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The National Health Insurance Scheme in Ghana

Implementation Challenges and Proposed Solutions

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ABSTRACT

Healthcare financing through social health insurance has become a very important tool in providing access to and utilization of health services in most developing countries such as Ghana. Ghana's National Health Insurance Scheme (NHIS) is a promising tool for policymakers. Yet since its inception in 2003, few studies have assessed the scheme.

This paper aims to explore the challenges facing the District Mutual Health Insurance Schemes (DMHISs), how these challenges have been managed over the years, and what can be done to improve the DMHIS operation. The scope of this study is to improve policies and guide support for Ghanaian DMHISs as well as to provide recommendations when implementing future NHISs in a developing-country context.

Keywords: health insurance, Ghana, implementation challenges

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ABBREVIATIONS AND ACRONYMS

DMHIS	District Mutual Health Insurance Scheme
EML	essential medicine list
GH¢	Ghana cedis
ICT	information and communications technology
IFPRI	International Food Policy Research Institute
NHIA	National Health Insurance Authority
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme

1. INTRODUCTION

Healthcare financing through social health insurance or tax-funded schemes has become a very important tool in achieving universal financial protection for healthcare in most developing countries such as Ghana. In Africa, health insurance is relatively limited to few countries. Yet community-based health insurance and mandatory health insurance for either the entire population or a segment of it seem to be gaining ground in the continent. Contributions to these schemes are usually based on one's means, and as such these systems provide relatively fairer means of financing healthcare, which is particularly good for the poor.

Ghana's National Health Insurance Scheme (NHIS) was introduced in 2003 to replace the *cash-and-carry system* of paying for healthcare service at point of receiving it. Since the inception of the scheme, few studies have assessed it; one is the 2008 Citizens' Assessment of the National Health Insurance Scheme (NDPC, 2009).

The NHIS operates Ghana's public healthcare system and allows three different kinds of insurance plans (District Mutual Health Insurance Schemes, or DMHIS; private mutual insurance schemes; and private commercial insurance schemes). The most popular plan is the DMHIS, which operates in every district in Ghana. The other insurance plans cover less than 1 percent of the insured population. Each DMHIS is in charge of accepting and processing memberships, collecting premiums, and processing claims from accredited facilities. This paper aims to explore the challenges facing the DMHISs, how these challenges have been managed over the years, and what can be done to improve the operation of DMHISs.

The data for this study come from a 2011 survey of all the DMHISs that have been operational since at least 2008. This survey was a joint effort between the International Food Policy Research Institute (IFPRI) and the University of Ghana, Legon.

The NHIS has had impressive achievements since its creation, especially in terms of increases in coverage, availability of health services, and utilization of healthcare services. By the end of 2011, around 8.2 million people (or 33 percent of the Ghanaian population) were covered by the insurance scheme. Before the creation of the NHIS, less than 1 percent of the population was enrolled in an insurance scheme. Similarly, by the end of 2011, the total number of accredited health facilities was 3,344, in contrast to 1,672 in 2008. Outpatient utilization of healthcare services increased more than fortyfold, from 0.6 million in 2005 and 16.9 million in 2010 to 25.5 million in 2011. Finally, inpatient utilization increased more than thirtyfold from 28,906 in 2005 to 973,524 in 2009, and then it rose further to 1,451,596 in 2011 (NHIA 2011).

Furthermore, studies analyzing the impact of the NHIS on healthcare quality received, healthcare-seeking behaviors, health outcomes, and out-of-pocket health spending have also shown positive results. According to the 2008 Citizens' Assessment (NDPC 2009), being an NHIS cardholder improves the chances of seeing high-quality health professionals (doctors and medical assistants versus consult drugstores and traditional providers). Similarly, being registered in the DMHIS increases the probability of seeking higher quality maternal healthcare as well as the likelihood that parents take their children to health facilities more often for both curative and preventive care (Gajate-Garrido and Ahiadeke 2013). NHIS members have a higher probability of obtaining prescriptions, visiting clinics, and seeking formal healthcare when sick (Blanchet, Fink, and Osei-Akoto 2012). Likewise, pregnant women who participate in the scheme enjoy reduced incidence of birth complications and are more likely to receive prenatal care, to deliver at a hospital, and to be attended by a trained health professional during birth (Mensah, Oppong, and Schmidt 2009).

According to the 2008 Citizens' Assessment (NDPC 2009), the number of days of school or work lost due to illness is highest among those who have not registered (4.8 days) compared with days lost by the insured population (3.6 days). Finally, Asuming (2013) estimates that insurance coverage leads to reduced out-of-pocket payments among individuals with prior positive expenses and also to improved health outcomes (fewer days of illness suffered).

Yet despite all these achievements, the NHIS still has a long way to go to achieve one of its main goals: to target the poor through selective premium subsidies. According to the 2011 National Health Insurance Authority (NHIA) report, less than 2 percent of Ghana's population is enrolled in the NHIS as indigent. Indigents are the poorest members of the population and are usually characterized by a lack of (1) employment, (2) a visible source of income, (3) a fixed place of residence, and (4) an identifiable consistent support from another person. Two percent coverage is very low compared with an estimated 28 percent living under the poverty line, according to 2006 Ghana Living Standard Survey figures. Indigents are not registering for health insurance for many reasons, such as a lack of public awareness of the insurance system, the long distances to travel to registration points, or a negative perception of the NHIS. In addition, the current method for identifying the indigent through means testing, by the DMHISs in collaboration with communities, is vague. Another possibility is abuse in the process for registering indigents. Premium collectors may be placed in a position to accept bribes for registering unqualified individuals as indigent. Also, the DMHISs have incentives to enroll members in the exempt category since they are paid a premium per person annually from the National Health Insurance Fund (NHIF), which is higher than the premium received from poor informal-sector workers.

Also many in the informal sector who are expected to pay the requisite premiums may be considered poor but not indigent. Poor informal-sector workers may not be able to afford the premiums or qualify for the premium subsidies for the indigent. As a consequence, the insurance program may unintentionally exclude poor informal-sector workers. Also in practice, the NHIA payments are only income related for the 3 percent of the population in the formal sector. For the informal sector, the premium is a flat rate per person. In practice, beneficiaries in the informal sector pay 8–12 Ghanaian cedis (GH¢) annually¹ to be able to enroll.

Although some studies have been done on the NHIS, none of them have looked at the operations of all the DMHISs in terms of the challenges they face and how managers of these schemes think such challenges can be addressed. This study discusses the internal and external challenges faced by the scheme, including access issues, as well as issues with service providers and clients. This discussion paper contributes to previous studies on the NHIS, and for various reasons, this report could help policymakers to initiate programs that will improve the performance of the DMHISs to ensure affordable healthcare services for all. First, this study considers all 145 district schemes that have existed since 2008; hence it is comparable to previous studies performed around the same time frame. Second, it provides current information on the DMHIS operations—it considers the status of these schemes in 2011. Third, since it uses data from every single DMHIS, it provides results that are representative at the regional level. Furthermore it presents information on the current membership rules in the DMHISs as well as their evolution, including the requirements to be considered as indigent, which could shed some light on the problems that the poorest face regarding access to the NHIS. Finally, this study is a contribution to the current literature because in addition it looks at specific challenges in district schemes that affect children's access to health services in each of the 10 regions in the country.

This discussion paper is divided into five sections. Following this introduction, background information on the NHIS is presented, including an analysis of previous studies of this scheme. Section 3 examines the data collection procedure, and Section 4 presents the results. Finally, Section 5 discusses the findings and concludes.

¹ This translates into US\$3.7 to US\$5.5.

2. GHANA'S NATIONAL HEALTH INSURANCE SCHEME

Based on the socialist ideology of Ghana's first government, healthcare financing, like other social services, was almost free after independence. The system of paying for healthcare, or the user fee system, was partly introduced into healthcare service through the enactment of the Hospital Fee Decree in 1969, which later became the Health Fee Act 1971. At the initial implementation of the user fee system, patients were charged a token for consultation, but this evolved into a system where a fixed fee was paid for consultation, examination, laboratory, and other diagnostic procedures (Nyonator and Kutzin 1999). The Health Fee Act 1971 was amended in 1988 to include charging the full cost of drugs to patients. This resulted in numerous challenges in the supply of essential drugs, including inequitable distribution of drugs to the various health facilities, which then led to the establishment of the cash-and-carry system, formally called the Revolving Drug Fund in 1992.

The cash-and-carry system was initiated to finance 15 percent of recurrent expenditure through the user fees paid by patients at the point of accessing health services (Nguyen et al. 2011). Under the system, each healthcare facility maintained a revolving drug fund, which was used to resupply the facility with drugs and other medical supplies. The cash-and-carry system impacted negatively on people's access to healthcare services—especially the poor—and this resulted in delay in seeking health services when ill and incomplete purchases of prescription drugs (Waddington and Enyimayew 1989; Asenso-Okyere et al. 1998). To offset the negative effects of the cash-and-carry system, some exemptions were introduced, such as the provision of free healthcare to those over age 70, pregnant women, children under age 5, the indigent, and those suffering from certain communicable diseases. However, these exemptions were rarely given due to identification problems and difficulties associated with getting refunds from the government (Asenso-Okyere et al. 1998). To solve the problems associated with the cash-and-carry system, the NHIS was established.

