups, and that important differences are found among them across different socio-economic and cultural contexts. Thus, there is a need to consider other variables interacting with gender.

The need to go beyond a 'single-axis framework' (Crenshaw 1991) when exploring inequalities is being increasingly recognized among feminist scholars, since women's experiences are not only shaped by gender relations, but by other social identities as well, including race, class, religion and others. This analytical refinement, and its theoretical underpinning known as "intersectionality", emerged in the late 1980s and early 1990s as a critique of feminist theory, when women of colour challenged the feminist epistemology on the grounds that it does not represent their struggles and experiences (Nash 2008). Noting that the feminist movement of the 1960s and 1970s was primarily rooted in the experiences and struggles of white, middle-class women, black women argued that it did not represent their experience. Thus, the notion that women are a homogeneous category that share similar life experiences has been challenged ever since.

Originally coined by Kimberlé Crenshaw, "intersectionality" has emerged as a refinement of feminist theory that acknowledges differences among women, and takes as its starting point the interactions between gender, race, class, religion and other social identities that uniquely shape women's experiences and struggles (Davis 2008). It suggests that gender should be understood in relation to other social identities it is embedded in.

Despite the growing conceptual and theoretical dominance of intersectionality as a means to understanding inequalities, its empirical application has been rather slow in coming, owing mostly to the lack of a clearly defined methodology (Shields 2008). Initial applications of intersectionality took a summative approach to assessing discrimination, exploring the cumulative impact of class, race and gender in shaping identities. The analytical focus gradually shifted to examining how the various social identities interact, "... in the social and material realities of women's lives to produce and transform relations of power." (Davis 2008: 71). However, questions related to how this interaction between the multiple identities is to be measured, whether the various social identities are equally important, and whether and how they shift in time and space remain largely unanswered²⁶. This has led to growing skepticism that, despite its importance as a theoretical paradigm, its potency in guiding empirical research is rather limited (*ibid*).

²⁶ See Shields 2008, Nash 2008, Valentine 2007, and Davis 2008 for a more detailed discussion about some of the limitations of the "intersectionality" concept in guiding empirical analysis.

While positioned within the conceptual underpinnings of "intersectionality", our research uses the analytical approach suggested by Armstrong and Armstrong (2001)—the "lumping" and "slicing" approach²⁷—to guide the empirical analysis. Like Armstrong and Armstrong, our research recognizes the common experiences that women as a group face, due to gendered norms and expectations (i.e. "lumping"). At the same time, we acknowledge that women (or men) are not homogeneous groups, and that important differences exist among them based on class, culture, religion and location (i.e. "slicing"). We also acknowledge that gender relations and positions of advantage/disadvantage evolve over time.

4. Assessing Health Policy

Analysis of the differentiated impact of Ghana's health financing reform—as suggested by the "intersectionality" concept—provides a useful means of evaluating whether and how the NHIS meets its overall objective of promoting equitable access to health care. However, our research also recognizes that policy processes and orientations can in themselves also shape the outcome. Mackintosh and Tibandebage (2004) argue that health systems and health sector reforms are themselves gendered, and could reinforce "social patterns of disadvantage". Further, individual and household assumptions that underpin public policies could have far reaching implications. While an in-depth assessment of the political economy of the

²⁷ Armstrong and Armstrong (2001) suggested the "lumping" and "slicing" approach in examining women's role as caregivers in the context of an increasingly globalized economy. They use "lumping" and "slicing" to explore commonalities and differences among women, taking account of time, space, or location.

health sector reform or analysis of the gender responsiveness of the health sector budget is beyond the scope of our research, our research examines the nature, orientation and embedded assumptions of Ghana's recent health financing reform to explore whether and how health policies may have unintended consequences that impact equity goals in access to health care.

Mackintosh and Tibandebage pose a number of important questions, three of which are particularly relevant for our study:

- Does the health sector reform contain implicit assumptions about women's rights and capabilities, and are they defensible?
- What are the assumptions about household and family structure that underlie health sector reform (e.g. women's financial dependence or autonomy in decision making), and are they justified?
- What are the underlying assumptions about women's access to care, and are they correct?

Our research also examines whether and how NHIS has affected the way health sector resources are generated and allocated. This permits us to assess the extent to which changes in the generation and allocation of funds to the health sector facilitate or constrain the scope of promoting equitable access to health care.

Chapter 3: Methodology

1. Geographic Scope of the Research

As noted earlier, this dissertation covers both the national and regional levels of analysis. It examines the overall impact of Ghana's health financing reform nationwide, and focuses on two regions for an in-depth analysis: the Greater Accra Region and the Northern Region²⁸.

Greater Accra Region is home to Accra, the nation's capital city. Though it is the smallest of the ten administrative regions in area, it has the second highest population, and is one of the most urbanized and affluent regions in the country (Ghanadistricts.com 2006). In contrast, the Northern Region is among the three poorest and most deprived regions. It is largely rural, with the exception of Tamale, the regional capital. Outside Tamale, the

majority of the economically active population in the region is engaged in agriculture. The Northern Region is also home to the vast majority of the country's Muslim minority, and polygamy is practiced widely. Markedly different geo-political, economic and cultural norms in the Northern and Greater Accra Regions provide

²⁸ Ghana is divided into 10 regions, which are in turn subdivided into 168 distinct metropolitan, municipal and district assemblies.

fertile ground for exploring potential inter-regional differences in the impact of the health financing reform.

Specific rural and urban districts are selected as case study sites within each of the two regions, to capture the potential intra-regional differences. These are Accra Metropolis and Dangme West in the Greater Accra Region, and Tamale and Savelugu-Nanton in the Northern Region. The following section includes a brief overview of the basic demographic, economic and health infrastructure profile of the case study sites, to provide background and context to our analysis.

2. Basic Characteristics of the Case Study Sites

Accra Metropolis is among the most populated and fastest growing cities in Africa, with a current population estimated to be approximately 2.3 million as shown in Table 3.1. The city has a disproportionate number of hospitals and other health facilities, and benefits from a relatively higher quality health delivery system than the rest of the country. The vast majority of private for-profit hospitals and clinics are concentrated in Accra and Kumasi, the capital of the Ashanti Region.

Dangme West is the largest district in the Greater Accra Region in terms of area, but one of the least populated, with an estimated population of 136,622. It is mainly rural, and is among the most deprived districts in Ghana. The majority of inhabitants

live in small, scattered communities of less than 2,000 people, which creates an enormous challenge to the provision of public services (*ibid*). The district was one of the pilot sites for the mutual health insurance schemes prior to the introduction of NHIS, and thus has had more exposure to health insurance than the other districts in our case study.

Table 3.1: Comparative overview of health infrastructure in selected localities in Ghana

	Greater Accra Region	Accra Metropolis	Dangme West	Northern Region	Tamale	Savelugu-Nanton
Population (2008 estimate)*	4.1 million	2.3 million	136,622	2.3 million	366,536	112,210
Number of hospitals (2007)**	101	72	3	16	6	1
Number of clinics/health centers (2007)**	303	207	12	153	18	9
Number of maternity homes (2007)**	58	35	3	9	5	0
Doctor to population ratio (2008)*	1:5202	n.a.	n.a.	1:92046	n.a.	n.a.
Nurse to population ratio (2008)*	1:979	n.a.	n.a.	1:1868	n.a.	n.a.
Percentage of population within 30 minutes from a health facility (2003)†	81.2	82.6	41.1	35.0	57.3	54.4
Percentage of the population with active NHIS membership††	31.9	n.a.	n.a.	46.7	n.a.	n.a.

* MOH Facts and Figures 2008

** MOH institutional data

† CWIQ II, Ghana Statistical Service

†† NHIA institutional data

Tamale, the Northern Region's capital city, has a population of 366,536. It is the only district in the region which is predominantly urban, and it serves as the administrative hub for the region. It is also often referred to as the NGO capital of Ghana, because it hosts most of the offices of local and international NGOs operating in the region. Although severely disadvantaged in terms of health infrastructure

compared to Accra, it has most of the hospitals and other health facilities in the region.

Savelugu-Nanton, a district bordering Tamale, has a population of 112,210 and is classified as being mostly rural. The district is noted for its high incidence and prevalence of Guinea Worm disease²⁹. Although Savelugu-Nanton is relatively better served in terms of health infrastructure compared to the other rural districts in the region, its selection for the case study was motivated by its accessibility, due to its proximity to Tamale.

3. Methodology

The dissertation draws on both qualitative and quantitative approaches to data collection. The qualitative data were collected through focus group discussions (FGDs) and in-depth key informant interviews³⁰. The focus group discussions were conducted in the four case study districts/metropolis in the Greater Accra and Northern Regions, namely Ayawaso, Kpeshie and Chokor sub-metros in Accra; Agomeda in Dangme West; Nyohini in Tamale; and Nayilifong in Savelugu-Nanton. The greater number of FGDs conducted in Accra is deliberate, to capture the wide

²⁹ Guinea Worm is parasitic worm infection prevalent mostly in Africa. It is linked with lack of safe drinking water. Ghana has the highest episode of Guinea Worm in the world, next to Sudan (Akintunde 2004)

³⁰ The research was conducted in accordance with approval granted by the Carleton University Research Ethics Committee and the Ghana Health Service Ethical Review Committee.

diversity of cultural and socio-economic characteristics of individuals and households in different settlements within the city.

FGD participants were recruited with the assistance of District Mutual Health Insurance Schemes (DMHIS) in each locality. The sampling was intentional, to ensure that diverse perspectives and experiences were captured. Participation was entirely voluntary, and all participants were 18 or older, representing a good mix of single, married, divorced and widowed individuals with and without children. While the majority of the participants were engaged in the informal sector, there was wide variety in experiences, ranging from those with steady jobs to those engaged in sporadic petty trading. There was also great diversity in the participants' level of education, though on average the men appeared to have higher education than the women participants. This is consistent with the overall lower literacy rate among Ghanaian women compared to their male counterparts (according to Ghana Living Standard Survey 5 survey, the adult literacy rate is 65.8% among men and 43.4% among women). The FGDs were mostly conducted in local languages with the aid of a translator, and each lasted between 1 and 1.5 hours.

The data—consisting of a total of 21 FGDs with an average of 6-7 individuals in each (a total of 127 individuals)—were collected in February and March, 2009. Separate focus groups were conducted for men and women in each locality, and within each gender group those with health insurance and those without were divided into separate sub-groups (see Table 3.2).

Table 3.2. FGD structure and sample

Region	FGDs	Total number of individuals
Greater Accra Region	Accra Metropolis	47
	Women with health insurance	9
	Women without health insurance	11
	Men with health insurance	10
	Men without health insurance	9
	Mixed ³¹	8
	Dangme West District	21
	Women with health insurance	6
	Women without health insurance	5
	Men with health insurance	5
	Men without health insurance	5
Northern Region	Tamale Municipality	33
	Women with health insurance	10
	Women without health insurance	6
	Men with health insurance	8
	Men without health insurance	9
	Savelugu-Nanton District	26
	Women with health insurance	7
	Women without health insurance	7
	Men with health insurance	7
	Men without health insurance	5

The FGDs were intended to examine the different experiences of women and men in accessing health care. In particular, they were aimed at generating deeper understanding of who has access to what kind of services, and what are the main obstacles faced by those who find it difficult to utilize the health care they need. The discussion was organized around four broad themes:

³¹ One FGD, with recipients of government cash transfer program (popularly known as the LEAP program), was held in Chokor, one of the deprived suburbs in Accra. Participants were mixed - women and men with or without health insurance coverage. The aim was to gather the perspectives of the LEAP beneficiaries, who make up the "poorest of the poor".

- (i) *health seeking behaviour*: what actions people normally take when they fall ill; where they usually go for treatment; who makes the decision.
- (ii) *access to health care*: what are the main barriers to access to health care.
- (iii) *household allocation decisions*: who generally makes decisions within the household about how money is allocated; how are resource allocations for health determined and who pays for it; who makes the decision about NHIS membership and who pays for the premium.
- (iv) *understanding allocation decisions in the context of time*: whether and how people's valuation of future benefits affect decisions about their insurance uptake.
- (v) *experience with NHIS*: whether and in what ways NHIS has been beneficial; whether and how NHIS has altered their use of health care.

Given our primary focus on assessing the impact of the recent health financing reform, participants were asked to reflect on both pre and post NHIS environments, in order to obtain their views regarding whether and how NHIS is helping facilitate access to health care, and the challenges remaining to be addressed. The data obtained from the FGDs complement and further explain some of the findings obtained from the analysis of the household survey data.

In addition to the FGDs, over 40 interviews were conducted with key informants in relevant government ministries and departments, civil society organizations, donor agencies and academia, as well as with District Health Insurance Scheme Managers and lead experts. The interviews were done to gain deeper insights about the policy orientation, processes, dynamics and underlying gender assumptions and considerations underpinning the health financing reform. Most of the participants for the key informant interviews were identified through snowball referrals. In addition, department heads responsible for health financing and/or health policy and planning in the key ministries were identified in advance and approached for interviews.

Quantitative data were obtained from two sources: (i) the Ghana Living Standard Surveys (GLSS 3, GLSS 4, GLSS 5 and GLSS 5+) and (ii) the Citizen's Assessment of National Health Insurance Household Survey, conducted by the National Development Planning Commission (hereafter referred to as the NDPC survey). Both the GLSS and NDPC surveys capture, among other information, self-reported morbidity (2 weeks prior to the survey for GLSS surveys and 4 weeks for the NDPC survey), health seeking behavior and utilization, maternal and reproductive health, and costs incurred in obtaining health care. In addition, the NDPC survey captures detailed information about health insurance and citizen's assessment of its benefits and shortfalls. GLSS5+ was intended to provide baseline information to monitor the impact of a poverty reduction initiative launched in 23 districts in Ghana. The survey adopted previous GLSS questionnaires, applied at the district level to

provide detailed situation analysis that can be used for decentralized planning and monitoring. It also captured information about health insurance status and usage. All the surveys collected data at the individual level, and thus the information can be disaggregated by age and sex, as well as location of residence, though some analytical limitations were imposed by the sample size of the sub-population.

Standard GLSS surveys involve large nationally representative samples collected through multi-stage stratified sampling. GLSS 3 (conducted in 1991/92) included 4,552 households; GLSS 4 (conducted in 1998/99) 6,000 households; and GLSS 5 (conducted in 2005/06) 8,687 households. Together, these three data points provide snapshots of the health seeking behavior and access barriers prior to and at the introduction of NHIS. Although Ghana had a long history of user fees, it was in 1992 that full-scale cost recovery—known popularly as the "cash and carry" system—was introduced. The GLSS 3 data provides a snapshot just prior to the rollout of the "cash and carry" system, and serves as a baseline for our analysis. Similarly, although the NHIS law was passed in 2003, it was not until November of 2004 that implementation began. GLSS 5 thus provides a snapshot at the outset of NHIS.

Conducted in 2008, the NDPC survey involved a nationally representative sample consisting of 1,988 households. GLSS 5+ was carried out in 2008/09, and involved

9,315 randomly selected households in 23 districts³². As such, it complements the data obtained from the national surveys. Together, the NDPC and GLSS 5+ surveys capture health seeking behavior, utilization, and access issues four years after the introduction of NHIS—the former at the national level and the latter at the district level.

Further details about the GLSS and NDPC survey methods and the relevant health questionnaires that inform our analysis is included in Appendix 2.

The availability of a rich, individual level, pre and post-NHIS survey data, combined with the qualitative data collected for the purpose of this dissertation, allow us to assess whether and what impact Ghana's recent health financing reform is having in terms of achieving equity in access to health services. Our research involved analysis of the micro data to investigate our research inquiry.

³² The sample consists of 1523 individuals in Dangme West (of which 796 are adults), 2333 in Savelugu-Nanton (1147 adults), and 1825 in Tamale (1097 adults). The sub-population of adults who reported being ill/injured is 168 in Dangme West, 188 in Savelugu-Nanton, and 98 in Tamale.

4. Issues Related to Survey Data and Variables

A number of issues related to data merit to be highlighted:

1. First, we used the classification of wealth quintile provided by the Ghana Statistical Services and the National Development Planning Commission for the GLSS and NDPC data respectively. While this ensures that our analysis is comparable to similar studies, the differences in the composition of wealth quintile between the data sources need to be noted. GLSS surveys collect income and expenditure data at the household level. Given the unreliability of income data in developing countries, expenditure data was used to compare the well-being of different households³³. This is a well recognized and often preferred approach when dealing with developing country data. However, as is common with specialized surveys, the NDPC survey did not collect income or expenditure data. Instead, it collected somewhat detailed information about household assets, which was used to develop an asset index to compare households by their relative well-being³⁴.

An asset index (also known as a wealth index) was primarily developed as a tool to help make use of demographic and health survey data in a more systematic manner to determine a household's relative economic status (Rutstein and Johnson 2004).

³³ This was done by using total household consumption expenditure adjusted for family size.

³⁴ Asset Index is used widely in demographic and health surveys (DHS) and other alternative surveys in developing countries in the absence of income or consumption data in these surveys.

While there is debate about the relative merit of using an asset index versus income or consumption data to measure socio-economic status, using an asset index in the absence of income or consumption data is widely recognized as a valid approach for comparing households. While the different methods used to classify households by their socio-economic status may be appropriate given the nature of the data, the implication for our research is that households may be positioned in a different wealth quintile, depending on whether expenditure or asset is used.

2. The questions in the health module of the GLSS questionnaire are consistent across the subsequent rounds, and are thus directly comparable. While the NDPC questionnaire is generally consistent with that of the GLSS, there are some important differences that should be noted. First, in capturing self reported illness, GLSS questionnaires asked whether the individual had suffered illness or injury in the past two weeks, while the NDPC survey captured illness/injury data for the past four weeks. Thus, the number of self-reported cases of illness/injury could be higher in the NDPC survey data, though potential issues with memory recall could minimize the difference, given the longer time period. Second, while the GLSS surveys asked if those who reported being ill/injured during the past two weeks had consulted a health practitioner, dentist or traditional healer or visited a health centre, the NDPC survey did not have this direct question, but rather asked what kind of health provider/facility they had visited in the past four weeks, and who they saw for the consultation. We constructed a categorical response based on this

that captures whether the individual consulted a health practitioner, dentist, traditional healer or visited a health centre.

3. The survey data do not capture the amount of treatment received by the sick/injured, nor does it allow us to assess the quality of care received. It simply indicates whether or not a sick/injured individual consulted a health practitioner. Thus our analysis of inequities in health care utilization does not account for differences in the amount or quality of care received. The implication of this data limitation is that our analysis likely masks important inequities that might exist among those who sought care.

4. A similar shortfall in the quantitative data is that it does not capture the reasons for non-utilization of care. Although preference for the type and source of treatment is captured in all the surveys by including people's use of both western and traditional health care, preference for non-utilization among the ill/injured is not captured. Thus the data do not allow us to distinguish between those who were unable to seek care due to financial or other access barriers, and those who chose not to use the available care (i.e. if the perceived utility was considered low, or if the opportunity cost was considered too high). Indeed, our qualitative research suggests that preference plays an important role in health seeking behavior, particularly among Ghanaian men.

5. Of the 23 districts covered by the GLSS5+ survey, three overlap with our case study sites: Dangme West, Tamale and Savelugu-Nanton. Unfortunately, we do not have similar data for Accra. As well, although the total sample size at the district level is fairly large, it is not sufficient to allow further disaggregation of health seeking behaviour among the sick by quintile and/or gender. This limits the level of analysis that can be undertaken with the data. Further, due to the high non-response rate to the question on NHIS membership status in the three districts, we are unable to use this data to explore potential linkages between health seeking behaviour and NHIS membership. We rely on the data collected through the FGDs for these.

6. Our analysis is restricted to the adult population, and we assigned 18 years as the minimum age to consider an individual an adult. We chose this to be consistent with the age cutoff that NHIS is using to categorize children and adults for the purpose of exemption. By setting the age cutoff at 18, our analysis inevitably excludes some individuals who married at younger age and might have households of their own. We tested whether including individuals of all ages based on their marital status makes a significant impact on the results of our analysis, and found it does not.

7. Finally, we should highlight the definition of household that is generally used in Ghanaian household surveys. A household is defined as, "... a group of people who have usually slept in the same dwelling and taking their meals together for at least 9 of the 12 months preceding the interview." Similarly, a household head is defined as, "... the person who provides most of the needs of the household and also takes most

of the major decisions affecting the welfare of the household. He/she is most familiar with all the activities and occupations of the household members. In any case he/she will be the person named when you ask the question 'who is the head of this household?'" (Government of Ghana, Ghana Statistical Service *nd*).

5. Statistical Analysis

Our analysis of the quantitative data consists of two stages. The first involves descriptive analysis of cross-tabulated data. The second applies a logistic regression model, using gender, wealth, location, health insurance and level of education as explanatory variables for determining health seeking behaviour among the ill/injured. To standardize need, the model also takes the number of days ill and age into account. Given the small sample size of reported illness/injury among pregnant women, and the high correlation with sex, a pregnancy dummy was not included in standardizing need.

All statistical analyses were adjusted for the complex survey design, and performed using the Stata (version 10) *svy* commands.

Chapter 4: Getting out of
medical poverty trap?
Understanding the
dynamics of health seeking
behaviour in the context of
health financing reform

1. Introduction

Hypothesis 1:

In the absence of effective social protection mechanisms targeted toward the poor, health financing reforms that are market based or rely on insurance will perpetuate or exacerbate existing inequities in access to health care in Ghana.

Hypothesis 2:

Given the prevailing pattern of asymmetries in the intra-household allocation of resources in Ghana, market and insurance-based health financing reforms will have different impacts on access to health services among women and men, within as well as across households in different socio-economic strata:

- 2.1. Poorest households (poorest quintile): In both fee-for-service and insurance-based health financing reform, the combined impact of the “rationing” of resources, and the expected prevalence of a high discount rate, will have an adverse impact on gender equity in terms of household health expenditure patterns .*
- 2.2. Wealthiest households (richest quintile): Significant gender equity impact will not be observed in this quintile, given the relative absence of gender bias in health resource allocation arising out of resource constraint.*
- 2.3. Middle income households (middle quintile): Insurance-based financing is expected to relax the “rationing” of resources, thereby reducing potential gender biases in resource allocation for health.*

This chapter tests the above hypotheses with respect to the interaction of health financing reform with socio-economic status, gender and intra-household resource allocation for health, and the resulting impact on utilization of health care. Although this entails two distinct hypotheses, as they are inter-related we examine them in the same chapter.

To examine the validity of our first hypothesis, we assess whether and how access to health care varies among households with different socio-economic status.

Drawing heavily on a series of survey data (the GLSS and NDPC surveys described in the previous chapter), as well as focus group discussions undertaken for this study, we examine access to health care before and after NHIS. We should note at the outset that our analysis uses utilization of health care as a proxy for access. Our underlying premise is that examining systemic differences in the utilization of health care provides an important starting point for assessing inequities in access to health care in Ghana.

Assessing the validity of our second hypothesis entails exploring two distinct yet inter-related phenomena with a gender lens: (i) the existence of a “rationing” bias (Iyer, Sen and George 2007) within households and how it varies across different socio-economic strata and, (ii) whether and how NHIS changes household resource allocation behaviours. The underlying premise is that financial barrier is an important, though not the only, barrier to access to health care in Ghana³⁵. Our analysis is based on household survey data, as well as key insights from focus group discussions that could offer plausible explanations for the observed behavior.

³⁵ For the quantitative data, our proxy for intra-household resource allocation for health care is health seeking behavior among those who reported being ill or injured – i.e., which individuals within households are likely to use health services when they fall ill, what kind of health services they use, and from whom. Health seeking behavior is captured in the GLSS and NDPC survey data as consultation with health practitioners— be it health professionals such as doctors, nurses, medical assistants, or non-conventional health practitioners such as traditional healers or spiritualists. In other words, the pattern of utilization of health care based on need can be used to assess how households prioritize allocation of resources for health. This approach is consistent with several other studies that have employed quantitative data to examine access to health care and/or equity issues arising thereof.

Adopting an approach similar to that used by Iyer, Sen and George (2007), we assert that as health care becomes more expensive, households with resource constraints are expected to "ration" resources, including those allocated to curative health care for sick family members. Among other reasons, the decision is expected to be based on intra-household dynamics and established hierarchies built on gender. As resource constraints are greatest among the poorest households, it is there that we anticipate the most "rationing" of health resources, and also where we expect to see adverse impacts on women, given their relatively weak bargaining position in Ghanaian households. The exception to this is when this socio-economic group is exempted from user fees, or from payment of insurance premiums, which will eliminate "rationing" and the subsequent potential gender bias. We expect "rationing" to diminish with the increase in the household's socio-economic status.

We further explore whether and in what ways the introduction of NHIS alters health seeking behavior, and the intra-household dynamics surrounding health care. In a country such as Ghana, where the overwhelming majority of the population is engaged in the informal economy, health insurance is primarily sold individually and independently, with only a small percentage of those engaged in the formal sector receiving it as part of an employment package or retirement benefit. The NHIS rules mandate that, outside the formal sector, each non-exempt adult must pay a health insurance premium for him/herself³⁶. Although the premium is meant to be

³⁶ "Indigents", pregnant women, and senior citizens over the age of 70 are exempted from paying insurance premium. Children under 18 are exempted from paying only if both parents are insured.

based on people's ability to pay, the difficulty in determining the ability to pay, coupled with capacity constraints to do so at the local level, mean that in practice a flat fee is usually levied for those outside the formal sector³⁷.

Our hypothesis is that NHIS will generally relax rationing by removing the need for payment at the point of service, and by so doing offer the potential for enhancing equity. However, we hypothesize that its impact will be mediated by socio-economic status and intra-household dynamics. We expect that, given their daily struggle for survival, the poorest households that are faced with systemic resource constraints are not likely to prioritize health insurance, which only offers potential benefits in the future. To the extent that they invest in health insurance, we expect priority will be given to the primary income earners; usually men, given the relatively higher wages they can earn in the market. We also anticipate that NHIS will alter health seeking behavior for those in the middle socio-economic strata, by relaxing the "rationing" of resources and reducing the financial barriers to access—this is expected to enhance gender equity. Gender-based inequity in access to health care is not expected to be found among the wealthy households, thus we do not expect NHIS to have a noticeable impact on this group.

³⁷ This in itself raises issues of inequity in the way health care is financed, with the poor potentially shouldering a disproportionate burden of financing than the wealthy. It also penalizes the poor who are engaged in the formal sector as they pay a higher premium than the non-poor in the informal sector as well as their poor counterparts. Assessment of equity in the financing of health care is beyond the scope of our research given our focus on equity in access to health care but it is an important and complementary research inquiry nonetheless.

Implicit in the above approach is the assumption that health seeking behavior is primarily defined by the financial ability of an individual to take appropriate action. We recognize that this is limiting. It is widely acknowledged that non-cost determinants, including preferences, distance, perception of quality of care and cultural norms also affect health seeking behavior. These are further explored in Chapter 5, when we examine the validity of our third hypothesis. For our purposes here, it is sufficient to note that our analysis only involves the financial determinants of utilization (i.e. the "affordability" optics on our access framework, as described in Chapter 2). It is primarily aimed at exploring whether and how household resource allocation decisions potentially affect health seeking behavior of men and women within households, and how the decision is in turn affected by intra-household dynamics, and by external factors such as health financing policies. It is not our intent to make assertions about access to health care on this basis alone.

In summary, the following analysis explores the validity of our first two hypotheses; in particular, (i) inequities in the utilization of health care across socio-economic gradients, and whether and what impact NHIS has and, (ii) the status of intra-household resource allocation for health (using health seeking behavior as a proxy), whether there is a "rationing" bias, how it differs across socio-economic strata, and whether and how NHIS alters this to mediate access frontiers.

The chapter begins with a descriptive analysis of the quantitative data. This provides an overview of the health condition of Ghanaian adults, as recorded at

different points in time over the past 15 years, and as such provides a useful context for the analysis of potential inequities in the utilization of health care. This is followed by an examination of health seeking behavior over time, and its intersects with health financing policy reform. The survey data allow us to investigate this at four data points at the national level: 1991/92, 1998/99, 2005/06 and 2008. The consistency of the data and some of the limitations were detailed in the preceding chapter. This notwithstanding, we have a comprehensive set of nationally representative data to use to explore our hypothesis at various points in time, and to assess whether and what impacts NHIS is having.

Our research recognizes that a national level analysis could mask important differences that might exist between, and within, regions. To mediate this, and to examine changes in health seeking behaviour and utilization of health services in selected regions since the introduction of NHIS, we draw on the analysis of the qualitative data. This is based on data collected from the Greater Accra Region and the Northern Region, two regions that exemplify different degrees of health care urbanization, wealth status and cultural orientation. Within these regions, the analysis focuses specifically on Accra Metropolis, Tamale City, Dangme West and Savelugu-Nanton, the first two representing urban centers and the latter two representing rural districts. This is supplemented by analysis of GLSS 5+ survey data, that provide an overview of health seeking behaviour in three of our focus districts— Dangme West, Savelugu-Nanton, and Tamale.

2. Descriptive Analysis

2.1 Health Condition

Self-reported illness and injury among the adult population in Ghana has been consistently high between 1991/92 and 2005/06, as shown in Table 4.1. On average, 25% of the population reported being ill or injured in the two weeks prior to the survey. While we expected to see some increase in self-assessed illness and injury in the 2008 survey, due to the four week reporting timeframe, the ratio actually decreased drastically, from 23.6% in 2005/06 to 12.1% in 2008. This implies that the country has made significant strides in improving the general well-being of Ghanaians. In spite of what the data suggests, however, there is no evidence to suggest that the health status of adult Ghanaians dramatically improved between 2005/06 and 2008. In fact, a review of various Ministry of Health annual reports reveals concerns about persistently high maternal mortality and disease burden.

