The Thrills and Tears of National Health Insurance Scheme Cardholders in Ghana

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Abstract

Ghana introduced a national health insurance scheme (NHIS) in 2004 as part of a major development policy framework - Ghana Poverty Reduction Strategy (GPRS) implemented in 2003. The aim of the NHIS was to replace the hitherto obnoxious 'Cash and Carry System' of paying for health care at the point of service, and to provide a better and much more humane financial arrangement that will enable the poor to access health care service without having to pay at the point of service delivery. The establishment of the scheme was also to ensure an improvement in the quality of basic health care services for all citizens, especially the poor and vulnerable. After years of being burdened under the cash and carry system the introduction of the NHIS received loud applause especially among the poor who now found a social protection system that provided succour for their healthcare expenditure problems. Five years later, a nationwide Citizen's Assessment of the scheme showed that over 40 percent of Ghanaians have not subscribed to the scheme and about 36 percent others who ever registered failed to renew their cards after expiry of their membership. Unfortunately no attempt is made to understand 'at a close range' the tears of those who have dropped out of the scheme or the thrills of those who are still registrants with the scheme. Information of this sort is important to help pull out both real and out of sight problems that confront the implementation of a publicly-subsidised national programme such as the NHIS. The goal of this study is to provide information on the determinants of households' chances of renewal or non-renewal (dropout) of membership on the NHIS. The methodology is both quantitative and qualitative. The inclusion of the qualitative is key to allow for closer interaction with persons who have used the insurance card to access health care.

1. Introduction

After independence Ghana's future was noticeably very bright. In the area of health, Ghana set up a National Health Service (NHS) which was fully financed from state revenue. The NHS system was seen as being progressive (high income individuals paid higher taxes than low income people). It provided service for everybody without any costs, and protected poor people from financial shocks. The NHS system did not involve out-of-pocket payments at point of service. The system however could not be sustained due to inadequate resources and budgetary constraints. Quality of medical services deteriorated and the urban population benefitted more from this system than the largely excluded rural poor. Government later in 1971 introduced minimal user fees to cover hospital procedures and overheads. But with general decline in agricultural productivity and exports which affected consumer goods, increased inflationary pressures, and a gradual build up of unemployment in the 1980s Ghana could not continue with even the minimal subsidies in the delivery of essential social services such as education and health.

With the Ghanaian economy literally on the verge of bankruptcy, Ghana had no choice but to accede to the then attractive proposals from the IMF and the World Bank for market reforms. This led to the introduction of the structural adjustment programme in 1983. Central to this was the goal of getting prices right by withdrawing subsidies, liberalising the domestic and external trade regime. Efforts were made in this regard to also encourage deregulation of various aspects of the economy, reduce the size of the state bureaucracy through civil service retrenchments, encourage the private sector, and promote the embrace of the market. There were budget cuts on social spending with health and to some extent education bearing the heaviest brunt. Government was forced to introduce full cost recovery (also known as "cash and carry") into the health system in Ghana. The World Bank/IMF propelled a policy of privatisation in the health sector as part of a whole module of macroeconomic structural adjustment programme hoisted onto the Ghanaian populace.

At Ghana's independence in 1957, existing user charges in government health facilities were abolished (Nyonator and Kutzin, 1999). Minimal levels of user fees were only charged with the enactment of the Hospital Fees Decree 1969, which was later amended into the Hospital Fees Act 1971. In the mid1980s however, the introduction of The Hospital Fees Regulation 1985 (L.I.1313) broadened the fees charged to include consultation, laboratory and other diagnostic procedures, medical, surgical and dental services, medical examinations and hospital accommodation. Government health spending further fell during the 1990s both in real terms and as a percentage of total public spending. Ministry of Health (MOH) recurrent expenditure represented 11.1% of total (excluding interest payments) government recurrent expenditure in 1991 and went down further to 6.9% in 1995 (Nyonator and Kutzin, 1999).

The main argument put forward by proponents of the health sector privatization was that it would increase the public's appreciation of health services and prevent overuse (Akin, et al. 1987). In responding to arguments of the poor potentially losing out on access to healthcare, the World Bank argued that, revenues from user fees could be used to subsidise those least able to afford care. Exemption schemes were also proposed to get round the threat of poor people being unable to afford adequate healthcare. However, a lot of these did not work out. Later empirical studies on the effects of the health sector reform component of the structural adjustment programmes revealed severely awful consequences (Asenso-Okyere et al. 1997 & 1998; Nyonator and Kutzin, 1999). Access of the poor to health services was adversely affected (Nyonator and Kutzin, 1999; Gilson and Mills, 1995). The 'Cash and Carry System' of paying for healthcare at the point of service put an enormous financial pressure on the poor and served as a major barrier to health care access. Healthcare inequalities became widespread, especially around the later part of the 1990s and early 2000.