Background Information on the NHIS

Replacement of the cash-and-carry system with the NHIS began with the enactment of the National Health Insurance Act (Act 650) 2003 and subsequent operation of the scheme in 2004. The act also established the NHIA, which regulates all health insurance schemes in the country and also implements the NHIS. Financing for the NHIS comes from the 2.5 percent tax charge on selected goods and services (which accounts for about 70 percent of revenues); from the 2.5 percent transfers from existing contributions in the Social Security and National Insurance Trust by formal-sector workers (around 23 percent of revenues); and from individual premiums and miscellaneous other funds from investment returns from the National Health Insurance Council, parliament, or donors (World Bank, International Labor Organization, and Danish International Development Agency).

Currently, three main health insurance schemes are in the country: district mutual health insurance, private commercial health insurance, and private mutual health insurance. The last two schemes are private insurance schemes; as such they do not receive financial support from the government, but their operations are regulated by the NHIA. The DMHIS is by far the most common form of health insurance scheme found in all 145 districts in the country. These schemes are public noncommercial ones, and they receive financial support from the NHIA.

Each district mutual health insurance scheme is responsible for establishing a district administration, enrolling and maintaining membership, collecting contributions from people who can pay, applying a means test to determine who is indigent, and administering subsidies received from the NHIF for the indigent.

The DMHISs are distributed across the different regions in Ghana and by 2008 had accredited 1,672 health facilities across the whole country (see Table A.1 in the appendix). Similarly, the enrollment rate varies across regions, with the lowest membership rates in the Central region and the highest in the Upper West region (see Table A.2 in the appendix).

Within these schemes the benefits packages offered are very similar. Yet each DMHIS can choose to provide supplementary benefits. The basic package consists of (1) coverage of all costs, including food, associated with outpatient department and admission treatment; (2) full payment for medicine included in an approved list; and (3) payments for referrals in an approved list (Salisu and Prinz 2009). Specifically, it covers oral health; eye care; emergencies; maternity care, including prenatal care, normal delivery, and some complicated deliveries; and treatment for malaria, diarrhea, upper respiratory tract infections, skin diseases, hypertension, asthma, and diabetes (Mensah, Oppong, and Schmidt 2009). More than 95 percent of disease conditions that afflict Ghanaians are covered by the NHIS. However, other healthcare products and services such as cosmetic surgeries, antiretroviral drugs, and assisted reproduction medical services are excluded from the scheme. A more extensive list of benefits as well as of excluded services is provided in the Appendix.

From the creation of the scheme, indigents, people above 70 years, children under 18 years, pensioners, and Social Security contributors were exempt from payment of the premium but had to register to obtain the scheme's benefits. In addition, starting in July 2008, pregnant women were also exempt from paying the premium (Witter and Garshong 2009). For people in the informal sector, premium payable per person per annum ranges between 7.2 and 48.0GH¢, depending on income and ability to pay (Gobah and Zhang 2011). The average premium paid by the informal sector (which constitutes the majority of the Ghanaian population) is around 10 GH¢, which is around 2.5 percent of the annual per capita income estimated from the last Ghana Living Standards Survey (GSS 2008). There is no limit on what NHIS pay in medical bills as long as the care is within the provision of the benefits package. Finally, no co-payments, co-insurance, or deductibles are required.

The DMHIS collects all the premiums either from paying beneficiaries or from the NHIF that provides subsidies for the exempt groups. At the beginning the NHIF paid an annual premium per beneficiary equivalent to 8 GH¢, but this gradually increased to 14 GH¢. During 2011 around 345,569 indigents, 403,163 people aged 70 and over, 485,460 pregnant women, and 4,089,228 children age 18 or under were exempt from premium payment. This means that the NHIA covered 5,323,420 premiums; at 14 GH¢ each, this amounts to 74.53 million GH¢. Yet the NHIA is covering much more than this: The total premiums collected from the informal sector in 2011 were only 27.66 million GH¢, and the Social Security and National Insurance Trust contribution was 107.61 million GH¢—yet the total expenditure by the schemes was equivalent to 764.07 million GH¢. Hence, the NHIA is subsidizing more than 82 percent of total expenditure. Indeed, the DMHISs are heavily dependent on the subsidies they receive from the NHIA, which provides some 80–90 percent of their revenue.

Previous Studies on the NHIS

Few studies have looked at the performance of the NHIS in terms of its operational challenges and management. Three of these studies will be discussed in this section: the National Health Insurance Authority Annual Reports for 2009 and 2010 and the Citizens' Assessment Report of 2008.

2008 Citizens' Assessment of the National Health Insurance Scheme

The most comprehensive assessment study conducted about the NHIS is the Citizens' Assessment study of 2008 (NDPC 2009). The study was undertaken to ascertain citizens' views on the NHIS in terms of providing affordable healthcare for all and how the scheme can be improved. A nationwide representative of 1,988 households, comprising 8,644 respondents, and an additional 920 patients leaving healthcare facilities were interviewed for the household sample. The study indicated that people who have registered visited healthcare facilities with sickness more frequently than those who are not registered. Again, the majority of the insured households were either very satisfied or satisfied with the performance of the scheme.

The study also interviewed 87 providers from 83 healthcare facilities and 58 district scheme managers. The health facilities were interviewed to examine the usage of these facilities by NHIS cardholders and nonholders, as well as to identify some challenges facing these facilities in the

implementation of the scheme and to find ways to deal with these challenges. The study identified that issues with claims payment, benefits packages, and cost of drugs are some of the challenges confronting the health service providers. The healthcare providers stated that some of the challenges they face with respect to claims are delays in reimbursement, lack of software and complex format for processing claims, as well as reduction in the number of claims submitted. Again, the exclusion of some drugs on the drug list, lack of awareness about the drug list, and the fact that drug prices are fixed although they were rising are some of the issues affecting drug prescriptions to NHIS beneficiaries. Health providers also suggested ways to improve the services rendered to NHIS members to help the NHIS to achieve its goals: extension of the scheme for all medical services, intensification of public education, constant monitoring of the scheme and the providers, and prompt release of funds for reimbursement of claims.

The district scheme officers interviewed also revealed that the NHIS was facing both operational and environmental challenges: Operational challenges included late renewal of membership cards, inadequate staff and logistics, low monitoring of providers, untimely release of funds and reimbursement, inadequate funds, and noncompliance with the gatekeeper system; and challenges from the environment included a bad roads network, high poverty and illiteracy levels among the population, inadequate health facilities, and politicization of the scheme. In conclusion, the study suggested that recruitment and training of staff, intensive public education about the scheme, provision of logistics, and an increase in the number of health facilities are some of the ways to improve the operation of district schemes.

The National Health Insurance Authority Annual Report 2009

The NHIA produces an annual report on the status of the health insurance scheme in the country. The 2009 NHIA annual report depicted the state of the NHIS to the new council members, who were appointed into office by the new government. The report indicated that the total subscriber base of the scheme at the end of 2009 was 14,511,777, with 1,930 healthcare facilities accredited nationwide to provide services to these members.

As of 2009 there were 145 district schemes offices, as well as regional offices that supervise the operations of the DMHIS and accredited service providers. Members of these regional offices are supposed to visit these district schemes and service providers regularly to monitor their activities and also ascertain their main challenges. After this monitoring exercise, the regional officers cited numerous challenges among service providers' operations, including wrong application of tariffs, charging of antenatal and other tariffs separately from the outpatient department, irrational drug prescription, collection of illegal fees, and forcing insured clients to come for more medical reviews even when they are well. In terms of the district schemes, the regional officers noted that their operations were hindered by lack of permanent office accommodation, low staff capacity, difficulty in identifying and registering indigents based on the guidelines, and inability of some schemes to reach certain overseas communities due to lack of outboard motors.

The report, however, did not mention how the challenges facing the district scheme will be addressed when considering the way forward for the scheme in the next year. The report did address the issue of drug prescription by stating that the NHIA will introduce a uniform NHIS prescription form and also ensure that prescriptions conform to the Essential Medicine Lists of the health ministry.

The National Health Insurance Authority Annual Report 2010

The 2010 report is the latest one produced by the NHIA. The report indicated that there were still 145 district schemes with an active membership of 8,163,714, as opposed to 10,638,119 for 2009. The reduction in the membership was attributed to a new methodology implemented to clean the membership data of multiple registration, dead subscribers, and expired or inactive ID cardholders. The number of service providers accredited increased from 1,930 in 2009 to 2,647 in 2010, with government healthcare facilities constituting the majority.

Among the initiatives undertaken in 2010 was the revision of the medicine list to 552 formulations through the exclusion of all anesthetics and inclusion of other drugs such as artemether injections. The NHIA also established claims processing centers for regional hospitals to ease the burdens from DMHISs. New guidelines for the gatekeeper system and free maternal program were also developed to avoid abuse of that system by insured clients. The NHIA has also recruited more employees for the head and regional offices, organized some training programs for staff, and developed the uniform prescription list.

Unlike the 2009 report, this report did not specifically look at the challenges affecting the DMHIS. It did consider problems with the scheme as a whole, but such problems are likely to impact the DMHIS. The report showed that some of the major challenges confronting the scheme are financial sustainability, problems in identifying indigents, issues with ID cards and claims management, and information and communications technology (ICT) problems. The NHIF is projected to decrease in 2012; hence the NHIA needs to find additional sources of funds and also reduce its operational costs. The introduction of the NHIS was partly to support the poor in society, but identification of indigents for free medical care was also a serious challenge, partly due to lack of information on the citizenry. Also, the slow speed of the Internet network, frequent breakdown in the network, and lack of information and communications technology experts at the district level make the use of information and communications technology very difficult, affecting the operation of the scheme at the district level. Again, although claims processing centers have been established, claims processing is still a serious challenge for the scheme due to the increased demand for health insurance. Regarding ID cards, problems with data entry, card production, and distribution continue to cause delays in issuing ID cards after registration.