Table 4.1. General health condition of the adult population in Ghana

	1991/92*	1998/99*	2005/06*	2008*
Percentage of adults who reported being ill/injured	26.74	29.12	23.64	12.13
Percentage of adult men who reported being ill/injured	25.39	25.04	21.3	10.37
Percentage of adult women who reported being ill/injured	27.87	32.55	25.68	13.67
Percentage of adults who reported being ill/injured by locality as a percentage of the local population:	24.92	25.66	20.94	12.25
Urban ³⁸	27.71	31.06	25.56	12.03
Rural				
Percentage of adults who reported being ill/injured and had to stop their activity because of it	65.27	60.93	58.59	79.32
Percentage of adult men who reported being ill/injured and had to stop their activity because of it	63.68	60.59	60.02	77.33
Percentage of adult women who reported being ill/injured and had to stop their activity because of it	66.46	61.15	57.56	80.62
Percentage of adults who reported being ill/injured by locality and who had to stop their activity because of it:				
Urban	53.46	59.61	54.99	73.86
Rural	70.93	61.54	60.69	83.79
Percentage of adult population who consulted a health practitioner	13.71	13.58	15.74	11.11

Source: Author's calculations based on GLSS 3, GLSS 4, and GLSS 5 surveys and the Citizen's Assessment of the National Health Insurance Household Survey.

* the 1991/92, 1998/99 and 2005/06 surveys asked if household members were sick or injured in the past 2 weeks of the survey. The 2008 survey asked if household members were sick or injured in the past 4 weeks of the survey.

Using the self-reported interruption of activity due to illness as a proxy for assessing the respondents' evaluation of the severity of illness³⁹, we find important

³⁸ There is no clear definition of what is considered "urban" or "rural" in Ghana. The official definition of "urban" refers to localities with a population of 5,000 or more (Boakye-Yiadom 2004; Owusu 2005). Rural Ghana is predominantly agricultural. It is also characterized by a large informal economy, lack of adequate infrastructure and basic social services (Boakye-Yiadom 2004). We use the classification provided by the various surveys as given.

differences between the GLSS and NDPC data that could explain the sudden drop in self-assessed illness. We considered those who reported stopping their activities due to illness/injury to be more seriously ill than those whose illness did not interfere with their daily activities. Applying this distinction reveals that, in general, the majority of those who reported illness/injury have done so across all the surveys. Over half of the adults who reported being ill/injured in 1991/92, 1998/99 and 2005/06 reported that they had to stop activities because of it. The proportion of self-assessed serious illness rose to 79% in the 2008 survey data⁴⁰, which is a 20% increase from 2005/06. This suggests that respondents in the 2008 survey predominantly reported illnesses that were serious enough to cause them to stop their activities, which could in turn explain the relatively low incidence of self-reported illness.

The degree of self assessed illness/injury appears to be generally higher among women. However, the difference was statistically significant only in 1998/99. This is somewhat surprising, given women's greater need for health care. Differences in the health conditions of men and women are not only limited to their reproductive role. It is well known that, compared to men, women generally have a lower mortality rate but higher morbidity, even after reproduction problems are excluded (Bird and

³⁹ We recognize the likelihood of under-reporting the severity of illness among the poor, as they are more likely to continue their activities out of necessity despite severe illness. While recognizing this potential bias in the data, we believe it persists across the various data points and thus the data is comparable.

⁴⁰ Unlike the GLSS surveys, the NDPC survey questionnaire did not have a direct question about whether the individual who reported being ill/injured had to stop his/her activity due to illness/injury. We derived this by creating a categorical variable (yes/no) from the questionnaire which asked "how many days of work/school did [name] miss due to sickness/injury."

Rieker 1999; Doyal 2000; Gomez *nd.*)⁴¹. It could be that there is under-reporting of ill health by women in Ghana, particularly those in the lower socio-economic strata. This notwithstanding, when place of residence is taken into account we find that rural women have the highest degree of self-reported illness, and urban men the lowest (see Diagram 4.1).

The proportion of self-reported illness/injury has been consistently greater among the rural population than their urban counterparts, suggesting there is greater disease burden in the rural population. Conversely, however, the distribution of health infrastructure is highly skewed toward urban areas. For example, as discussed in the previous chapter, excluding intra-regional disparities, 82% of the population of the Greater Accra Region live within 30 minutes of a health facility, whereas in the predominantly rural Northern Region only 40% are within 30 minutes of a health facility (Government of Ghana. Ghana Statistical Service 2005). The distribution of health professionals reveals a similar urban bias. Greater Accra Region has a doctor to population ratio of 1 : 5202, compared to a ratio of 1 : 92,046 in the Northern Region (Government of Ghana. Ministry of Health 2008d). The relatively poor rural health infrastructure, coupled with the high incidence of rural poverty, likely adds to the higher disease burden among the rural population.

⁴¹ Biology and gender also interact to shape some of the differences in patterns of disease. For example, men suffer from heart disease much earlier than women (Doyal 2000); women tend to develop autoimmune disease and mental disorder (depression, anxiety) more often (Chawala and Rout 2007); men suffer from injuries more often; women are more susceptible than men to contract HIV/AIDS virus (Doyal 2000; östlin 2005).

Our analysis of the NDPC survey data indicates that this gap in self-reported illness between rural and urban areas seems to have narrowed significantly in 2008. It is not clear whether this is attributable to the difference in the survey sample size between the GLSS and NDPC data, or if it reflects improved health conditions in rural areas. We suspect the former, as available data does not suggest significant improvements in the country's key health indicators.

Diagram 4.1. Self-reported health status of Ghanaian adults by locality, gender and quintile

Source: Author's calculations based on GLSS 3, GLSS 4, and GLSS 5 surveys and the Citizen's Assessment of the National Health Insurance Household Survey

As depicted above, self reported illness/injury increased with wealth status in the analysis of the three rounds of the GLSS survey data. Initially this is somewhat surprising, given the large body of evidence supporting the correlation between

poverty and ill-health⁴². However, there is also evidence suggesting that the poor tend to under-report their sickness (Schneider & Hanson 2006; Iyer, Sen and George 2007; Lokshin and Ravallion 2008). Our data seem to reflect this reporting bias. This implies that our analysis of the impact of health financing on health seeking behavior among individuals and households in different socio-economic strata should consider that the quantitative data will not likely capture the true extent of the burden of illness among the poor.

As seen in Diagram 4.1, the socio-economic difference in self-reported illness/injury disappears in the 2008 survey data. We offer two plausible explanations for this: (i) it could suggest that NHIS may have raised the awareness of health needs among those in the lower socio-economic strata or, (ii) it could reflect potential differences in the method used to classify households in the wealth quintiles (i.e. expenditure-based classification versus asset-based).

To conclude, the descriptive analysis of the GLSS and NDPC survey data indicates: (i) generally high self-reporting of illness among Ghanaian adults, (ii) greater burden of illness among those who live in the rural areas and, (iii) potential under-reporting of ill-health among Ghanaian women and those in lower socioeconomic strata.

⁴² See Subramanian et al. 2002 for a good summary of poverty-inequality-wellbeing linkages. Also see la Barra 1998; Nayer 2007.

2.2. Health Seeking Behavior Among Adult Ghanaians

Analysis of the survey data reveals a changing trend in health seeking behavior over the past 15 years. As depicted in Table 4.2, the percentage of the adult population who were ill and sought care dropped between the 1991/92 and 1998/99 surveys, from 48.1% to 43.4%, then increased in 2005/06 to nearly 60%. A dramatic increase to 91% is also recorded in the 2008 survey. Recall that the full "cash and carry" system was introduced in 1992, and that NHIS became operational in 2004/05, with most schemes not starting until 2006. Thus, the overall time period of the four surveys is auspicious with respect to capturing two distinct health financing policy regimes.

Table 4.2. Actions taken by ill/injured adults in Ghana

	1991/92	1998/99	2005/06	2008
Percentage of the adult population who consulted a health practitioner	13.71	13.58	15.74	11.07
Percentage of the adult population who consulted a health practitioner				
Men	12.26	11.45	14.13	9.29
Women	14.9	15.36	17.14	12.61
Percentage of the adult population who reported being ill/injured and who consulted a health practitioner in the same period	48.14	43.36	59.96	90.99
Percentage of the adult population who reported being ill/injured and who consulted a health practitioner in the same period by gender				
Men	45.76	42.89	60.79	88.21
Women	49.93	43.67	59.36	92.82
Percentage of the adult population who reported being ill/injured and who consulted a health practitioner in the same period by locality and gender				
Urban Men	56.19	49.15	68.28	94.81
Urban Women	59.01	55.13	67.49	96.79
Rural Men	41.11	40.04	56.63	82.37
Rural Women	45.31	38.38	54.48	89.27

Source: Author's calculations based on GLSS 3, GLSS 4, and GLSS 5 surveys and the Citizen's Assessment of the National Health Insurance Household Survey.

The initial change in health seeking behavior among the sick/injured, reflected by the drop in the percentage of the adult Ghanaians who sought care, confirms our general expectation of how households would react when faced with increased health care costs (assuming that other determinants of health care remain constant). Our finding is also consistent with studies that have reported delayed treatment and an increase in self-medication associated with the introduction of cost recovery policies in Ghana (for example see Waddington and Enyimayew 1990, Asenso-Okyere et al. 1998, Nyongator and Kutzin 1999). What is surprising is the increase in 2005/06, which seems to suggest that the initial adverse impact of the full "cash and carry" system had leveled off over time. However, closer examination reveals that is largely due to a greater reliance on self-medication, through the use of drug/chemical sellers⁴³. Unlike the earlier surveys, the 2005/06 survey included those who visited drug/chemical sellers when they were ill as part of their consultation with a health practitioner. Thus, the percentage of reported consultations is inflated in the 2005/06 survey data. If we exclude this, to make the data comparable to the previous surveys, the percentage drops by ten percentage points, to 50.6. The reduction of the overall level of national poverty rates may also have lessened the adverse impact.

Overall, in terms of basic numbers, more women than men in Ghana seek health care at any given time (Table 4.2). However, if we take illness/injury into account,

⁴³ Drug/chemical sellers are for the most part not qualified to provide professional medical advice. Self-medication provides an alternative to seeking professional health advice for cash-strapped Ghanaians.

the gender differential at the national level disappears. The difference becomes more pronounced when the individual's location (urban or rural) is also taken into account. As expected, there is a significant difference between the urban and rural populations, with those living in urban areas seeking more care than their rural counterparts. Overall, when ill, urban women are more likely to consult health practitioners, followed by urban men.

Diagram 4.2: Pattern of consultation of health practitioner by quintile and gender

Source: Author's calculations based on GLSS 3, GLSS 4, and GLSS 5 surveys and the Citizen's Assessment of the National Health Insurance Household Survey.

There is a significant difference in health seeking behavior between the first (poorest) and fifth (richest) quintiles. This difference has persisted across the data points, with the exception of 2005/06 (see Diagram 4.2). The latter is largely driven by the changes in the survey questionnaire in 2005/06 mentioned above, which

included self-medication (i.e. the use of drug/chemical sellers) in the category of "consulting a health practitioner." As self-medication is predominant among the poor⁴⁴, the survey results inflate the degree of medical care the poor received compared to the rich. If we remove the drug/chemical seller category, to make the data comparable to the previous surveys, we see a consistent pattern of positive correlation between wealth and health seeking behavior.

Further examination of socio-economic status by gender reveals that at our baseline (1991/92), the percentage of ill/injured women and men who reported seeking care did not differ greatly in the lowest wealth quintile. In 1998/99 and in 2005/06, we observe that more men than women in the poorest quintile sought health care. This trend reversed in the post NHIS survey period (2008).

Diagram 4.3: Health seeking behavior among adult Ghanaians who reported illness

Source: Author's calculations based on GLSS 3, GLSS 4, and GLSS 5 surveys and the Citizen's Assessment of the National Health Insurance Household Survey.

⁴⁴ The use of drug/chemical sellers is 38.7% among the poorest and 24.9% among the richest.

Given the variety of methods used by Ghanaians to meet their health care needs, a closer look at who those reporting illness/injury have consulted provides a better view of the nature of the changes in health seeking behavior. As stated above, and also depicted in Diagram 4. 3, the proportion of ill/injured adults who did not seek any care increased between 1991/92 and 1998/99, with a modest reduction in 2005/06, mostly due to the inclusion of self-medication in the survey. We also observe that the introduction of NHIS has significantly altered health seeking behavior among adult Ghanaians; a greater proportion of sick/injured individuals are seeking care.

Whom did those who were ill/injured and consulted a health practitioner consult? Overall, as Table 4.3 shows, there was a significant reliance on doctors/medical assistants among those who consulted a health practitioner, compared to other alternatives. In 2005/06, the use of drug/chemical sellers was also very high, accounting for 32% of the actions taken by ill/injured adults. This dependence on drug/chemical sellers was higher among those who live in rural areas compared to their urban counterparts (36% rural; 26% urban). In 2008, the proportion of those who consulted a doctor/medical assistant increased by 43% compared to the 2005/06 level. Similarly, we see a reduction in the use of pharmacy/drug/chemical sellers and traditional healers⁴⁵.

⁴⁵ The World Health Organization defines the practice of traditional medicine as "... the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness." (<http://www.who.int/medicines/areas/traditional/definitions/en/index.html>) The term is often used interchangeably with "alternative medicine"—including in the context of this dissertation—to

Table 4.3. Whom did those who consulted a health practitioner consult?

	1991/92	1998/99	2005/06	2008
General:				
Traditional healer	12.09	6.51	3.82	2.69
Doctor/medical assistant	65.48	63.1	47.4	67.53
Nurse	8.77	13.37	10.48	9.0
Pharmacist	6.71	6.77	3.12	18.40*
Other	6.95	10.24	3.56	2.39
Drug/chemical seller	n.a	n.a	31.62	*
Men:				
Traditional healer	15.65	8.18	4.02	3.37
Doctor/medical assistant	63.41	62.67	43.67	62.84
Nurse	9.55	10.79	9.83	9.68
Pharmacist	7.11	7.81	4.09	21.43*
Other	4.27	10.55	2.83	2.69
Drug/chemical seller	-	-	35.57	*
Women				
Traditional healer	9.64	5.46	3.68	2.26
Doctor/medical assistant	66.9	63.38	50.16	70.46
Nurse	8.24	15.0	10.95	8.57
Pharmacist	6.42	6.12	2.4	16.5*
Other	8.8	10.04	4.1	2.2
Drug/chemical seller	-	-	28.7	*

Source: Author's calculations based on the GLSS 3, GLSS 4 and GLSS 5 surveys and Citizen's Assessment of the National Health Insurance Household Survey.

* Note that the GLSS survey combined pharmacists and drug/chemical sellers. Thus what is reported here in the pharmacist category is likely to be inflated, as it also includes consultation with drug/chemical sellers.

The reported degree of consultations with traditional healers is surprisingly low, and is greater among men. Its relative importance has diminished significantly over the years. To the extent that this is practiced, it is most common among men in the poorest quintile (not included in the Table). From our analysis of the qualitative

refer to a broad set of health care practices that fall outside the dominant health care system. Although traditional medicine in Ghana is used for a wide range of ailments or injury such as malaria, fever, headache, bone setting, childcare delivery and psychotherapy, among others, we should note that the GLSS and NDPC surveys record the use of traditional healers and traditional birth attendants separately. The use of traditional healers in the context of our analysis thus excludes traditional birth attendants. The latter is reported separately.

data, it is apparent that the survey data underestimates the use of herbal medicine in the country, as it is used most often in conjunction with western medicine, and thus is not captured in the surveys. This notwithstanding, the findings of the analysis of the survey data indicate a general shift from primary reliance on traditional medicine and/or pharmacy/drugstores, toward greater dependence on professional health practitioners. This may in part be due to the fact that NHIS does not cover traditional medicine. Reported consultation with drug/chemical sellers, while a common practice across all quintiles, is most concentrated among the lower income strata.

Table 4.4. The use of doctors/medical assistants among the sick who consulted a health practitioner - percentage by quintile and gender

	1991/92	1998/99	2005/06	2008
General:				
Quintile 1 (poorest)	63.08	54.75	35.78	56.68
Quintile 2	61.27	58.96	39.8	63.36
Quintile 3	63.59	64.71	44.03	68.16
Quintile 4	63.18	66.2	45.99	66.22
Quintile 5 (richest)	70.56	64.75	58.03	78.86
Men				
Quintile 1 (poorest)	63.93	57.94	34.52	47.04
Quintile 2	64.62	68.68	42.4	57.76
Quintile 3	58.95	58.55	38.98	62.19
Quintile 4	64.76	58.6	42.46	65.09
Quintile 5 (richest)	64.46	66.22	51.82	73.69
Women				
Quintile 1 (poorest)	62.32	52.51	36.98	62.37
Quintile 2	59.26	53.46	37.95	66.62
Quintile 3	67.21	68.44	47.9	71.87
Quintile 4	62.21	71.33	48.57	66.79
Quintile 5 (richest)	74.69	63.83	62.23	83.14

Source: Author's calculations based on GLSS 3, GLSS 4, and GLSS 5 surveys and the Citizen's Assessment of the National Health Insurance Household Survey.

Table 4.4 shows an increasing correlation between the use of doctors/medical assistants, and wealth status. The gap between the poorest and richest quintile grew from 10% in 1998/99 to 22% in 2005/06, and there was no change in 2008. Further disaggregation of the pattern of consultation by gender shows modest and inconsistent differences, with a general tendency of women in the richest quintile to rely more on doctors.

2.3. Uptake of NHIS Among Adult Ghanaians

In the four years since the introduction of NHIS, its uptake has been impressive. At the end of 2008, 46%⁴⁶ of the population was actively insured. While there is no statistically significant difference between women and men's membership in NHIS nationally, the NDPC survey shows that the uptake is slightly higher among those who live in urban areas. Urban women make up the greatest proportion of the insured, followed by urban men. Rural men are the least insured (see Table 4.5).

NHIS membership increases with wealth status. Only a third of the adult population in the lowest quintile is insured, while, conversely, a third in the highest quintile is not insured. The data do not reveal a statistically significant gender difference in insurance membership within the same wealth quintile, but the difference is significant when comparing men and women across quintiles, suggesting that wealth status may be a stronger determinant of insurance uptake than gender.

⁴⁶ This is based on NHIA institutional data. The percentage is calculated based on the 2008 population estimate and thus may be different than other estimates that use the 2000 census.

Table 4.5. NHIS membership by gender, locality and quintile
2008

Membership status (%)		
Insured	48.37	
Registered	7.13	
Not Registered	44.5	
Membership status by gender (%)		
	Men	Women
Insured	44.95	51.34
Registered	6.32	7.83
Not Registered	48.72	40.83
Membership status by locality (%)		
	Urban	Rural
Insured	54.06	43.39
Registered	7.08	7.17
Not Registered	38.8	49.44
Insured by locality and gender (%)		
	Men	Women
Urban	51.05	56.56
Rural	39.86	46.58
Membership status by quintile (%)		
	Insured	Not-registered
Quintile 1 (poorest)	30.67	62.6
Quintile 2	38	52.97
Quintile 3	48.06	43.5
Quintile 4	57.48	36.93
Quintile 5 (richest)	63.85	29.93
Insured by quintile and gender (%)		
	Men	Women
Quintile 1 (poorest)	28.42	32.78
Quintile 2	33.53	41.73
Quintile 3	44.1	51.01
Quintile 4	54.12	60.28
Quintile 5 (richest)	60.12	67.53

Source: Author's calculations based on the Citizen's Assessment of the National Health Insurance Household Survey.

Diagram 4.4. Financial burden for health care among Ghanaians

Source: Author's calculations based on the Citizen's Assessment of the National Health Insurance Household Survey.

Both the GLSS and NDPC surveys collected data regarding who pays the medical expenses. As shown in Diagram 4.4, it is clear that the introduction of NHIS has significantly shifted the burden of direct medical expenditures at the point of service away from households, and from relying on the good will of relatives. In the years prior to the introduction of NHIS, households paid 89 to 94% of the health care cost at the point of service, and this decreased by about half in the post NHIS survey, to 47%. While this signals a major shift away from out-of-pocket payment, it is important to note that an equivalent proportion of households (46%) still do pay out-of-pocket. As stated earlier, given that the uptake of NHIS membership is the lowest among the poor and those living in rural areas, it is likely that the majority of

those who pay out-of-pocket and continue to face financial barriers in access to health care are found in this group.

2.4. Local Realities: Health Conditions and Health Seeking Behaviour in Selected Localities

While the above analysis provides a good overview of the burden of care and health seeking behaviour at the national level, we recognize that national aggregates can mask important inter and intra-regional differences. The GLSS 5+ survey allows us to see health conditions and health seeking behaviour in three of our case study districts: Dangme West, Savelugu-Nanton, and Tamale.

Table 4.6. Health Seeking Behavior in our Case Study Districts*

	Dangme West	Savelugu-Nanton	Tamale
Percentage of adults who reported being ill/injured	19.83	16.5	9.19
Percentage of adult men who reported being ill/injured	17.09	15.17	7.48
Percentage of adult women who reported being ill/injured	22.2	17.64	10.94
Among those who reported illness/injury, percentage who consulted a health practitioner in the same period	31.16	35.24	63.51

Source: Author's calculations based on GLSS 5+ survey.

* The GLSS 5+ survey does not include Accra.

As shown in Table 4.6, there are notable urban-rural differences in the burden of illness, as well as the utilization of health care, by those who reported being ill/injured. We see a significantly higher burden of illness in the two rural districts

of Dangme West and Savelugu-Nanton, than we do in Tamale. Whereas 19.8% of the adult population in Dangme West and 16.5% in Savelugu-Nanton reported being ill/injured in the two weeks preceding the survey, only 9.2% reported this in Tamale. This is consistent with our earlier findings, which suggested that the disease burden appears to be greater in rural Ghana. We also observe that, across all localities, slightly more women reported illness/injury than men. This finding is also consistent with the national level data presented earlier, and it reflects women's higher morbidity. What is interesting, though not entirely unexpected, is the stark rural-urban differences in the utilization of health care among those who reported illness/injury: 31.2% in Dangme West, 35.2% in Savelugu-Nanton, and 63.5% in Tamale.

Compared to the national estimate of a 91% utilization rate reported earlier on the basis of the NDPC survey data, these figures—even Tamale's comparatively higher percentage—are extremely low. The discrepancy could have been partly due to the fact that the NDPC survey captured reported illness and associated health care utilization in the four weeks preceding the survey, while the GLSS surveys captured the data over only two weeks. It is plausible that the 91% national average in the NDPC survey would have been lower if the timeframe had been limited to only two weeks, although the difference would not likely have been significant. Although the two data sets are not directly comparable, Table 4.6 indicates that national level estimates do not adequately reflect local realities, and that important intra and inter-regional differences exist.

While the Northern Region is considered one of the poorest regions in the country, we noticed significant differences between urban Tamale and Savelugu-Nanton, which is considered a rural district. Dangme West, one of the poorest districts in Greater Accra Region (GAR), is also predominantly rural. There are interesting similarities in the burden of care and in health seeking behaviours between Dangme West and Savelugu-Nanton. This suggests that urban-rural grouping may be more meaningful than region-based comparisons⁴⁷.

As noted in the methodology section, the available data do not allow further disaggregation by sex or quintile. It also does not allow detailed examination of the potential linkages between NHIS status and health seeking behaviour. This is a major limitation in the GLSS5+ data in terms of our analysis. For example, the low utilization rate in the two rural localities reported above is likely to correlate with the higher proportion of poor living in rural Ghana and who do not likely have health insurance. The qualitative data collected for this study (and presented in the next section) provides for closer examination of this, and allows us to better understand the local level realities, experiences and challenges of women and men who want or need access to health care.

⁴⁷ Asante et al. (2006) found significant intra-regional inequities in resource allocation for health. They argue that the focus on inter-regional comparisons mask such differences and call attention to the need to address sub-regional inequities.

3. Statistical Analysis

The descriptive data presented above provided us with an overview of the changes in health seeking behaviour and the utilization of health services at different points in time, pre and post NHIS. We used a logistic regression model to further explore whether there are differences in utilization of health care along socio-economic lines, and if so whether and how this inequity has changed over the years. Our aim is to examine the hypothesized impact of the introduction of NHIS with respect to facilitating equitable access to health care by the poor. Our dependent variable is the likelihood of consulting a health practitioner. Our independent variables are: reported number of days ill, age, sex, health insurance and wealth status. We anticipate the need for health care will vary, based on (i) the severity of illness, (ii) age and (iii) sex. In addition to wealth status, we anticipate that whether an individual has health insurance, and where they live (urban or rural) will likely affect his/her utilization of health care as well. However, since wealth status is highly correlated with whether the individual lives in rural or urban areas (i.e. the majority of the poorest are concentrated in rural areas), we did not include location with among independent variables⁴⁸.

With regard to the utilization of health care, we are not restricting our analysis to professional health care. We also examine alternative care, including traditional

⁴⁸ We run a separate regression substituting wealth status by locality, and the results are consistent. Location is a significant predictor of the likelihood of seeking health care. Those in rural areas are 40% less likely to consult a health practitioner compared to those in urban areas.

healers or traditional birth attendants, and others. Our analysis is limited to adult Ghanaians (i.e. 18 years and older) who reported being ill or injured. Our control group is men and the richest quintile.

We developed four models. Model 1 tests the independent effects of number of days ill, age, sex, and wealth on treatment seeking behaviour. The regression was done for all the GLSS and NDPC survey data. Model 2 focuses on the 2008 survey data (i.e. post NHIS), and adds health insurance as an explanatory variable. Model 3 tests the independent effects of number of days ill, age, sex, wealth, and health insurance on the likelihood of the sick to consult a doctor/medical assistant. Model 4 tests the independent effects of age, sex, and length of illness within each of the wealth quintiles, to evaluate potential gender differential in health seeking behaviour in the groups. All the models indicate whether the explanatory variables are independently significant. We tested whether sex and wealth relate to each other, and found that the results are not statistically significant.

Table 4.7. Model 1: Likelihood of consulting a health practitioner

Independent variables	Logistic Regression			
	<u>1991/92</u>	<u>1998/99</u>	<u>2005/06</u>	<u>2008</u>
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Number of days ill	1.10*	1.09*	1.03*	na
Age	0.99*	0.99*	0.99*	1.03*
Female	1.14	1.03	0.94	2.07*
Quintile 1	0.43*	0.44*	0.65*	0.10*
Quintile 2	0.52*	0.47*	0.75*	0.30*
Quintile 3	0.57*	0.56*	0.69*	0.49
Quintile 4	0.70*	0.64*	0.84	0.50
Sample size (N)	2489	3703	4328	583

Note: model 1 tested the independent effects using the richest quintile and men as a reference group. * $p < .05$

As shown in Table 4.7, wealth is a significant predictor of the likelihood of consulting a health practitioner. Holding the number of days ill and age at the mean, and holding sex constant, a move away from the highest wealth quintile reduced the likelihood of consulting a health practitioner in both 1991/1992 and 1998/99. As expected, the change is more pronounced at the lowest quintile, where the move from the richest quintile to the poorest reduced the likelihood by more than half (57% in 1991/92 and 56% in 1998/99). The results are similar for 2005/06, except that the decrease in likelihood is smaller (35%). This seems to indicate that inequities between the richest and poorest quintiles have decreased over time. However, as discussed earlier, the 2005/06 survey is not directly comparable to the previous surveys, as it includes self-medication as a "consultation of health

practitioner" and thus artificially inflates the utilization of health services. As self-medication is more common among the poor, it is expected that it will account for much of the apparent reduction in inequity. The magnitude of inequities aside, the regression results for the pre-NHIS data points indicate a strong correlation between wealth status, and the likelihood of an ill or injured person consulting a health practitioner.

The regression results for post NHIS (2008) also indicate some correlation between wealth status and health seeking behaviour among the ill/injured. Unlike the previous surveys, the difference is only significant when moving from the highest wealth quintile to the lower two quintiles. The move from the richest quintile to the poorest reduced the likelihood by a significant 90%, and moving to the second poorest reduced it by 70%.

Given that NHIS status is an important variable that can affect health seeking behaviour, we ran a separate model for the 2008 data, adding health insurance status as an independent variable. The result, presented in Table 4.8, shows that holding the number of days ill and age at the mean, and holding sex and NHIS status constant, a move from the highest wealth quintile to the lowest and second lowest reduced the likelihood of consulting a health practitioner by 87% and 66% respectively. The difference moving to the 3rd and 4th quintiles is not significant.

Table 4.8. Model 2 - Likelihood of consulting a health practitioner

Logistic Regression 2008		
Independent variables	Odds Ratio	<i>p</i> -Value
Age	1.02	0.025
Female	1.85	0.056
Active NHIS member	2.74	0.004
NHIS registered*	2.76	0.132
Quintile 1	0.13	0.000
Quintile 2	0.34	0.068
Quintile 3	0.51	0.327
Quintile 4	0.48	0.234
Sample size (<i>N</i>)	583	

Note: the model tested the independent effects taking account of health insurance status, and using the richest quintile and men as a reference group.

* NHIS registered are those who do not yet have a valid NHIS membership card, and so are not currently covered by insurance

The above analysis strongly supports our first hypothesis that, in the absence of effective social protection mechanisms targeted toward the poor, market-based health financing reforms will perpetuate or exacerbate existing inequities in access to health care. There is evidence of inequity in the "cash and carry" health financing regime that preceded NHIS, and during the NHIS regime as well. Further, contrary to intentions, NHIS seems to have exacerbated inequities in utilization of health care between the wealthiest and the lowest two quintiles. The design of the NHIS included social protection mechanisms meant to exempt "indigents" from paying premiums. However, given the narrow definition of indigents, in practice only about 2.5% of the population are exempted. Compared to the estimated 29% poverty rate in Ghana, this is a long way from providing effective social protection for the poor.