Ghana, recognising the importance of healthcare for the quality of her human capital, under the new development policy framework - Ghana Poverty Reduction Strategy (GPRS I: 2003 - 2005), made a number of commitments and initiated a number of measures in the medium term to minimise the healthcare inequities in the system. One major pro-poor policy introduced was the promulgation of a National Health Insurance Act (NHIA Act 2003: Act 650) and implementation of a National Health Insurance Scheme (NHIS) that would replace the 'Cash and Carry System. This was aimed at eliminating the financial barrier to healthcare posed by the obnoxious 'Cash and Carry System' by limiting out-of-pocket cash payment at the point of service delivery. This will enhance access to, and improve delivery of quality healthcare services to every Ghanaian.

1.2 Ghana's District-wide Mutual Health Insurance Scheme system

The 'Cash and Carry System' of paying for health care at the point of service was hurting Ghanaians and this was acknowledged by all. It limited access to health care and the impact of paying directly for the cost of health reduced resources available for the household. To remove this burden and also ensure affordable and sustainable health care arrangement for the poor, the government initiated the National Health Insurance Scheme (NHIS) in 2003. The declaration of the United Nations' Millennium Development Goals (MDGs), and the introduction of Ghana's own new development policy framework - Ghana Poverty Reduction Strategy (GPRS) implemented in two parts (GPRS I; 2003 – 2005 and GPRS II; 2006 - 2009) gave further push to the process of implementing an alternative health financing arrangement in the form of community-based (District-wide) mutual health insurance programme that was more 'friendly'.

In existence were Christian-based (CHAG hospital-based) pilot schemes for mutual health insurance. However, the eventual introduction of a NHIS (National Health Insurance Law, Act 650; LI 1809) was seen as a marked innovation in health service delivery in Ghana. The NHIS is designed as a local response to the growing inability of patients to pay their hospital bills. The law mandates the establishment of District-wide mutual health insurance schemes (DMHIS) (henceforth called schemes) in all districts of Ghana. The NHIS has in its design an in-built mechanism for equity in financial contributions with subscribers paying income-adjusted premiums. In practice, however, because of difficulties in assessing accurately people's socioeconomic status, schemes charge a flat rate. There is no cost-sharing beyond the premiums; members do not pay any co-payments or deductibles.

Enrolment is legally mandatory. Enforcement of this requirement however is fraught with difficulties due to the fact that it is a social policy, coupled with the given large informal sector we have in Ghana. In the absence of an accurate database system that will provide information about the informal sector, schemes are left to depend on voluntary registration of members from this sector. Effectively, with the exception of SSNIT contributors who are mostly in the formal sector, all other persons are practically voluntary. Beyond the premiums collected locally, the NHIS is financed through a 2.5% National Health Insurance Levy instituted by the Central Government. This 2.5% value added tax (VAT) is collected on most goods and services. Basic foodstuffs and goods predominantly consumed by the poor are however excluded. There is an additional 2.5% deduction of workers contribution to the Social Security and National Insurance Trust (SSNIT) fund. The rest of the funding sources include accruals from investments made by the national health insurance council (NHIC); funds allocated to the scheme by the Government of Ghana via Parliament; central exemptions fund; and donor funds. Informal sector participants' membership is based on their payment of scheme-specific premiums. Persons aged under 18, over 70, pensioners, pregnant women or persons deemed indigent (core poor) are exempt from premium payments.

The National Health Insurance Authority (NHIA) mandates a pre-defined benefits package that covers 95% of the disease burden in Ghana. Services covered include outpatient consultations, essential drugs, inpatient care and shared accommodation, maternity care (normal and caesarean delivery), eye care, dental care and emergency care. The DMHIS contracts accredited providers (public, private and church-based) to deliver services to its members and reimburses them after submission of claims for services. This system separates the purchasing and provision functions across different stakeholders to increase transparency. Currently the NHIS reimburses providers based on the Ghana Diagnostic Related Groupings (G-DRGs) and fee-for-service (FFS) for medicines using a medicines tariff list (MOH 2009).

Research issues

A prominent expectation of the NHIS arrangement is to narrow the inequality gap by providing financial insulation to individuals and households and to ensure affordable and sustainable health care arrangement for the poor (NDPC, 2009). The trump card of the NHIS, unlike the cash and carry system, is the opportunity it provides for risk pooling and cross-subsidisation of healthcare expenditure of certain category of Ghanaians classified as vulnerable. These people are giving fee exemptions that allow them to benefit from healthcare services that hitherto would have been inaccessible to them. This insulates them from suffering directly the perverse impact of healthcare expenditure and low access to healthcare services.

However by the end of the implementation of GPRS I, a significant proportion of Ghanaians still did not have adequate access to quality health services with inter-regional and socio-economic variations (NDPC, 2009). In 2007 the NHIA implemented a number of measures to increase membership and improve upon the benefits of the scheme. Some of these measures include expansion of providers by increasing the accreditation of private health care providers; and addition of a new exempt category, free maternal health care. Notwithstanding these, the NHIS still faces some difficulties, regarding low coverage and non-renewal of membership. According to a recent national survey conducted in 2008 about 36 percent of previous registrants of the National Health Insurance Scheme (NHIS) did not renew their membership (NDPC, 2009). The issue of non-renewal of membership has not yet received enough concern. But if we consider that a significant portion of the NHIS financing comes from fees paid through payment of premium and membership registration, then there must be concern for increase rate of non-renewal (dropout) of membership. This study is an invaluable attempt to examine three main things. First of all to examine the trend of growth of the scheme spanning four years that data is available. The second attempt is present a model of factors that explain a household's decision to discontinue participation in the scheme. And the third objective is to present the voices of the both disenchanted and enchanted persons (households) who have utilised the insurance policy to access health care.