The report concluded with plans to solve these challenges and improve upon the scheme's performance in the next year. The scheme intends to review the annual premium charge, generate funds internally, and seek additional sources of funding, among other things, to ensure financial sustainability of the scheme. It will also employ more people, organize regular training, and improve staff work conditions to improve upon the human resource base of the scheme. Other initiatives in the next year will include piloting of electronic processing of claims and the development of a manual for ID card management.

3. DATA COLLECTION

The IFPRI's Ghana Strategy Support Program conducted a study to understand the functioning of the Ghanaian NHIS. This project was a joint effort between IFPRI and the Institute of Statistical, Social, and Economic Research at the University of Ghana, Legon.

To carry out this study, a survey was implemented to improve the understanding of the NHIS and its role in improving health outcomes across Ghana. The study was supported by the NHIA, who provided an official letter addressed to the health insurance scheme regional offices and the DMHISs indicating that the data collection effort was approved by this institution.

In particular, this survey aimed to generate robust evidence about the DMHISs, their regulations, and their administrative rules in order to support them in helping to improve the health of all Ghanaians, especially children. It included quantitative information on the membership rules in the DMHISs. Furthermore, the survey included open questions related to the main barriers children faced when accessing the healthcare services in the district, the main problems or challenges the DMHISs have faced in the past, and the how the management of the scheme dealt with these problems or challenges. Finally, potential actions proposed to improve operations in the DMHIS were recorded.

To collect the necessary information, a census of the 145 DMHISs that were operational in 2008 took place between August and September 2011. At the beginning of August, 18 enumerators and 4 supervisors were trained in Accra and then sent to visit each of the 145 DMHISs for a month until mid-September. The main respondents of the survey were scheme managers (49 percent of respondents) followed by public relations officers (27 percent) and information system managers (12 percent). The rest of the respondents were either claim managers, administrative assistants, or accountants.

In addition to the open questions mentioned above, quantitative information was collected on the membership rules in the DMHISs from 2006, 2007, 2008, and 2011. Examples of different membership rules, just to mention a few, are (a) verification methods employed by the DMHIS to ensure that parents were registered in the NHIS in order for their children to benefit, (b) the existence of exceptions that allowed children to benefit from the NHIS without their parents being registered, and (c) information on the annual and renewal fees for nonexempt adults and on the waiting periods for both adults and children when registering.

For the purpose of the census, the survey team was divided into four zones:

Zone 1: Volta, Greater Accra, and Eastern regions

Zone 2: Central and Western regions

Zone 3: Ashanti and Brong Ahafo regions

Zone 4: Northern, Upper East, and Upper West regions

Enumerators were assigned to areas where they had a linguistic advantage, and supervisors accompanied them during some interviews to observe and verify the consistency of the data collection process. Given the nature of the information requested, the enumerators had to visit each district scheme at least twice, as the interviewee in general did not have all the information at hand and had to look into administrative files. The result of this data collection effort was the District Mutual Health Insurance Schemes 2011 Census.

4. RESULTS

The District Mutual Health Insurance Schemes 2011 Census is used to record the DMHIS officials' assessment of the NHIS as well as to analyze the evolution of NHIS policies from 2006 until 2011. We start by presenting the officials' evaluation of the functioning of the district schemes and the system as a whole. Then we discuss how the registration requirements have evolved over time and where they stand now.

DMHIS Officials' Assessment of the NHIS

One of the goals of this study was to try to understand what challenges the DMHISs have faced in the past and continue to face and how managers of these schemes have dealt with these issues or think such challenges can be addressed in the future. This meant understanding both the internal and external challenges faced by the scheme, including access issues, as well as issues with service providers and clients. In addition, this study wanted to understand the role of the DMHISs in facilitating or obstructing children's access to healthcare. In doing so we were also able to collect information on other potential barriers that affect children's access to proper care related to parental and geographical restrictions.

This subsection begins by addressing the issues involved in children's access to healthcare and proceeds by discussing the main challenges faced by the DMHISs as well as the solutions proposed for these.

Barriers That Have Affected Children's Access to Healthcare

According to the DMHIS officials' assessment of the NHIS, the most serious barriers to child healthcare accessibility in Ghana are related to DMHIS operations, followed by poverty and poor infrastructure (poor road networks and subpar health facilities). As shown in Table 4.1, for all 10 regions, a major problem with the DMHISs is the coupling of parents' and children's registration. In many of the district schemes, both parents were required to be registered in order for the child to enjoy the NHIS benefits. Yet fathers were especially reluctant to enroll. This is described as an important barrier to healthcare accessibility for children by 52 percent of the DMHISs in the country. Another problem that most DMHIS officials find concerning is the lack of adequate marketing to increase knowledge about the scheme; this afflicts around 13 percent of DMHISs. As a consequence, a lack of trust and a variety of negative beliefs exist about the scheme, including that people would become sick as soon as they register. Processing issues such as delays in issuing identification (ID) cards and claim payments and long waiting periods after registration are the third most important problem. These issues are present in only half of the regions but are very predominant in these, especially Upper East, where 50 percent of DMHISs record having these processing problems. Finally, inadequate technical human capacity and logistics² as well as the politicization of the schemes are mentioned by some DMHISs as pressing issues. This is particularly true in the Upper West region, where 88 percent and 25 percent of schemes, respectively, mention these issues.

²*Inadequate capacity* refers mainly to the lack of properly trained staff in most communities.

Table 4.1 Percentage of District Mutual Health Insurance Schemes (DMHIS) facing scheme-related barriers that affect children’s access to healthcare, 2008

Region	DMHIS Barriers				
	Coupling of children with parent registration	Lack of adequate marketing to increase knowledge about the scheme	Processing issues	Inadequate technical human capacity and logistics	Politicization of the schemes
Western	47	7	0	7	0
Central	69	15	0	0	8
Greater Accra	50	10	0	0	0
Volta	67	0	13	0	0
Eastern	24	24	0	0	12
Ashanti	63	13	13	0	4
Brong Ahafo	68	11	32	0	5
Northern	39	22	22	0	6
Upper East	67	0	50	17	0
Upper West	13	25	0	88	25
Average	52	13	12	6	6

Source: GSSP (2011).

Parental and location barriers are examined in Table 4.2. Financial constraints are definitely the most important of these issues, with more than 40 percent of DMHISs reporting this as a key issue for children’s enrollment (with 60 percent of Greater Accra DMHISs mentioning this issue). Low levels of parental education seem to be a problem only in certain regions, especially in the Northern and Upper West regions, where 33 percent and 25 percent of DMHISs, respectively, mention it. Other difficulties mentioned by DMHIS officials include preference for traditional medicine and self-medication (in particular in the Volta and Eastern regions) and the high divorce and single parenthood rate (in Brong Ahafo).

Table 4.2 Percentage of District Mutual Health Insurance Schemes facing parental and district barriers that affect children’s access to healthcare, 2008

Region	Parents Barriers				District Barriers	
	Financial constraints	Low education level among parents	Preference for traditional medicine and self-medication	High divorce rate and single parenthood	Poor road networks and limited health infrastructure	Low quality of healthcare
Western	47	13	7	7	33	7
Central	54	8	8	0	8	8
Greater Accra	60	10	0	0	0	0
Volta	53	0	13	0	7	7
Eastern	47	0	18	0	18	0
Ashanti	46	4	4	4	17	0
Brong Ahafo	16	0	0	16	11	0
Northern	44	33	0	0	39	6
Upper East	17	0	0	0	33	0
Upper West	13	25	0	0	88	38
Average	41	9	6	3	22	5

Source: GSSP (2011).

In terms of location-related issues, the lack of appropriate road and health infrastructure is a particularly important problem, with an average of 22 percent of DMHISs referring to it. Yet in some regions like Upper West, this is much more pressing, since 88 percent of DMHIS officials report this problem. In contrast, as expected, Greater Accra has no infrastructure shortage. Finally the low quality of healthcare is mentioned as an additional issue, but it is pressing in only a couple of regions, in particular, in Upper West.

Challenges that the DMHISs Have Faced

The challenges faced by the DMHISs can be classified as internal and external. Internal challenges have been the most important problems. As seen in Table 4.3, around 72 percent of all DMHISs referred to inadequate logistics and infrastructure, as the main internal challenges. The main issues are limited computers, vehicles, and office accommodations and breakdown of Internet service and electricity. The lack of appropriate office accommodations is by far the most pressing of these issues (noted by 81 percent of DMHISs that referred to logistics and infrastructure problems).

Table 4.3 Percentage of District Mutual Health Insurance Schemes facing internal challenges, 2008

Region	Inadequate logistics and infrastructure	Inadequate human resources	Lack of adequate funds	Delays in claims reimbursement
Western	80	40	27	20
Central	62	62	8	8
Greater Accra	70	70	20	0
Volta	93	67	13	7
Eastern	65	47	0	12
Ashanti	75	63	0	25
Brong Ahafo	68	42	21	21
Northern	78	44	22	11
Upper East	67	83	33	0
Upper West	50	75	75	0
Average	72	56	17	13

Source: GSSP (2011).

The second most important internal challenge has been the lack of appropriate human resources (stated by 56 percent of all DMHISs). Officials referred to the lack of specialists for data management, general understaffing of the offices, lack of training, and unmotivated personnel. Other issues mentioned only briefly were delays in salary payments and low levels of these salaries as well as fraud and embezzlement of funds by the staff (mentioned by only 2 percent).