It is worth noting that in the pre-NHIS regime, utilization was highly skewed toward the richest quintile, with a drop in utilization as one moved down the successive quintiles. In the NHIS regime however, we see that the upper three quintiles seem to have gained equal access, with the differences concentrated only between the upper and lowest two quintiles. The significance of this is it suggests that utilization has increased overall, though mainly benefiting those in the middle and upper wealth quintiles. However, the equity gap between the wealthiest and poorest quintiles seems to have widened. Model 2 also shows that NHIS status is a significant predictor of utilization of health services. Active NHIS members are nearly three times more likely to consult a health practitioner than those with no insurance. Our second line of research inquiry is whether and how access to health care, as measured by the utilization of health services, differs between women and men in different social strata. We found that gender is not a significant predictor in both Model 1 and Model 2. Holding other dependent variables at their mean or constant, gender does not predict the likelihood of treatment. In Model 3 (Table 4.9) we explore whether the gender differentials are evident in each quintile, as opposed to at the aggregate level. Our expectation is that gender based inequities will be pronounced in the poorest quintile when the cost of health care increases.

We found that gender was significant in the poorest quintile in 2005/06. While all other variables held constant or at their mean, being a woman in the lowest quintile reduced the likelihood of seeking health care by 30%. This suggests that the impact of the "cash and carry" system over time has put the poorest women at a

disadvantage in terms of access to health care. Unfortunately, the small sample size of the NDPC survey does not allow for analysis of health seeking behaviour disaggregated by quintile and gender, and so we cannot assess if the gender disadvantage in the lowest quintile observed in 2005/06 prevails. Results from our qualitative data suggest otherwise.

Table 4.9. Model 3: Likelihood of consulting a health practitioner

Logistic Regression (1991/92)					
Independent variables	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Number of days ill	1.04	1.09*	1.06*	1.13*	1.14*
Age	0.98*	0.98*	1.00	0.99	0.98*
Female	1.07	1.26	1.00	1.14	1.22
Sample size (N)	347	409	476	554	703
Logistic Regression (1998/99)					
Independent variables	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Number of days ill	1.09*	1.06*	1.10*	1.11*	1.09*
Age	0.99	0.99*	0.99	0.99	0.98
Female	0.77	1.18	1.08	0.92	1.4
Sample size (N)	554	640	673	806	1030
Logistic Regression (2005/06)					
Independent variables	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Number of days ill	1.03	1.06*	1.04*	1.00	1.03
Age	0.98*	0.99*	0.99	1.00	0.99*
Female	0.70*	1.11	0.74	0.97	1.09
Sample size (N)	703	733	792	908	1192

Note: Model 3 tested the independent effects of gender and wealth status within each wealth quintile group. * $p < .05$

Our analysis to this point has not distinguished between the kinds of care people in different wealth quintiles rely on. Thus, we have made 'consultation with a professional health practitioner' equivalent to consulting an herbalist or a pharmacy, or even self-medicating. To account for this, and to explore the extent of reliance on doctors or medical assistants by women and men, and by those in different socioeconomic strata, we run a separate regression (see Table 4.10 and 4.11).

Table 4.10. Model 4a: Likelihood of consulting a doctor/medical assistant

Independent variables	Logistic Regression		
	<u>1991/92</u>	<u>1998/99</u>	<u>2005/06</u>
	Odds Ratio	Odds Ratio	Odds Ratio
Number of days ill	1.00	1.03	1.08*
Age	1.00	1.00	1.00
Female	1.15	1.02	1.26*
Quintile 1	0.74	0.66	0.40*
Quintile 2	0.64*	0.76	0.44*
Quintile 3	0.73	1.00	0.54*
Quintile 4	0.71	1.07	0.59*
Sample size (N)	1196	1600	2590

Note: Model 1 tested the independent effects using the richest quintile and men as a reference group. * $p < .05$

Table 4.11. Model 4b: Likelihood of consulting a doctor/medical assistant

Logistic Regression 2008		
Independent variables	Odds Ratio	p-Value
Age	1.01*	0.003
Female	1.47*	0.045
Active NHIS member	3.09*	0.000
NHIS registered	0.81	0.613
Quintile 1	0.34*	0.003
Quintile 2	0.43*	0.008
Quintile 3	0.48	0.053
Quintile 4	0.51	0.055
Sample size (<i>N</i>)	531	

Note: the model tested the independent effects taking account of health insurance status and using the richest quintile and men as a reference group.

* $p < .05$

As shown in Tables 4.10 and 4.11, wealth status (when holding number of days ill and age at the mean, and holding sex and NHIS status constant) was only a significant predictor of the likelihood of consulting a doctor/medical assistant in 2005/06 and 2008, whereas going further from the richest quintile the likelihood of consulting a doctor/health practitioner diminishes. For example, in 2005/06 the move from the richest quintile to the poorest reduced the likelihood by 60%. Similarly, in 2008 the likelihood decreased by 66%. Sex is also a significant predictor of consulting a doctor/medical assistant. Holding number of days ill and age at the mean, and holding wealth and NHIS status constant, being a female increased the likelihood of consulting a doctor/medical assistant by 26% in 2005/06 and 47% in 2008. As discussed in the next section, our analysis of the qualitative data confirms and highlights this.

What can we surmise, based on the above analysis? While we have some basis to assess the validity of our second hypothesis, some questions must be answered before we can make a conclusive assessment. Is there rationing of resources for health care among the poorest households, and is it gender biased? Is there evidence of discount rates among the poorest households? In addition, the quantitative data analyzed above only reports on whether an individual seeks treatment when ill or injured; it does not take into account how long women and men had to wait before seeking care, nor how they financed it. This means it does not differentiate between someone who was able to meet health expenditures with little or no difficulty, and someone who had to wait longer and was forced to sell assets or borrow to meet the costs. These are all important considerations for assessing gender equity in access to health care, and the quantitative data cannot adequately address them. To fill this gap, we now analyze the qualitative study data. A qualitative analysis also allows us to explain the observed health seeking behaviour and access barriers.

4. Qualitative Analysis

As described in the methodology section, focus group discussions (FGDs) were held in selected metropolis/districts in the Greater Accra Region (Accra Metropolis and Dangme West), and in the Northern Region (Tamale and Savelugu-Nanton). In this section, we draw on the FGD findings to complement and further explore our

analysis of the data, by examining the validity of our first two research hypotheses at regional levels. As separate focus groups were held for women and men, and for those with health insurance and those without, we were able to capture diverse experiences in accessing health care by gender, and also compare the experiences of those with and without health insurance.

Table 4.12. Characteristics of FGD participants

Characteristics	Men	Women	Total
Insured	31	37	68
Not insured	29	30	59
Married*	44	44	88
Divorced	-	6	6
Widowed	3	9	12
Single	13	8	21
Earn income	47	43	90
No income**	4	24	28
Student	9	-	9

* includes 4 men with multiple wives

** does not include students

4.1. Health seeking behavior

A brief overview of self-assessed health conditions of the FGD participants provides useful context for the analysis of health seeking behaviour among Ghanaian adults.

As expected, expressed need was closely linked with age, with older women and men reporting they needed more care than youth. We also found an important gender difference in the perception of health care needs. Women in both urban and rural areas expressed greater need for health care than men. Most of the male

participants stated that they did not have much need for hospitals, due to their generally good health. As one participant in Accra (Ayawaso) said, "... I don't fall sick. I wouldn't even use the word hardly. I don't fall sick. Period. But once in a while I go for checkup." Referring to his good health standing, a participant in Savelugu-Nanton said that he hasn't been to the hospital for 10 years. Another stated that the last time he visited the hospital was 20 years ago, and still another said that he went to the hospital recently, but only because he had an accident and needed urgent care. This perception of generally good health status is more pronounced among those who have not taken up health insurance, indicating that there could be adverse health conditions among the men who have signed up for NHIS. However, men generally believe that their wives and children need more health care than themselves, mostly due to pregnancy and other illnesses related to reproduction. As we will see in the following section, men's general perception of their health and that of their wives has important implications for the uptake of health insurance, and for decisions regarding intra-household resource allocations for health, particularly among poor households facing financial constraints.

What actions do people normally take when they become ill? The results of our FGDs reveal that this clearly depends on whether one is insured or not, and to some extent on gender and locality of residence.

We observed that the first thing the overwhelming majority of people do when they become ill or injured, whether they are insured or not, is self-medicate. This usually

means going to a drugstore, and for some, seeing an herbalist as the first line of consultation. The key question is, can the ill or injured get the necessary care when they need it? Also important in terms of our research hypothesis, is whether those without health insurance face barriers to access to health care, and if those who have health insurance also face these barriers. In other words, is the introduction of NHIS having any impact on the health seeking behaviour of adult Ghanaians?

It is common for those without insurance to wait longer before seeking professional medical advice than those who have insurance. The waiting time seems to be generally higher among the poorest individuals, in both rural and urban areas. A woman in Savelugu-Nanton who does not have health insurance, succinctly described the challenge of accessing health care faced by most poor people , "... if you are sick you stay in the house and pray to God that you get better." A woman in Tamale said that she was extremely ill by the time she was able to visit the hospital, and ended up being hospitalized for eight days, which cost her more than 100 Ghana Cedi (equivalent to \$ 97 CAD at that time). Several others mentioned similar experiences. Another common phenomenon among poor people with no health insurance is delayed or inaccurate diagnoses of their illnesses. As a woman in Tamale remarked, they rely on their own assessment of their illness, and take the medication that they think will help, or what the drugstore keeper—who is not qualified to give professional advice—suggests. A woman from Kpeshie noted that, "I suffer from asthma. I didn't know what the problem was and so I was buying all kinds of drugs. But when the national health insurance came, I went to the hospital

and they told me what it is and gave me drugs. So I know now what drug to use when the illness comes.” Another participant added, “. . . previously one can be suffering from illness for a very long time before knowing what the problem was. We had to go and buy drugs to take care of the illness which we don’t even know what it was. But now it is not the case anymore. We can go to the hospital and get proper diagnoses.” Malaria is a common illness among Ghanaians, and most people self-medicate when symptoms of malaria appear. There is evidence suggesting that other illnesses are often mistaken for malaria, leading to ineffective treatment and sometimes making the condition worse.

Among the uninsured, the financial barrier is seen as the most difficult impediment to access to health care among women, in urban and rural areas alike, as well as among rural men. Since poor people with no insurance tend to wait until their illness is very severe, they also end up spending more money for treatment; thus they have a greater financial burden for health care. Most of the uninsured men in Accra (Ayawaso and Kpeshie) who participated in the FGD, reported that they go to the hospital if their illness is serious, and prefer the "cash and carry" system.

The use of drugstores as the first source of treatment is not unique among the uninsured. We found little evidence that those with health insurance rushed to the hospital. Unless the illness persists after self-treatment, or the individual has a known medical condition, Ghanaians will usually self-medicate first. Those with health insurance coverage said that they generally wait a couple of days before

going to the hospital. The key differences of those without insurance are, (i) the length of time before they seek professional medical advice and, (ii) whom they consult.

We found widespread use of herbs among adult Ghanaians, more so than the quantitative data suggests. It is particularly high in the Northern Region, where herbal treatment is a common practice, even among those who have health insurance. For some conditions, such as boils, broken legs, migraine or poison, traditional medicine is strongly preferred, as it is believed to be more effective than conventional medicine. Also, for most people the use of herbs and conventional medicine are not mutually exclusive. Many in the Northern region, and some in Dangme West, reported using both forms of treatment simultaneously for a given condition. The household surveys don't typically allow multiple responses, which could be one reason why the survey data underreports the use of traditional medicine, since it tracks only those treatments where the use of traditional medicine is the primary and only resort for an illness or injury. The overall use of alternative/traditional medicine is more prevalent among men. Women generally prefer to use health facilities more than men, although there are reports of them also using traditional medicine, particularly in the Northern region. Women in Accra are the least likely to use traditional medicine.

The important difference with respect to the type of treatment people with and without health insurance rely on, is the options available to them. For the poor with

no health insurance, the use of traditional medicine is sometimes their only option for treatment, not necessarily the preferred one. As a participant from one of the most deprived areas in Accra expressed, "... sometimes when the sickness comes unexpected, you look at the amount of money you have and that tells you where you go. We go to the herbalist because it is cheaper. The herbal medicine gives us a relief for sometime but it does not take the illness away. . . Even if we manage to go to the hospital we don't often afford the medication." The choice of treatment accessible to the poor without health insurance is severely limited.

In addition to comparing the health seeking behaviour of women and men with insurance and without, our FGDs also explored whether there are significant changes in behaviour among those who are insured, compared to when they were not. We asked the participants for their own assessment of how their current health seeking behaviour compared to the pre-NHIS era.

There is strong evidence that those with insurance, (i) use health facilities more often than before when their illness requires it and, (ii) wait less time than they did previously before going to the hospital/clinic . Most participants, regardless of their location of residence, said that prior to NHIS they sought medical care from a health professional only when the condition was critical, and when they had money. Now the financial barrier to accessing health care is significantly reduced, thus the decrease in the delay time before diagnosis and/or treatment. As one woman

participant from Savelugu-Nanton said, "... we do not waste much time before seeking medical care."

Asked what changed in their health seeking behaviour after getting health insurance, one participant from Kpehsie said that he had diabetes that went undiagnosed for a long time, and that he lost one of his legs to the illness as a result of delayed treatment. Now he is able to get a regular medical follow-up. A woman in Tamale expressed, "... In the early days, it was very difficult to go to the hospital because the transportation cost alone was too much. But now even if transportation cost still remains, at least I don't have to pay for the hospital. So I go more frequently to the hospital than before." Another women who is diabetic said,

"... before, I only went (to the hospital) once every six months or even a year, because transportation cost and hospital fees were too much. Now I go every month. It is the same thing with our children. As soon as I see that the body is warm I take the card and go (to the hospital). But in those days, hmmm, you prescribe paracetamol (a painkiller), you prescribe medicine for your children and sometimes you make the sickness worse. But these days, you just pick your card and go to the hospital. They will check and give you the right treatment for yourself and for your children. In the old days sometime we didn't even take our children to the hospital if we didn't have money. It is not that we don't know the way to the hospital, but transportation to the hospital is expensive and then we have to pay for the hospital. But things are different now. Health insurance is really helping us."

Similarly, a women in Savelugu-Nanton noted, "... before the insurance, we relied a lot on concoctions for first aid. Now we can go to the hospital. It is the same with children. Before, if my child had fever, I would just put cold water on him to cool him down and send someone to the drugstore to buy some drugs. But now I take him to the hospital." Another participant from Kpeshie related, "... if we had national health insurance at the time my father was sick, I am sure he wouldn't have died. But he died because there was no money."

Although our findings are not conclusive, the anecdotal evidence from our FGDs also suggests that NHIS has made hospital delivery a feasible alternative for those who are insured and live within accessible distance from the hospital or maternity home. A participant from Kepeshi recalled,

"... previously when you have a baby at the hospital and your husband does not have money to have you discharged from the hospital, or a family member does not have the amount of money required to have you discharged from the hospital, you will be there for a long time. You have to take your bag and secretly run away without the knowledge of the doctors. But with national health insurance you deliver and you are discharged. Now we are no longer detained. Previously we were detained."

Another women echoed this experience: "... a relative delivered in the hospital and she had a cesarean and we had to contribute money to have her discharged. It took over two months to be able to get the money to have her discharged. Getting the money was very difficult." Another added, "... we have benefited a lot from this

national health insurance. Because previously if you don't have money to be discharged from the hospital your baby could crawl and even walk in the hospital before you are discharged. But national health insurance really helped us. We no longer go through this." Because poor women often rely on traditional birth attendants for their delivery, they often rush to the hospital when they have complications with the birth, or when they or their babies are considered to be at high risk. Such complications often elevate the fees, due to longer hospitalization or the need for surgery. Meeting these costs can be daunting for those who do not have insurance coverage.

The use of hospitals/clinics is generally greater among women than men, even among the insured. This reflects the fact that women report greater health care needs than men, and that men tend to wait longer than women before going to hospital. The most frequent reason given by men for this is the long waiting time at the health facilities, and the inherent opportunity cost. When asked what changed for them post-NHIS, several men from Dangme West reported that, even if they don't rush to the hospital, it gives them the confidence that anytime they need to go to the hospital they can do so without, "... panicking where the money is going to come from." One participant further elaborated, "... we don't get money every day, and so if we get sick we can depend on NHIS to meet our health care needs." This sense of security has also been seen to extend to the fulfillment of their family responsibilities: "... many times some of us travel outside the district for work.

Maybe you are away and something happens to your wife and there is nobody to help you. But if she is insured she can go and so it is very good.”

Interestingly, the insured and non-insured men and women in our FGDs rarely used health facilities for general checkups. Among the 127 individuals who participated in the FGDs across our case study sites, only one person in Accra mentioned a regular health checkup. He was not insured, and preferred to pay for the service (his wife lives in the USA). This non-use of facilities may be due to the fact that a large majority of FGD participants were low income and poor individuals; the pattern could very well be different among the more affluent Ghanaians. What we find from our analysis is a continued emphasis on curative care among the low income and poor people in Ghana, even those with insurance.

Finally, we found no evidence in our case study sites, either rural or urban, that women need men's "permission" before seeking care. Women generally informed their husbands and/or neighbors before going to the hospital or seeking alternative care. However, as discussed in the next section, given Ghanaian women's strong reliance on their husbands to meet health care expenditures, when and what kind of health care they seek is often indirectly dictated by their husband's resource allocation decisions. By revoking the need for payment at the point-of-service, NHIS brought about significant changes in household resource allocation dynamics. As a woman in Savelugu-Nanton explained, "... before NHIS, I had to always quarrel with

my husband for money because I had to pay for medical treatment every step of the way. But now I don't need to worry. I just take my insurance card and go."

4.2. Household resource allocation decisions

Given that financial barriers constitute a significant impediment to access to health care for Ghanaians, analysis of the household resource allocation decisions and the resulting impacts on access to health care is relevant. In this respect, our FGDs sought to understand four key issues: (i) who generally makes decisions within the household about how money is allocated, (ii) how are resource allocations for health determined and who pays for it, (iii) who makes the decision about NHIS membership and who pays for the premium and, (iv) whether and how household dynamics *viz* resources for health has changed as a result of NHIS.

Our findings confirm Ghanaian women's high participation in the labour force. A large majority of the women in our FGDs were involved in petty trading, which earns them very little money. Women are generally expected to "assist the men" and contribute to the upkeep of the family. Men generally consider themselves to be the principal breadwinners and providers of their households. A participant from Dangme West declared, "... according to our custom it is the man's responsibility to take care of the family. A women is a helper." We found very little evidence of income pooling, or of explicit contracts regarding the financial responsibility of household members. When asked if they know how much their husbands earn, and

if their husbands know how much the wives earn, women generally laughed and responded with a resounding, "No!" A women in Kpeshie remarked, "... my husband doesn't know how much I make, neither do I know how much he makes. Sometimes he gives me money for things and would ask me to add something. If I have money I add to it and if not I don't." Women and men seem to be independent in terms of the use of their own earnings. However, there appears to be informal understanding of their respective financial responsibilities, albeit largely based on the perception of the other's income. Intra-household resource allocation decisions are thus often a frustrating process, marred by conflict.

Men pay for big item expenditures, like maize flour or guinea fowl, and expect their wives to supplement this with their own money to get what is required to prepare the food. Women are also generally responsible for children's upbringing, including their schooling. Health expenditure is generally considered to be primarily the man's responsibility. Most of the male FGD participants stated that, even if their wives work and contribute to the family's upkeep, it is the man's responsibility to take care of the health of his wife and children, albeit with contribution expected from the women. Although these are tacit rules governing most Ghanaian households⁴⁹, the household allocation decisions and intra-household dynamics are not without conflict and ongoing negotiation. Some of the women participants noted

⁴⁹ We expect the situation to be different among households where a woman is educated and earns a reasonable income of her own, in which case the dependency on her husband would be less. The intra-household dynamics and resource allocation is also expected to be different. Our analysis portrays what goes on in a traditional home and among the low income households where resource allocations are made under financial constraint.

that, if their husbands refuse to allocate resources to meet their expected responsibilities, they will use their own money, even if they have to borrow to make ends meet.

Many of the uninsured women described their constant struggle to negotiate with their husbands for resources to meet their health expenditures; they sometimes succeeded, but in most cases only when the need was at critical stage. Indeed, most also recognize the resource constraints. Among the participants from Accra—and in the other case study sites to some extent—several women reported resorting to borrowing or seeking help from their relatives to meet their health care needs.

We explored who paid for health insurance premiums among those who were insured. A large majority of those who are married reported that the husbands paid for it. This is consistent with the findings of the survey data reported above. What is somewhat surprising, is that we also found instances where a man has insured his wife and children, but not himself. We discuss this point later.

We also found strong evidence that NHIS is a welcome initiative for average Ghanaian men, as it provides them an "affordable" option for fulfilling the societal obligations of being the primary caretaker of the health of their wife and children⁵⁰. A participant from Savelugu-Nanton explained, ". . . as a father and a husband, health

⁵⁰ We should note that the financial constraint is greater among polygamous households, particularly given the expectation that one either insured all wives and children or insures none.

insurance has helped me a lot because if your child or your wife is sick, the responsibility is yours. Before health insurance, if your wife had fallen sick or your child had fallen sick and you do not have money, you yourself are a failure and will fall sick because naturally you feel bad because you are not able to take the responsibility. So naturally, the health insurance has relieved that burden and now I work with surety that I don't have to worry about it." Another echoed this, remarking, "... with health insurance when you are sleeping you have a sound sleep because you are not thinking of saving money to pay for health care in case your wife and children get sick." This sense of societal expectation appeared to be stronger among participants outside Accra. For those in Accra, particularly in Kpeshie, cost-saving was the primary reason given for the uptake of insurance.

Table 4.13. NHIS premium rates (yearly)

Locality	Insurance Premium*	Registration Fee
Ayawaso	18 cedi	4 cedi
Kpeshie	20 cedi	4 cedi
Tamale	7.2 cedi	3 cedi
Savelugu	7.2 cedi	3 cedi
Dangme West	10 cedi	4 cedi

* 1 Ghana Cedi is equivalent to .74 CAD as at Oct. 5, 2009 rate

This does not imply, however, that every Ghanaian who can afford the health insurance premium is insured. While we found that, among the uninsured the main reason for not taking up insurance is financial constraints, we also found that financial constraints are not the only—and perhaps not the major—determinant of health insurance uptake, particularly in Accra. Among the participants in Kpeshie,

we found several men who simply chose to pay for services when they need them, in part because of their perceived good health, as well as their preference for "cash and carry," which they claim renders faster service⁵¹. There are also women and men in other sites who chose to either delay or not take up insurance, due to perceived or actual negative experiences of those with insurance. This notwithstanding, health insurance is generally considered a beneficial initiative among Ghanaian women and men, and those who are not insured are overwhelmingly among the poorest, who simply cannot afford the premium. Thus, the poorest are benefiting least from what NHIS has to offer.

In view of this, we explored intra-household resource allocation decisions in Ghanaian households facing financial constraints. We found some instances where men insured only their wives and their children when they were experiencing financial constraints. This is initially puzzling, given that men are generally considered to be the main breadwinners, which leads to our expectation that the meager resources will be prioritized to ensure their good health. Upon closer examination, however, we found two plausible explanations for this apparently odd finding. One relates to the Ghanaian family structure and kinship ties, and the other to the place of children in Ghanaian society.

⁵¹ We need to keep in mind here that (i) as shown in Table 4.10 insurance premium is generally higher in Accra than in the Northern region; and (ii) the high concentration of health facilities and medical staff in Accra provides a lot more option for individuals who seek care compared to the other 3 case study sites.

Those who insured only their wives and children all claimed to have primary responsibility for them, thus their rationale for prioritizing them when facing financial constraints. Underlying this, however, is the men's perception of their relatively healthy status compared to their wives and children, and so the decision appears to be made on the grounds of pragmatism as well. In Dangme West for example, 60% of the FGD participants had insured their wives and children, but not themselves. Asked why, one replied, "... in our tradition if you go and marry somebody's daughter all things will depend upon you, the man. . . I can say that you have to save for insurance because women fall sick often. Pregnancy is not a sickness, but if it comes it is the duty of a man to cater for his wife's health care needs." Similarly, when asked why they don't prioritize their own health, given their role as primary breadwinners, a participant from Savelugu-Nanton explained, "... if you are well you are fine. When you fall sick and you go to the hospital and you are unable to pay bills, family members are compelled to pay because it will denigrate the family name because a family member went to the hospital and they couldn't even pay his medical bills. . . family members are compelled to pay for you. Society expects that the family members would come and rescue you." But when asked if he would expect the same had it been his wife at the hospital instead, he replied that it is the man's responsibility—not the extended family's—to pay for his wife, stating, "... it is you who brought her to your family and so it is your responsibility to take care of her." Another participant said, "... if I fall sick, most people won't see me as sick but if my wife is sick, they will say 'why aren't you taking your wife to the hospital?'" Thus, household resource allocations for health seem to reflect the

combined effects of norms, women's lower earning power, and men's perception of their infrequent need for health care compared to their wives and children.

Several participants also mentioned their obligations toward their extended families. Asked why they don't use their own earnings to pay for their insurance premium, a number of women noted that it is their husband's responsibility to pay for their health, and that they use whatever little money they make for upkeep of the family, or to pay for children's schooling. The choice to take up insurance for them is a choice between the two. In addition, they are expected to contribute towards their own extended family's (e.g. father, mother, etc.) health care costs. We found supporting evidence for this obligation to the extended family: Almost all the widowed and elderly participants in the FGDs said that their children or grandchildren paid for their insurance premium, or for their registration if they are exempted. Thus, resource allocation decisions within typical Ghanaian families extend beyond the confines of the nuclear family.

The high regard for children in Ghanaian families provides another plausible explanation for the apparent household priority accorded women and children for health insurance coverage. Children have a special place in Ghanaian households. In fact, being infertile is often grounds for a man to divorce his wife. Both parents generally prioritize their children's health before their own. As a woman from Kpeshie noted, "... when I fall sick, I go and buy drug from the drug store, but when my daughter is sick, I take her to the hospital."

NHIS mandates that children under 18 are exempt from paying the premium, when both their parents or guardians are insured. Although this was initially enforced, an outcry from single parents and child advocacy organizations prompted several health insurance schemes to relax the rule, and grant children exemptions if only one of their parents is insured. From this perspective, and given women's primary responsibility for taking children to hospital, prioritizing their wives' insurance coverage over their own becomes a rational decision for men with resource constraints. While the proposed amendment of the NHIS Bill to completely decouple children from parents—children under 18 would be automatically eligible for exemption, regardless of their parent's insurance status—is heralded as a major victory by child welfare advocates, there is also concern that it may create a disincentive for men to register their wives.

How do those who do not have health insurance meet their health care costs? The majority of those in our sample who are in this category are the very poor. They expressed the enormous challenges they face meeting health care costs, which often include borrowing money from relatives and friends. Other than the poor, those who are generally without any social protection for health are students who are still dependent on their families, and more than 18 years old—the cutoff age for insurance exemption. The majority of the participants in our FGDs who are in this category said they are generally healthy, and do not expect to have extensive health care needs. At the same time, however, they are also concerned that they don't have

health protection should they need it, thereby putting additional burden on their families.

4.3. Resource allocation behaviour in the context of time

It is well documented in the literature that the principle of discount rate can predict individual and household behaviour related to pure savings or investment. The poor generally show a preference for allocating resources to items that generate immediate benefits (for example see Wood 2003). Our research further explored whether and how people's evaluation of future benefits affects decisions about their health insurance uptake. The aim is to assess if the predicted high discount rate among the poor is borne out by empirical evidence; are those with health insurance truly more risk averse than those without, and does this affect resource allocation decisions?

Asked how they would allocate resources if they had a given amount of money for a month, and had the opportunity to invest a small portion of it to pay for free access to health care should an illness occur in the future, the overwhelming majority said they would allocate some portion of the resources towards health care. The most common response was that illness is unpredictable and can strike when one is least prepared for it, which can lead to catastrophic health costs. However, youths, who generally assessed their health as good, had different allocation priorities.

Investment in their own health did not rank high on their list of concerns. All said

that they are under the care of their parents, and that it is their parents' responsibility to provide for their health care needs. The fact that they consider their health generally good also reduces their perceived probability of falling ill. For all others, investing in their own and their children's health was important.

Why then have some participants invested in health insurance and others not?

While extreme poverty accounts for much of this, we found that it is not the only determinant. Individuals who have not invested in health insurance can be grouped into two broad categories. One is comprised of those who are simply too poor to afford even a heavily subsidized premium. For people in this category, just meeting the basic necessities of life is a daily struggle, and the opportunity cost of investing their meager income on health insurance is tremendous. A participant from Tamale remarked, "... I can't starve my children and buy insurance." He added that it is easier to seek support from relatives for health expenses than for other necessities, saying, "... in Ghana, when you go to somebody to ask for money to help with school expenses for example, normally they don't want to give you money for school. But if you are sick and when they realize that it is a critical condition, some would volunteer to cover the cost because they want to save the life. They would do whatever they can to help you out."

The other category of people who have not invested in health insurance is made up of those whose decision on insurance uptake is not primarily related to finances.