This section of the paper is followed by a review of the relevant literature and raises the key research issues that arouse this research interest. Section 3 provides the sources of data and the methodology for the study, whilst section 4 presents preliminary analysis of descriptive results. Section 5 discusses the empirical model and presents the discussions and policy issues thereafter. Section 6 is a qualitative presentation of my interaction with cardholders in some selected health facilities. Section 7 which is the final section contains the concluding remarks.

2. Brief review of theory and literature

The current thinking in major discussions on health service utilisation and the burden of increasing cost of medical care is settling on community-based health insurance (CBHI) as a transitional mechanism to achieving universal coverage for health care in low-income countries. This is based on microeconomic theory that contends that given that health insurance lowers the cost of medical care at the point of use, thus effectively removing the financial barrier to access, utilisation of health service will increase (Manning et al. 1987). In other words the tendency to purchase extra healthcare when individuals are not faced with the immediate responsibility of bearing the financial consequence of health behaviour is higher.

The emergence of health insurance as a tool for financing health care provision and enhancing access to health service on the African landscape has therefore generated a lot of research interest. The economic interest of households regarding the emergence of this alternative health financing arrangement is the assurance that health insurance will make health care services affordable and financially accessible more than before. Studies that approached the health insurance discourse from the household perspective have therefore largely discussed both the health care benefits and economic cost (poverty) impact of purchasing a health insurance policy. The empirical results have largely been positive and slightly controversial.

Studies that have examined membership of health insurance organisations and utilisation of health services arrive at conclusions that membership is associated with higher and timely utilization of modern health care in the form of outpatient visits or hospitalization (Nielsen and Garasky, 2008; Mitka, 2004; Jutting 2004; Jakab and Krishnan 2001; Schneider and Diop 2001; Atim 1999). A number of others that investigated the economic impact of health insurance use and the cost of healthcare also provide evidence that health insurance membership reduces out-of-pocket payment for health care and also reduce vulnerability and poverty (Joglekar, 2008; Sepehri *et al.* 2006; and Jutting, 2002). Studies conducted in Ghana using very recent survey data also suggest that membership of health insurance schemes protected households from paying high health expenditures (Osei-Akoto and Adamba, 2011; NDPC, 2009; Asante and Aitkins, 2008; Sulzbach et al. 2005).

However, a number of studies doing household analysis present results that suggest that membership of health insurance schemes may not increase health service utilisation or limit increases in out-of-pocket payment for health expenditures. Gumber (2001) observes that members of mutual health insurance organisations were less likely than non-members to seek care when ill. On the effect of limiting out-of-pocket payment for health care expenses and protecting households from incurring catastrophic health expenditures, controversial evidence available indicates that health insurance tend

to increase ones chances of paying higher out-of-pocket health expenses. These studies provide evidence suggesting that membership of health insurance indeed actually increase ones likelihood of incurring catastrophic health expenditure (Chankova et al. 2008; Ekman, 2007; van Dalen, 2006). Van Dalen (2006) for example, observed that health insurance does not offer real protection against unpredictable high health care expenditures and can lead people into a position of long-term poverty or serious liquidity problem. Ekman (2007) also did not find enough evidence to support the claim that health insurance protects people from catastrophic health expenditure. Based on evidence from three West African country situations (Ghana, Mali and Senegal), Chankova and others (2008) also concluded that enrolment in a mutual health insurance scheme does not appear to lower out-of-pocket expenditures for outpatient care.

Much recently, the discussion has not only revisited the critical issue of coverage, but has moved on and now centres on sustainability of health insurance programmes across the Africa continent. Constraints to increasing health insurance coverage and ensuring sustainability have been identified primarily by a body of literature. These discussions have taken both economic and health system perspectives. The principal economic response to the question of why people purchase health insurance; has been to avoid financial risk. This is based principally on the theory of expected utility which is premised on the principle that people are generally averse to risk (Arrow, 1963; Friedman and Savage, 1948). According to this theory, if consumers are sufficiently averse to financial risk, insurance companies can charge premiums that cover the expected coverage losses plus a loading fee, and still sell insurance. But Pauly (1968) contends that issues of moral hazard could create such a perversely large net utility loss that insurance would become undesirable. Accordingly, for people to continue to purchase insurance, the benefits of risk-avoidance must be sufficiently large that it exceeds both the loading fee and the moral hazard loss.