Lack of adequate funding was found to be the third most important problem, more pressing in certain regions (such as Upper West and Upper East) than in others (such as Central, Eastern, and Ashanti). Financial difficulties were related to high administrative costs and poor revenue generation in the districts, due to the high poverty levels.

Finally, delayed reimbursement of claims was identified as an issue in several regions, especially in the Ashanti, Brong Ahafo, and Western regions. Officials thought this was related to the lack of a common bills settlement plan.

External challenges faced by the NHIS can be divided by the type of issues that have been confronted: issues with service providers, issues with clients, and issues with access. This is illustrated in Table 4.4. Issues with service providers are the least pressing, with an average of 6 percent of DMHISs mentioning this problem. These issues include a lack of adequate healthcare services and facilities (in particular in the Upper West region), lack of cooperation by health providers (especially in the Western

region), and inaccurate filing of claims (in particular in the Eastern and Greater Accra regions). The lack of cooperation by health providers refers to noncompliance with the NHIS medicine lists and tariffs and delays in submitting of claims. The inaccurate filing of claims refers to fictitious or over-blotted claims and the abuse of the gatekeeper system.

The issues with clients were by far the most important external challenge that the schemes had to face, in particular the low awareness of the scheme and the trust and interest in it. This problem was noted by 29 percent of the schemes and refers to weak publicity and lack of outreach programs and insurance literacy. As a consequence, awareness of the benefits of the scheme was low, especially among men, who thought the NHIS was meant only for women. Furthermore, lack of policy clarity and frequent changes in the policy made the scheme confusing to potential members. Politicization of the scheme³ was the second most important client issue, noted by 18 percent of all schemes. Yet this percentage hides great variations across regions. In the Volta and Eastern regions this was a crucial issue, but in the Upper East and Ashanti regions it was barely mentioned, if at all. Other challenges mentioned include high poverty levels, leading to low levels of patronage (a particular concern in the Central and Northern regions), delayed registration and renewal rates, and fraudulent representation (especially in the Upper East region).

Finally, access issues are mainly the existence of a poor road network that hampers registration and complicates access to health facilities, especially in the Western, Northern, and Brong Ahafo regions.

³ The people did not join because they associate the scheme with a political party or a particular politician in office.

Table 4.4 Percentage of District Mutual Health Insurance Schemes facing external challenges, 2008

Region	Issues with service providers			Issues with clients					Access issues
	Inadequate healthcare services and facilities	Lack of cooperation by health providers	Inaccurate filling of claims	Politicization of the scheme	High poverty leading to low patronage	Delayed registration and renewal	Low awareness, trust, and interest in the scheme	Fraudulent representation	Poor road network
Western	7	20	7	13	0	7	33	0	33
Central	0	8	8	23	31	8	15	8	0
Greater Accra	0	0	10	20	10	10	30	0	10
Volta	7	7	0	33	0	7	20	0	13
Eastern	6	0	12	35	0	6	24	6	6
Ashanti	0	8	8	4	8	8	29	8	4
Brong Ahafo	11	0	0	16	5	11	32	5	16
Northern	6	0	6	11	22	11	50	6	17
Upper East	0	0	0	0	0	17	17	17	0
Upper West	25	0	0	25	13	0	25	0	13
Average	6	5	6	18	9	8	29	5	12

Source: GSSP (2011).

Solutions Applied by the DMHIS Management to Deal with Challenges or Problems

Most solutions provided to tackle these problems are related to logistical and infrastructural interventions, followed by human resource improvements and awareness campaigns. As shown in Table 4.5, solutions for all internal challenges previously mentioned were attempted by most schemes. In particular, improved logistics and infrastructure were provided in 52 percent of all DMHISs, but all regions saw some level of improvement. This included the acquisition of new offices, computers, and vehicles and the provision of nationwide software and Internet networks by the NHIA. In some cases motorbike and taxi services were hired for official operations; in others, vehicles were provided temporarily by district assemblies and district health directorates. Human resources were reinforced in all regions, with particular emphasis in the Upper West, Brong Ahafo, and Ashanti regions. Permanent staff members were trained, as well as community health insurance committee members and agents; and contract, casual, youth employment program, and national service personnel were recruited. Finally, current staff management was improved. Both NHIS financial support and internally generated funds increased, but only for 7 percent of the schemes, most of these in the Greater Accra, Brong Ahafo, and Northern regions. Six percent of schemes also mentioned the creation of a claims processing center that has allowed the timely release and payment of claims. Finally, 10 percent of district schemes—in particular, Central, Eastern, Brong Ahafo, and Upper West regions—applied for support from higher management to help them solve their remaining issues but had not heard back yet at the time of the survey.

Table 4.5 Percentage of District Mutual Health Insurance Schemes applying management solutions to deal with internal challenges

Region	Provided logistics and infrastructure	Reinforced human resources	Provided adequate funds	Created claims processing center	Applied for support from higher management
Western	60	33	7	13	7
Central	54	46	0	8	15
Greater Accra	50	40	10	0	10
Volta	67	33	7	0	13
Eastern	47	29	6	0	18
Ashanti	54	50	8	8	0
Brong Ahafo	37	53	11	11	21
Northern	56	39	11	11	0
Upper East	17	33	0	0	17
Upper West	63	88	0	0	13
Average	52	43	7	6	10

Source: GSSP (2011).

In contrast, fewer of the external challenges were tackled. Table 4.6 indicates that the only exception was in the area of awareness and policy issues, where 43 percent of schemes stated that intensive public education was provided about the benefits of being registered in the scheme. All regions attempted to tackle this issue, especially the Northern region. The new marketing strategy included using local radios, holding formal community meetings, and providing house-to-house education. Other client issues addressed in some schemes included engaging in dialogue and educating the public on de-politicization of the schemes (although in only some schemes in the Central, Eastern, and Northern regions); reducing premiums and providing financial help by nongovernmental organizations (in particular in the Northern and Upper West regions); and allowing decoupling and providing intensive registration during critical times and in key locations (especially in the Greater Accra and Upper East regions). This last item involves providing registration at times when members would have cash (such as after harvest) or in places where the most potential members could be located (in primary schools during enrollment).

Table 4.6 Percentage of District Mutual Health Insurance Schemes applying management solutions to deal with external challenges

Region	Service provider issues addressed		Client issues addressed			Access issues addressed
	Provided regular training and monitoring of service providers	Engaged in dialogue and educated public on de-politicization	Reduced premiums and financial help provided by nongovernmental organizations	Allowed decoupling and provided intensive registration during critical times and in key locations	Provided intensive public education about the benefits of being registered in the scheme	Adoption of community registration
Western	13	0	7	13	27	13
Central	0	8	8	0	31	0
Greater Accra	0	0	10	20	30	0
Volta	0	0	0	13	40	0
Eastern	12	12	0	0	41	0
Ashanti	13	0	8	8	46	4
Brong Ahafo	11	0	0	11	47	11
Northern	6	11	17	0	72	6
Upper East	17	0	0	17	33	0
Upper West	0	0	13	0	50	0
Average	8	3	6	8	43	4

Source: GSSP (2011).

Regarding issues with providers, the main solution DMHIS officials mentioned was the provision of regular training and monitoring of service providers (employed by 8 percent of all schemes). The accreditation process became more demanding, and service providers were trained on the NHIS tariff and drug lists and educated on claims procedures so that they could submit claims on time.

Finally, to address the access issues, community registration was adopted on average by 8 percent of schemes in the Western, Ashanti, Brong Ahafo, and Northern regions so that potential members did not have to travel to the district capital to become an NHIS member. None of the other regions addressed access issues.

Potential Actions Suggested to Improve the Operations of the DMHIS

The purpose of the final set of questions posed to DMHIS officials was to ascertain what they believed could be done to further improve the schemes' operations. DMHIS managers believe the provision of logistics and infrastructure is the main action that should be taken to improve the schemes; this was followed by human resource issues, awareness, and policy and financial issues.

As illustrated in Table 4.7, the number one action suggested by DMHISs around the country was to provide updated logistics and permanent infrastructure. Not only did 67 percent of schemes suggest this but they particularly emphasized the acquisition of permanent office accommodations and the provision of means of transport. Other logistics issues mentioned included increasing the supply of computer hardware and software, improving Internet connections, and decentralizing the database and the card processing system. The second most salient issue is the need to hire permanent staff and to train and motivate them appropriately (an average of 62 percent of schemes mentioned this). DMHIS officials emphasized the need to improve working conditions by increasing salaries, allowances, and benefits as well as paying them timely. In addition, regular training in archiving, customer care, data management, claims management, and general accounting was deemed necessary. The need to provide adequate and timely funds was also a pressing internal concern, especially in the Upper West region, where 38 percent of schemes suggested it. The issue with timely reimbursement of claims still concerned some DMHISs, particularly in the Northern region, where 22 percent of schemes expressed concern. Finally, two new internal issues were brought up. DMHISs in the Eastern, Brong Ahafo, and Northern regions suggested that decentralizing scheme operations and giving DMHISs more autonomy could encourage efficiency, since this will allow the schemes to negotiate with providers in terms of service charges. This concern was especially important in the Brong Ahafo region, where 26 percent of schemes mentioned it. The second new concern was the need to speed the application process, mentioned by the Central, Eastern, Ashanti, and Brong Ahafo regions.