The most common rationale given by people in this category is lack of confidence in

the effectiveness of the NHIS and its perceived benefits—although this is largely based on their own perceptions, and/or the experience of others. The reasons often cited are long waiting times at health facilities for those with health insurance, the questionable quality and effectiveness of the medication given to the insured, and the insufficient coverage of effective drugs. This group is predominantly comprised of men who are in relatively good health.

A participant from Accra felt that the opportunity cost of long waiting times is an important consideration for some men: "I don't want to go to the hospital and sit there and spend the whole day and lose the money I would have made." For those in Accra who have a wide range of service providers to choose from, the "cash and carry" system is seen as a viable alternative, due to the prompt service it can provide. Interestingly, most have insured their wives and children, who they consider to be in greater need of health care than themselves.

We found that the insurance concept itself is also not properly understood, and this generates unrealistic benefit expectations. One participant expressed, "... every year you have to renew it (*insurance*). If I register now and it expires next year, and if I don't have money to renew it and I go to the hospital, they won't treat me. You see I registered and at the end of the year it expired. I don't have any money to go and register again. If I go to the hospital when I get sick, because I haven't registered again they won't treat me. They would say I had to renew it and I didn't have the money that time." This is a common complaint, among the insured and uninsured

alike. Although we don't have sufficient information to assess the rate of renewals among the insured, we suspect that the initial enthusiasm for health insurance may decrease over time, given the widespread misunderstanding of the insurance concept itself.

4.4. Poverty, intra-household dynamics and health seeking behaviour

Based on the insights obtained from our FGDs, we can draw three broad conclusions about the interaction of poverty, gender, intra-household dynamics and health seeking behaviour:

- (i) Analysis of the qualitative data supports our earlier conclusion regarding the persistent correlation between wealth status and access to treatment. While the introduction of NHIS has generally been very beneficial in removing financial barriers to access to health services for most Ghanaians, the poorest continue to be excluded from the benefits. Women in this socio-economic group are particularly disadvantaged, given their greater need for health care.
- (ii) The introduction of NHIS has had a clear impact on the intra-household dynamics of the allocation of health care. It has significantly reduced the frequency of negotiation and conflict among the insured, and increased women's relative independence in health care decision-making. Prior to NHIS, resource allocation decisions were negotiated whenever illness arose, but the

yearly membership reduces the need for these negotiations. However, this does not mean that there are no health expenditures that need to be negotiated. Indeed, while NHIS is said to cover 95% of the common diseases affecting Ghanaians, participants in our focus group discussion noted that some drugs are not included.

(iii) Societal norms, priority given to child health, and men's generally favorable assessment of their health status all interact to give greater priority to allocating resources for purchasing health insurance to women when health resources are rationed among poor households.

5. Revisiting our Research Hypothesis

What can we conclude about our research hypothesis, based on the analysis of the survey data, and insights from the qualitative data presented above? We examine the evidence herein:

Hypothesis 1: *In the absence of effective social protection mechanisms targeted toward the poor, health financing reforms that are market based or rely on insurance will perpetuate or exacerbate existing inequities in access to health care in Ghana.*

There is clear evidence of persistent inequities in access to health care. What emerges from our analysis of the survey data and empirical evidence from selected

regions and localities is that, by delinking payment and utilization of health services, the NHIS has had an important influence on reducing financial barriers in accessing health care for most Ghanaians. However, the benefits are not equitably distributed across the socio-economic strata. The very poor continue to face significant financial barriers in access to health care.

As seen from our statistical analysis, wealth was and continues to be a significant predictor of the likelihood of consulting a health practitioner in Ghana. At our baseline (1991/92), the likelihood of the poorest 20% of Ghanaians seeking treatment when ill was 57% less than that of the wealthiest 20%. Taking health insurance into account, the difference was exacerbated in 2008, whereby the poorest quintile was 89% less likely to seek care when ill than the richest quintile. Some of the difference could likely be accounted for by the fact that different methods were used to classify individuals into wealth quintiles in the two surveys, as discussed in the methodology chapter. Thus, while the magnitude of inequity may be debatable, it is clear that inequities do exist and persist. This is also supported by our qualitative study, which found evidence that the very poor, who cannot afford insurance premiums, still face huge financial barriers. Concurrently, differences in the likelihood of seeking care among the upper three quintiles has leveled off since NHIS.

In both the NHIS and its predecessor, the "cash and carry" system, policies were designed to cushion the poor from potential adverse impacts, by implementing

mechanisms to exempt them from paying fees. There is ample evidence that targeting was ineffective in protecting the poor under the "cash and carry" regime, due largely to implementation challenges (see for example Sulzbach et al. 2005; Badasu 2004; Nyongato and Kutzin 1999; Government of Ghana. Ministry of Health 2006b). The NHIS attempted to rectify this by offering subsidized premiums for those who are considered poor, and full exemptions for those considered very poor (the indigents). As noted earlier, although this has been a welcome reform, and beneficial for many of the poor in Ghana, the strict definition used to identify indigents effectively excludes the majority of the very poor, who badly need social protection.

The qualitative study provides further insights about the observed inequities in access to health care. Since the demand for health care is inflexible, sick people—rich and poor—eventually seek care. Thus, simply looking at whether people seek care or not will not reveal the full extent of the inequities. The issues are, how long they wait before they seek care, and the kind of care they can get. We have seen from the FGDs that inequities often manifest as delays in diagnosis and treatment, and in a limited range of treatment options. For example, though alternative medicine may not be the best choice for the very poor, it could be the only viable option they have. Similarly, financial constraints often compel the very poor to delay treatment until their condition is critical, or to resort to self-treatment. Further, because they often wait until their condition is urgent before seeking professional care, they tend to incur high costs. Since the majority of those without

health insurance are concentrated in this group, health care costs can have a catastrophic impact on the economic wellbeing of the poor.

Hypothesis 2: Given the prevailing pattern of asymmetries in intra-household allocation of resources in Ghana, market as well as insurance-based health financing reforms will have differential impact on access to health services among men and women, within as well as across households in different socio-economic strata:

2.1. Poorest households (poorest quintile): In both fee for service and insurance-based health financing reform, the combined impact of "rationing" of resources, and the expected prevalence of a high discount rate, will have an adverse impact on gender equity in terms of household health expenditure patterns .

2.2. Wealthiest households (richest quintile): Significant gender equity impact will not be observed, given the relative absence of gender bias in health resource allocation arising out of resource constraints.

2.3. Middle income households (middle quintile): Insurance-based financing is expected to relax the "rationing" of resources, thereby reducing potential gender biases in resource allocation for health.

Our analysis of the survey data suggests that at the aggregate level, gender is not a significant predictor of the likelihood of health care use. There does not appear to be a major gender difference regarding the likelihood that individuals would consult health practitioners when ill or injured. When the individuals' socio-economic status is taken into account, however, we find evidence of gender bias among the poorest quintile in 2005/06. Women in this quintile were 30% less likely to seek health care when ill than men of the same wealth status. This signals a potential "rationing" of resources for health care in favor of men among the poorest households when they are confronted by financial barriers to accessing health care, and thus lends

support—albeit partial—to our hypothesis 2.1 under the fee for service regime. This gender bias is not evident in the 1991/92 and 1998/99 surveys, nor was it seen among those in the higher socio-economic strata. Due to limitations arising from the small sample size of the 2008 survey, we are unable to determine whether the bias has been reinforced, or rectified, post-NHIS. The evidence from the qualitative data suggests the latter. In terms of health insurance membership, the data indicates a significant difference between those in the richest and poorest quintiles, but the gender difference within quintiles is not statistically significant.

While the survey data allows us to determine whether significant gender differences exist in the use of health services among women and men of different socio-economic status, it does not reveal the interplay between intra-household dynamics for resource allocation and gender in shaping the observed health seeking behaviour. Thus, the following questions remain unanswered: (i) is there a rationing of resources for health care among households in different socio-economic strata, and does gender matter in shaping the outcome? (ii) is there any evidence of discount rate among the poorest households, and if so how is it mediated by gender? This is where the qualitative data offers much insight.

Our qualitative data confirms that the unitary model of household is not the norm in Ghana, and that spouses do not typically pool their incomes. On the contrary, resource allocation decisions in Ghanaian households are largely characterized by bargaining and negotiation, even when the financial responsibilities of spouses are

implicit. Financing health care is one area where resource allocation decisions are required. Tradition and custom dictate that men have the primary responsibility of ensuring their wives' and children's health. While the active engagement of Ghanaian women in the labour market has reduced their dependence on men, women's earnings are generally lower, and so reliance on men for major expenditures such as health care continues. While this typifies a traditional Ghanaian household, the intra-household dynamics are expected to be different in those where women are educated and/or earn sufficient income.

Financial barriers were considered to be significant impediments to access to health care for a large majority of those who participated in our FGDs. This is underscored by the fact that the majority of the participants were from low income and poor households. We found that prior to the introduction of NHIS, poor women who needed to pay for health expenditures had to continually negotiate with their husbands for a share of the meager resources available. There was also frequent borrowing from relatives to meet health care costs. Given women's higher morbidity compared to men, the unmet needs among poor women due to financial constraints were greater. For most of these women, NHIS is a great escape from relying on their husbands or relatives to finance their health care. It also significantly altered intra-household bargaining and negotiation for the allocation of resources.

Interestingly, most men who participated in our FGDs thought the most important benefit of NHIS was that it offered them an affordable alternative for fulfilling their

obligations of ensuring the health of their wives and children. With the exception of those diagnosed with a health condition requiring routine care, the majority of the men did not perceive much need for health care. And even if they did, the long waiting times at the medical facilities discourages them from seeking care unless their condition is critical. As noted earlier, this, coupled with kinship ties that can be called upon for help if a man is in dire need of financial resources for his own health, can explain why we often see situations where men prioritize their wives and children for health insurance. While the survey data shows no significant gender difference in the uptake of health insurance across the wealth strata, the qualitative study suggests that when faced with financial constraints, Ghanaian men are more likely to insure their wives and children than themselves.

There is some evidence of a high discount rate among the extremely poor, whereby, even though they value the importance of insuring against unexpected ill health, the severe struggle for daily survival is predominant. Contrary to our hypothesis 2.1, however, when they are able to buy health insurance, households tend to do so for the women first, for the reasons mentioned above, as well as to meet the (relaxed) requirement that at least one of the parents must be insured for their children to be exempt from paying premiums. In light of the recent amendment of the NHIS—which exempts pregnant women from paying premiums for up to three months after delivery—and the proposed amendment to delink the exemption of children from their parent's insurance status, the question that remains is whether poor households will continue to allocate resources for women's health insurance. We

believe they will not, since these are precisely the reasons motivating poor households to invest their meager resources in health insurance in the first place.

Data from the qualitative study suggests that those in the middle income group, and some of the poor, have benefited most from the NHIS in terms of improved access to care. This is mostly due to the fact that the NHIS premium is heavily subsidized, and *offers an affordable alternative to the "cash and carry" system for many Ghanaians.* This has been particularly beneficial for women, given their greater need for health care, and their higher degree of reliance on health facilities than men.

In conclusion, the analysis of both the survey data and the qualitative data support our research hypotheses 1 and 2.3, and partially support hypothesis 2.1. Given that participants for the FGDs were drawn largely from poor and middle income households, our qualitative data does not provide sufficient grounds to assess the validity of hypothesis 2.2. However, the analysis of the survey data does validate the hypothesis.

Chapter 5: Assessing the multi- dimensionality of access to health care

1. Introduction

As noted in the previous chapter, the cost of treatment is a major determinant of access to health care in Ghana. While the NHIS has played a significant role in resolving this, by removing payment at the point-of-service, we know that the very poor are still not served by the NHIS and continue to face significant cost barriers. We have also seen how gender relations and socio-economic status intersect to influence household resource allocation decisions for health expenditure. While our analysis has been insightful in assessing the extent to which NHIS has facilitated the utilization of health care by reducing financial barriers to access, it does not allow us to explain with certainty why some who need health care do not get it. We argue that access to health care is not merely a function of affordability of treatment, though that is an important aspect.

Although research on equity and/or access to health care has generally focused on the utilization of care as a proxy for access, the multi-dimensionality of access and the need to understand the inter-linkages between the dimensions is gaining wide recognition. Advocates of the multi-dimensional approach suggest that access should be evaluated relative to its three dimensions: availability, affordability and acceptability (see Figure 1). This approach raises a number of issues relevant to our analysis. For example, a public policy may be designed to make health care "affordable" to those in need. However, if health facilities are not located close enough, or if the health facilities lack the necessary resource capacities or medical

equipment to effectively treat patients, what can be said about access? Similarly, if the quality of the service is poor, or if it is not culturally appropriate, what can be said about its accessibility? Is it the utilization of health care that ultimately matters, or is the burden of getting care (monetary and non-monetary) and the effectiveness of the care also important? Do they matter equally for the wealthy and the poor, for urban and rural dwellers, for women and men, or do socio-economic status, gender and locality affect the accessibility of care? It is these questions that underpin our analysis in this chapter.

2. The Multi-Dimensionality of Access

As outlined in Chapter 2, our research adapts and further expands McIntyre (2006) and McIntyre, Thiede and Birch's (2009) multi-dimensional framework of access by incorporating gender and socio-economic dimensions. This analytical refinement recognizes that wealth/income and gender are important sources of social inequity (Sen, Östlin and George 2007) and that they can mediate access to health care in important ways.

Figure 1. A framework for analyzing determinants of access to health care. Adopted from McIntyre (2006) and McIntyre, Thiede and Birch (2009)

Guided by the above analytical framework, we now explore the various dimensions of access in light of the empirical evidence from Ghana. We recognized from the outset that a lack of gender and socio-economic disaggregated data pertaining to some of the dimensions of access constrains the scope of our analysis. Regardless, our research sheds important light on whether and how gender and wealth matter. The analysis consists of two parts. In the first, we reflect on access to health care—based on empirical evidence—in the context of the NHIS, employing the analytical framework above. Following this, we further examine the intersection of access dimensions with gender relations and socio-economic variables, using maternal health as an example.

Availability

Availability relates to whether appropriate health care is provided to meet the prevailing needs of the population (McIntyre, Thiede and Birch 2009). This is dependent on a number of factors, including: where the health care providers are located relative to the population in need of services, whether the service hours are convenient for users, and the presence of necessary medical equipment, drugs and trained health professionals.

The gender and wealth interface ...

.....
Constrained physical access to health facilities can affect men and women differently—men are generally more mobile than women, having greater access to financial resources. This acquires greater significance with respect to emergency care. Pregnant women in the lower socio-economic strata are particularly disadvantaged by the lack of physical access to health services. This is one of the main contributors to maternal mortality among women in rural Ghana. It also explains, in part, the low institutional deliveries prevalent in the country.
.....

Data on the distribution of health facilities in Ghana reveals deep-rooted inequities, which perpetuate the colonial legacy of prioritizing urban centers. Whereas 79% of people in urban areas live within 30 minutes of the nearest health facility, such geographic accessibility applies to only 42% of rural Ghanaians (see Table 5.1). Intra as well as inter-regional disparities also abound. The distance individuals must travel to health facilities can significantly impact the utilization of health care. As

presented later in this chapter, geographical access constitutes a major barrier to the use of health services in Ghana, particularly for pregnant women in rural areas.

Table 5.1. Households with health facility within 30 minutes of residence

Ghana	57.7
Locality	
Rural	42.4
Urban	78.6
Greater Accra	81.2
Accra Metropolitan Area*	82.6
Ga	77.2
Tema Municipal Area*	94.8
Dangme West	41.1
Dangme East	57.3
Northern Region	35.0
Bole	11.1
West Gonja	41.3
East Gonja	17.7
Nanumba	30.2
Zabzugu-Tatale	29.9
Saboba-Chereponi	11.1
East Dagomba	31.6
Gushiegu-Karaga	27.0
Savelugu-Nanton	54.4
Tamale*	57.3
Tolon	54.4
West Mamprusi	20.9
East Mamprusi	36.2

Source: GSS 2005 (CWIQ II)

* Urban centers

In an effort to address the inequities in the distribution of health facilities, and enhance health care accessibility for those living in rural areas, the Ghana Health Services launched a national initiative entitled, *Community-based Health Planning and Services* (CHPS) in 1998. CHPS trains health care workers from existing, under-utilized district facilities, and then deploys them to rural communities as Community Health Officers (CHOs). The CHOs have been instrumental in providing

essential services (e.g. immunization, health education, family planning) to local communities, and promoting maternal health (Nyonator et al. 2003). While CHPS has been very effective in bringing health services closer to rural communities and promoting primary health, it often lacks the skilled personnel required to handle serious health issues (Government of Ghana. Ministry of Health 2009c). Thus the issue of geographic access to emergency and quality health care remains a critical challenge in Ghana.

The poor who live in remote communities are highly impacted by geographic access constraints, and the problem is often compounded by poor roads and transportation systems that can often obstruct timely receipt of health care. Addressing the difficulties faced by the geographic inaccessibility of health facilities, a participant in our focus group discussion remarked,

"... for those who live in the remote places, unless they are able to travel with a car to the health centre or walk, normally people carry them on their backs. I remember at a village here that somebody was pregnant and she was about to deliver. We had to put her in a push cart. The place was far. Sometimes we weave a cart with a bamboo straw and carry the sick, especially if they have to cross a river. It is very difficult."

Constrained physical access to health services is more significant with respect to emergency care. Pregnant women are particularly disadvantaged by inaccessible emergency obstetric care. As seen in the following section, this is one of the main

contributors to maternal mortality among women in rural Ghana. In addition to maternal health, constrained physical access to health facilities can affect women and men differently, as men are generally more mobile than women, due to greater access to financial resources.

A related issue is the availability of trained staff, medical equipment and/or personnel. As seen in Tables 5. 2 and 5.3, there are marked inequities in the distribution of health professionals in Ghana. The two biggest cities, Accra and Kumasi (the capital of Ashanti Region), have 70% of the doctors and 40% of the nurses in the country. There is one doctor for every 5,202 people who live in the Greater Accra Region, compared to a doctor to population ratio of one to 92,046 in the Northern Region. The distribution of nurses across regions seems to be less unbalanced than that of doctors, except for the higher concentration in Accra.

Table 5.2. Doctor to Population Ratio

Region	2003	2004	2005	2006	2007
Ashanti	1: 13,689	1: 13,237	1: 13,221	1: 11,681	1: 10,667
Brong Ahafo	1: 28,467	1: 35,783	1: 33,672	1: 25,365	1: 22,479
Central	1: 37,761	1: 35,347	1: 37,625	1: 31,675	1: 29,260
Eastern	1: 24,068	1: 29,305	1: 26,260	1: 22,019	1: 18,141
Greater Accra	1: 7,469	1: 6,550	1: 7,280	1: 5,624	1: 5,202
Northern	1: 68,721	1: 81,338	1: 74,657	1: 67,154	1: 92,046
Upper East	1: 31,348	1: 33,146	1: 30,369	1: 28,897	1: 33,111
Upper West	1: 54,214	1: 68,534	1: 57,026	1: 45,568	1: 43,253
Volta	1: 30,876	1: 35,986	1: 28,981	1: 25,430	1: 28,269
Western	1: 33,060	1: 37,638	1: 33,625	1: 32,746	1: 33,794
National	1: 18,274	1: 17,733	1: 17,899	1: 14,732	1: 13,683

Source: Government of Ghana. Ministry of Health 2008d

Table 5.3. Nurse to Population Ratio

Region	2003	2004	2005	2006	2007
Ashanti	1: 2,243	1: 2,121	1: 2,115	1: 2,136	1: 2,024
Brong Ahafo	1: 2,879	1: 2,034	1: 2,014	1: 2,036	1: 1,099
Central	1: 1,713	1: 1,573	1: 1,546	1: 1,577	1: 1,476
Eastern	1: 1,331	1: 1,203	1: 1,203	1: 1,251	1: 1,173
Greater Accra	1: 917	1: 969	1: 976	1: 993	1: 979
Northern	1: 2,380	1: 2,079	1: 2,002	1: 2,126	1: 1,868
Upper East	1: 2,027	1: 1,395	1: 1,367	1: 1,298	1: 1,243
Upper West	1: 1,860	1: 1,368	1: 1,352	1: 1,315	1: 1,266
Volta	1: 1,440	1: 1,232	1: 1,264	1: 1,302	1: 1,266
Western	1: 2,309	1: 2,241	1: 2,276	1: 2,368	1: 1,993
National	1: 1,649	1: 1,510	1: 1,508	1: 1,537	1: 1,454

Source: Government of Ghana. Ministry of Health 2008d

The role of NHIS in promoting equity in access to health care needs to be considered in light of the existing, indeed persistent, inequities in the distribution of health services, personnel and medical supplies. It is too early to assess whether and what impact NHIS has had on expanding provision of health services to remote and excluded communities. NHIS taking an increasing share of the financing of curative health care⁵² could allow for re-allocation of government health financing, enabling the Ministry of Health to devote greater resources to strengthen CHPS, and to provide emergency facilities close to communities currently underserved. This, however, does not happen automatically; it requires intentional design and political commitment. Thus it remains to be seen whether and what impact NHIS would have on enhancing the availability of health services.

Geographic distribution of health facilities and health professionals

notwithstanding, in the area where NHIS is currently expected to make a vital

⁵² It is estimated that NHIS contributes to some 41% of the health sector revenue (Government of Ghana. Ministry of Health 2009a). The 2009 Budget speech estimates that the National Health Insurance Levy and the SSNIT contributions to the NHIS will yield 375.2 million Ghana cedi, representing 1.8 percent of GDP.

contribution—making treatment and the necessary medication available to patients without requiring them to pay at the point of service—some issues regarding availability of care are emerging.

NHIS is designed to provide Ghanaians "affordable" health care for the most common diseases they suffer⁵³. According to NHIA, the benefit package addresses 95% of the disease burden in the country. The National Health Insurance Regulation (Government of Ghana 2004) mandates that minimum benefit provision include out-patient and in-patient services, oral health, eye care, maternity care and emergencies (see Appendix 3 for a full list of minimum health care benefits and exclusions). Prescription drugs are also included, as outlined in the National Health Insurance Scheme Drug List. Though NHIS offers a comprehensive benefits package, it is noteworthy that it does not cover family planning⁵⁴, and also excludes treatment for prostate cancer. These raise important gender issues that merit further consideration as the NHIS evolves (this will have important implications for reproduction and maternal health, as well as reproductive rights), and in view of the overall financial sustainability of the scheme.

Our research explored whether people who are insured and need care get the prescribed benefits. While the empirical evidence collected for the study shows that

⁵³ Its focus is on curative health, not preventive.

⁵⁴ This does not mean that family planning is totally absent in Ghana. It is funded separately, mostly through donor funding, thus its sustainability is volatile.

people's overall experiences have been positive, it also reveals some emerging challenges related to availability of care.

A prominent challenge highlighted by participants in all of our FGDs concerned prescription drugs. The main issue is not so much the shortage of drugs, but the inconsistencies in the implementation of drug policy on the supply side, and the lack of clarity about drug coverage/entitlement on the demand side.

In principle the NHIS provides drugs on the NHIS Drug List to insured patients, but the practice does not always bear this out. The typical experience, as one participant expressed, is that patients are required to buy some drugs, "... if the doctor prescribes four drugs for example, you might be told when you go to the dispensary that either some of them are not covered (*by the insurance*), or that they don't have it. You will be forced to buy it." There does not seem to be consistent medication coverage. Experiences vary from place to place and facility to facility, suggesting that the NHIS drug list is not being adhered to. There is also lack of transparency in what is and is not covered in terms of both drugs and treatment. The experience of the overwhelming majority of NHIS members who participated at our FGDs in both urban and rural areas confirms this.

Concern about the quality of drugs has also become an important issue. The majority of participants stated that the drugs available to them through the NHIS are normally the less expensive drugs, leaving them to buy the more costly drugs on

their own. Some of the participants associate this with the efficacy of the drugs supplied through the NHIS, thinking they may be generally less effective to treat their conditions. One participant stated, "... the medication you get from NHIS is not effective, and you have to buy the real medication." Although we don't have the means to evaluate the efficacy of the drugs provided through the NHIS—which is also beyond the scope of our research—we have seen that the above opinion resonates with the general perception held by many of the participants.

Our research reveals lack of knowledge among the general population about what is covered by the NHIS and what is not, and it applies to treatment as well as prescription drugs. As one participant said, "... most of us don't know what drugs the insurance covers and so we have to rely on what the doctors/nurses tell us. If they say the insurance does not cover, we have no option but to buy the drugs." While the NHIS may be designed to provide a broad range of services, the general lack of knowledge of benefit entitlements seems to have allowed health care providers to define the boundaries of the availability of care. There is also some ambiguity in the implementation of NHIS. As a frustrated participant from Accra complained, "... specific information about what is and is not covered should be posted in health facilities. They should not just write x-rays. They should specify which type of x-ray is covered so that you know which type of x-ray is not covered. But they simply write x-ray and when you go they will tell you this type of x-ray is not covered. Meanwhile on their list it states x-rays." Isolated cases of service

providers taking advantage of the public's ignorance and denying them free services have also been reported by the FGD participants.

Given that women on average have less education, they tend to be disproportionately impacted by the lack of knowledge concerning their entitlements. The following experience, shared by a participant from Accra, is echoed by many of the women participants in our *FGDs*:

“I will go to the hospital alright. I have the national health insurance. They will take care of me. Sometimes they will give me some drugs and give me another prescription to buy the one which the national health insurance does not cover. Maybe I will go to a drugstore and maybe the drug will cost me 50 Ghana cedi. I don't have that much money to purchase it. So I have to come home with my disease. . . . Those drugs that are less expensive are affordable. We could manage to buy them. But for the expensive ones we have no option. What I am trying to say is that at times we go and they are able to give us the drugs. But there are times they will tell you that they don't have the drug and you have to go and purchase it or the insurance does not cover it.”

Our research found that, along with the affordability of the NHIS premium, the issue of drugs is a significant deterrent to insurance uptake among the uninsured. It is also a key issue because it dissuades some NHIS members from renewing their membership due to the high cost of medication, which can sometimes be higher than consulting a health professional.

Given that health practitioners are reimbursed for the cost of eligible prescription drugs, as well as the services they render, a question emerges: What explains the inconsistent and restrictive practices discussed above? From the supply side we see some real problems in the administration of the NHIS, that undermine the ability of health providers to supply the needed care.

In line with the decentralized administration and management of the NHIS, accredited health care providers and pharmacies are reimbursed by District Mutual Health Insurance Schemes (DMHIS) for the services they render to NHIS members, at a rate specified by the NHIA⁵⁵. Due to the heavily subsidized premiums and various exemptions that are in place, the DMHIS in turn rely on the transfer of funds from the NHIA to supplement the resources they get locally from collecting premiums. It is estimated that premium collection accounts for less than 10% of the NHIS funds nationally. Thus DMHIS are heavily dependent on the subsidies they receive from the NHIA (Government of Ghana. Ghana Ministry of Health 2009a).

While the decentralized health financing mechanism was intended to facilitate prompt processing of claims and reimbursement of health care providers, experience suggests otherwise. Delay in paying health providers has become a chronic issue that threatens the continued existence of the NHIS. As NHIS membership has grown over the years, not only has the delay in reimbursing health care providers increased, but the number of payments in arrears has also escalated.

⁵⁵ The rate is periodically reviewed and revised by the NHIA.

Maternity homes and pharmacies that do not have the resiliency to withstand long delays due to their size are particularly impacted. A trained birth attendant who runs a maternity clinic in Tamale—where delays can exceed three months—described the challenge she faces due to slow reimbursement. Her clinic gets 300 to 500 clients each month, most of whom are NHIS members and thus do not pay directly for services. The clinic is faced with severe financial problems, and resorts to obtaining essential drugs on loan while waiting reimbursement from the DMHIS. She stressed the increasing challenge in sustaining the operations of the clinic. A pharmacist voiced a similar concern.

The delays in reimbursement are reported to have affected the operations of most health facilities, since, while the NHIS has increased the utilization rate, delayed reimbursement has meant that health providers find it very difficult to get the required drugs and equipment to provide the needed care. Speaking of the depth of the problem, the Chief Executive Officer of the Korle-Bu Teaching Hospital in Accra stated that the NHIS owes the hospital 1,702,438 Ghana Cedi in back payments (Myjoyonline.com: 3/4/2009). Some hospitals are reportedly on the, "... brink of collapse" due to the financial strain caused by persistent delays in reimbursement (Sule 2009).

The lack of cash liquidity created by the delays in reimbursement decreases the availability of care for those with insurance, and results in a preference for those who pay cash for the services rendered. As one FGD participant explained,

"... you go there (*to the hospital/clinic*) and when you need x-ray, they will tell you that the insurance does not cover and you will have to pay for it. And when they are prescribing medicine they can prescribe medicine from A to Z, but when you take the prescription to their pharmacy they will tell you that they don't have it. But when you are holding cash for the same medication you will get it at the same pharmacy behind the counter."

As another participant echoed, there is a general perception that, "... medicine is available when you have cash."

While the debate between the NHIA and DMHIS as to who is at fault continues⁵⁶, the problem has recently increased to the extent that some hospitals are threatening not to honor NHIS cards, and to go back to the "cash and carry system" (*ibid*). This has attracted much media attention, and raised concerns about the potential demise of the NHIS. An article published in the *Ghanaian Chronicle* in September 2009 reported, "A major health disaster is brewing in the Ho Municipality and other parts of the Volta Region, as health institutions refuse to provide healthcare for National Health Insurance Scheme (NHIS) card-bearing patients." The headline of another article published in April 2009 reads, "Agogo hospital threatens to turn away NHIS card holders" (Myjoyonline.com: 5/5/2009). Therefore, from the supply side the

⁵⁶ NHIA attributes the problem to the management inefficiencies and corruption at the DMHIS level. The DMHIS on their part accuse NHIA of deliberately undermining their operations by delaying the transfer of funds. NHIA has recently tabled a proposal to centralize the management of claims in an effort to resolve the issue. If this is adopted, the role of DMHIS will change drastically. The proposal is met with skepticism from various quarters including donor agencies who caution that the proposed solution is opportunistic and undervalues the core values and principles of decentralized and community-based health insurance system that underpin NHIS.

decreased availability of services and effective medicine for insurance holders appears—at least in part—to be a rational response to delayed reimbursement.