An alternative explanation (health system perspective) to the question of why people buy health insurance is the fact that it represents a mechanism for gaining access to health care that would otherwise be unaffordable. Nyman (1998) argues that the benefits from health insurance are not limited to the gain from avoidance of financial risk by the risk averse purchaser. Additional benefits are derived from insurance's ability to make available medical care that would not otherwise be affordable. This fundamental value of insurance is different from the risk-avoidance value because, by definition, there is no financial risk for unaffordable health care purchases because the purchases cannot privately occur (Nyman, 1998). In furtherance of this argument Osei-Akoto and Adamba (2011) also added that purchasers of health insurance will only realise the benefits of the policy if there is health services (quality and variety) available in geographically accessible distance to use.

We can say at this point that research on health insurance has indeed advanced. Where the discussion is lacking intensity and appears to be less well nuanced is the area of sustainability. In countries where health insurance programmes rely largely on contribution of members for survival, continuous membership (renewal of membership) is a major concern for scheme sustainability. Particularly in Africa where governments are unable to sufficiently subsidise health systems to give leverage to budding health insurance organisations, there is an even greater need for intensive discussion on how to ensure continuous renewal of membership.

Empirical studies in this area are however quite few and the issues raised deserve further empirical attention (Dong et al. 2009; Bjerrum and Asante, 2009; Asante and Aikins, 2007). Two studies in Ghana that analyse data collected in two districts in 2007 found that while higher economic status positively influence enrolment (Asante and Aikins, 2007), renewal of membership was not affected by economic status, but was affected by location (urban-rural) household (Bjerrum and Asante, 2009).Using a logistic regression model, Dong and others (2009) also found lower number of illness episodes, less health care seeking and poor perceived quality of care as significant factors that influence non-renewal of membership with community-based health insurance organisations.

Less than a decade in the implementation of the health insurance scheme in Ghana and there are already anecdotal evidence of growing concerns about the quality of care that policy holders are given in our health care facilities. There are concerns of poor treatment from health service personnel and delivery of low quality drugs specifically to insurance policy holders among others. Non-empirical surveys conducted much recently also seem to confirm these concerns (SEND-Ghana, 2010; Witter and Garshong, 2009; NDPC, 2009). As health insurance pushes up consumption of health care, it is obviously inevitable that both ex ante and ex post moral hazard and adverse selection issues will occur. It is also true that increased utilisation of health care is not axiomatically positive and care patterns can be distorted by provider interests and bias overuse by different groups of people. But the impact that these simmering concerns have on sustainability is imminently ruinous as they affect renewal of membership. Whilst there is the need to empirically examine the factors that determine a household's decision not to renew its membership with the district mutual health insurance scheme, there is a greater need to listen to currently insured members to understand the things that satisfy them and the things that brings frustration as they navigate the corridors of health care facilities seeking health care.

3.1 Data and methods

The study utilises a mixed method design with qualitative analysis embedded in an econometric model results. The econometric model uses data from the Ghana Living Standards Survey 5+ (GLSS

5+). The survey is a population based sample representative of 23 districts in six regions across all the three ecological zones in Ghana. The survey covered 9,310 households containing 38,481 individuals. The selection of the enumeration areas (EAs) and the households from these EAs was representative at each level. The survey covered several community and households modules. The health module collected information on health shocks, health insurance status, use of health facilities by individuals who reported ill or injured and the cost incurred. The survey also has extensive modules on community issues and expanded facility survey, which is linked to the household survey. Geographical coordinates (GPS measurements) of households and healthcare facilities are provided (patients can be linked to the facilities they used within a reasonable radius). A qualitative data is added to nuance the discussion and give further impetus to the results of the econometric model. The qualitative data is gathered through in-depth interviews in one purposively selected district among the 23 districts that the GLSS5+ survey was conducted. The interviews were held with cardholders, opinion leaders, personnel of health service facilities and management of the district mutual health insurance scheme in the selected district.

4.0 Preliminary descriptive results and discussions

Contribution of premium paying members to NHIS growth/coverage

Legally speaking, membership of Ghana's NHIS is mandatory (unless alternative private health insurance can be demonstrated). Effectively however, due to practical inabilities in enforcing this legal requirement, membership has so far been voluntary for non-formal sector workers who incidentally constitute the bulk of the population and the largest of the economy. Total valid card-holders rose from 6.6% of the population in 2005 to 48% in 2008 (NDPC, 2009). As of 2005 the proportion of premium paying members in the total membership was equally impressive and progressed from almost 35 percent in the 2005 to over 36 percent in 2006. Since 2006 growth in premium paying members plateaued and actually declined in 2008 from over 36 percent in 2007 back to a little over 34 percent. The NHIA does not normally indicate card-holders by category of member (formal or informal) but provides this information for 'registrants' (a larger group comprising those who have paid some or all their entire premium). The formal sector, has incidentally constitutes the lowest to the total coverage level over the past three years comprising only 3% of registrants in 2008. By contrast, informal sector registrants have grown from 3% to 16% of the population (Witter and Garshong, 2009).