Table 4.7 Percentage of District Mutual Health Insurance Schemes noting internal actions that can be taken to improve the scheme

Region	Provide updated logistics and permanent infrastructure	Hire permanent staff and train and motivate them	Provide adequate and timely funds	Reimburse claims on time	Decentralize scheme operations and give DMHIS autonomy	Speed application process
Western	73	73	13	7	0	0
Central	46	54	8	8	0	15
Greater Accra	50	60	0	0	0	0
Volta	80	40	7	0	0	0
Eastern	65	65	6	0	6	6
Ashanti	54	63	8	8	0	4
Brong Ahafo	63	58	16	11	26	11
Northern	83	61	17	22	6	0
Upper East	67	67	17	17	0	0
Upper West	100	100	38	0	0	0
Average	67	62	12	8	5	4

Source: GSSP (2011).

Several actions were suggested on how to overcome pending external challenges. The most salient was to provide public education about the scheme. Table 4.8 shows that on average 21 percent of DMHIS officials think there is still a need to increase education about the NHIS and that this education campaign should involve opinion leaders and main stakeholders. It is interesting to note that even in the Greater Accra region there is still a perceived deficit in the schemes' marketing techniques; 30 percent of the DMHISs stated that this is a lingering problem. Other client issues yet to be addressed include the need to avoid the politicization of the scheme and the need to organize special mass registrations for communities that have a harder time reaching the DMHIS offices (in particular the Northern region). A service provider issue still to be addressed is the improvement of the monitoring system. Officials in several DMHISs feel that introducing financial controls is necessary to avoid fraud and ensure quality, as mentioned expressly by several schemes in the Western, Brong Ahafo, and Upper East regions. Finally, very few schemes (2 percent on average for the whole country) suggested the need to expand healthcare facilities coverage.

Table 4.8 Percentage of District Mutual Health Insurance Schemes noting external actions that can be taken to improve the scheme

Region	Service provider issues left to be addressed		Client issues left to be addressed		
	Improve service provider monitoring to avoid fraud and ensure quality	Expand healthcare facilities coverage	Avoid politicization of the scheme	Organize special mass registration for communities	Provide more public education about the scheme involving stakeholders
Western	13	7	7	7	20
Central	8	0	8	8	15
Greater Accra	0	0	10	0	30
Volta	0	7	13	0	20
Eastern	6	0	6	0	6
Ashanti	4	0	0	4	17
Brong Ahafo	11	0	0	0	37
Northern	0	6	6	17	11
Upper East	17	0	17	0	33
Upper West	0	0	0	0	38
Average	6	2	6	4	21

Source: GSSP (2011).

NHIS Policies Evolution across Time

Several aspects are important to consider regarding membership rules. Two items are discussed in this subsection. The first is how financially taxing the membership is. This is reflected by the premium that needs to be paid to become a member as well as any additional fees to either start the membership or maintain it over time. The second is how cumbersome the membership regulations could be. This is encompassed by the requirements, exceptions, and waiting times that are included in the regulations.

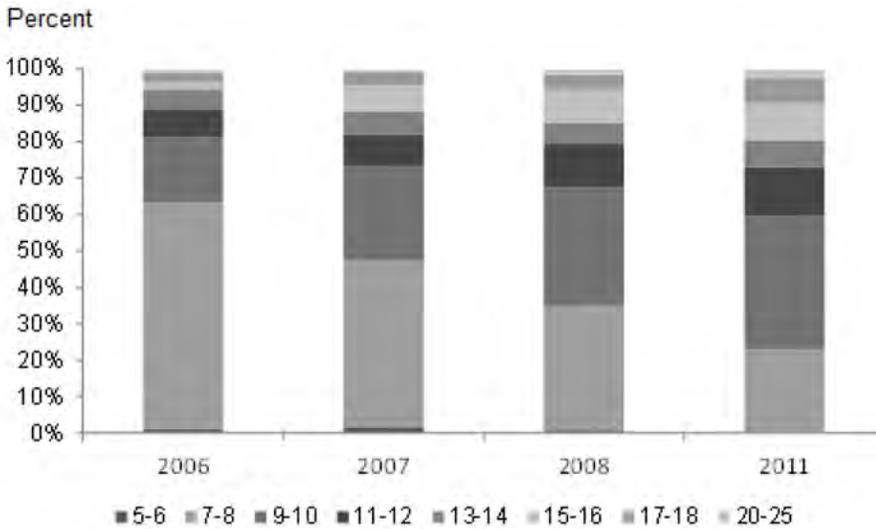
Premiums and Fees

The fee structure for the DMHIS comprises (1) an annual premium or membership payments required to enroll for the first time, (2) a renewal fee to be paid for each additional year of enrollment, and (3) a card processing fee to be paid once during the initial enrollment.

According to the NHIA regulations, membership payments are supposed to be income-related; however, this is the case for only the 3 percent of the population in the formal sector. In practice, for informal members, the premium is a flat rate per person. Most beneficiaries in the informal sector pay between 8 and 12 GH¢.

As Figure 4.1 shows, the annual premium for nonexempt adults for most DMHISs was around 7–8 GH¢ in 2006, followed by the rate of 9–10 GH¢. Indeed in 2006, DMHISs charging either of these premiums accounted for around 80 percent of all district schemes, the average premium nationwide being barely above 9 GH¢. Premiums have increased over time, and by 2011 the largest category was 9–10 GH¢, with more than 36 percent of DMHISs charging this amount and almost 39 percent of all DMHISs charging at least 11 GH¢. The average premium in 2011 was 11.4 GH¢.

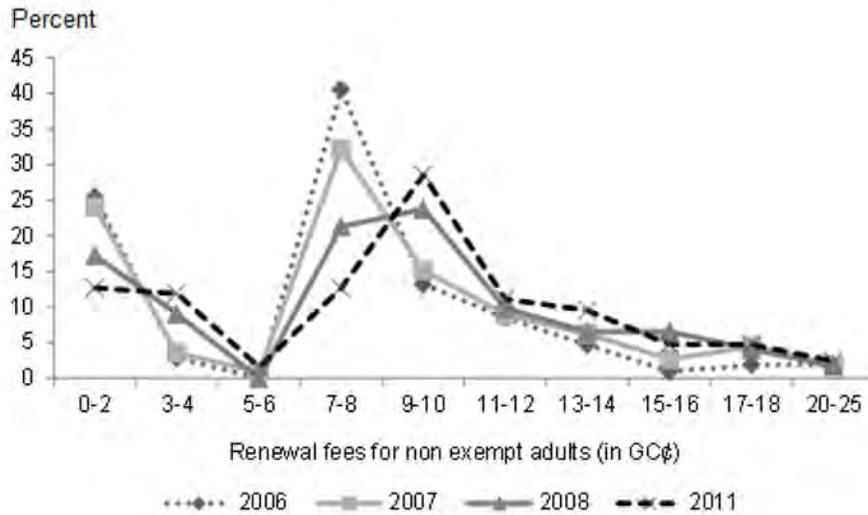
Figure 4.1 Evolution of annual premiums for nonexempt adults (in GC¢)



Source: GSSP (2011).

Renewal fees have had a similar evolution, as shown in Figure 4.2. In 2006 the average renewal fee was just over 7 GH¢, with one-fourth of DMHISs charging renewal fees for nonexempt adults of 2 GH¢ or less, while 41 percent charged 7–8 GH¢. In 2011 the most popular category was 9–10 GH¢, with around 29 percent of DMHISs charging this amount, while only 13 percent charged 2 GH¢ or less. This resulted in an average renewal fee of 9.25 GH¢.

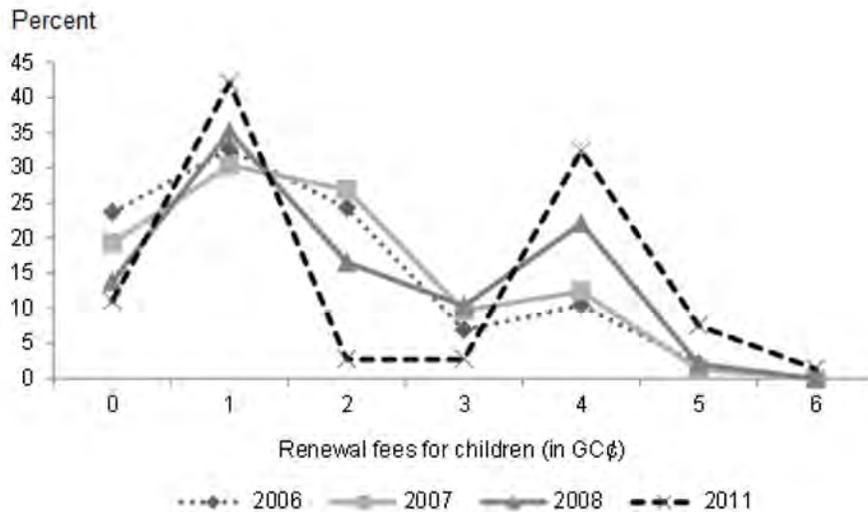
Figure 4.2 Evolution of renewal fees for nonexempt adults (in GC¢)



Source: GSSP (2011).

Children are supposedly exempt from paying premiums to enroll in the NHIS, yet according to the data collected they still had to pay renewal fees to maintain their membership after they had enrolled. As seen in Figure 4.3, these renewal fees have also been increasing over time and show a clearly bimodal distribution. For all years the two most popular categories have been 1 GH¢ and 4 GH¢, but the mean has increased over time from 1.5 GH¢ in 2006 to 2.3GH¢ in 2011.