In conclusion, the experience of Ghana reveals that the geographic distribution of health facilities and health professionals determines, to a great extent, the accessibility of health care. Those who live in remote communities and rural areas are negatively impacted, and women—due to their socio-economic status and greater need for health care—are disproportionately affected. Our study reveals that, while the introduction of the NHIS can, in principle, facilitate the availability of health care where health facilities are geographically accessible, the emerging implementation challenges are beginning to undermine the potential of this. The benefits of NHIS are increasingly being weighed against the additional costs members incur, most of which are for the purchase of prescription drugs. If the current problems with drugs and the lack of clarity of entitlement remain unresolved, or if the costs health facilities incur due to delayed or non-payment continue, the initial interest and enthusiasm for NHIS will decline. The very sustainability of the health care system itself may also be in jeopardy.

Affordability

Affordability generally refers to the ability of individuals to meet the cost of health care. While the direct cost of medical care can be a significant determinant of the affordability of health care, affordability also includes other direct and indirect costs

related to the receipt of care, including transportation and medication costs⁵⁷, as well as opportunity cost in terms of lost income. Affordability should also take the differential impact of health care expenditures on people's welfare into account.

The gender and wealth interface ...

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For many Ghanaian women, NHIS provides a welcome change from the dependence on their husbands or relatives to finance their and their children's recurring cost of treatment. This notwithstanding, indirect costs continue to pose important access barriers for the poor. Poor women are particularly impacted given their relatively low income compared to men and their weak intra-household bargaining positions.
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How health care is financed is an important policy consideration with respect to the direct cost of care. As seen in the previous chapter, Ghana has shifted its health financing approach from a "cash and carry" system to one based on social health insurance. Since we have already examined the implication of this for equity and access to health care in detail, we will not elaborate on it here. Suffice to say that our research strongly supports the view that NHIS has contributed to reducing the financial burden of getting treatment, and has facilitated utilization of health care by delinking payment and utilization for millions of Ghanaians. Further, NHIS made another important contribution by removing the pre-admission deposits required in the "cash and carry" system. As noted in the previous chapter, pre-admission deposits had been a significant hindrance to institutional delivery in Ghana in the

⁵⁷ The drug issue relates to both "availability" and "affordability" access pillars. In the case of the former, the key issue is the supply, or lack thereof, of prescription drugs that are in principle covered by the NHIS. In the latter, we focus on the cost that those who need prescription drugs incur. The two are inter-related.

past. Stressing the important contribution of NHIS in this respect, a participant in our FGD remarked,

"... my wife was pregnant and delivered at the hospital. She needed a surgery and she had a safe delivery. She stayed at the hospital for four days and it was all covered by NHIS. Those with no insurance are asked to deposit 500 Ghana Cedi before they are attended. If it was not for the health insurance, I would not have been able to pay the deposit. ... If we didn't have insurance to deliver at the hospital, she would have died."

This notwithstanding, the poorest cannot afford the insurance premiums, and thus the pressing need for the country to address the ensuing inequities. The government has recently expanded the NHIS premium exemption category to include all pregnant women, during and up to three months after delivery (more on this in the next section). While this initiative has been welcomed by many women, and by advocates of maternal and child health, it does not fully address the existing inequities in access to health care.

As noted above, availability of medicine is becoming an important issue in NHIS context. There is strong evidence that health insurance has facilitated consultation with health professionals for those who are insured and need care. This has clearly reduced the self-diagnosis of illness that epitomized the "cash and carry" financing regime. However, despite increased access to professional consultation, there is emerging evidence that many of the poor are unable to buy necessary prescription

drugs. We noted the supply side factors that have contributed to this earlier.

Measuring access to care on the basis of affordability of treatment and utilization of health care thus provides a limited view of access. We present a framework for assessing affordability of health care in Table 5.4.

Table 5.4. A framework for measuring affordability

	Indicators of affordability	Assessment of NHIS
Direct cost	Cost of treatment	NHIS has delinked payment from utilization of health care and has had a significant and positive impact on reducing the cost of treatment. The poorest, however, have not benefited from NHIS as they cannot afford even the heavily subsidized premium.
	Cost of medicine	Although in principle NHIS covers the cost of medicine contained in the NHIS Drug List, in practice coverage has been partial at best. Serious issues have emerged with regard to the additional cost of drugs to those insured, and the resulting questions about affordability.
	Deposits	NHIS has removed the need for pre-admission deposits for those insured. No co-payments are required.
Indirect cost	Transportation cost	NHIS does not address this directly, but there is some anecdotal evidence suggesting that removing the cost of treatment at the point of service can free up resources that can be allocated for transportation.
	Opportunity cost	The long waiting time at health facilities is considered to be a significant access barrier, particularly to Ghanaian men, regardless of health insurance status.
Enabling	Payment options	There is some evidence of local initiatives that provide flexibility in the payment of insurance premium, although these cannot be generalized nationally.

NHIS primarily addresses the direct costs of care. As Table 5.4 indicates, assessing "affordability" of health care needs to take the total cost of the receipt of care into account. Transportation cost can be a significant barrier to access to health care, particularly for those who live far from health facilities. The opportunity cost of seeking care can also be a major determinant of the utilization of care, especially when the receipt of care requires long waiting times at health facilities. Our male FGD participants, in both rural and urban areas, identified this as one of the main deterrents to their utilization of health care. And it was irrespective of health insurance status; those with and without health insurance all regarded long waiting times at health facilities, and the associated opportunity cost, to be significant deterrents to the timely use of health care. Experiences of waiting times at a health facility of more than five hours, or even a full day, are all too common⁵⁸. One of the consequences of this is that men tend to delay seeking professional health care, even when they have health insurance. The issue of long waiting times at health facilities was also raised by the women participants, but they did not view it as a major deterrent to utilization—except in the case of maternal health as seen the next section.

Outside the purview of maternal care, we do not have sufficient data to assess the extent to which transportation costs deter people from accessing health care in Ghana. However, evidence collected during our FGDs supports the claim that transportation exerts additional financial burden on individuals needing health care.

⁵⁸ This will have differential impact depending on the health condition of the patients and the urgency of the need.

By removing the upfront cost of treatment, some view NHIS as having contributed to relaxing the financial burden of care. In this regard, a female participant from Tamale remarked, "... in the early days, it was very difficult to go to the hospital because transportation cost alone was too much. But now even if transportation cost still remains, at least you don't have to pay for the hospital. So I go more frequently to the hospital than before." However, as the recent Ghana Demographic Health Survey (GSS, GHS & ICF Macro 2009) suggests, indirect costs continue to be important access barriers for the poor (explored further in the next section). Women can be particularly impacted, given their relatively low income and weak intra-household bargaining positions.

Flexibility in the timing of payments and payment options can facilitate affordability. Indeed, one of the attractive features of consulting traditional health practitioners is the payment flexibility they often grant to users, which may include in-kind payments or credit arrangements (Asenso-Okyere 1995) . In the context of NHIS, we have discovered some initiatives to enhance the flexibility of premium payments, such as initiating registration campaigns during the harvest season (in Dangme West) and allowing payment in small installments for those who are unable to pay all at once. However, we do not have sufficient evidence to determine whether these experiences occur nation-wide or only locally.

At the start of this section we stated that affordability should take account of the differential impact of health care costs on people's welfare. McIntyre, Thiede and

Birch (2009: 186) argue that "... two individuals may face the same full costs of care, and they both may have the ability to pay these costs, but the consequences for the rest of their lives and that of their families may differ." Even if people can afford the cost of health care, how the cost is financed is an important consideration, as it could have a catastrophic impact on household resources. The evidence gathered from our FGDs—and presented in the previous chapter—highlights the significant impact of the "cash and carry" system. Many individuals managed their health care expenditures by borrowing from relatives or friends. The economic consequences of paying for health services is a very important consideration. It could lead households into poverty, or exacerbate their current level of poverty, if financing is done through borrowing, or selling assets. Our analysis of the survey data shows that NHIS has made a considerable contribution to reducing catastrophic health expenditures, and has shifted the financial burden away from reliance on families and friends.

Acceptability

Acceptability is a normative and context-specific concept that reflects people's expectations and perceptions. It can be influenced by culture and traditional norms and beliefs; for example, cultural norms may require women to be treated by female health workers. What is acceptable can also be influenced by one's level of education and perception of rights (Nketiah-Amponsah and Himenez 2009; Agha and Do 2009; McIntyre & Mooney 2007). Individuals with higher education are more likely to be

aware of their rights, and to demand higher standards, than those less educated. Even when financial barriers are removed, people may choose not to use health services if they view them as unacceptable. Or, individuals could utilize health services, but the quality of the service and their interaction with health professionals may be poor (McIntyre & Mooney 2007). Thus, acceptability is an important dimension in measuring accessibility and equity in the provision of health care.

The gender and wealth interface ...

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Long waiting times at health facilities and poor attitudes of health professionals are significant deterrents to timely access to medical care among Ghanaians. This is exhibited more vividly in maternal care, where bad attitudes of health care workers discourage many poor women from coming to hospitals to deliver their babies.
.....

We have no evidence suggesting that the NHIS has contributed to an improvement in the quality of health services. However, interviews with NHIA staff suggest that quality assurance is one of the priority areas identified by the agency. Strategies explored include periodic reviews of the accreditation of health providers, and development of enforceable quality standards.

Our FGDs identified three issues concerning acceptability of health care in Ghana. These include: (i) staff attitude; (ii) waiting times; and (iii) information about the benefits package.

Our research reveals diverse experiences with health care professionals. Asked about their experiences as users of health care, several participants complained about the bad attitudes of government hospital staff, particularly nurses and support staff. Some respondents said the staff would admonish them for coming to health facilities, telling them that they are only there because they have insurance, not because they are sick. Others felt that those who paid cash got better treatment. Only a small number said that they were satisfied with the service they received. However, most participants believed that the situation is improving, as NHIS continues to evolve and become established. Geographic location did not seem to matter with respect to people's experiences, and experiences seemed to vary from one health facility to another. However, those who live in Accra have more choices of health care providers, due to the greater number of hospitals and clinics in Accra than in Dangme West, or the Northern Region. Thus those in Accra can—at least in principle—shop around for better services.

The second issue is the long waiting times. For those with health insurance, the issue is not only the waiting time at the health facility, but the time it takes to get or renew health insurance cards. We noted the long waiting times at health facilities earlier, in the context of opportunity cost considerations. While there was a general consensus among our FGD participants about this, opinion was divided with regard to whether it is better, has become worse, or remains the same, compared to the "cash and carry" days. Opinion about differences in waiting times between those who have health insurance and those who pay cash was also divided. The majority

believed that those who pay cash receive faster treatment, largely because of the 'red tape' involved in registering the insured users, in order to be reimbursed for claims⁵⁹.

How NHIS operates creates a time burden on users, and an unintended delay in the receipt of care. Upon receipt of a valid health insurance card, members are given a limited number of user cards (usually three) that must be presented to an accredited health provider, along with their health insurance card, every time they receive health care. Health care providers write the details about the treatment on the user card, then send it to the DMHIS for reimbursement. The card is returned to the user for further use once the provider's claim has been processed. The user is required to physically go and get the card from the DMHIS or local representative, which can take a long time. Every time an insured individual visits a health facility, she or he must present a user card. If the ailment requires more than three visits within three weeks or a month, the individual will run out of cards and will not be able to receive free coverage, regardless of his/her insurance status. This has proved to be an extremely frustrating experience, particularly for women, as they are also the primary caretakers of children and, as such, use the health facilities more than men. A women participant from Tamale complained about her experience,

⁵⁹ Because of the difference in registration procedures and formalities, some hospitals have different registration counters for those with insurance and for those who pay cash. As the number of people who pay cash is smaller, their registration can be faster.

"... it takes too long to get back your claims card. Sometimes it takes up to a month or even longer and you have to chase it. Even if you go back the next day to the hospital for a follow-up you have to give them another card. Sometimes you just give up and just pay for the service. Someone I know was registered at Savelugu and so she has to take a lorry to go there and look for her card. It takes several trips before you locate your card. You sometimes spend the whole day. If you have serious health issues, you just pay even if you are insured because the insurance card alone does not get you treated."

The new ICT-based membership card introduced by NHIA in 2008 is expected to address this issue, although the feasibility of this, in view of local capacity, is not evident.

The third issue regarding acceptability that came out of our FGDs is the poor knowledge base about how NHIS works and the benefits coverage. This finding is supported by a recent study conducted by Alfors (2009), which focused on female informal workers in Accra. There is much confusion and misconception about how NHIS operates, particularly among the less educated. For example, some participants assumed that renewal of membership is related to the extent health services are used in a given year, i.e. if they have not or rarely used their insurance in the year, why do they have to pay again for renewal? Also, many of the elderly and illiterate women and men find it difficult to keep track of the renewal due dates, as there is no system to notify them of the timing of renewals. Most only find out that their cards have expired when they go to a hospital or clinic for treatment. As well, many of the participants were not fully aware of what services NHIS covers or,

as noted above, their entitlement to specific treatments and/or drugs. The government has worked hard to get people registered, as seen by the impressive uptake in such a short time. However, it is also evident that this has not been matched by a similar effort to build up the users' knowledge base.

Conclusion

As summarized in Table 5.5, the multi-dimensional access framework is effective in assessing the challenges and opportunities of expanding access to appropriate and quality health care in Ghana. The framework is also a useful analytical lens to assess the contributions of NHIS to the ultimate health sector goal of enhancing equitable access to health care. Our analysis has revealed information, albeit limited, regarding how access frontiers can be mediated by gender and socio-economic status.

We can draw a number of key lessons with respect to some of the emerging gender issues when assessing access to health care from a multi-dimensional perspective. With respect to the 'availability' dimension for example, we note that while the maldistribution of health professionals and health facilities in favor of urban centers poses a serious access barrier in rural Ghana, it can affect men and women differently; men being generally more mobile than women, given their greater access to financial resources. Pregnant women are particularly disadvantaged with respect to emergency care. Lack of physical access to health services is one of the

main contributors to maternal mortality among women in rural Ghana. Aside from physical access, we also note that what is and is not included in the benefits package may raise important gender issues. In the case of the NHIS, the failure to integrate family planning within the NHIS framework could have serious implications for reproductive and maternal health in the long run.

Viewed from the point of view of 'affordability', for many Ghanaian women, NHIS provides a welcome change from the dependence on their husbands or relatives to finance recurring treatment costs for themselves and their children. In addition, the recent policy to exempt all pregnant women from paying insurance premiums would be beneficial for poor women, albeit for a limited period of time tied to their pregnancy. Indirect costs on the other hand continue to pose access barriers for poor women, given their relatively low income compared to men, and their weak intra-household bargaining positions.

Finally, in terms of the 'acceptability' dimension, we note persistent issues regarding hospital staff attitude, particularly related to institutional delivery. Similarly, long waiting times at the health facilities is noted as a significant deterrent to timely access to medical care among Ghanaian men. The utilization of user cards has added an enormous burden on women—as primary health care users and caretakers of children—in terms of time and resources.

While our analysis thus far supports our hypothesis about the role of non-cost variables in shaping access to health care, the predicted interactions with gender relations and socio-economic status need further investigation. In the next section, we further examine the dimensions of access in the context of maternal health. The focus on maternal health is strategic. First, given the richness of the available data, it allows us to further explore whether and how gender and socio-economic status can mediate access frontiers. Second, it offers an opportunity to explore issues of vertical equity in access to health care, given that our analysis thus far has dealt largely with horizontal equity. Third, maternal health is an issue that is currently on the health sector agenda in Ghana—indeed internationally—in the context of monitoring progress in attaining the goals set by the Millennium Development Goal (MDG 5). Thus, our analysis can make an important contribution to the on-going policy dialogue.

Table 5.5. Revisiting the Impact of NHIS Through the Multi-dimensional Access Lens

Dimension of Access	NHIS Impact	Gender Issues	Socio-Economic Factors
Availability	<p>NHIS offers a comprehensive benefits package, encompassing 95% of the disease burden in the country. While this has been beneficial, for those with little or no physical access to health facilities/qualified health professionals, it remains a distant promise.</p> <p>Geographic inequities in the distribution of health facilities and personnel persist. There is no evidence suggesting that NHIS has contributed to the provision of health services in deprived areas. As NHIS continues to take greater share of curative health financing, it could allow the government to devote more funds to improve geographic access. This, however, requires intentional design and government commitment.</p> <p>While the introduction of the NHIS can facilitate availability of health care where health facilities are geographically accessible, the emerging implementation challenges are beginning to undermine its potential.</p>	<p>It is noteworthy that NHIS does not cover family planning, which is an important component of maternal health. Also excluded is treatment for prostate cancer. These raise important gender issues that merit further consideration as the NHIS evolves, and in view of the financial sustainability of the scheme.</p> <p>Constrained physical access to health facilities can affect men and women differently. Men are generally more mobile than women, having greater access to financial resources.</p> <p>Physical access constraints have increased significance with respect to emergency care. Pregnant women are particularly disadvantaged. Lack of physical access to health services is one of the main contributors to maternal mortality among women in rural Ghana. It also explains—in part—the low institutional deliveries prevalent in the country (more on this in the next section).</p>	<p>Geographic access constraints adversely impact the poor. Not only is this linked to the high cost of transportation to reach the nearest facilities, but the lost income, however small, has a potentially detrimental impact on their economic wellbeing, given their precarious financial standing.</p> <p>Lack of available drugs supplied through the NHIS, and the associated cost implications, often result in the poor getting the proper diagnosis but unable to afford the medication. Herbal medication often provides the poor with affordable alternatives to costly drugs.</p>

Affordability	<p>NHIS primarily addresses the direct cost of care. There is sufficient evidence to show that it has played an important role in reducing the cost of care for those with insurance. By delinking payment and utilization of health care, it has facilitated utilization for millions of Ghanaians. However, the evidence also reveals that the poorest are by and large excluded.</p> <p>NHIS does not address the indirect costs of receiving care, which can create significant access barriers.</p>	<p>For many Ghanaian women, NHIS provides a welcome change from the dependence on their husbands or relatives to finance recurring treatment costs for themselves and their children (ref. chapter 4). The removal of pre-service admission deposits has had a positive impact on expanding access to institutional delivery.</p> <p>While indirect costs continue to pose important access barriers for the poor, women are particularly impacted given their relatively low income compared to men, and their weak intra-household bargaining positions.</p> <p>The recent policy to exempt all pregnant women from paying insurance premiums would be beneficial for poor women, if only for a limited period of time tied to their pregnancy.</p>	<p>Affordability of drugs continues to be an important issue in accessing health care for the poor, even among the insured.</p> <p>Indirect costs pose significant access barriers for the poor. For most of them, indirect costs such as transportation determine the overall affordability of health care.</p> <p>Payment flexibility—where available—provides the poor viable mechanisms for joining NHIS.</p>
Acceptability	<p>There is no evidence that NHIS has improved the quality of services. Long waiting times at the health facilities, lack of drugs, and negative staff attitudes are often identified as issues that discourage utilization of health care and, in some</p>	<p>The utilization of user cards has added an enormous burden on women—as primary health care users and caretakers of children—in terms of time and resources.</p>	<p>There is much confusion and misconception about NHIS, particularly among the less educated. There is also information asymmetry regarding</p>

	cases, membership in NHIS. There is scope for addressing quality issues both through the accreditation of health providers under NHIS, and through the development of enforceable quality standards.	Long waiting times at the health facilities is a significant deterrent to timely access to medical care among Ghanaian men.	benefits and entitlements. Higher educated individuals are more likely to be aware of their rights, and to demand higher standards than those less educated.
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3. Maternal Health

The World Health Organization (WHO) defines maternal health as, "The health of a women during pregnancy, childbirth, and the postpartum period."⁶⁰ Women's access to health care during this period is important for their wellbeing, and that of their children. This exemplifies the case of vertical equity, i.e. acknowledging the specific and different needs of women related to reproductive health. Using our expanded analytical framework of access, in this section we explore the potential of NHIS to enhance access to maternal care in Ghana. We use antenatal care, skilled delivery, and postnatal care as indicators to measure maternal health. Our focus is women in the 15 to 49 year age groups.

Antenatal care can be effective in ensuring the wellbeing of pregnant women⁶¹, and detecting pregnancy-related complications. It can include immunization against tetanus (one of the leading causes of neonatal deaths), treatment and prevention of anemia and malaria, assessment of birth complications, and the provision of information about safe motherhood to expectant mothers. WHO recommends a minimum of four antenatal visits during pregnancy.

⁶⁰ See http://www.who.int/topics/maternal_health/en/

⁶¹ In Ghana, this typically includes tetanus injection to protect the pregnant woman and her child against tetanus infection, iron supplements, anti-malarial drugs, and general assessment of wellbeing.

Ghana has consistently had a high level of antenatal care coverage. The 2008 Ghana Demographic Health Survey (DHS) reveals that 95% of women who had a live birth in the five years preceding the survey received antenatal care, a slight increase from 92% in 2003 (see Table 5.5). The same survey showed that 78% of these made at least four antenatal visits, a substantial improvement from the 69% recorded in 2003. As expected, antenatal care is influenced by wealth, with women in the lowest wealth quintile receiving less care than those in the highest. As well, receipt of antenatal care increases with women's degree of education. Urban-rural gaps are also notable, although these differences are not pronounced between regions.

While antenatal care is known to be an important component of maternal health and wellbeing, its role in reducing maternal mortality has been questioned (see Abou-Zahr and Wardlaw 2003 for example). Amid growing evidence indicating that most obstetric complications cannot be predicted, advocates of maternal and child health have called for action to ensure that pregnant women have access to quality services for the treatment of complications during pregnancy and childbirth (Unicef, WHO & UNFPA 1997). This represents a shift of focus, from risk prediction and management embodied in antenatal care, to an emphasis on expansion of access to emergency obstetric care (Sen 2009).

Table 5.6. Trends in Maternal Health Indicators (%)

	2003	2007	2008
Antenatal Care*			
Ghana	91.9	96.1	95.4
Urban	97.9	98.4	97.8
Rural	88.6	94.9	93.9
Greater Accra	96.3	95.8	95.7
Northern Region	82.7	91.6	95.6
Lowest Quintile	83.3	92.7	92.5
Highest Quintile	98.2	96.1	99.1
Mother's Education			
No education	86.1	93.2	93.5
Primary	92.6	96.1	93.5
Middle/JSS	96.9	98.2	97.6
Secondary+	100	99.5	98.9
At least four visits	69.4	76.7	78.2
Institutional Delivery**			
Ghana	45.7	54.3	57.1
Urban	78.6	85.3	82.4
Rural	29.3	38.2	41.7
Greater Accra	79.6	79.0	83.7
Northern Region	16.4	26.3	26.3
Lowest Quintile	19.4	27.0	23.5
Highest Quintile	89.4	91.6	92.8
Mother's Education			
No education	27.8	31.2	34.6
Primary	42.9	51.8	53.3
Middle/JSS	63.4	70.8	72.8
Secondary+	89.0	87.9	90.9
Postnatal Care†			
Ghana	46.8	75.8	77.0
Urban	60.6	82.7	88.2
Rural	44.5	72.2	69.5
Greater Accra	32.5	64.2	90.5
Northern Region	41.8	79.6	59.6
Lowest Quintile	36.6	65.8	59.3
Highest Quintile	62.5	84.3	93.7

Source: GSS, NMIMR & ORC Macro 2004; GSS, GHS & Macro International 2009; GSS, GHS & ICF Macro 2009 (author's compilation)

* percentage of women who had a live birth in the five years preceding the survey, and received antenatal care from a skilled health professional for the most recent birth (doctor, nurse, midwife, auxiliary midwife, community health officer).

** percentage of women who delivered at a health facility in the five years preceding the survey

†percentage of women who had a live birth in the five years preceding the survey and received postnatal care

Rural Ghanaian women typically give birth at home with the help of traditional birth attendants, most of whom cannot deal with obstetric complications. Providing all women with access to emergency obstetric care, and increasing the percentage of institutional deliveries, are important strategies for reducing maternal mortality. Despite having a high level of antenatal care coverage, institutional delivery remains low in Ghana.

As Table 5.6 indicates, although there has been some increase in institutional deliveries over the past decade, it has been slow. The 2008 DHS data shows that in the five years preceding the survey, 57% of live births nationally took place in health facilities. Institutional delivery⁶² is highly co-related with the mother's level of education and wealth status. While 93% of women in the highest wealth quintile had institutional delivery, only 23% of women from the lowest wealth quintile gave birth in a health facility. And 90% of women with secondary or higher education delivered in a health facility, while 67% of those with no education gave birth at home. This suggests that women who have more education or are from a higher wealth quintile are more likely to deliver at a health facility, and with the assistance of skilled personnel. There are also significant regional disparities. For example, 80% of births in the Greater Accra Region happen in a health facility, compared to 20% in the Northern Region. Overall, the majority of babies in rural Ghana are delivered at home by non-medically trained health providers. These inequities in

⁶² The proportion of deliveries by skilled health professionals is slightly higher than the corresponding percentage for institutional delivery. The Ghana 2008 DHS for example records 58.7% of women who had live births in the five years preceding the survey were assisted by a skilled provider during delivery (GSS, GHS & ICF Macro 2009).

access to maternal health care during delivery based on levels of education, wealth status, and geographic location suggest that maternal mortality is likely higher among less educated, poor women living in rural areas (Tibadebage & Mackintosh 2009).

Figure 5.1. GHS estimates of deliveries by skilled health professionals⁶³

Source: Government of Ghana. Ministry of Health 2009; Oatf 2008 (author's compilation)

Institutional data collected by the Ghana Health Service provides a much less optimistic picture of progress in skilled deliveries, as shown in Figure 5.1. DHS surveys typically capture women's experiences with live birth in the five years preceding the survey. The Ghana Health Service figures record yearly results based on institutional data. The data show slow but steady progress until 2006, reaching 44.5%. The drastic reduction in 2007 to 35.1% is attributed to the phasing out of the free delivery program (details on this later). The recorded improvement in 2008 is far less than the 60% target set by the Ministry of Health (Government of Ghana. Ministry of Health 2009c).

⁶³ Skilled health personnel include doctors, nurses, midwives or community health officers.

Achieving postnatal coverage in Ghana has progressed over the past decade, though it remains low. Postnatal care is important for the wellbeing of mothers, "... up to 45% of all maternal deaths occur within one day of delivery, and 65% occur within the first week." (GSS, GHS & ICF Macro 2009: 158). Postnatal care is not the only important issue for mothers, as timing is critical as well.

As depicted in Table 5.7, postnatal care has increased from 47% to 77% in the 2003 and 2008 DHS surveys respectively. Rural-urban and regional differences remain high. Wealth status and mothers' education levels are also strong indicators of the likelihood of postnatal check-up. Women who have institutional delivery are more likely to have postnatal care than those who deliver at home (see Table 5.7). Thus, the low institutional delivery noted above has an additional impact on the likelihood of women seeking care after delivery.

Table 5.7. Timing of first postnatal check-up

	Less than 4 hours	4 to 23 hours	1 to 2 days	3 to 41 days	Don't know/missing	No postnatal check-up
Place of delivery						
Health facility	61.3	15.4	10.9	4.0	1.9	6.6
Elsewhere	24.3	4.2	11.1	12.3	0.5	47.6
Residence						
Urban	56.2	15.7	10.0	4.8	1.6	11.8
Rural	40.1	7.7	11.5	9.0	1.1	30.5
Region						
Greater Accra	57.5	15.3	16.0	0.9	0.8	9.5
Northern	32.3	6.1	6.4	12.7	2.1	40.4
Education						
No education	35.8	6.8	8.8	10.6	1.4	36.5
Primary	43.4	10.2	12.0	6.7	0.8	26.9
Middle/JSS	55.5	13.3	10.7	5.6	1.2	13.7
Secondary+	55.6	17.2	16.1	4.7	2.8	3.7
Wealth quintile						
Lowest	30.1	4.0	11.1	12.7	1.4	40.7
Second	40.9	8.0	11.0	7.7	0.6	31.9
Middle	52.8	9.7	12.4	5.4	1.2	18.4
Fourth	56.7	17.2	8.0	4.2	1.9	12.0
Highest	57.6	18.6	12.6	5.3	1.6	4.3
Ghana	46.5	10.9	10.9	7.3	1.3	23.0

Source: GSS, GHS & ICF Macro 2009

As shown in Table 5.7, the receipt and timing of post-natal care varies widely by place of delivery, mothers' education, wealth status and location. A woman who lives in an urban area (e.g. Accra), and has a secondary or higher level of education or higher wealth status, is not only likely to deliver at a health facility, but to also have a postnatal check-up within two days of delivery. Women with little or no education and who live in rural areas have the least coverage. The Northern region has the lowest postnatal check-up ratio, as well as the lowest institutional delivery in the country.

What can we conclude from the above about the potential impact of NHIS on access to maternal health services? Though the available national level DHS and GMHS data do not allow analysis of the observed trends relative to respondents' health insurance status⁶⁴, we can offer some general remarks based on the data presented.