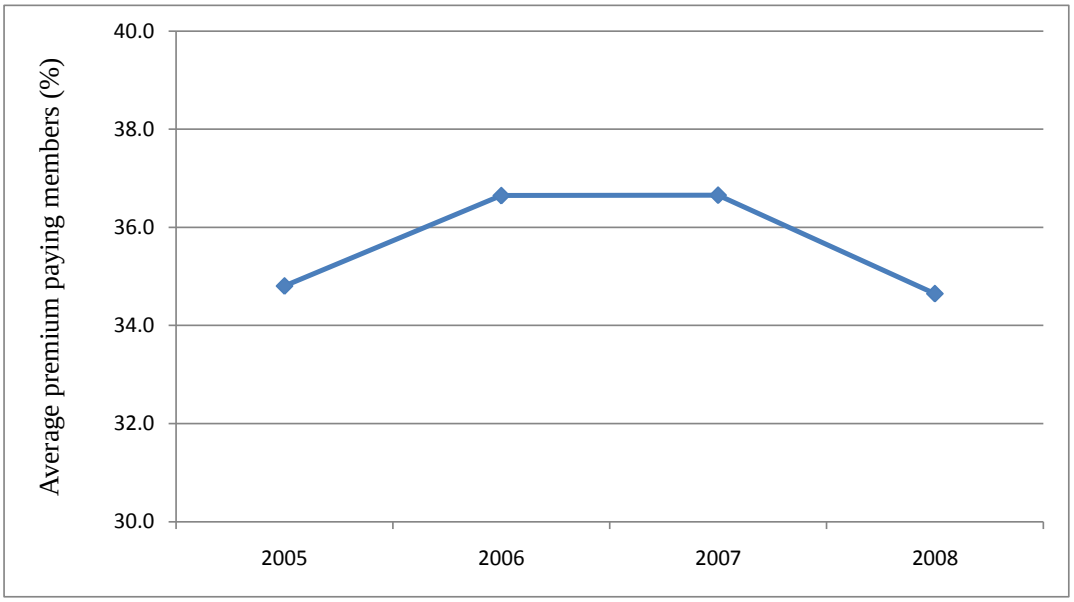
There are variations across regions in similar fashion. The region that has the highest proportion of premium paying members is the Greater Accra region (with the capital as the capital town of Ghana). This is perhaps understandable as it has the largest proportion of both formal and informal sector workers, besides having the largest population in the country. In the early part of the implementation

of the scheme the Ashanti region (the second largest region) appeared unenthused. Membership however picked up from 2006 and peaked at 2007 similar to all the other regions. Observably, membership by the informal sector (largest proportion of premium paying members) declined on the average in 2008. Political economists believed that political pronouncements leading to the general elections in 2008 had a significant effect in influencing this decline. This point was corroborated in an interaction with scheme managers as part of "A Citizens' Assessment of the NHIS" (NDPC, 2009). In that survey scheme mangers noted that one of the challenges that affect smooth management of the scheme was undue politicisation of the scheme.

Examples of key pronouncements that possibly shaped peoples perception about the state of the scheme regard the fact that the two main political parties had different messages regarding how they were going to pursue (continue) with the scheme if they won the elections to form a government in 2009. Whilst the ruling New Patriotic Party (NPP) accused the opposition National Democratic Congress (NDC) party of wanting to cancel the scheme if they came to power, the NDC in turn indicated that they were going to make it better by introducing a "one-time" premium for all. These variations relate in part to these pronouncements. Depending on which political party has more followers in which region participation swung in that direction. It is generally known in Ghana that the Ashanti and the Western regions are "strong-holds"[1] of the NPP and that reflected in the unaffected participation of the informal sector in the scheme as the NPP was the government in power. The same however cannot be said of the Volta region and the three northern regions noted to be sympathetic to the NDC. The Central is generally perceived to be indifferent to any of the political parties and is largely unaffected by their pronouncements.

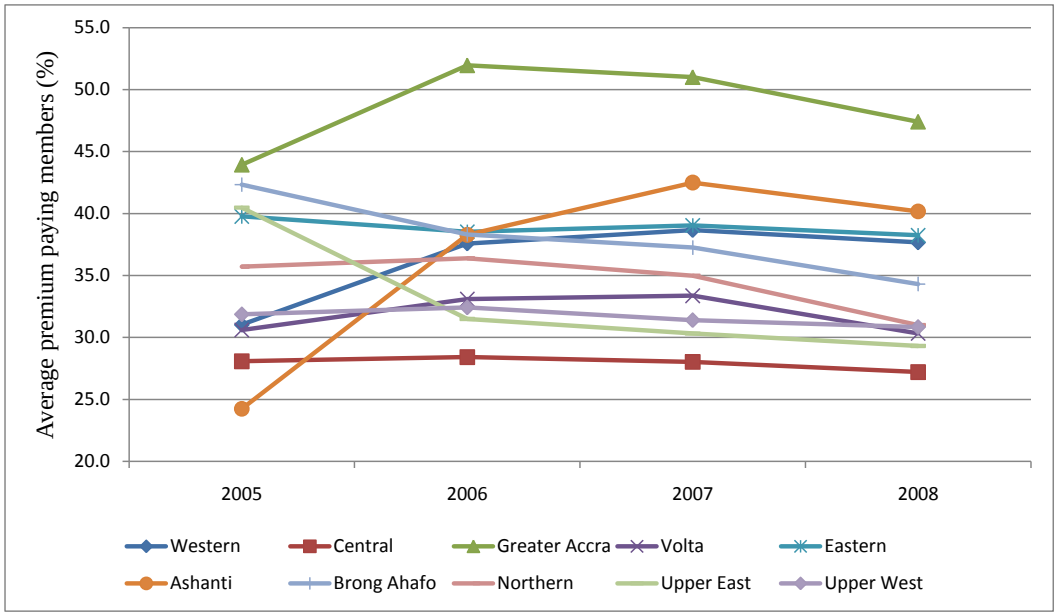
[1] The NPP party has more following in those regions than any other region