Figure 4.3 Evolution of renewal fees for children (in GC¢)

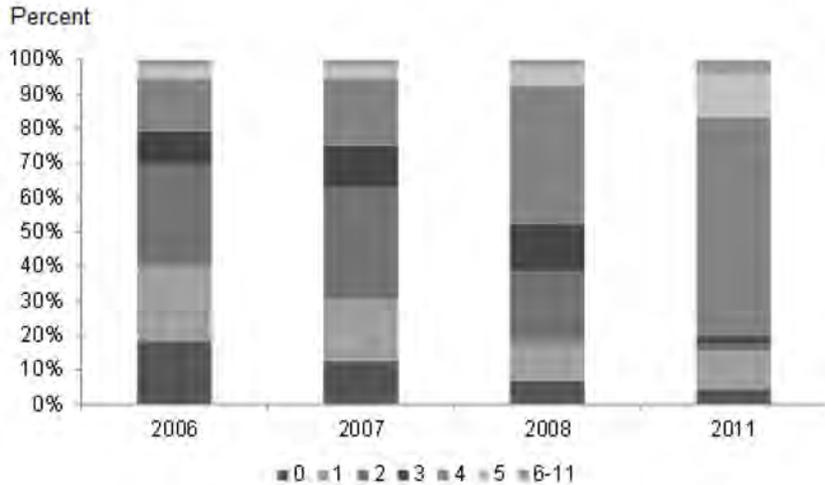


Source: GSSP (2011).

Note: GH¢ = Ghana cedi.

Other fees related to becoming a member of the NHIS include card processing fees for both adults and children. For adults, Figure 4.4 shows that these fees have seen a dramatic increase, with around 80 percent of DMHISs charging less than 4 GH¢ in 2006, and the opposite in 2011 when 80 percent of all DMHISs charged 4 GH¢ or more. The average card processing fee almost doubled over time from 2 GH¢ in 2006 to 3.8 GH¢ in 2011.

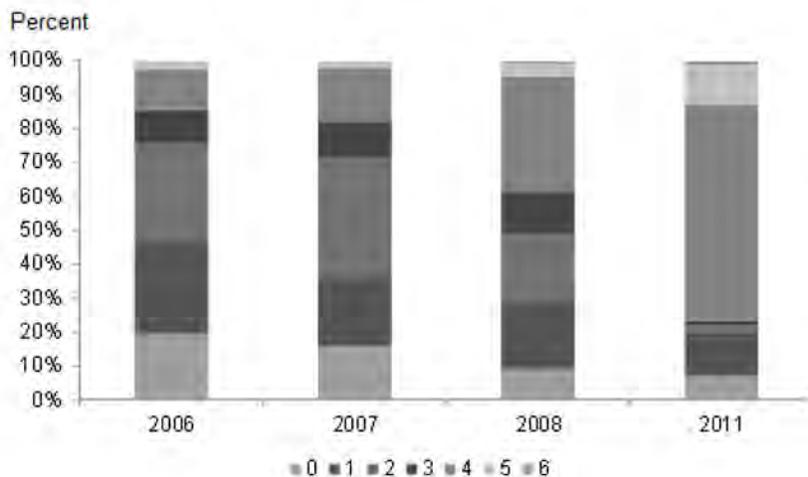
Figure 4.4 Evolution of card processing fees for nonexempt adults (in GC¢)



Source: GSSP (2011).

A similar phenomenon has been experienced with card processing fees for children, as shown in Figure 4.5. Around 80 percent of DMHISs charged less than 3 GH¢ in 2006, but the opposite happened in 2011 when more than 77 percent of all DMHISs charged 3 GH¢ or more. The average card processing fee for children doubled, from 1.7 GH¢ in 2006 to 3.4 GH¢ in 2011.

Figure 4.5 Evolution of card processing fees for children (in GC¢)

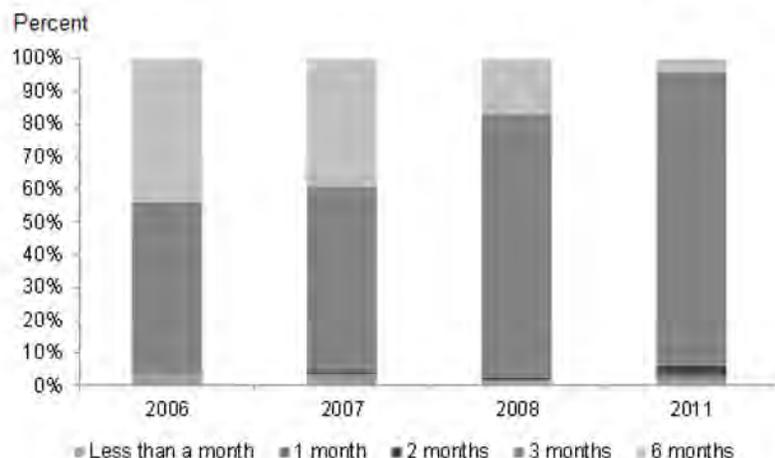


Source: GSSP (2011).

Requirements, Exceptions, and Waiting Times

The second item to consider when discussing membership rules is how cumbersome these could be. Here we examine the requirements, exceptions, and waiting times that are included in these regulations. As shown in Figure 4.6 waiting times for nonexempt adults have decreased substantially. During 2006, half of the DMHISs had a waiting period of three months, followed closely by a waiting period of six months demanded by around 44 percent of schemes. By 2011, around 90 percent of all schemes had reduced their waiting period to three months.

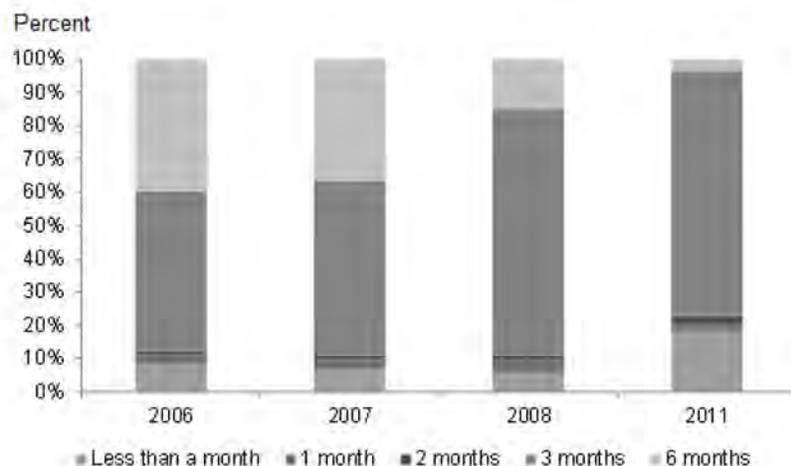
Figure 4.6 Evolution of waiting periods for nonexempt adults when registering



Source: GSSP (2011).

For children, waiting periods have always been shorter on average, but they also exhibit improvements, as seen in Figure 4.7. During 2006 the waiting periods for children were very similar to those for adults, with half of the DMHISs demanding a waiting period of three months and 40 percent asking for six months. In 2011, around 74 percent of all schemes had reduced their waiting period to three months. Furthermore, around 19 percent actually had a waiting period shorter than a month, with an average waiting period for all DMHISs of 2.5 months.

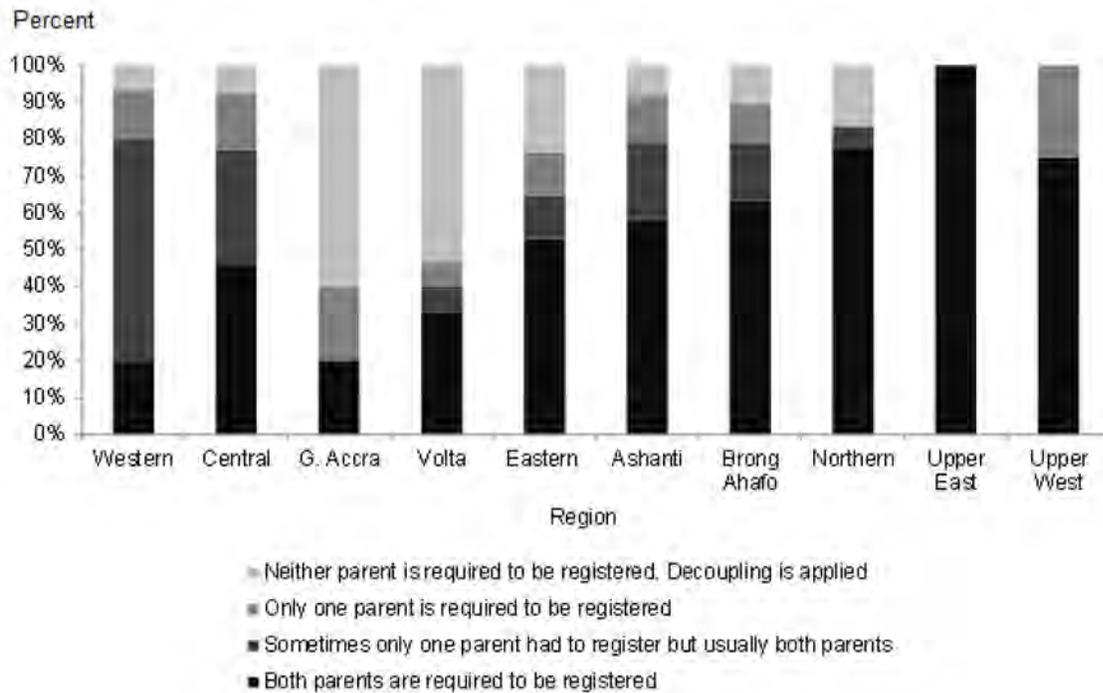
Figure 4.7 Evolution of waiting period for children when registering



Source: GSSP (2011).