As indicated, antenatal care coverage was already high prior to the NHIS regime, so NHIS may not have had significant consequences in this respect. However, the potential impact of NHIS on increasing skilled delivery and post-natal check up is more ambiguous and debatable. While the removal of financial barriers to institutional delivery was identified by participants in our FGDs as an important benefit of enrolling in NHIS, most of the participants did not come from remote villages, where physical access is a major challenge. Our evidence suggests that, for those who do not have serious difficulty reaching health facilities, NHIS has made institutional delivery a viable option. The same reasoning applies to the use of postnatal care, given the inter-linkages between institutional delivery and postnatal care noted earlier. Another important consideration with respect to institutional delivery is the fact that from 2005 to 2007 Ghana had a delivery fee exemption policy (DFEP), aimed at removing financial barriers to institutional delivery. Thus, the gradual increase in institutional delivery during this period more likely reflects the impact of this policy, rather than that of the NHIS. As noted earlier, it is

⁶⁴ The 2008 Ghana DHS includes a series of questions related to NHIS status and perceptions. Unfortunately the survey does not capture information regarding when respondents obtained NHIS or how long they have had a valid card. Thus the NHIS-related variable cannot be linked with utilization patterns given that maternal health indicators capture the respondents' experiences up to 5 years preceding the survey but we don't know how long respondents have had insurance for.

interesting that the GHS institutional data on skilled deliveries show a decrease that coincides with the phasing out of DFEP, suggesting that financial barriers constitute an important impediment to institutional delivery. Concurrently, the fact that there has not been a marked improvement in institutional delivery following the introduction DFEP, suggests that we should examine factors other than the cost of delivery to fully understand why Ghanaian women don't go to health facilities to deliver their babies. We examine this further in the next section, in the context of maternal mortality.

There is little empirical research on the impact of NHIS on maternal health, and the available research shows conflicting assessments. For example, a USAID-financed study on the impact of NHIS on maternal health in the Brong Ahafo region, indicates that NHIS did not have an impact on institutional deliveries; i.e. the reduction in out-of-pocket payment for delivery care was not accompanied by an increase in institutional delivery, despite an increase in the number of women enrolled in NHIS compared to the baseline at 2004 (USAID 2009). The study also showed that NHIS did not increase the utilization of prenatal care, which was already high prior to NHIS. However, Mensah et al.'s (2009) study focusing on Brong Ahafo and Upper East regions, found a positive association between NHIS membership and institutional delivery. The different methodologies and districts chosen for the study may account for the diverse conclusions. Indeed, our knowledge of the determinants of institutional delivery in Ghana is limited at best. More research is required to

understand the impact of cost on institutional delivery, particularly with respect to the recent government policy to provide free NHIS coverage to pregnant women.

Maternal mortality

For over a decade, lack of reliable maternal death information at the national level made tracking progress in reducing maternal mortality difficult. In the absence of this data, policy makers relied on institutional maternal mortality ratios, which inevitably underestimated the true figures, given that many Ghanaian women deliver at home and are not accounted for. The 2007 Ghana Maternal Health Survey (GMHS), released in May 2009, and the 2008 Ghana Demographic Health Survey (GDHS) addressed this by providing national level data on maternal mortality. GMHS estimated maternal mortality to be 580 per 100,000 live births⁶⁵, whereas the Ministry of Health estimate was 224 per 100,000 live births, based on institutional data⁶⁶. Although the GMHS figure compares favorably with other countries in West Africa, it is nonetheless unacceptably high⁶⁷. Underscoring the severity of the problem, USAID (2009) predicted that "... a Ghanaian woman's risk of dying from a treatable or preventable complications of pregnancy and childbirth over the course

⁶⁵ The 2007 Ghana Maternal Health survey has a lower estimate at 451 per 100,000 live births.

⁶⁶ This figure represents what is reported by national authorities. The national level data figures are not usually "adjusted" to account for underreporting and misclassification. UNICEF, WHO and UNFPA often "adjust" the figures to correct for these. The "adjusted" figure for 2005 was 510 (see Unicef http://www.unicef.org/infobycountry/ghana_statistics.html).

⁶⁷ Maternal mortality rates per 100,000 stand at 970 in Mali, 700 in Burkina Faso, 810 in Cote d'Ivoire, 840 in Benin, and 1100 in Nigeria as at 2005 (Source: MDG Monitor: www.mdgmonitor.org).

of her lifetime is about 1 in 45, compared to 1 in 7,300 in the developed regions." What also makes this unacceptable is that most of the deaths are preventable⁶⁸.

According to the GMHS, hemorrhage is the major cause of maternal mortality in Ghana, accounting for 24% of maternal deaths. The rates from other main causes include induced abortion (11%), hypertension (9%) and obstructed labour (4%) (GSS, GHS & Macro International 2009). While these medically explain the high maternal mortality, it is critical to understand the indirect causes. Thaddeus and Maine (1994) proposed a conceptual framework that provides a useful starting point for understanding why women die of treatable pregnancy-related complications. Focusing on the onset of obstetric complications, the framework suggests that the outcome can be affected by three types of delays, namely: delay in the decision to seek care, delayed arrival at a health facility, and delay in accessing quality care at a health facility. This framework has been widely used in several countries to explain maternal health in general, and maternal mortality in particular.

Using Thaddeus and Maine's 3-delay framework, we explore the underlying causes of maternal mortality in Ghana as depicted in Table 5.8.

⁶⁸ See Ansong-Tornui et al. 2007.

Table 5.8. Exploring the underlying causes of maternal mortality in Ghana through the three-delays analytical lens

	Supply-side issues	Demand-side issues
Delay in decision to seek care	<p><i>Availability</i></p> <ul style="list-style-type: none"> - availability of health facilities or qualified health professionals <p><i>Affordability</i></p> <ul style="list-style-type: none"> - fees - flexible payment options - transportation and other indirect costs <p><i>Acceptability</i></p> <ul style="list-style-type: none"> - staff attitude - quality of service - availability of appropriate care 	<ul style="list-style-type: none"> - culture/tradition - intra-household preferences and decision making - education (not being able to recognize complications and risks) - preference for home delivery - cost of care - indirect costs
Delay in arrival at health facilities	<p><i>Availability</i></p> <ul style="list-style-type: none"> - distance from health centre <p><i>Affordability</i></p> <ul style="list-style-type: none"> - high transport cost - cost of care - payment options 	<ul style="list-style-type: none"> - time required to raise the required funds, if lacking - indirect costs - lack of vehicles, bad roads
Delay in receiving adequate care	<p><i>Availability</i></p> <ul style="list-style-type: none"> - operating hours of medical facility - availability of qualified staff - availability of drugs, equipment and medical supplies - availability of appropriate intervention - waiting time <p><i>Affordability</i></p> <ul style="list-style-type: none"> - direct and indirect cost - method of payment <p><i>Acceptability</i></p> <ul style="list-style-type: none"> - quality of care - staff attitude 	<ul style="list-style-type: none"> - inability to meet the costs outright

There is sufficient evidence to suggest that, despite the high incidence of antenatal care, most decisions about the place of delivery are made after the onset of labour, not during pregnancy (see Mills and Bertrand 2005 for example). Many supply and demand factors can influence women's timely utilization of obstetric care. The decision is limited by a number of factors, including the interplay between women's decision making power and socio-cultural norms on one hand, and the availability, affordability and acceptability of health services on the other. Once the decision to seek professional care is made, further delays could occur due to difficulties getting to the health facility, as well as the challenge of raising the required funds⁶⁹. The capacity of the health facilities to provide timely, quality care also plays a pivotal role in deciding whether to deliver at a health facility.

On the demand side, the key factors that shape women's access to health care with respect to maternal care seeking include:

- Direct and indirect costs: For those who live far from health facilities, the cost of transportation can be unmanageable. Other costs include lost income, and transportation costs for those accompanying the care seeker.
- Intra-household decision making: When the decision impinges on finances, husbands can play an important role in determining where the delivery takes

⁶⁹ According to 2007 GMHS, the proportion of stillbirths at a health facility outnumber live births - 68% of stillbirths take place in a health facility, while 54% of live births take place in a health facility (GSS, GHS & Macro International 2009). A potential explanation given is that women with delivery complications are more likely to go to a health facility for help.

place for women who do not have sufficient financial resources of their own (Mills and Bertrand 2005). This often accounts for some of the delays in seeking care.

- Education: The generally low level of literacy among women means they may lack knowledge and awareness of pregnancy risks. The female literacy rate in Ghana is 55%, compared to 73% for men. The Northern Region has the lowest female literacy rate, as well as significant problems with access and use of maternal health information (Government of Ghana. Ministry of Health 2008C).
- Timing: Given that ultrasound is not readily available to those living in rural areas, estimating a delivery date is often difficult, "... labor cannot be scheduled in advance, but women can arrange to attend antenatal care on a market day when transportation is available"(Mills and Bertrand 2005:55).
- Traditional beliefs and practices associated with pregnancy and childbirth: These can shape the health seeking behavior of expectant mothers. For example, a study in the Kassena-Nankana District of northern Ghana found that a traditional belief that associates prolonged labour with extramarital affairs can be a major source of delay when deciding whether to seek professional medical care. A male opinion leader expressed, "... a promiscuous woman would definitely have problems if she is giving birth. She would have to tell everybody

present the number of men who have slept with her apart from her husband, before she would be able to give birth" (*ibid*).

- Preference for home-based births: Women's own assessments of perceived need can play an important role in delaying decisions to deliver at a health facility.

Similarly, the key supply side factors that shape women's access to health care with respect to maternal care seeking include the following:

- Poor condition of health facilities, shortage of essential drugs, inadequate qualified health staff.
- Hostile attitude of nurses and doctors and perception of poor quality care (Mills and Bertrand 2005 note that the majority of hostile attitudes are experienced during delivery and not during antenatal care).
- Location of health facilities.

What the above holistic framework suggests is that, while the cost of treatment/care can be a significant deterrent to timely access to maternal care, addressing the challenges of low institutional delivery and high maternal mortality in Ghana requires dealing with the broader supply and demand issues that mediate and shape women's access to health care. It is apparent that access to obstetric care

cannot be measured solely in terms of the affordability of services. One approach to exploring this further is through the multi-dimensional access framework discussed earlier.

We have previously discussed the disproportionate distribution of health facilities and health professionals in Ghana that favors urban centers. While we noted its adverse impact on access to health services in general, the impact with respect to obstetric emergency on maternal health can be particularly devastating. Referring to Kassena-Nankana district of northern Ghana, for example, Mills and Bertrand (2005) note the difficulties pregnant women face reaching health facilities. "In communities lacking clinics or hospitals, emergency transportation is always a problem. Most of the communities had no vehicles, so someone has to bicycle to the nearest town (as far as 40 kilometers away) to fetch a commercial vehicle. This process takes so long that by the time a vehicle is available, it is often too late" (p. 51-52). Further, the available health facilities in rural communities are often unable to deal with emergencies. For example, hemorrhage is the main cause of maternal death in Ghana. However, many of the CHPS and rural maternity clinics are not equipped to provide the blood transfusions necessary to save women's lives; nor are they able to deal effectively with emergency obstetric care (Government of Ghana. Ministry of Health 2009c). The urban biased doctor to population ratio noted earlier further constrains access for rural women. Thus, the availability of obstetric emergency facilities and qualified staff is essential to achieving a decrease of maternal mortality in the country.

Where health services are available, the quality and appropriateness are important. Access barriers created by poor quality of service have been identified as a critical issue with respect to maternal health in Ghana, particularly in light of the country's dismal performance in reducing maternal mortality. As Fathalla, F. Mahmoud (quoted in Hulton, Matthews and Stones 2000) rightly put it, "... the question should not be why do women not accept the service that we offer, but why do we not offer a service that women will accept?" The Independent Review Team of Ghana's 2008 Health Sector Programme of Work notes the poor state of maternal health services in the country:

"... the field visit was a real shock for the review team, especially for consultants who had never visited GHS facilities before. The labour wards visited were all in an appalling state, with rusty delivery beds, incomplete delivery sets and no material at all for neonatal resuscitation. Unfortunately, inventory reports from other regions, and statements from interviewed officials, confirmed that the poor state of labour rooms is the rule, rather than exception. ... The review team is convinced that the IGF (Internally Generated Funds) in most facilities is sufficient to cover the small investments required. ... Maybe we have to make the cynical conclusion that Ghanaian women are smart: they know that they can benefit from antenatal services and therefore they come; at the same time they know that in a labour room in a facility they are hardly better off and deliver at home." (Government of Ghana. Ministry of Health 2009c:25)

While the conclusions reached by the Independent Review Team are debatable, their assessment underscores real issues regarding the quality of maternal health

services available for poor women who cannot afford to deliver at private health facilities.

A confidential enquiry, conducted to assess differences in the quality of maternal care before and after the introduction of the universal free delivery policy, found no difference in the quality of care (see Ansong-Toruni et al. 2007). The finding suggests that the quality of care given to women upon delivery remained consistently and unacceptably poor. This was largely attributed to staff attitude and lack of professionalism, which contributed to avoidable deaths. Medical officers were found to be ill prepared to handle obstetric emergencies:

"Doctors seemed ill prepared to deal with obstetric conditions commonly seen in district hospitals. In Ghana, one district hospital will only have on average one medical officer in attendance. This means that the medical officer covers all serious emergencies (obstetric and otherwise), and this is a situation not conducive to providing good quality emergency maternity care. Regrettably, to compound this problem of availability, doctors are not competently managing most obstetric emergencies. Additionally, there were a number of cases seen which might be considered very basic emergencies that any medical officer should be able to deal with, however, even these were poorly managed. Basic resuscitation techniques (not even specific to obstetric care) appear to be either extremely poorly recorded or not done at all" (*ibid* 130).

The poor quality of maternal care is troubling in light of the high maternal mortality rate in the country. Efforts to enhance maternal care need to address quality issues

first. Indeed, attempts to reduce financial barriers without seriously addressing quality issues will have limited impact on improving access to maternal care.

A related issue is staff attitude. Poor attitude of health care staff has attracted much criticism from various quarters, including from within the health establishment itself. The Ghana Registered Nurses Association (GRNA), for example, expressed worry over the, "... gradual dwindling of public trust and confidence in nursing and midwifery services, mostly at public health facilities, as a result of poor attitudes exhibited by some of its members" (Ghana News Agency 2006). Likewise, the Deputy Minister of Health cautioned health workers about their poor attitude toward patients (Myjoyonline.com 2009: 6/9/2009)⁷⁰. While poor quality of health service is an issue that permeates the health care system generally, staff attitude is more pronounced with regard to maternal health. Abusive attitudes to women in maternity wards are widely reported, which may in turn discourage care seeking (see for example D'Ambruso, Abbey and Hussein 2005).

We conclude this section with a review of the problems regarding accessing health care that were identified by women in the 2008 Ghana DHS survey. Though the survey does not capture issues regarding the acceptability of care (e.g. quality of care or staff attitude), it nonetheless provides women's own perspective of some of

⁷⁰ Ghana faces an acute shortage of health professionals that has resulted from sustained exodus of its doctors and nurses to other countries. This, coupled with the increase in utilization of health care since the introduction of NHIS may be putting an added pressure on the already weak health system.

the challenges they face with respect to the availability and affordability of health services.

Table 5.9. Problems in accessing health care

Percentage of women age 15 to 49 who reported having serious problems accessing health care for themselves when they are sick								
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern no female provider available	Concern no provider available	Concern no drugs available
Ghana	7.0	45.1	25.9	25.0	18.4	21.5	43.5	44.9
Residence								
Urban	4.8	40.0	16.4	15.2	14.2	17.9	37.4	38.0
Rural	9.2	49.9	34.8	34.2	22.4	24.8	49.3	51.3
Region								
Western	8.1	26.6	24.1	22.1	20.4	28.2	79.6	83.0
Central	3.3	40.6	22.2	20.0	19.2	8.8	26.2	28.5
G. Accra	4.3	41.2	15.7	13.8	12.5	19.3	17.3	18.9
Volta	5.4	64.3	30.6	34.7	28.5	32.4	38.1	35.8
Eastern	3.3	37.7	22.8	26.3	16.9	14.0	44.3	44.0
Ashanti	4.8	45.3	20.3	17.3	16.8	23.5	59.0	59.4
Br. Ahafo	3.9	39.5	24.8	28.6	13.7	28.4	51.7	52.7
Northern	12.0	53.8	35.1	28.2	19.4	16.2	22.6	27.5
Upper East	33.9	67.1	69.4	68.7	30.0	23.9	66.5	69.0
UpperWest	10.8	56.8	35.5	40.0	21.6	20.5	46.7	47.7
Wealth Q.								
Lowest	14.6	60.2	50.9	49.7	28.0	28.9	47.1	50.0
Second	8.0	49.8	30.2	32.1	20.2	24.4	51.5	51.8
Middle	5.0	49.1	22.5	21.7	19.5	18.3	45.8	46.8
Fourth	3.8	41.3	18.6	17.3	16.0	18.8	42.1	43.9
Highest	6.1	31.3	15.2	12.7	11.9	19.5	34.2	35.0

Source: GSS, GHS & ICF Macro 2009

At the national level, the cost of treatment, availability of drugs and availability of services are the three most important problems Ghanaian women identified in accessing health care. While this confirms our general conclusion that the cost of treatment is an important barrier to access to health care, it also highlights the significance of both the availability of services and indirect costs associated with the

receipt of care. The data reveal significant differences by geographic location and wealth status, which suggests that solutions for enhancing access to health care should be context specific. Women in the lowest wealth category face significant access barriers, yet, as our earlier analysis revealed, it is precisely the people in this socio-economic category that are not served by the NHIS.

4. Conclusion

What can we conclude about women's access to maternal and obstetric care, based on the above analysis? The analysis of access to maternal health care in Ghana provides further support for our hypothesis that the availability of NHIS alone is not sufficient to significantly alter the patterns and frequency of utilization of health services. Non financial factors—and their intersection with gender—play an important role in defining who gets access to health care and how. We premise our conclusion in the context of the policy response to the challenge at hand.

Ghana has implemented a number of key policy initiatives intended to enhance maternal health by removing financial barriers associated with the cost of treatment. With the introduction of user fees to the public health system, access to maternal health services became fee-based (with the exception of tetanus toxoid immunization for pregnant women, which was exempted from fees) (GSS, GHS & Macro International 2009). A free antenatal care policy was instituted throughout the country in 1997 in an effort to promote maternal health (*ibid*). Delivery fee

exemption policy (DFEP) began in 2003 in the four most deprived regions (Northern Region, Upper East, Upper West and Central Region), and this was expanded to the remaining six regions by 2005 through funding from HIPC debt relief (Ansong-Tornui et al. 2007). The aim was to remove financial barriers to accessing obstetric care, and thereby reduce maternal mortality (*ibid*). DFEP was phased out in 2007 when the funding was depleted. As noted earlier, the sharp reduction in deliveries assisted by skilled health professionals in 2007 (from 44.5% to 35.1%) is attributed to the phasing out of DFEP (Government of Ghana. Ministry of Health 2009c). It was assumed that most pregnant women would already be enrolled in NHIS, and so the impact was expected to be minimal (Witter and Adjei 2007).

As discussed, Ghana's national maternal mortality rate is currently 580 per 100,000 live births (GSS, GHS & Macro International 2009). The MDG 5 goal seeks to reduce maternal mortality by 75% between 1990 and 2015, and to achieve universal access to reproductive health by 2015 as well. In Ghana, this would require a reducing the 1993 national figure of maternal mortality rate of 214⁷¹ per 100,000 live births to 54 per 100,000 live births (UNDP 2007). Not only is attaining the MDG target improbable, but the slow progress indicates the severity of the challenges that remain to be addressed, if the loss of thousands of women's lives is to be prevented.

⁷¹ It is not clear if this figure represents the "unadjusted" government estimates based on institutional data or that adjusted to account underreporting and misclassification. If the former, the actual figures will be much higher. Either way, it is clear that the country has a long way to go to attain the MDG 5 goal.

Maternal mortality was declared a national emergency in Ghana by the Minister of Health in 2008, and free membership to NHIS for pregnant women was declared by the President in July 2008 to enhance maternal care. This is also expected to improve institutional delivery. Further, maternal and neonatal health improvement was declared a priority theme for the 2009 health sector program. While these are all important and commendable efforts, they risk being reduced to technical fixes to a complex and multi-faceted underlying problem. Our research suggests that Ghanaian women face several barriers to access, and these interact with each other to create a cycle of gender disadvantage in the receipt of maternal care. Policies aimed at only removing the cost of treatment will inevitably have limited success reducing maternal mortality. For example, maternal mortality rates cannot be decreased without adequate and appropriate obstetric care being available near those who need it. Likewise, providing obstetric care without addressing the quality issues and socio-cultural barriers will not be effective in removing obstacles to women's access to health care. It is important to recognize that the poor are disadvantaged in many of the dimensions of access to health care. As our analysis suggests, maternal mortality is primarily a problem affecting poor women. Dealing with this requires positioning maternal health in the context of the root causes of women's disadvantaged positions in society, as opposed to addressing it in isolation (Sen 2009).

Many high-level consultative meetings to discuss strategies for improving maternal health have been held since the declaration of the maternal mortality crisis. While

the high level political support is encouraging, some have cautioned that what is really needed to respond to the maternal health crisis is not another policy, but concrete action. The 2008 Independent Review of the Health Sector Programme of Work (Government of Ghana. Ministry of Health 2009c) stated that unless concrete steps are taken, the current momentum may lead to yet another delay in maternal health, "... high level talk without action."

Chapter 6:
The Melding of Ideas,
Interests, and Politics: The
reformation of health
financing policy

1. Introduction

In the previous chapters we examined the empirical evidence regarding the equity impact of Ghana's recent health finance reform in terms of access to health care. In this final chapter we take a step back, and position our findings in the context of the broader health financing policy and resource allocation scenario. Our objective is two-fold: (i) to highlight the policy processes, motivations and assumptions that underpinned the reform; and (ii) to examine whether and how NHIS has affected the way health sector resources are generated and allocated. The first will allow us to explore whether and how health policies may have unintended consequences that impact equity goals in access to health care. For example, in the absence of deliberate gender aware policy measures, do health financing reforms that are presumed to be gender neutral create or perpetuate existing gender inequities, even when they are guided by a commitment to equity? The second will allow us to assess the extent to which changes in the generation and allocation of funds to the health sector facilitate or restrict the scope for promoting equitable access to health care.

Our analysis draws extensively from key informant interviews, as well as official government documents and financial reports. We conducted over 40 interviews with lead experts, and key informants in appropriate government ministries and departments, civil society organizations, District Health Insurance Schemes, donor agencies and academia, to gain deeper insights about the policy orientation, process, dynamics and underlying assumptions underpinning NHIS. The official government

reports and financial data complemented this, and allowed us to assess changes in the generation and allocation of financial resources to the health sector, and the implications thereof.

2. Drivers of Change

Although the introduction of NHIS is a recent health financing policy reform in Ghana, the country has had experience with mutual health insurance since the early 1990s. The concept of mutual health insurance was first introduced there by the Christian Health Association of Ghana (CHAG)⁷² in an effort to reduce catastrophic health expenditures among the poor, and ensure the financial sustainability of the CHAG facilities was not adversely impacted by mounting unpaid hospital bills. The rising child and maternal mortality rates, and the increasing burden of out-of-pocket payments on the poor (women in particular) prompted the need to rethink the prevailing health financing approach. In 1992, CHAG piloted the first health insurance scheme in the Nkroanza district of Brong Ahafo region, to provide a viable financing alternative for the poor. Speaking of the genesis of mutual health insurance in Ghana, a key informant recalled,

⁷² CHAG is an umbrella organization for church-based health service providers in Ghana. It has about 180 health facilities throughout the country (Interview, Accra, 19 February 2009). Its mandate is to serve the poor, and so it is mostly active in rural areas where government facilities are not available. It has emerged to fill the void in available health care for the poor and underprivileged. The share of CHAG in terms of service provision in the country is debatable, as there are no accurate data. CHAG estimates that it is between 20-30%. Its share is believed to have decreased in the last 5 years or so, following the introduction of CHPS and the enhanced role of GHS therein. The private, for-profit, sector's share is estimated to be 10%. The Ghana Health Services, which oversees the service provision of public health facilities, is the primary health provider in Ghana, accounting for about 60%. (See Diagram 6.1).

"The Nkroanza CHAG facility was struggling with high mortality rate caused mostly by delayed health seeking behavior. As is typical with CHAG hospitals, most of the clients were extremely poor. They owed huge amounts of money to the hospital. Unlike the government's 'cash and carry' system or the private for profit outfits, as a mission hospital, CHAG could not turn people away for lack of ability to pay. This necessitated the need to find a sustainable solution to the resulting financial difficulties. Insurance was considered a way out of this. The scheme was run by the health facility and offered limited service to members. Benefits were limited to in-patient care... After few years of implementation, there was a drop in mortality rate and also in the money owed to the hospital. By 1995, other mission hospitals got interested and the idea spread to other provinces like a wild fire. The (then) government also launched its own pilot in Dangme West" (Interview, Accra, 17 February 2009).

Due to its success, the Nkoranza scheme became a model for other facilities. Interest in health insurance as an alternative to the "cash and carry" system continued to grow through the late 1990s, although the idea was largely a localized experiment. By the time the NHIS was introduced, an estimated 168 mutual health insurance schemes were operating across the country (Sulzbach et al. 2005), albeit with limited reach. The "cash and carry" system was not working, and NHIS became an increasingly attractive alternative. Mutual health insurance schemes showed much promise, but their coverage—in terms of the number of beneficiaries—remained low (*ibid*).

The growing undercurrent of discontent with the health care system made health financing a central issue in the Ghanaian political arena. In 2000, the then opposition party (NPP) made health financing reform its main election platform, and promised to replace the "cash and carry" system with a national health insurance scheme that would offer affordable health financing to Ghanaians. A key informant noted, "... the idea of a national health insurance was first introduced by the NDC government when it was in power, but the government only pilot tested the idea in few districts. It did not have the chance to graduate the idea to the national level. At the 2000 national election, the NPP party hijacked it and made it part of its election platform" (Interview, Accra, 18 February 2009). Unlike earlier pilots which offered limited coverage, NPP promised to expand the scope by including both out-patient and in-patient admissions. It also renewed hope for universal health insurance.

Upon taking office, the NPP government assigned a technical team—headed by the Ministry of Health—to draft a policy document and an implementation plan to meet its election promise. Consultation with key stakeholders, including CHAG, was key during the inception period, as securing buy-in from key stakeholders and community leaders was considered important for successful implementation of the reform. The proposed implementation plan was subsequently piloted in several districts.

Box 6.1 provides a summary of the key policy milestones of the launch and implementation of the NHIS. In 2003, the National Health Insurance Act was approved by Parliament (Government of Ghana 2003), despite fierce resistance from the opposition party and the Trade Union Council (TUC). The TUC initially wanted a separate scheme for formal employees, but its proposal was not accepted by the technical advisory team. The government wanted to include both formal and informal workers in a single national system. The opposition party contested the proposed health insurance fund, that was to draw 2.5% from employee social security contributions (SNNIT) and introduce a new 2.5% health insurance levy. The Act passed because the sitting government had the majority of seats in Parliament.

Meanwhile, as the 2004 national election drew near, so did the pressure to have NHIS in place to show that the sitting government had met its past election promise. As one key informant noted, "... our democracy was maturing. Politicians knew that people make them accountable for their election promises" (Interview, Accra, 12 February 2009). Several policy analysts and practitioners noted that, although the NHIS was a welcome reform, it was driven by political prerogatives and thus implemented rather quickly. In most districts, for example, the schemes were set up by the government to fast-track the launch, and then handed over to the respective communities. A key informant remarked, "... the government had no alternative but to deliver on its promise. There was going to be another election in 2004. So, whether it was feasible or not they had to do it to win the hearts of the people. They set up the National Health Insurance Council (now renamed NHIA) to see to the

implementation of the policy" (Interview, Accra, 12 February 2009). Noting the lack of actuarial basis guiding its rollout, the 2008 Independent Review of the Health Sector Programme of Work stated, "... the original setting of the subsidy amount per member (which has since been adjusted upward by a small amount each year) was apparently based on the premia used by the existing mutual health organizations. However, these were offering very limited packages at the time, so could not have provided an accurate basis for such broad coverage as is offered by the NHIS." (p. 59).

There is remarkable similarity between NHIS and the pre-existing mutual health insurance schemes in terms of structure, management and organization. This is not surprising, as NHIS built upon prior successful experiences with mutual health insurance. As one key informant noted, "... that is why we have the structure as it is currently— mutual and district based." (Interview, Accra, 18 February 2009). While this has helped enhance the adoption of NHIS—particularly in regions that had extensive experience with mutual health insurance—the political pressure for quick results meant that some of the existing mechanisms were simply transported to the national level. In fact, as discussed later, some of the emerging implementation challenges were due to this. Regardless, what is innovative about NHIS is the introduction of the health insurance levy and SNNIT contribution to the Fund. This gave the government the secure and reliable resource base necessary to scale the initiative to the national level. Unlike previous policy reforms that were largely donor driven, the idea of NHIS had its impetus from within. Donor agencies only

participated once the government decided on the direction of the reform; the agencies mainly played a supporting role by providing technical advice.