Figure 1: Proportion of premium paying members in the total membership of the NHIS



Source: NDPC, 2009

Figure 2: Proportion of premium paying members in regional NHIS membership



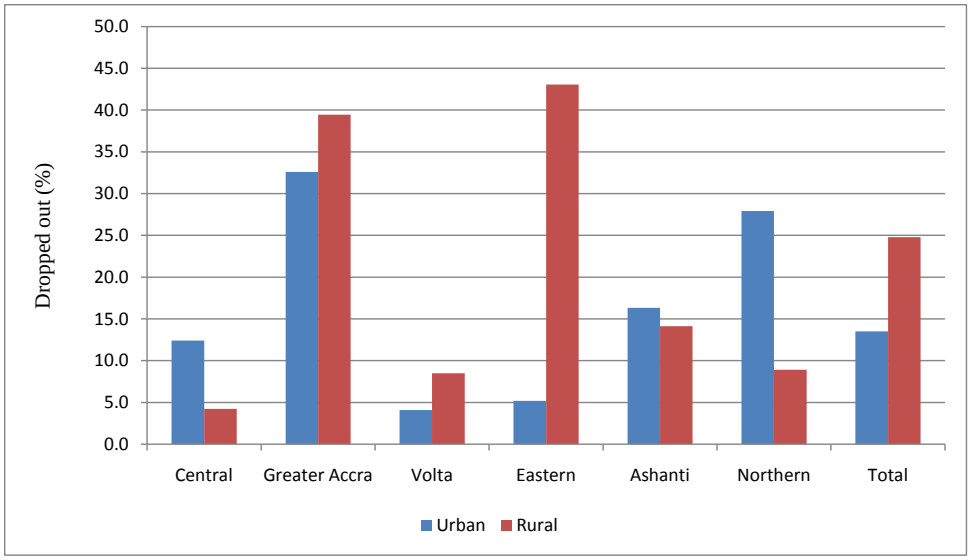
Source: NDPC, 2009

Rate of dropout (non-renewal) of membership on the scheme by premium paying members

Recent and growing evidence present a variety of implementation problems that are beginning to have a negative impact on schemes across the country. These implementation challenges include perceived poor quality of care, delays in NHIS card production and distribution, lack of trust in scheme management, long waiting times for insured clients and high enrolment dropout rates, among others (Jehu-Appiah et al. 2011; NHIA 2010; NDPC, 2009;). The issue of high dropout rates is particularly worrying for most of the schemes due to their dependence on premium payment for sustainability. The data shows that there is as many as a 21 percent drop out rate from the NHIS. This

is slightly higher than found in Jehu-Appiah and others (2011) who observed a 16 percent drop out rate. The Greater Accra (34%) and the Eastern (26%) regions recorded the highest proportion of dropout rate is the country. Dropout rate is also very high in rural areas as compared to urban areas. In an analysis of data collected in two districts in 2007 it was similarly found that renewal was affected more positively by location (higher among urban members) than by economic status (Bjerrum and Asante, 2009).

Figure 3: Proportion of premium paying members who dropped out NHIS membership



Source: Authors calculations from GLSS5+ Data

The NHIA has not so far published any data on rate of renewal or dropout since the scheme was implemented. This poses significant difficulties to be comfortable with their current estimates of enrolment or coverage. The contention is that many times these estimates suffer double counting of cumulative counting mere registrants who may have dropped out or died. This can lead to inaccurate and inflated coverage figures. The Ministry of Health (MOH, 2010) clearly intimated this, noting that the estimated increase in the total number of NHIS card holders from 10,417,886 in 2008 to 12,123,338 in 2009 was an accumulated figure of cards issued since health insurance started, and the actual number of individuals holding a valid NHIS membership card in 2009 is therefore expected to be lower due to health insurance dropout (e.g. lack of renewal, death and emigration). In other words the total coverage presented by the NHIA represents an accumulation of individuals who were issued one or more cards and not the accumulation of cards issued, i.e. the figure increases every time an individual renews his or her membership card. This interpretation by the MOH makes the analysis of drop out rate even more important.