As shown in Figure 4.8, the requirements to register children for free in the NHIS vary considerably across regions. Regions like Greater Accra and Volta are much more lenient, allowing most of their DMHISs to register children for free even when neither parent is enrolled (decoupling) or requiring only one parent to be enrolled. In contrast, in regions in the north such as Northern, Upper East, and Upper West, the requirements are much more stringent, with at least 75 percent of the DMHISs in each of these regions demanding that both parents be enrolled to allow their children free NHIS benefits.

Figure 4.8 Rule to be able to register children for free in the NHIS, 2011

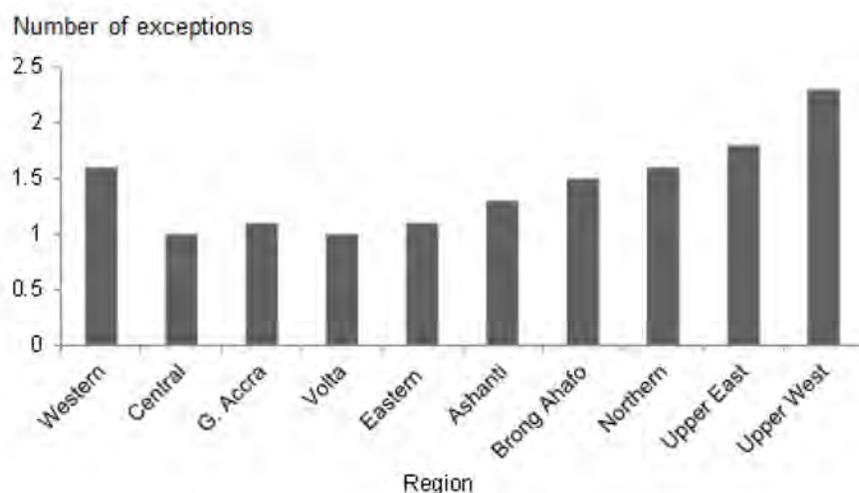


Source: GSSP (2011).

Similarly, regions vary in the exceptions each DMHIS provides to allow children to benefit from the NHIS without their parents being enrolled. Exceptions mentioned by DMHIS officials include if the child is considered an indigent, if the child has a disability, if the child has a guardian, if the child is an orphan, if the child was exempted by the social welfare department, and finally if the decoupling rule is applied by the scheme.

Apparently this is a mechanism that allows compensating for the severity of the enrollment rules exhibited by most DMHISs across regions. Figure 4.9 shows how regions such as Greater Accra and Volta have fewer exceptions than regions located in northern Ghana such as Northern, Upper East, and Upper West.

Figure 4.9 Total number of exceptions for children to benefit from the NHIS without parents being registered, 2011



Source: GSSP (2011).

Another very important membership regulation is related to how easy it is to enroll the poorest members of the population in the scheme. NHIS rules refer to people as indigent and establish that they should be enrolled for free if they fulfill four official requirements: (1) they are unemployed and have no visible source of income; (2) they do not have a fixed place of residence; (3) they do not live with a person who is employed and who has a fixed place of residence; and (4) they do not have any identifiable consistent support from another person. However, in practice, DMHISs do not always demand that all of these requirements be fulfilled. Furthermore, sometimes they request additional conditions that are not part of the ones established in the legislation. The two most common unofficial requirements to be defined as indigent and hence be excluded from paying a premium to enroll in the NHIS are (1) to be mentally or physically handicapped and (2) to be classified by the community leaders or the social welfare department as an indigent.

As Table 4.9 shows, most DMHISs demand that the person be unemployed and have no visible source of income as well as have no identifiable consistent support from another person. Yet when it comes to not having a fixed place of residence or not living with someone that does and is employed, they are less demanding. In the Northern region, for example, less than 40 percent of the DMHISs actually required these two conditions to be fulfilled to define someone as indigent. Also in the Greater Accra and Ashanti regions these two requirements are not so widespread, yet many of the schemes in both of these regions do demand that the person be mentally or physically handicapped (30 percent of DMHISs in Greater Accra and 25 percent in Ashanti) to be classified as indigent.

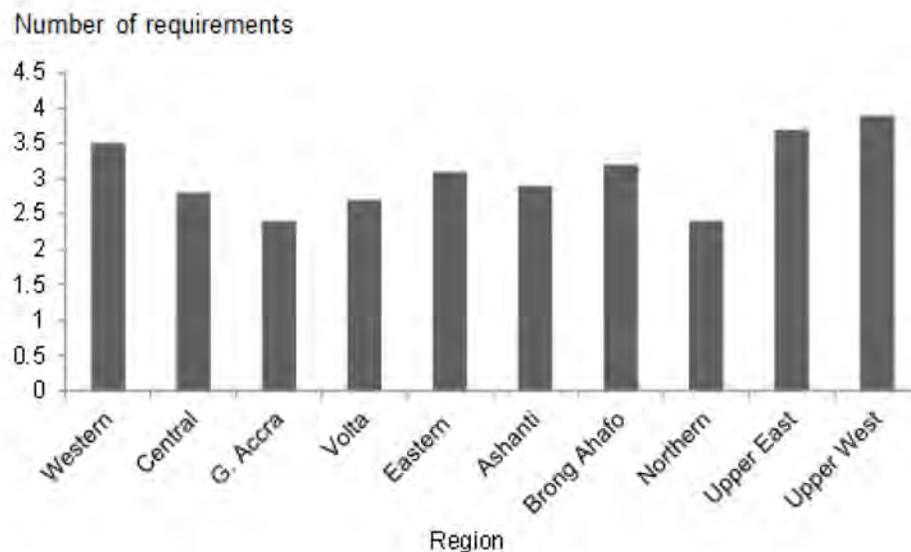
Table 4.9 Percentage of District Mutual Health Insurance Schemes in each region that demanded the following requirements to determine indigent status

Region	Official				Other	
	Be unemployed and have no visible source of income	Do not have a fixed place of residence	Do not live with a person who is employed and who has a fixed place of residence	Do not have any identifiable consistent support from another person	Be mentally or physically handicapped	Be classified by the community leaders or the social welfare department as indigent
Western	93	80	87	80	13	0
Central	92	38	54	77	15	0
Greater Accra	70	50	30	40	30	0
Volta	93	60	47	53	13	0
Eastern	88	71	59	65	12	18
Ashanti	83	50	54	67	25	17
Brong Ahafo	68	74	68	79	16	16
Northern	56	33	39	94	11	11
Upper East	100	83	83	100	0	0
Upper West	100	100	88	100	0	0
Average	82	61	59	74	15	8

Source: GSSP (2011).

This lack of consistency across DMHISs means that different regions have different rules regarding the determination as indigent. As seen in Figure 4.10, on average all the regions enforce fewer than four conditions, with the Upper West being the most demanding with 3.9 requirements on average, and the Northern and Greater Accra regions the least demanding with an average of 2.4 requirements.

Figure 4.10 Total number of requirements to be assessed as indigent, 2011



Source: GSSP (2011).

5. DISCUSSION AND CONCLUSIONS

In 2003 the National Health Insurance Act passed, which created Ghana's NHIS. This system establishes that people pay an annual fee according to their income. However, the government subsidizes the poor as well as at-risk population groups (pregnant women, people over 70 years old, and children under 18) to ensure that they have access to healthcare services. Yet in practice, fees are income related for only 3 percent of the population that works in the formal sector. Informal workers, in general, pay a flat-rate premium per person, which is established by the DMHISs that they are enrolled in. DMHISs are the operational units of the scheme and are the object of this study.

The main goal of this study is to understand what challenges the DMHISs have faced in the past and continue to face and how managers of these schemes have dealt with these issues or think such challenges can be addressed in the future. To achieve this goal, both the internal and external challenges faced by the schemes were analyzed, paying particular attention to access issues as well as issues with service providers and clients. In addition this study wants to understand the role of the DMHISs when it comes to facilitate or obstruct children's access to healthcare. This analysis is supported by the discussion of the evolution over time of the registration requirements potential members had to face.

Regions, and even districts within regions, vary greatly regarding the rules for registering children for free in the NHIS. Rules range from not requiring either of the parents to be enrolled (known as the decoupling system) to regions demanding that both parents be enrolled to allow their children to benefit for free from the NHIS. Yet, as seen in this study, the existence of exceptions in each DMHIS that allow children to benefit from the NHIS without their parents being enrolled is a mechanism that allows compensating for the severity of most DMHISs' enrollment rules.

Clearly, the main barrier to healthcare access affecting children is the coupling of children with parent registration. This is an issue mentioned constantly across regions and that cannot be solved simply by creating exceptions to the rule. The second most important barrier directly related to the functioning of DMHISs is the lack of adequate marketing techniques that increase knowledge about the scheme. This is an issue that we see repeated constantly when looking at the main challenges faced by the schemes. People do not understand the function of the NHIS or how it can benefit them, and hence they do not trust it. As a consequence, they do not pursue enrollment of their children, even when decoupling is applied. Processing issues are mentioned by some schemes, especially in the Upper East, Brong Ahafo, and Northern regions, yet these issues do not seem to be important concerns in most schemes. This is probably because hindrances such as waiting times have been improving over time for both children and adults. Between 2006 and 2011, waiting times decreased on average from 6 to 3 months for adults and from 3 to 2.5 months for children.