Box 6.1. Summary of Key Policy Milestones

NHIS	Maternal Health
2000: NPP won a national election with a promise to replace the 'cash and carry' system with a national health insurance scheme	2003: Free maternal delivery introduced in the three northern regions and the Central Region
2001: Draft Bill on health insurance initiated	2005: Free maternal delivery extended to all provinces
2002: Mutual health insurance schemes piloted in 42 districts	2007: Free maternal delivery phased out
2003: National Health Insurance Act (650) approved by Parliament	2008: Maternal mortality declared a national emergency
2004: NHIS formally launched	2008: Free NHIS for pregnant women announced by the President in July
2004: NHI Council established	
2006: Nation-wide campaign launched to issue insurance ID cards to registered members	
2007: New universal ID cards and ICT platform introduced	
2008: New Diagnostic-Related Groupings (DRGs) and tariffs introduced	
2008: Maternal mortality declared a national emergency	
2008: Free NHIS for pregnant women announced by the government	
2008: Proposal to de-couple children's registration from parents' tabled before the Parliament	
2008: NDC government promised to institute a one-time payment of insurance premium	
2009: Preparatory work for the implementation of one-time payment initiated	
2009: Proposal to centralize the management of claims presented to Parliament	
2010: One-time payment of premiums expected to commence (overhaul of NHIS)	

As noted in the introductory chapter, NHIS is a form of social health insurance premised on financing and managing health care based on risk pooling. While in theory it pools the contributions of individuals, with some government support, in practice the scheme is heavily subsidized, with an estimated 63% of NHIS members exempt from paying any premium. NHIA estimates that close to 90% of NHIS funds are derived from SNNIT and the health levy. Though membership is supposed to be compulsory, except for the formal sector employees who contribute through SNNIT, there are no mechanisms for enforcing membership for the vast majority of Ghanaians. The heavy subsidies and comprehensive package make NHIS an attractive alternative to "cash and carry" for most people.

What the introduction of NHIS meant for the pre-existing schemes was that, given its comprehensive benefits package and the subsidies offered to District Mutual Health Insurance Schemes (DMHIS), most of the pre-existing schemes either re-constituted themselves as DMHISs or ceased operation. Prior to the introduction of NHIS, CHAG was playing the roles of provider and purchaser with respect to mutual health insurance. Since it is primarily a service provider, it decided to relinquish its role as purchaser and closed its insurance schemes⁷³.

⁷³ As a service provider, CHAG members are all accredited and are eligible providers for NHIS.

Political will, backed by the strong technical leadership of the Ministry of Health⁷⁴ and the previous positive experience with mutual health insurance schemes, can be credited for Ghana's recent health financing policy shift from "cash and carry" to social health insurance.

Health care is increasingly becoming a means of winning votes in Ghana. This was demonstrated in the 2008 national election when NHIS was once again central to election platforms, and the then opposition government (NDC) gained power with a promise to institute a one-time payment of insurance premiums. Strong political will has been a positive force behind the introduction of NHIS. However, while political commitment is essential for ensuring the sustainability of the NHIS, its current politicization—and the resulting competition among the political parties to outdo each other—could lead to the system being overburdened with unrealistic expectations. The biggest challenge now facing health financing in Ghana is to establish a healthy balance between sustainability, effectiveness and politics. So far it appears that politics has the most influence which, though good for the survival of the scheme, could potentially lead to its demise, if it is not backed up by sufficient resources to strengthen the health care system as a whole.

⁷⁴ The Ministry of Health was charged with the mandate of developing a viable mechanism for the implementation of the NHIS.

3. Equity

Enhancing equity is one of the important underlying objectives of the NHIS. Central to this is the notion that the financing and utilization of health care need to include the poor (i.e. be "pro-poor"). This idea of inclusiveness is embodied in the official definition of equity, as articulated in the NHIS policy document (Government of Ghana 2004b: 8):

"Equity implies that everybody has access to the minimum benefit package irrespective of peoples' socio-economic background. This means that everybody should have the opportunity to join a health insurance scheme. So health insurance should be at the door-step of every resident in Ghana. Also, health insurance should be available at all time so that subscribers are not denied access to health care when they need it."

The NHIS policy framework makes two important distinctions regarding equity. It is extended to all Ghanaians by providing equal access and the opportunity to join a health insurance scheme. Upon joining the NHIS, however, individuals are assured of equal access to a minimum benefit package, and the right to health care when needed. There is an implicit assumption that everyone will eventually subscribe to the NHIS, thus allowing the government to extend basic health care to all Ghanaians. Indeed, the overarching goal of the NHIS is to ensure universal access to basic health care services to all Ghanaians (Government of Ghana. Ministry of Health 2009a). The most effective way to reach this goal is by facilitating membership to NHIS. But as noted earlier, while NHIS membership is mandatory in principle, not everyone is

willing or able to join. The question then becomes, how does the concept of equity apply to those who are not able to subscribe to NHIS?

The design of the NHIS incorporates the recognition that not everyone has the ability to pay the insurance premium. The scheme is thus based on the principle of pooling risks and benefits. Equity in terms of ability to pay is addressed by exemptions for certain groups: pensioners, children under 18 (if both parents are registered), those over 70 years of age, 'indigents' and, more recently, all pregnant women. The exemptions—constituting 63% of the NHIS card holders (see Table 6.1)—are primarily age-based, with some limited consideration of gender and socio-economic status. The underlying assumption is that individuals who fall within the exempt category are vulnerable, and need assistance to ensure that they are not excluded from the benefits of NHIS.

Table 6.1. NHIS card-holders by category, 2008

NHIS category	ID card holders		Proportion of total population
	Number	Percentage	Percentage
Informal Sector	3,727,454	29.9	15.8
SSNIT	811,567	6.5	3.4
Pensioners	71,147	0.6	0.3
Total exempt	7,858,390	63.0	33.3
Aged (over 70)	816,956	6.5	3.5
Under 18	6,305,727	50.6	26.7
Indigents	302,979	2.4	1.3
Pregnant women	432,728	3.5	1.8
Grand Total	12,468,558	100	52.8

Source: Author's calculations based on NHIA figures presented in the 2008 Independent Review of Programme of Work (Government of Ghana. Ministry of Health 2009b)

* Percentage calculated based on 2008 population estimates of 23,582,501 (Source: Government of Ghana. Ministry of Health 2008d)

A common view in the NHIA, Ministry of Health, DMHIS and other stakeholders is that exemptions are a large part of equity. The NHIS is also considered to be an important pro-poor strategy for the health sector.

This raises the question of who exactly is considered "poor" within the definition of the NHIS? In principle, NHIS premiums are based on the 'ability to pay'. However, the difficulty in assessing people's ability to pay has caused most schemes to adopt a flat rate, which in some districts is the lowest premium scale. A key informant noted, "... for the informal sector, it is difficult to determine who needs to pay more than others. What do you base to assess wealth? Someone may be living in a nice house but gotten it through inheritance. It does not mean that the person can afford to pay more ... Nobody wants to pay more than others, and so they all insist that they are poor." (Interview, Accra, 11 February 2009). This has raised some concerns about the fairness of the distribution of health financing.

The core poor, classified as 'indigents', are to be exempt from paying premiums. However, as already noted, the narrow definition of 'indigent' has effectively excluded the majority of people who are extremely poor, but don't meet the 'indigent' criteria. There is general agreement among DMHIS managers that very few meet the NHIS criteria of 'indigent' in the strict sense. There is also some confusion about exactly who qualifies as an 'indigent'. It has become a common practice among many NHIS agents to grant "indigent" status to widows, orphans and the handicapped.

The need to better define the poor is now recognized both by the NHIA, which regulates the schemes, and by the scheme managers themselves. As a key informant noted, "... the difficulty is that we are not experts in poverty. So we find it hard to look at people and determine how much they can afford because they are outside the tax regime ... The Department of Social Welfare has identified who the poor are for the LEAP⁷⁵ project. There is an effort to integrate our targeting with LEAP, but we have not moved far. This is not officially adapted yet." (Interview, Accra, 16 February 2009). NHIS has much work to do to reach the estimated 18% of Ghanaians believed to be living in extreme poverty.

Another emerging equity concern relates to the impact of a recently introduced diagnosis related grouping (DRG) on non-NHIS members, particularly the poor who can not afford the NHIS premium. NHIA introduced the DRG system in 2008, as a way to harmonize the processing of service claims and enhance efficiency. This has inadvertently led to an increase in the claims submitted by the NHIS service providers, which suggests an associated increase in the cost of health care for those who pay for the services out-of-pocket. Witter and Garshong (2009) argue that, in addition to the financial strain that this will likely put on NHIS, the possibility that it may "squeeze out" the non-insured from the market is also worrisome.

⁷⁵ LEAP (Livelihood Empowerment Against Poverty) is a donor backed initiative aimed at improving the livelihood of those living in extreme poverty by providing cash transfers.

4. Gender

A review of official documents, as well as interviews with key informants, indicates that gender has not been given much consideration in the discussion and/or formulation of NHIS policy. The underlying assumption guiding the reform is that the policy is gender neutral. To the extent that gender is considered, it is largely reduced to upholding non-discriminatory practices on the basis of sex. Thus, the fact that membership in the NHIS is open to all is considered confirmation of equity. Capturing the dominant view among policy makers and practitioners, a key informant noted, "... the scheme is open to everybody. It does not matter if you are a man or a woman." (Interview, Accra, 12 February 2009).

Underlying the absence of gender considerations and the presumed gender neutrality of NHIS, there is an implicit assumption about women's financial independence and autonomy in decision making. As noted earlier, this is not borne out by the empirical evidence, which reveals overwhelming financial dependence of Ghanaian women on their husbands, particularly in rural areas. Reinforcing this, a key informant noted, "... gender did not figure much in the NHIS formulation. It was mostly age that was considered, focusing on children and those over 70. However, most women would depend on their spouses to pay for their premiums in Ghana. Some even need to get permission to go to the health facilities" (Interview, Accra, 18 February 2009). Membership to the NHIS is individually based, requiring both men and women to register and pay the premiums. As our research indicates, among

married women who have health insurance, it is their husbands who usually pay their premiums. Thus, the financial burden on those involved in polygamous marriages can be enormous. We found some evidence of this in the Northern Region. It would be beneficial to further investigate the extent to which the financial burden on polygamous families may affect NHIS membership among women living in these households.

As the implementation of the NHIS continued, there was an important policy amendment in 2008, intended to enhance women's maternal health by providing free NHIS membership to all pregnant women. Thus pregnant women are advantaged, regardless of their socio-economic status. While this policy adjustment seems to signal the beginning of recognition of women's social disadvantages in access to health care—albeit limited to their reproductive role and years—a closer examination reveals that it was entirely donor driven. The mid-term review of MDG 4 (re: child health) and MDG 5 (re: maternal health) strongly criticized Ghana for its slow progress in meeting the stated goals. Both maternal and child mortality were estimated to have either remained the same or become worse. The UK Department For International Development (DFID) had some unallocated funds from its aid envelope to Ghana, and suggested they be used for maternal and antenatal care. The government used this opportunity to announce free NHIS for pregnant women, and declared maternal mortality a national emergency. The Ministry of Health subsequently provided a one-time contribution of 16 million Ghana Cedi to the NHIA, to help with the additional costs the new policy would impose on the NHIS

(Government of Ghana. Ministry of Health 2009c). A key informant noted, "... the free maternal care is run as a project. The UK government had money and they wanted to use it to reduce maternal mortality. The money then got implemented through the NHIS. This was not an NHIA or a government initiative" (Interview, Accra, 19 February 2009).

NHIA has proposed including all children under 18 in the exempt category, whether or not their parents are enrolled. Some schemes have already adopted one parent membership, to deal with single parenthood issues and to prevent children from being penalized for lack of parental initiative. The proposed amendment, largely driven by the need to meet MDG 4 goals, is to decouple children from their parents' registration status. While this has been welcomed by many, some have pointed that the 18 year cutoff is too high, and requires careful evaluation from an actuarial standpoint (Government of Ghana. Ministry of Health 2009b). Others argue that, as the proposed reform does not target the poor, leakages will be high. A key informant also cautioned the potential gender implications of this, "... to some extent, when you decouple children, women may register less since they registered because of their children. As well, once maternity is taken out of obligatory membership, the incentive for women to register would drop" (Interview, Accra, 27 February 2009).

The incorporation of free health care for pregnant women under NHIS has already caused some discomfort in the NHIA. While the policy is consistent with the principle of risk pooling, it is also expected to be the most expensive expenditure

item for the NHIS. A key informant noted, "... whereas among the general population the risk of falling ill is spread widely, the probability of using health care once a women gets pregnant is one." (Interview, Accra, 3 March, 2009). As the policy is fairly recent, financial data regarding the costs involved are not readily available. Nonetheless, the question that most NHIS managers ask is, "Do we have enough funds to sustain all these exemptions?" The risk is that, like the free maternal delivery policy that was cancelled in 2007 when the HIPC funding ran out, this new policy of providing free health care to pregnant women may also be phased out if it is "dumped" on NHIA without sustained government financial support. In the short term, the high cost of providing free health care for pregnant women may also constrain NHIS' scope for further expanding the coverage of the poor for premium exemption.

In terms of the service package for women (e.g. offering premium exemption for pregnant women), the NHIS can be said to facilitate vertical equity through maternal health care—although its effectiveness is arguable, as discussed in the previous chapter. However, the lack of systematic consideration of gender issues beyond maternal health suggests that gender is not considered an important determinant of access to health care. This does not mean that the NHIS has had an adverse impact on gender equity. Indeed, as detailed in the previous chapters, its impact has been largely positive. However, this success is not due to a deliberate gender aware policy, but rather it is a combination of intra-household relations, gender roles, international pressure to meet MDG goals and other influences. The danger is that,

unless gender is recognized and incorporated in a policy framework guiding the future directions of health financing in the country, the initial positive outcomes may not be sustained.

The need to consider gender in health policy planning and implementation is beginning to be recognized within the health sector, largely due to donor insistence. The Ministry of Health is putting a strategy in place to integrate gender issues into the sector's programs and priorities. In its 2008 Programme of Work, the Ministry declared, "... there is a need to integrate gender issues into the sector's programs and priorities. This is primarily because men and women differ in terms of their healthcare needs and have different roles to play in their responses to health promotion and the reduction of barriers to accessing health services" (Government of Ghana. Ministry of Health 2007b:15). A gender equity indicator is also a part of the health sector's annual performance reviews. However, analysis of this indicator—done for the first time in the 2008 Independent Review of the sector—is generally limited to whether or not there are differences between men's and women's levels of registration in the NHIS. While collecting gender disaggregated data on NHIS membership is a useful starting point for gender-based analysis, our research indicates that membership status does not reveal the underlying intra-household dynamics, or allow us to examine other gender-based disadvantages that determine access to health care. Furthermore, the recent amendment to exempt pregnant women will prompt a higher NHIS membership rate among women, and

thus the data could be misleading if the intent of the indicator is to capture gender equity in access to health care.

5. The Missing Dimension

As outlined above, the lack of a clear strategy for ensuring that the poor are not excluded from the NHIS, and the absence of gender considerations, limit the potential of the NHIS to achieve equitable access to health care. Consideration of geographic location is also missing from the NHIS policy framework. For example, what does NHIS membership mean for a pregnant woman who lives in a remote village, and has little or no easy access to a health facility? Or what motivation will a man in a rural village have for membership when he has little confidence in the quality of the service at the health facility, and relies heavily on traditional herbs? And will an NHIS membership for someone in Accra, for example, provide the same benefits as it would for someone living in the Northern Region or Dangme West? These considerations are seriously lacking in the NHIS policy framework. Yet, attaining the NHIS' goal of ensuring universal access to basic health care services for all Ghanaians does not depend on a high NHIS membership rate, but on the availability of health services to its members⁷⁶. The weak portability of NHIS membership compounds the problem.

⁷⁶ NHIS membership is widely used within NHIA as well as the Ministry of Health as a proxy to assess access to health care. This explains why there is a lot of emphasis on getting people registered to the NHIS.

6. The Evolution of NHIS: Growing Pains

The rapid growth in NHIS uptake to the current estimate of 45 to 53%⁷⁷ of the population having active membership is impressive, given its recent start. As discussed in the next section, NHIS is rapidly becoming an important player in health sector financing in Ghana, in curative health care in particular. Its rapid growth has created implementation challenges which were anticipated at the outset: a lack of sufficient local capacity to administer NHIS schemes, difficulty collecting premia from those in the informal sector, and the possibility of increased demand on health facilities as utilization rises. However, as the NHIS evolves a number of unexpected challenges have also arisen, some of which could threaten the survival of the scheme.

The most notable challenge pertains to the design of the NHIS itself. As noted earlier, the NHIS is meant to be a district owned and managed scheme, with NHIA playing an oversight role. District Mutual Health Insurance Schemes (DMHIS) are independent entities governed by a locally elected Council and Board. As a regulatory body under the Ministry of Health, NHIA registers and licenses all health insurance schemes, accredits health providers, assures quality control and monitors compliance to set standards. It is also a fund manager of the NHIS and, as such, it disburses funding to DMHIS on behalf of the exempt members, and assists schemes

⁷⁷ Active NHIS membership estimates range between 45% to 53% of the population depending on the source of data.

that are in trouble. As membership to the NHIS increased over the years, and the number of those in the exempt category continued to grow, the dependence of DMHIS on funds from NHIA increased as well. It is estimated that insurance premiums account for only 10% of the total NHIS resources, the rest coming from the health insurance levy and SSNIT⁷⁸.

The fact that NHIA provides almost all the DMHIS funding, but does not have direct control over their administration or management, has become something of a problem for the NHIA. A key informant noted, "... this (NHIS) is a national scheme. It is not really mutual. Most of the money comes not from the scheme itself but from the government through earmarked taxes and SSNIT" (Interview, Accra, 23 February 2009). There is a growing sense that the NHIA is entitled to a greater say in the management of the schemes. We previously highlighted the delays in paying claims to the providers, and the extent of indebtedness of DMHIS across the country, so these are not further discussed here. It should be mentioned, however, that though these challenges may appear to have come about due to simple administrative hurdles, they might reflect deeper tensions in the NHIA-DMHIS relationship, due to its structural foundation.

Those outside the NHIA complain about its lack of transparency, and its increasing use of a top-down approach to decision making. For example, in 2007 the NHIA

⁷⁸ Developed country experiences also show growing tensions between central and devolved management of NHS, raising challenges for intra-regional equity in access to health care. For further information, see Leys 1999.

developed and installed an ICT-based platform for reporting membership and claims at the DHMIS offices and service providers—reportedly with no input from them. As the schemes converted their data management to the new ICT platform, they realized that they were simply feeding information to a centralized system linked directly to NHIA, and they could not analyze their own records. The provider side also has concerns; as the 2008 Independent Review of the Health Sector reports, "... from the provider side, there is also concern about the top-down way in which the program is being implemented, with terminals being put in inappropriate places in facilities without consultation or any discussion of how they are to be set up, used and maintained. According to key informants 80-85% of systems installed in facilities are not working," (Government of Ghana. Ministry of Health 2009b: 60).

The above undoubtedly exacerbate the delays in the reimbursement of service providers, and create further tension between the NHIA and DMHIS. On one hand, these issues can be considered merely growing pains of an evolving program. On the other, it can be a sign that a major transformation in the management and implementation of NHIS is looming. Two recent key milestones support the latter view.

7. NHIS at the Cross-Roads

The NHIA has presented a Bill to Parliament proposing some fundamental changes to the way the NHIS operates. The proposal is to remove the autonomy of the district schemes and merge them into a unified system (Government of Ghana. Ministry of Health 2009b). The NHIA stated that this would enhance the efficiency of claims management, by reducing the processing of claims from the current 145 district schemes to 10 regional NHIA centers. This is a radical departure from the principles of decentralization that underpin the NHIS Act, and opinion is divided on its merits. Some believe that it will indeed enhance efficiency in the management of claims, and might also resolve the current delays in reimbursement. Others argue that since NHIA is removed from what happens on the ground, instead of centralizing it should strengthen the capacity of the DMHIS. A key informant cautioned, "... if management is centralized, ownership and responsibility at the local level would be lost. NHIA would turn into a centralized payment organization, adding to yet another institution that has no connection to what is happening on the ground. There has been a gradual move away from public engagement and towards centralized decision making. There is a need to bring back public engagement. This was there in the early days but now it is becoming more and more government controlled" (Interview, Accra, 3 March 2009). From the users' perspective this is not an issue, as the schemes are seen as a government initiative to begin with. Their concern is rather with efficiency and service quality.

Another proposition being considered by Parliament is the introduction of one-time contribution, signaling a complete overhaul of the NHIS. As noted earlier, this is driven purely by politics. As the implementation strategies are currently being developed, it is not clear exactly what this would entail, how it would work, or whether and how it may alter the role of the key players in the management of NHIS, namely DMHIS and NHIA.

From the point of view of feasibility, given that premium collections account for only a small percentage of the total NHIS funds, the policy may not have a big impact on the total NHIS resource envelope. It would also decrease the transaction cost associated with the identification of those needing exemption. What is unknown is whether and how the government would make up the lost revenue, given its promise not to raise taxes. The concern is, if the one-time contribution rate is higher than the current annual premium many people could simply not afford it. The reaction of the overwhelming majority of our FGD participants to the proposed policy reform supports this concern.

From the point of view of access to health care, the one-time contribution is a move toward universal health care, and could play a significant role in addressing the current socio-economic disparities in access to health care. It could also rectify existing registration bottlenecks and membership renewal problems that are barriers to membership. The key here is to ensure adequate efforts are made to identify those needing to be exempted from the one-time contribution.

From the point of view of health financing, this would be another move toward reliance on tax-based financing, and a further departure from the concept of 'insurance'. Many see a resemblance to the free health care era of the 1970s, and question whether it would be sustainable. The fact that the government still calls it 'insurance' despite its weak base could very well be a strategy to distinguish it from the old health financing regime that was fraught with problems.

8. Transformations in Health Sector Financing

How has the introduction of NHIS impacted the generation and allocation of health sector funds, and how might this affect the scope for facilitating equitable access to health care?

Analysis of Ghana's health sector financing—in terms of the amount, flow and source of funds—is difficult, both due to the complexity of the flow of funds (see Diagram 6.1) and inconsistencies in data recording. Significant discrepancies exist between the funds indicated in the Ministry of Health Annual Programme of Work, the official budget statements captured in the Medium Term Expenditure Framework (MTEF) issued by the Ministry of Finance, and those recorded in the Ministry of Health annual financial reports⁷⁹. In addition, although there has been some progress in differentiating Internally Generated Funding (IGF) sources arising

⁷⁹ The limitation imposed by such incongruent records is noted in the 2007 Independent Review of the Health Sector Programme of Work (Government of Ghana 2008b).

from out of pocket payments from the NHIS, problems with lumping and double counting have been highlighted. Further, the NHIS funds captured in the health sector budget reflect only those that are channeled through the Ministry of Health, either directly or through the reimbursement of public health facilities. Thus the total share of NHIS in health sector financing is underestimated. Reliable data, particularly on the latter, is lacking.

The above limitations suggest that care should be taken when interpreting the data presented below. The numbers are also likely to vary depending on the data source used. While keeping these limitations in mind, we assess below the overall trend in health financing, including the main sources of funds and the relative proportion of resources allocated to key budget categories. In order to examine the dynamics of the health sector financing landscape after the introduction of the NHIS, we extended our analysis from 2002/2003 to 2008.

Diagram 6.1. Health Financing in Ghana: Flow of Funds

Table 6.2. Government allocations to the health sector (Ghana Cedi)

	2003	2004	2005	2006	2007	2008
GoG*	89,341,300	102,747,200	155,192,600	192,013,300	248,190,400	268,517,036
Total health sector budget	115,461,800	144,946,200	245,278,000	478,654,800	563,756,400	752,233,368
GoG funding for health as a % of total government budget	11.46%	9.77%	12.23%	13.1%	12.46%	9.55%

Source: Author's compilation based on MTEF, Ministry of Finance

* GOG = Government of Ghana

Table 6.2 shows government funding to the health sector, as well as the overall health sector budget envelope since 2003. The total budget figures for the years 2003 to 2005 should be interpreted with caution, as they include only government budgetary allocations and donor funds. The total budget envelope would be greater if other funding sources, such as internally generated funds, HIPC and NHIS, were included, as in the later years. However, even with the most optimistic estimates, the overall budget for health sector financing is increasing in nominal terms. As described in the next section, the government is an important player in health sector financing in Ghana. Although government budgetary allocation to the health sector has increased significantly in nominal terms in the past, there is a gradual downward shift in the proportion of total government resources allocated to the health sector in the last three years. In 2008, the allocation to the health sector was 9.55% of the total government allocation, which is well below the Abuja Declaration target of 15%⁸⁰, and the lowest since 2003.⁸¹

⁸⁰ In April 2000, African heads of states signed a declaration in Abuja, Nigeria (called the Abuja Declaration), committing to spend 15% of their national budget on health. In 2006, total expenditure on health accounted for 4.4% of GDP (Government of Ghana. Ministry of Health 2008b).

⁸¹ It should be noted that we have excluded donor funds, IGF, and statutory funds from the total government budget. If these are included the percentage will be higher.

Table 6.3. Composition of health sector budget

	2002	2003	2004	2005	2006	2007	2008
GoG	48.51	47.25	40.20	43.23	52.64	49.26	44.94
Internally Generated Funds	14.42	12.89	11.86	12.42	12.26	17.12	26.57
Health Fund	19.03	13.35	23.79	15.30	7.80	-	-
MOH programs	7.57	14.37	7.17	13.72	8.86	13.51	10.90
Financial Credits*	10.47	8.58	10.70	15.14	8.34	4.69	4.29
HIPC funds	-	3.55	6.29	0.20	4.99	2.98	0.10
NHIS	-	-	-	-	5.11	5.87	6.67
Budget support	-	-	-	-	-	6.57	6.53
Total	100	100	100	100	100	100	100

Source: Ministry of Health Financial Reports

*Financial credits are loans from international sources for specific projects

A closer look at the composition of health sector funding reveals a number of important shifts, as shown in Table 6.3. The first is that, although government allocations account for approximately half of the health sector budget in Ghana, its share has declined since 2006, while those of IGF and NHIS have increased. As noted earlier, IGF reports often combine NHIS and user fees, thus the IGF figures reported above are not user fees only. Indeed, with the increasing coverage of NHIS the share of user fees will have decreased, while that of NHIS rises. The above figures also reflect the portion of NHIS that is channeled through the Ministry of Health or public health facilities, and thus does not provide a complete picture of the share of NHIS in health sector financing. An accurate assessment of the NHIS resource envelope is not available. The 2007 Independent Review of the Health Sector Programme of Work estimated the NHIS share at 29%. According to the MTEF for 2009, the NHIS is now estimated to contribute 41% of the overall health sector revenue.⁸² The NHIS

⁸² The share of user fees and NHIS varies widely amongst regions. NHIS funding is proportionately most important in the North and least important in Greater Accra (Government of Ghana. Ministry of Health 2009b).

share is thus estimated to be almost at par with government resource allocation to the sector.⁸³ Considering that user fees made up less than 15% of the overall health sector resource envelope in the first half of the decade⁸⁴ this is a dramatic increase, as shown in Table 6.3. While the original intention of NHIS was to replace user fees, and thereby reduce financial barriers to health care,⁸⁵ "... its role has changed subtly but significantly over the past few years" (Government of Ghana. Ministry of Health 2009b). As seen below, with NHIS taking on an increasing share of the health sector budget, a greater proportion of health care is being funded through the NHIS channel (*ibid*).

Another significant shift in Ghanaian health sector financing is the changing modality of donor partnership. Whereas donor funding was channeled through a Health Fund until 2006, there has been a gradual shift to Budget Support, in line with the Paris Declaration that called for the harmonization of aid.⁸⁶ The Paris Declaration signaled a radical shift in donor strategies and *modus operandi*, with

⁸³ The 2010 Government Budget Speech estimated NHI Levy (which consists of 2.5% health tax and 2.5% of SSNIT contribution) to be 480.9 million, or 1.9% of GDP (Of this, SSNIT contribution accounts for 142.4 million). This is more than 50% of the total health sector budget for 2008.

⁸⁴ The Ministry of Health estimates this to be around 20% (Government of Ghana. Ministry of Health 2002).

⁸⁵ Health insurance does not abolish cost recovery but is meant to replace direct out-of-pocket payment at the point of service use.

⁸⁶ The Paris Declaration, endorsed in March 2005, is an international agreement to which more than 100 signatories from donor and developing country governments, multilateral and international agencies agreed to harmonize their work to enhance aid effectiveness. At the heart of this Declaration is a commitment to help developing country governments to formulate and implement their own national development plans to reduce poverty, and for donor agencies to play a supporting, rather than a leading role. This called donor agencies to coordinate their aid by channeling it through government's own budgetary processes. To facilitate its implementation, Ghana developed the Joint Assistance Strategy (developed jointly by the government and development partners) and the Ghana Harmonization and Alignment Plan.

donors increasingly providing funds directly to the government's own financial system to support its poverty reduction programs, as opposed to targeting specific programs or sectors. In Ghana's case, most of the major donors active in the health sector have shifted to Budget Support, with some support earmarked for specific health sector programs. While donor support continues to be an important source of health sector financing in Ghana, its relative share has decreased significantly in recent years, as shown in Table 6.3.

Table 6.4. Health expenditure by category

	2002	2003	2004	2005	2006	2007	2008
Item 1: Personal Emoluments	44%	43%	38%	41%	47%	47%	46%
Item 2: Administration	13%	10%	10%	11%	5%	10%	8%
Item 3: Services	24%	34%	31%	27%	26%	28%	37%
Item 4: Investment	19%	13%	21%	21%	22%	15%	9%

Source: Government of Ghana 2007c; Government of Ghana 2009b

A review of health sector expenditure by category provides a useful insight on how resources are allocated within the sector, and whether there have been significant changes post NHIS. Table 6.4 shows the breakdown of total expenditures by the four

budget categories: personal emoluments (consisting largely of salaries and related expenditure), administration, services (covering the cost of service delivery), and investment.