The predominant reason for non-renewal of membership is high premium. Nearly 60 percent of dropout memberships complain of high premium, whilst a little of 4% loss confidence in the

operators of the scheme. The operators of the scheme combine the scheme managers and medical service providers. An insignificant percentage as of the time of the survey was dropouts because they did not know that they had to renew it by a particular date. This touches on the issue of sensitisation and proper enlightenment about the operation of the schemes in the various districts.

The survey did not collect information on the quality of services clients received. However the data shows that there are people who even though benefitted from the scheme still dropped out from it. This suggest that other factors must also be at play that actually influence the decision to drop out or not to from the NHIS. This is particularly curious in areas such as the Greater Accra and the Northern regions where people who benefitted from the scheme but still dropped out are higher than it happened in the other regions. However, the highest proportions of dropout are those who indicated that they did not benefit from the scheme. Persons who did not benefit are either people who did not fall sick in the period they were members of the scheme or fell sick but the scheme did not cater for the health care needs due to reasons such as sickness not included in the NHIS benefit basket or in their view "they just did not benefit". This is one of the key reasons that lead to a great deal of disenchantment among policy holders who finally dropped out. The next section presents a model of dropout from the NHIS.

5.1 Econometric model

The unit of analysis in the econometric analysis is the household. A household is classified as insured if at least there is one member of the household who is registered or is covered by the district mutual health insurance scheme. A frequency analysis shows that a household register at least about 1.90 members of the household with a variance of 2.98. People who were first time registrants were excluded from the analysis. Persons aged 70 and older were also since they are expected to have a higher incentive to register or renew with the scheme. The total sample size used in the model is 2387 households. A logistic regression model was used to model the determinants of a household's decision or chances of dropping out after registering with the scheme.

The dependent variable is drop-out (yes = 1 and no = 0). The selection of the independent variables were informed largely by two earlier studies that discussed participation in the scheme and another that looked at the vulnerability reduction power of health insurance. In these studies we realised that ethnic and religious diversity impacted negatively on the decision to participate in the insurance scheme. We noted that ethnic diversity in particular was associated with migration. A key variable in this model is the hypothesis that a household head/member that is a migrant or intends migrating will likely not renew his membership. Similarly we found that the presence of a hospital within 5km of the household precipitated participation in the scheme. In this study we examine whether or not an

insurance holder was seen by a medical doctor will change the decision to renew membership. We also hypothesised that the higher the number of illness episodes in a household the higher their chances of renewing their membership.

5.2 Analytical discussion of empirical results

Household factors

In contrast with Dong and others (2009), household size was not found to significantly influence a household decision to drop out of a scheme. This can possibly be attributed to the various exception packages for children below 18 years, the aged above 70 years and maternity mothers. Bigger families are also more encouraged to participate in the scheme to distribute their health financial risk. The purported one-time single payment arrangement that is being considered for implementation will however pose difficulties for bigger household. Larger households, although in principle often wealthier, may find it difficult to mobilise large amounts of cash to register for all at once. The number of educated people (educated beyond secondary education) in a household and the age of the household head also informs a household's decision to renew or drop out.

As the number of educated people in a household increases the higher is the odd of that household dropping out of the national scheme. Higher order households in terms of education are more likely to look for higher quality insurance services in the private sector. On the other hand as the age of the household head increases the more likely they are to stay in the scheme. This is due to the fact that the household head may begin to employ exemptions from the NHIS. I did not also find that households with more episodes of illness in the past year dropped out of NHSI. This is particularly good information since, this situation poses positive effects on protecting unhealthy people.

Location variable

Results of the model indicate that the probability of a household dropping out from the scheme increases as one moves from urban to rural areas, which is statistically significant at 5%. This is a reasonable result as generally it is easier to access health services in urban areas than it is in rural areas. In terms of distance and availability perhaps households in urban areas are far more able to get value for buying insurance than households in the rural areas. The point is hospitals, unlike health centres or clinics are associated with higher quality treatment. The desire of every person who perceives unwellness to be treated in a hospital is thus higher than in clinics and health posts. The effect of location further partially supports findings made in Osei-Akoto and Adamba (2011) that suggest that distance to a hospital is a key determinant of a household's decision to participate in the scheme. This evidence and the support that it is the household's economic status (household total expenditure) that has an insignificant effect on renewal of insurance membership confirm similar

findings by Bjerrum and Asante (2009). We also found that the household the higher economic status (proxied by a higher household expenditure) was positively correlated with dropping out of influencing household.

Insurance premium

The NHIS insurance premiums are district rated and not based on individual risk assessments. The effect of premium payable on non-renewal decision is positive and statistically significant. This means that with high premiums the odds of dropping out of the scheme is equally very high.

Service delivery received

The survey did not collect information on quality of services and so it was extremely difficult to measure and include that. We included number of patients seen in a day by at a medical facility and also whether or not a patient was seen by medical assistant, nurse, etc. interestingly for us all these variables are significant in determining renewal or non-renewal even though the value of the variable that captures number of patients seen in a day was not significant. The odds of a household renewing its membership due to an increase in the number of patients seen by a medical doctor are high.