Other important issues mentioned by officials but not directly related to DMHIS operations are the financial constraints parents face and the poor state of road networks and health infrastructure. It should be noted that these issues are not so important when it comes to the registration of children, but officials believe that they could affect the quantity and quality of care received by children once they are enrolled. On the other hand, most DMHIS officials do not perceive the low level of education among parents or the low quality of healthcare as barriers affecting children's access to healthcare.

On the other hand, the internal assessment performed by DMHIS officials revealed that inadequate logistics, infrastructure, and human resources are the main problems that the schemes faced over time. The management has attempted to tackle these issues but has provided only temporary solutions, and officials request more lasting ones including permanent office accommodations, vehicles owned by the schemes, and permanent staff members who are appropriately trained and motivated. Related to this lack of resources is a lack of adequate and timely funds, an issue mentioned by several schemes. This problem seems to have been resolved in several districts, possibly because of an increase of fees across all DMHISs, but it still lingers in most of them. Enrollment fees, as well as renewal fees and processing fees for both children and adults, have increased over time, with the latter doubling between 2006 and 2011. These increases have possibly helped the schemes to fund their daily activities. The last

internal challenge mentioned repeatedly by district scheme officials is the delay in claims reimbursements. This issue has been at least partially resolved by the creation in 2010 of a claims processing center to ease the burden of claims management at the district schemes. However in some regions such as the Northern and Upper East regions this is still a concern.

External challenges have been harder to address on many levels. By far the most important external problem has been the low awareness of the scheme and the trust and interest in it. The NHIS management has tried to overcome this obstacle by providing intensive public education about the benefits of being registered in the scheme, but as the concerns of the officials show, these actions have not been enough. Many of the district schemes still feel this is a major issue. The second most important issue with clients involves the politicization of the scheme. In contrast with the first problem, this issue has not been tackled head on, probably due to the difficulties related to avoid it. Yet, these are only two of the many client issues.

Other less-pressing concerns involve delayed registration and renewal of memberships, and high poverty leading to low patronage. The former is present in some degree in almost all regions, while the latter is mentioned only in some regions where it is much more significant (such as Central and Northern). The system lacks flexibility in the payment of premiums that if incorporated could promote registration of the poorest who are not indigent. Many in the informal sector who are expected to pay the requisite premiums may be considered poor but not indigent. Poor informal-sector workers may not be able to afford the premiums or qualify for the premium subsidies for the indigent. As a consequence, the insurance program may unintentionally exclude poor informal-sector workers. Indeed, for poor households the main reason attributed to not registering in the scheme is affordability of premium (91 percent of the lowest socioeconomic group answered as such according to the 2008 Citizens' Assessment). The DMHISs attempted to tackle these issues by allowing decoupling of children and parents and providing registration during critical times and in key locations. In addition, the reduction of premium fees for the poorer (but not indigent) in certain districts as well as financial help provided by nongovernmental organizations have been employed by the most affected districts to deal with low patronage among the poorest.

The main access issue brought up by DMHIS officials was the poor condition of the road networks. To deal with this problem the schemes have begun adopting community registrations for communities that have difficulty accessing the DMHISs, but many districts still need to organize special mass registration in certain communities.

Finally, issues with service providers did not appear to worry most of the DMHIS officials. The lack of adequate healthcare facilities and services is mentioned repeatedly in only a few districts, as well as the lack of cooperation by health providers and the inaccurate filing of claims. In the past, the NHIA in its reports had mentioned several issues with service providers such as collecting illegal fees, applying tariffs, requesting unnecessary visits, filing false claims, and negative provider attitudes and practices toward the insured. Yet these do not appear to be pressing issues according to the DMHIS officials. Furthermore, solutions such as the regular training and monitoring of service providers have been attempted with moderate success. Only a few district schemes feel there is a need to improve the monitoring of providers to ensure quality and avoid fraud.

We stated at the beginning of this report that the NHIS still needs to improve its targeting mechanisms to ensure equitable universal healthcare access for the poorest residents of Ghana. Less than 2 percent of Ghana's population is enrolled in the NHIS as indigent. This is very low compared with an estimated 28 percent living under the poverty line. After analyzing the data provided by the DMHISs, it is clear that the indigent are not registering for health insurance for many reasons, such as a lack of public awareness of the insurance system, the long distances to travel to registration points, and a negative perception of the NHIS. In addition, the current method for identifying the indigent by the DMHISs is highly imprecise. Adherence to the official requirements to be assessed as indigent, and thus enrolled for free in the NHIS, varies greatly across regions, and in addition, district schemes sometimes impose unofficial requirements.

The main findings of this discussion paper are in line with the previous studies done about the functioning of the NHIS; the main contribution of this paper is that it disentangles geographically where the different problems affecting the DMHISs are more salient. In addition this study provides potential solutions to confront the challenges faced by these schemes.

Since the creation of the NHIS outstanding achievements have been made in terms of coverage and increases in healthcare utilization. However, the NHIS still needs to improve to achieve its full potential. Inadequate logistics (facilities and equipment); insufficient administrative, managerial, and technical human capacity; inadequate technical tools for processing and reimbursing claims; and poor management of public expectations of the NHIS are among the most important challenges that the scheme has faced and continues to face.

The lessons learned from this document are manifold. Whenever a health insurance scheme that attempts to deal with equity concerns is going to be implemented at a national level, several recommendations need to be followed:

1. Adequate permanent infrastructure and training need to be provided to the scheme personnel even before the scheme becomes operational.
2. An automatized claims' processing center needs to be created to accelerate claims processing.
3. A decoupling mechanism (which ensures that children are able to enroll for free in the scheme without their parents being enrolled) must be part of the original design.
4. It is necessary to design, from the very beginning, a monitoring and evaluation unit that is able to keep corruption under control. This could include having periodic clinical audits in collaboration with provider groups.
5. Prior to the implementation of the scheme, intensive public education about the benefits of being registered in the scheme (especially for children) should be provided. This activity should involve main stakeholders and important opinion leaders in each community and should emphasize the apolitical nature of the scheme.
6. Flexibility in the payment of premiums should be incorporated to promote registration of the poorest who are not indigent (premiums could be paid by installment, and timing of premium collection should be appropriate for members, for example during harvest time for farmers).
7. Mass community registrations should be part of the initial stage of implementation.
8. Finally and essential, a targeting strategy to identify low-income groups must be tested and perfected before the creation of the scheme.

Even though the NHIS did not fulfill these requirements in its initial implementation stage, it has been working toward achieving these goals with moderate success. Much more is left to be done, but hopefully the NHIS will continue to address the multiple concerns raised by DMHIS officials and will be able to tackle its major challenges as the scheme evolves.

APPENDIX: SUPPLEMENTARY INFORMATION AND TABLES

Benefits of Health Insurance

Beneficiaries are given cards that can be used to seek treatment in any hospital in the country. Bills are sent to the scheme provider for payment. Furthermore, portability allows NHIS members to access services outside their own district.

The following minimum services are provided:

- Outpatient services: general and specialist consultation reviews; general and specialist diagnostic testing including laboratory, X-rays, ultrasound scanning, medicines on the NHIS medicine list, and surgical operations such as hernia repair and physiotherapy.
- Inpatient services: general and specialist inpatient care, diagnostic tests, medications on the NHIS medicines list, blood and blood products, surgical operations, inpatient physiotherapy, accommodation in the general ward, and feeding.
- Oral health: pain relief (tooth extraction, temporary incision, and drainage), dental restoration (simple amalgam, filling, temporary dressing).
- Maternal care: antenatal, delivery, caesarian section, postnatal care.
- Emergencies: crises in health situations that demand urgent attention such as medical emergencies, surgical emergencies, pediatric emergencies, obstetric and gynecological emergencies, and road traffic accidents.

The following services are excluded:

- Appliances and prostheses, including optical aids, heart aids, orthopedic aids, dentures, and so forth.
- Cosmetic surgeries and aesthetic treatment.
- Antiretroviral drugs for HIV.
- Assisted reproduction and gynecological hormone replacement therapy.
- Echocardiography.
- Photography.
- Angiography.
- Dialysis for chronic renal failure.
- Organ transplants.
- All drugs not listed on the NHIS list.
- Heart and brain surgery other than those resulting from accidents.
- Cancer treatment other than breast and cervical.
- Mortuary services.
- Diagnosis and treatment abroad.
- Medical examinations for purposes other than treatment in accredited health facilities (for example, visa applications, education, institutional, driver's license, and so forth).
- VIP ward (accommodation).

Table A.1 District Mutual Health Insurance Schemes and facilities accredited by region, 2008

Region	Schemes	Facilities Accredited	Facilities per 100,000
Ashanti	24	534	13.7
Brong Ahafo	19	71	3.6
Central	13	98	5.7
Eastern	17	158	7.0
Greater Accra	10	266	8.5
Northern	18	81	4.1
Upper East	6	53	5.3
Upper West	8	69	11.3
Volta	15	138	7.9
Western	15	204	9.8
Total	145	1672	8.2

Source: NHIA (2009).

Table A.2 NHIS membership by region, 2008

Region	% Insured (with valid card)	% Registered (no valid card)	% Not registered
Ashanti	45.2	11.9	42.9
Brong Ahafo	49.0	10.5	40.5
Central	38.9	6.3	54.8
Eastern	53.5	3.8	42.8
Greater Accra	40.0	3.3	56.7
Northern	39.6	16.2	44.2
Upper East	54.7	1.3	44.0
Upper West	60.7	7.8	31.5
Volta	58.5	2.7	38.8
Western	58.3	3.6	38.1
Total	47.9	7.7	44.5

Source: NDPC (2009).

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