As depicted in Table 6.4, the emerging trend in health expenditure can be characterized by steady expenditures on personal emoluments, a significant increase in expenditures on services, a significant decrease in expenditures on investment, and a fluctuating expenditure ceiling on administration. Personal emoluments (PE) take the majority of the health sector budget. This is not surprising, given the dominance of public health institutions in Ghana (estimated to account for 60% of health care providers in the country). PE is financed primarily with government funds, and accounts for over 90%⁸⁷ of the government allocation for the health sector. A small percentage from IGF and NHIS is also allocated to PE, to cover the NHI Council and District Secretariat staff and contract workers in IGF generating institutions (Government of Ghana 2007b).

After a significant increase in 2006, spending on PE has stabilized at about 46 to 47% of the total health sector expenditure. In 2006, the government introduced salary reform for health workers, replacing the Additional Duty Hour Allowance (ADHA) with a new Health Salary Scheme aimed at improving performance, and reversing the 'brain drain' of health professionals. The new salary structure has had

⁸⁷ As per the Ministry of Health's Financial Reports, PE takes up almost all of the GoG contributions to the health sector, accounting for 88% in 2006, 90% in 2007, and 93% in 2008.

considerable impact on the wage bill (*ibid*). The increase in the share of PE impacted expenditures on administration, which dropped to 5% in 2006, a 6% reduction from the previous year. It has increased since, however, though that does not indicate a clear trend. On the other hand, after a steady decline, spending on services⁸⁸ shows a reverse trend to 38% in 2008, the highest level since 2002. Expenditure on investment has been erratic, with rapid decline in recent years to 9% in 2008, the lowest since 2002. Resource flow into infrastructure investment is generally low. One of the implications of the low capital investment in the sector is that adequate facilities cannot be built, nor are there sufficient funds to maintain or upgrade existing ones.

Table 6.5. Proportion of total health sector expenditure by source

	Personal Emolument				Administration			
	2004	2005	2007	2008	2004	2005	2007	2008
GoG	96.6	97.0	97.6	96.6	10.9	13.2	17.6	17.6
IGF/NHIS	3.4	3.0	2.4	3.4	28.6	30.2	73.2	80.9
Budget Support	-	-	-	-	60.5	56.6	9.2	1.5
MOH Programs	-	-	-	-	-	-	-	-
Financial Credits	-	-	-	-	-	-	-	-
HIPC Funds	-	-	-	-	-	-	-	-
Total (percentage)	100	100	100	100	100	100	100	100
	Services				Investment			
	2004	2005	2007	2008	2004	2005	2007	2008
GoG	10.1	11.6	6.2	3.8	2.2	0.3	8.4	4.9
IGF/NHIS	25.6	28.4	37.7	49.2	2.1	2.6	19.8	33.9
Budget Support	38.4	20.9	7.0	16.1	21.4	23.0	20.3	8.7
MOH Programs	23.6	38.4	49.1	30.9	-	-	-	-
Financial Credits	-	-	-	-	52.7	74.1	31.5	51.2
HIPC Funds	2.3	0.7	-	-	21.6	-	20.0	1.3
Total (percentage)	100	100	100	100	100	100	100	100

Source: Author's calculations based on Ministry of Health Financial Reports

⁸⁸ The Services budget category includes costs incurred in the delivery of health services. These range from medical supplies to fee exemptions to staff development and training.

Table 6.5 shows expenditure patterns by source just prior to and after the introduction of NHIS. Whereas PE continues to be financed almost entirely through GoG funding, significant shifts are seen in the other budget categories.

Administration is now financed almost entirely from IGF/NHIS,⁸⁹ with some contribution from GoG and Budget Support. The role of donors in supporting this budget category has decreased substantially. Similarly, the role of IGF/NHIS in funding health services has risen significantly, increasing by nearly 21% between 2005 and 2008. IGF/NHIS is now the most important source of funding for clinical care in Ghana. The above figures capture only those that relate to public health facilities; if IGF contributions through the private sector were included the figures would be greater. Finally, while financial credits (loans) continue to play a major role in funding investment, the share of IGF/NHIS is also increasing, although this likely reflects infrastructure related to DMHIS and NHIS apparatus.

In summary, a review of the generation and allocation of health sector funds in the last eight years reveals a number of important transformations:

- a gradual decrease in government allocations to the health sector in terms of the proportion of the total government resource envelope;
- a rapid increase in the share of IGF/NHIS financing, accompanied by a declining share of GoG and donor funding;
- a significant increase in resources allocated to services, and a reduction in allocations to investment; and,

⁸⁹ We have collapsed the IGF and NHIS amounts together given the unreliability of the separate records.

- the emergence of IGF/NHIS as a major source of funding for services and administration.

While the NHIS was designed to replace the "cash and carry" and provide additional funding to the sector, the reduction in the proportion of government funding signals a gradual shift of the burden of health financing from the GoG to the public, through taxes and premiums (Government of Ghana. Ministry of Health 2007c). Commenting on the anticipated contribution of NHIS to the financing of the health sector, a key informant noted, "... it was expected that health insurance would bring about 20% of health funding to the health sector, which was the share of the 'cash and carry'. It was also expected that other expenditures for health should not be reduced because of the additional money coming in. Unfortunately most of the government funds are going to item 1, while NHIS covers items 2 and 3. So health insurance is not additional money to the system as envisaged" (Interview, Accra, 3 March 2009). One of the implications of this is that as GoG allocations go almost entirely to PE, not much is left for investment and non-curative care.⁹⁰ Investment continues to rely on loans and donor funds, which are highly volatile.

As noted earlier, NHIS has taken a prominent role in the financing of curative care. This should be viewed with some caution. As NHIS membership continues to grow, and the exempted category increases due to the recent free memberships to

⁹⁰ Financing for non-curative services relies heavily on donor and earmarked funds. As donor funding continues to decline, there is a risk that preventive care will be compromised unless deliberate effort is made to secure financing for it.

pregnant women and the planned de-coupling of children under 18, financial strain on the system might also increase. A recent ILO assessment cautioned that the de-coupling of children, while feasible in the short term, could put the NHIS in the red by 2015 (ILO 2007). This underscores the need for sustained government funding if the health sector is to be strengthened, and if equitable access to health care is to be enhanced.

9. Conclusion

NHIS is an important step in facilitating access to health care, and with further refinement it could also be an effective tool for addressing equity in access to health care. However, much depends on who or what is driving the health financing policy reform agenda. NHIS is at a cross-road. The proposed changes in the way it is financed (one-time contribution) and managed (centralized management of claims) signals an opportunity for policy re-engagement on issues of equity—with gender, socio-economic status and location considered—and the chance to explore mechanisms for addressing non-cost related barriers to accessing health care. The scope of addressing these issues depends on the extent to which a commitment to meet the health sector's objective of enhancing universal access to health care underpins the policy refinement. The growing politicization of NHIS poses a risk of diverting focus away from finding sustainable solutions, and toward demonstrating quick and visible results in the short term. It could also overwhelm the NHIS with unrealistic expectations driven by political imperatives.

Chapter 7: Conclusion

7.1. Social Health Financing, Equity and Gender: Lessons from Ghana

This dissertation sought to provide answers to three overarching questions regarding the gender and equity impact of Ghana's introduction of the National Health Insurance Scheme, namely: (i) what impact has the NHIS had on access to health care, especially for the poor and marginalized groups? (ii) does gender—and its interaction with other social identities such as class and culture—shape access to and utilization of health services, and how is this affected by the introduction of NHIS? (iii) what are the underlying assumptions about individual and household behaviours that underpin the NHIS, and what are the implications of these for improving or further exacerbating inequities in access to health care? We hypothesised that: (i) without effective social protection mechanisms targeting the poor, health financing reforms that are market-based or rely on insurance will exacerbate or perpetuate existing inequities in access to health care in Ghana; (ii) given the prevailing asymmetrical pattern of intra-household allocation of resources, market and insurance-based health financing reforms will have diverse impacts on access to health services for women and men, both within and across households in different socio-economic strata; and (iii) the availability of NHIS alone will not significantly alter the patterns and frequency of the utilization of health services; non-financial factors—and their interrelationship with gender—play an important role in defining who gets access to health care and how. In this

concluding chapter, we revisit the research questions and hypothesis that guided the study and draw out some of the key lessons that the Ghanaian case offers.

Ghana's implementation of a national health insurance scheme demonstrates that social health insurance, or a variant of it, is not only feasible in a developing country, but that it can also be an effective vehicle for facilitating access to health care. It has shown that, with political commitment, poor countries can explore innovative health financing approaches that extend coverage beyond public sector employees. However, the Ghana case also illustrates that, unless adequate provisions are made to include the poor, policies based on insurance can perpetuate or even exacerbate existing inequities in access to health care.

Through the analysis of pre and post-NHIS survey data, and empirical evidence from selected regions, our research provides evidence that by delinking payment and utilization of health services, NHIS has been beneficial in removing financial barriers to access to health care for most Ghanaians. The heavily subsidized NHIS premium has also provided a more affordable alternative to the previous "cash and carry" system and has altered health seeking behaviour of adult Ghanaians, as observed in the overall increase in the utilization of health care, particularly with respect to consultations with doctors and professional health care, reduced waiting time before seeking care, less reliance on self medication, and more reliance on professional health care staff. However, our research findings also reveal persistent correlation between wealth status and access to health care. The poorest citizens,

who cannot afford even the subsidized premium, continue to face significant financial barriers. Indeed our findings give credence to our first hypothesis that health financing reforms that are market based or rely on insurance will not be effective in addressing equity issues in access to health care unless mechanisms for exempting the poor work.

While our research findings indicate that NHIS has led to an overall increase in the utilization of health care—particularly with respect to consultations with doctors and professional health care—it also highlights that the gap between the rich and the very poor, as measured in terms of utilization of health services, may have widened. NHIS has generally had a positive impact in facilitating utilization of health care (91% of the sick sought care in 2008, as opposed to 58% in 1991/92), but the benefits are not equitably distributed. At our baseline (1991/92), the likelihood of the poorest 20% of Ghanaians seeking treatment when ill was 57% less than that of the wealthiest 20%. By 2008, the poorest quintile was 89% less likely to seek care when ill compared to the richest quintile.

In principle, NHIS has mechanisms in place to rectify this by offering subsidized premiums for those considered poor, and full exemptions for those considered very poor (the "indigents"). Although the subsidized premium has been beneficial for many poor Ghanaians, the stringent definition of "indigents" has effectively excluded the majority of those in extreme poverty, who badly need social protection. While in theory the NHIS is expected to distribute the financial burden

for health care across the population based on "ability to pay", the lack of technical capacity at the district level, and the difficulty to determine people's financial ability given the large informal sector has seriously undermined the scope for attaining this objective. Targeting for premium exemption is predominantly age based, with recent extension to include maternal health. The exempt category is currently dominated by children (constituting about 80% of the exempt), while the share of women in this category is expected to rise in light of the new exemption for pregnant women. From an administrative point of view, this form of targeting is relatively easy compared to a means-test targeting. The question is, "is this the right type of targeting viewed from the point of view of enhancing equity, or should the country instead focus on reaching the core poor?" Answering this question requires careful balancing of costs and benefits, administrative capacity, and the commitment to the advancement of pro-poor policy objectives.

Our research went beyond household level analysis, to determine if there are important differences within households, and whether and to what extent gender—and its interaction with other social stratifiers such as income and culture—shapes access to health care. This has given us a better understanding of the differential impact of NHIS on individuals within households across the different socio-economic strata. Given that the financial barrier is a significant impediment to access to health care in Ghana, intra-household bargaining models provided a useful framework for understanding the dynamics of health expenditure allocation decisions within households, and helped predict the likely impact of NHIS.

We found evidence that the introduction of NHIS has impacted the intra-household dynamics regarding allocation of resources for health care. Gender plays an important role in resource allocation decisions in Ghana in that it dictates who makes the decisions and shapes the negotiated outcome. The research findings demonstrate the high dependence of Ghanaian women on their husbands to cover health care costs—particularly among the poor and those living in rural areas—and that household decision-making is typically characterized by negotiation and conflict.

Prior to the introduction of NHIS, many poor Ghanaian women continually struggled to negotiate with their husbands for a share of the meager resources available, in order to meet their health expenditures. There was also frequent borrowing from relatives to pay for health care costs. Also, given women's higher morbidity compared to men, the unmet needs among poor women due to financial constraints were greater. The introduction of NHIS has clearly impacted the intra-household dynamics regarding the allocation of health care, by significantly reducing the frequency of negotiation and conflict among the insured, as well as by increasing women's relative independence in health care decision-making. Prior to NHIS, resource allocation decisions were negotiated whenever illness arose; they now take place far less often, due to the yearly memberships. However, this is not to imply that there are no other health expenditures that require negotiation. For most of the women, NHIS provides relief from their dependence on their husbands or relatives to finance their health care costs at the point of need. For most men, NHIS

offers an affordable alternative for fulfilling their culturally prescribed obligations for ensuring the health of their wives and children.

Is there an evidence of a "rationing bias" in the allocation of resources for health care within Ghanaian households? We had anticipated that, given men's bargaining power and their relatively higher wages, poor households faced with financial constraints would likely prioritize men's health. While our analysis of the survey data show no statistically significant gender difference in the uptake of health insurance across the wealth strata, we found empirical evidence in our case study regions which suggested that, contrary to our expectations, Ghanaian men are in fact more likely to insure their wives and children than themselves.

Insights from the focus group discussions offer some plausible explanations for the observed preference to insure women. For example, the self-assessed need for health care is markedly different among Ghanaian men and women, in both rural and urban areas. With the exception of those diagnosed with a health condition requiring routine care, the majority of the men felt they didn't have much need for health care. And even if they do require care, unless their condition is critical they might not seek it, due to the long waiting times at medical facilities. Women expressed a greater need for health care, and relied on it more. Another reason why Ghanaian men are more likely to insure their wives and children than themselves is the high regard for children within Ghanaian families, and that children's health insurance coverage is dependent on (at least one) parent being covered. These,

coupled with kinship ties for men if they need financial resources for their own health, help explain the observed tendency among the poor to prioritize women's and children's health insurance.

Is health insurance a panacea for improved access to health care? Our research suggests it is not, although it plays an important—and mostly positive—role. The research reinforced our view that facilitating equitable access to health care requires more than dealing with the cost of getting care. Although finances are a key access barrier to health care in Ghana, examining the multi-dimensionality of access in terms of availability, affordability and acceptability of health services allowed us to explore other non-financial barriers, and thereby gain a more holistic view of why everyone who needs health care does not get it. The case of maternal health demonstrates this vividly.

The review of maternal health care in Ghana provided further support for our hypothesis that the availability of NHIS alone will not significantly alter the patterns and frequency of utilization of health services, and that non-financial factors—and their intersects with gender, socio-economic status and geographic location—play an important role in defining who gets access to health care and how. It revealed that policies aimed at removing only the cost of treatment will inevitably have limited success in enhancing access to health care. This is most evident in Ghana's poor record of enhancing institutional delivery as a means to curb maternal mortality, despite a number of policy measures to remove financial barriers to

access. Poor women are most impacted by this, particularly those living in remote villages.

The common view among policy makers is that NHIS is gender neutral. To the extent that gender is considered, it is done so in the context of reproductive health.

Further, NHIS has implicit assumptions about women's financial independence and autonomy in decision making. It assumes that men and women have equal capacity to pay. It also assumes away intra-household allocation dynamics and its likely impact. Neither does it take into account the potential impact of polygamy in terms of facilitating or constraining ability to pay. Does this mean that NHIS reinforces social patterns of disadvantage?

In terms of the service package for women (e.g. premium exemption for pregnancy), the NHIS does facilitate vertical equity through maternal health care, despite questions about its effectiveness. However, the lack of systematic consideration of gender issues beyond maternal health, suggests that it is not considered an important determinant of access to health care in Ghana. This does not mean that NHIS has had an adverse impact on gender equity; indeed, as detailed herein, its impact has been largely positive. Why then is gender consideration important, particularly given the overall positive impact? Our study suggests that the positive gain in improving women's utilization of health care is not due to a deliberate gender awareness policy, but rather to a combination of intra-household relations, gender roles, international pressure to meet MDG goals, and other influences. In

light of the recent amendment of the NHIS exempting pregnant women from paying premiums for up to three months after delivery, and considering the proposed amendment to delink the exemption of children from their parents' insurance status, it is questionable whether poor households will continue to allocate resources for women's health insurance. Since these are also the primary reasons motivating poor households to invest their meager resources in health insurance in the first place, it is possible the initial positive outcomes may not be sustained.

While our research highlighted the importance of examining whether and how public policies impact women and men differently, it also reaffirmed that neither women nor men are homogeneous groups, and that examining equity solely on the basis of gender will mask important inter and intra-group differences that exist along socioeconomic lines. Further, it revealed that given the uneven distribution of health facilities and services in Ghana, location is very important in terms of accessing health care. In this respect, we found that those living in rural areas are severely disadvantaged in terms of access.

Our finding reveals that the geographic distribution of health facilities and health professionals determines, to a great extent, the accessibility of health care. The maldistribution of health professionals and health facilities in favor of urban centers poses a serious access barrier in rural Ghana. Other factors such as negative hospital staff attitude, particularly related to institutional delivery, and long waiting times at the health facilities are also noted as important deterrents to timely access to

medical care. A key lesson here is that policies aimed at only removing the cost of treatment will inevitably have limited success in facilitating equitable access to health care.

In sum, our research highlighted three important policy gaps in the design and implementation of NHIS:

1. lack of a clear strategy for ensuring that the poor are not excluded from the NHIS. Targeting is primarily based on age, with the exception of the recent expansion to pregnant women.
2. lack of systematic consideration of gender issues beyond maternal health, which suggests that gender has not been considered an important determinant of access to health care in Ghana.
3. insufficient attention to consideration of geographic location and the maldistribution of infrastructure and resources for health care.

These, and the over-emphasis on expanding insurance coverage, limit the potential of NHIS to achieve equitable access to health care. They also leave policy makers and practitioners a number of important questions that need to be considered in assessing the impact of NHIS: What does NHIS membership mean for a pregnant woman who lives in a remote village and has little or no easy access to a health facility? What motivation will a man in a rural village have for membership when he has little confidence in the quality of the service at the health facility, and relies heavily on traditional herbs? Will an NHIS membership for someone in Accra, for

example, provide the same benefits as it would for someone living in the Northern Region or Dangme West? Such considerations are currently seriously lacking in the NHIS policy framework. Yet, achieving the NHIS goal of ensuring universal access to basic health care services for all Ghanaians does not depend on a high NHIS membership rate, but on the availability of health services to its members.

NHIS is at a crossroad. The current dialogue promoting changes to how it is financed and managed signals the opening of a policy window to re-engagement on issues of equity—including consideration of gender, socio-economic status and location—and provides an opportunity to explore mechanisms for addressing non-cost related barriers to accessing health care. NHIS is clearly an important step in facilitating access to health care, and with further refinement by taking account the missing dimensions noted above, it could also be an effective tool for addressing equity in access. As stated previously, the scope for addressing these issues depends on the level of commitment to policies that promote the health sector's objective of enhancing universal access to health care. Such commitment should be backed up by assurances to not reduce the proportion of government funding, contrary to the current trend. Political will has been paramount to making the NHIS a reality in Ghana. This commitment should now extend to ensuring its sustainability and to addressing supply side barriers to access.

Appendix 1

Empirical evidence on resource allocation decision making – what we know and what we don't

There is a growing body of empirical evidence suggesting that gender biases in intra-household resource allocation exist, largely in developing countries. These are mainly documented cases of the allocation of resources between girls and boys within a family. There is also increasing evidence that the marginal effect of income in the hands of women is different than that in the hands of men, thus questioning the existence of income pooling within households (Haddad 1999; Thomas 1997). These studies show the prevalence of separate budgets within households, with men and women negotiating to make claims on each other's perceived earnings in meeting the household needs.

Using new household data sets from Bangladesh, Indonesia, Ethiopia and South Africa, Quisumbing and Maluccio (1999) found little evidence to support the currency of the unitary model as a description of household behaviour, but rather found that assets controlled by women have a positive and significant effect on expenditure allocations towards children's education and clothing.

Similarly, Thomas (1997) found in a study on intra-household allocation in Brazil that unearned income in the hands of women is more positively associated with expenditures on child health than income under the control of a father. Hoddinott and Haddadi (1995) also found similar data in Africa as well as evidence of separate budgets within households.

Orubuloye et al. (1991) show the prevalence of separate household budgets in West Africa, mostly attributed to unstable marriages due to the practice of polygamy, and wives' efforts to protect themselves by retaining their earnings separately.

In a study based on survey data from Kenya, Tanzania and Cote d'Ivoire, Appleton, et al. (1991) show that although women suffer more days of illness than men, they do not make significantly greater use of health facilities. The greater number of days of untreated illness is also shown to correspond with the number of days of women being too ill to work.

It is noteworthy that, while intra-household models deal primarily with distribution between spouses, for the most part the empirical literature has focused on gender inequities in resource allocation among children. With the exception of the intra-household allocation of labour, very little is known about the distribution of resources such as food, education and health care among spouses. To the extent that these have been examined, the studies focus mainly on intra-household decision-making related to participation in the labour market. Jose (2003) cautions that the factors that influence resource allocation between children may not be the same as those between spouses.

1. The Ghana Living Standard Survey (GLSS)

The GLSS is a nationally representative household survey periodically carried out by the Ghana Statistical Service (GSS), the country's official data collection agency. Since the first GLSS survey was carried out in 1987/88, four rounds of surveys have been conducted: GLSS 2 (1988/89), GLSS 3 (1991/92), GLSS 4 (1998/99), and GLSS 5 (2005/06). This dissertation drew largely from the GLSS 3, 4 and 5 data for the pre-NHIS quantitative analysis.

The GLSS survey covers a range of topics aimed at assessing the standard of living of Ghanaians. The data are obtained through three questionnaires—a household questionnaire, a community questionnaire, and a price questionnaire. Household questionnaires are used to collect information such as household composition, education, health (including maternal and child health), employment, migration, housing, income, expenditure and consumption. Most of the information is collected for each member of the household, making it possible to further disaggregate the data by sex, age, or other identifiers. Community questionnaires capture information about infrastructure and public services available in the community such as schools, hospitals and transportation. The price questionnaire is used to collect information about food and commodity prices in various parts of the country

to enable the construction of regional price indices that are used to adjust household expenditures in light of regional variations in purchasing power (Government of Ghana. Ghana Statistical Service 2000).

Multi-stage stratified sampling techniques are used to select households to be surveyed. This involves a random selection of enumeration areas (EAs)⁹¹ using a probability proportional to size (PPS) method in the first instance, and a random selection of households in the second (*ibid*). GLSS 3 included 4,552 households; GLSS 4 included 6,000 households; and GLSS 5 included 8,687 households. The collection of household data involves frequent visits to each household. While the initial two rounds of GLSS survey involved only two visits, two weeks apart, subsequent surveys significantly increased the number and frequency of visits to obtain a more accurate estimate of household consumption and expenditure. In the GLSS 3 survey for example, households were visited eight times at two-day intervals in rural areas, and 11 times at three-day intervals in urban areas (Government of Ghana. Ghana Statistical Service 1995). The survey is spread over a 12-months period in order to capture fluctuations in the household expenditure and consumption.

The health module of the household questionnaire contains the following questions for each member of a household (Government of Ghana. Ghana Statistical Service 1995, 2000, 2008):

⁹¹ These are the smallest geographical units for which population and household data are available (Government of Ghana. National Development Planning Commission 2009).

- During the past 2 weeks has (name) suffered from either an illness or an injury?
- For how many days during the past 2 weeks has (name) suffered from this condition?
- During the past 2 weeks did (name) have to stop the usual activities because of this condition?
- For How many days?
- During the past 2 weeks has (name) consulted a health practitioner, or dentist or visited a health centre or consulted a traditional healer, etc?
- On this visit whom did (name) consult? (Options: traditional healer, doctor, dentist, nurse, medical assistant, midwife, pharmacist, traditional birth attendant, spiritualist, others. Drug/chemical seller added in the GLSS5 survey)
- What was the reason for the most recent visit? (Options: check up, illness, injury, vaccination, prenatal care, postnatal care)
- Where did the consultation take place? (Options: hospital, dispensary, pharmacy, clinic, maternity home, MHC, consultant's home, patient's home, other)
- Is this a public or private facility?
- How much did (name) pay for this consultation?
- How much did (name) pay to travel there and to return?
- How much time did this consultation take, including travel time?
- During the past 2 weeks was (name) admitted to a hospital or health centre on account of the illness/injury?
- How many nights did (name) stay in hospital/health centre during the past two weeks?
- How much did (name) (or will name) pay for staying in a hospital/health centre during the past 2 weeks?
- For the past 12 months was (name) hospitalized for any illness or injury?
- During the past 2 weeks did (name) buy any medicine or medical supplies?
- Who pays for most of these health expenses including consultations and hospital stays (if any)?

In addition to the above, the health module collects information about child health (including vaccination), postnatal care, fertility, prenatal care, and contraceptive use.

2. Citizen's Assessment of National Health Insurance Household Survey

The Citizen's Assessment of National Health Insurance Household Survey was conducted by the National Development Planning Commission (NDPC) in 2008 with the aim to assess the impact of NHIS. Its stated objectives were to: "obtain feedback from citizens about how the NHIS is performing from the perspective of local communities; determine whether the NHIS is achieving its goal of ensuring equitable access to quality basic health care for all residents (including vulnerable and excluded) in Ghana; and gain insight into how to bridge the equity gaps in access to quality health care services." (Government of Ghana. National Development Planning Commission 2009: 4).

The survey involved a nationally representative sample households, based on the sampling frame and techniques used for the GLSS 5 survey (*ibid*). The household questionnaire included 1,988 households from across the country and collected information about education, employment, health condition, utilization of health services, health insurance, and household assets. The pertinent questions that informed the quantitative analysis of this dissertation include the following:

- Has (name) had any type of illness in the last 4 weeks?
- What sort of sickness/injury did (name) suffer?
- How many days of work/school did (name) miss due to sickness/injury?
- What kind of health provider/facility did (name) see or visit during the last 4 weeks? (Options: general hospital, government health centre/clinic, mission hospital, mission clinic, private hospital, private clinic, maternity home, traditional birth attendant, drug store/pharmacy, herbal healer, other)
- Who did (name) see for the consultation? (Options: doctor, medical assistant, midwife, traditional birth attendant, nurse, chemical seller/chemist/pharmacy, dentist, traditional herbal healer, other)
- Who paid for most of (name's) medical expenses?
- Does (name) have any health insurance, or is a member of a mutual health organization?
- What type of health insurance scheme does (name) have?
- Why is (name) not registered with the NHIS?
- Who is currently paying (name's) insurance cost/premium?
- Does (name) hold a valid NHIS card?
- Why is (name) not holding a card?

Issues related to the use of the GLSS and NDPC survey data and variables in our quantitative analysis, and some of the limitations are detailed in Chapter 3.

Appendix 3

NHIS Benefits Package and Exclusions

Source: Republic of Ghana, NHIS Regulations, 2004 (L.I. 1809)

Minimum Healthcare Benefits [Regulation 19 (1)]

1. Out-patient Services

- Consultations including reviews, including both general and specialist consultations.
- Requested investigations including laboratory investigations, x-rays and ultrasound scanning for general and specialist out-patient services.
- Medications, namely, prescriptions drugs on National Health Insurance Scheme Drugs List, traditional medicines approved by the Food and Drugs Board and prescribed by accredited medical and traditional medicine practitioners.
- HIV/AIDS symptomatic treatment for opportunistic infection.
- Out-patient/day surgical operations including hernia repairs, incision and drainage, haemorrhoidectomy.
- Out-patient physiotherapy.

2. In-patient Services

- General and specialist in-patient care.
- Requested investigations including laboratory investigations, x-rays and ultrasound scanning for in-patient care.
- Medications, namely, prescriptions drugs on National Health Insurance Scheme List, traditional medicines approved by the Food and Drugs Board and prescribed by accredited medical and traditional medicine practitioners, blood and blood products.
- Cervical and breast cancer treatment.
- Surgical operations.
- In-patient physiotherapy.
- Accommodation in general ward.
- Feeding (where available)

3. Oral Health Services including,

- Pain relief which includes incision and drainage, tooth extraction and temporary relief;
- Dental restoration which includes simple amalgam fillings and temporary dressing.

4. Eye Care Services including

- Refraction;
- Visual fields;
- A-scan;
- Keratometry;
- Cataract removal;
- Eye lid surgery.

5. Maternity care. including

- Antenatal care;
- Deliveries, namely normal and assisted;
- Caesarian Section;
- Postnatal care.

6. Emergencies

All emergencies shall be covered. These refer to crisis health situations that demand urgent intervention and include,

- Medical emergencies;
- Surgical emergencies including brain surgery due to accidents;
- Paediatric emergencies;
- Obstetric and gynaecological emergencies including Caesarian Sections;
- Road traffic accidents;
- Industrial and workplace accidents;
- Dialysis for acute renal failure.

Exclusion List [Regulation 20]

- Rehabilitation other than physiotherapy;
- Appliances and prostheses including optical aid, hearing aids, orthopedic aids, dentures;
- Cosmetic surgeries and aesthetic treatments;
- HIV retroviral drugs
- Assisted Reproduction eg. Artificial insemination and gynecological hormone replacement therapy;
- Echocardiography;
- Photography;
- Angiography;
- Orthoptics;
- Dialysis for chronic renal failure;
- Heart and brain surgery other than those resulting from accidents;
- Cancer treatment other than cervical and breast cancer;

- Organ transplantation;
- All drugs that are not listed on the NHIS Drug List;
- Diagnosis and treatment abroad;
- Medical examinations for purposes of visa applications, educational, institutional, driving licence;
- VIP ward (Accommodation)
- Mortuary services

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