6.0 Qualitative discussion of views of cardholders

Issues that brings satisfaction

Clients are largely satisfied with a service when their perception of a service received meets an expectation (Donovan N et al, 2001). Perceptions and expectations could also be informed by a lot of factors including previous experience, personal needs, informal and media communication. Health insurance is good with those who have benefitted from it. Even though Ghana's NHIS is modelled on the principle of social insurance with pooling of risk and cross-subsidisation as its trump-card, people are not that altruistic after all. A discussion of their satisfaction with the scheme is always anchored on what they have personally (also through a relation) experienced with scheme in the corridors of healthcare facilities.

Perceive high medical bills absorb by scheme

All persons who expressed happiness with the scheme are persons who perceived their medical bills to have been higher and potentially destabilising in terms of reducing household expenditure if they were to directly bear it. The loudest satisfaction was found among maternity women who recently delivered a baby. As part of the NHIS scaling up process maternal health was made free under the scheme if only a woman delivers in a hospital. In the words of two women with separate medical reasons summarise this point:

- People say that the scheme is not helpful, but for me it has helped me. I stayed in this hospital for about three more days after delivery and I have paid nothing. The only problem is that I was made to buy a rubber bucket for my cleaning and washing. (A women who recently delivered in the hospital).

- I knew I had this sickness for sometime, but the cost of operation that I was told was too much for me. So last year I registered with the scheme just to see if it will help me. Now I can say that it has helped me. I have done this operation free without paying anything. I think I will encourage all women to join if only they have the money to register. (A woman operated upon for fibroid)

Responsiveness of scheme managers

A key information that came up even though unanticipated was the fact that patients did not only assess the value of the scheme on the services they receive from health facilities, they also considered how responsive scheme managers are to their concerns (problems) regarding the treatment they receive at the health facilities. Pleased cardholders discussed how the willingness and responsiveness of scheme managers to attend to their complaints helped them to receive health care.

- I was made to pay some monies at the dispensary the last time I brought my wife here which I did not understand. So I took the receipt to the scheme management office and complain to the manager. Because the hospital is just nearby he went back with me to the place and demand for a refund of my money. I think that is good for all of us here. (A delighted teacher)

This is particularly important since the insurance card is now considered a "ticket to healthcare" in the Ghana. This ticket must be seen to be valid. This support and prompt attendance to complaints of clients validates the card as an authentic ticket to healthcare. In the words of this respondent (the teacher interviewed above) "quick responses such as this inspires trust and confidence in the scheme.

Issues that causes dissatisfaction

The frustrations of cardholders are generally borne out of the announcement that heralded in the health insurance scheme. The introduction of the scheme was not led by health expects, economists, sociologists, none of this than politicians. It was made part of a campaign promise in the NPP 2000 general election campaign manifesto. Typical of political campaigns they eulogised the virtues of the scheme and shielded a lot of the responsibilities, prospects and consequences. Three years into the reign of the NPP party a NHI bill was put before parliament and by 2004 it was passed. A national health insurance scheme came into being with the promise of eliminating out-of-pocket payments for health care at the point of receiving care. So far, the NHIS has not deviated substantially from its promised deliverables. But cardholders are shedding tears of: unmet expectations; under-hand payments; discriminatory treatment in the hands of health personnel; and time wasting.

Unmet expectations

Expectations among Ghanaians about the NHIS are generally high and understandably so among formal sector workers. This is somewhat logical as they are the only category of people who are

mandatorily selected into the scheme. Cardholders now expect more fairness, some respect, and dignity from health personnel and shorter waiting time at the health facility. In the words of some frustrated clients:

- *We were given the impression that health insurance was a new magic balm; once we buy the insurance policy when you come to the hospital everything will be given to you free. It is pure lies.*
- *They promised us food when we sleep in the hospital. It is only rice they have here. Nothing since I came here apart from rice.*
- *They give those of us with insurance cards low quality drugs. When you complain they tell you the other ones are very expensive and that if we want we can go and buy from the drug stores*
- *We those in the slums are never given anything good. They came here to sell the insurance paper to us. But when we are sick we have to travel to the city. When we go there too they say we are not under their care. Now I have stopped using it*

Health care personnel indicate that these frustrations are largely unfounded. According to a medical officer:

- *They come here and they expect to be fed on **fufu**[2]. Who will pound the **fufu** in the hospital for them? Their complaints are purely lack of understanding of the insurance basket. There is very little we can do except to have patients and always explain to them. We will take the insults but we shall overcome that one day*

An alternative explanation to the issue of delay is the increased attendance at health facilities that the scheme has engendered. Many people now have financial access to health services than before resulting in increased numbers of persons attending health facilities. This however has not bee catered for by a corresponding increase in the numbers of health staff. The perception of low quality drugs for insured clients is a clear recipe for non-membership and non-renewal (Schneider et al, 2005).

Under-hand payments

There are claims of under-hand payments for drugs and other auxiliary health services at health facilities. In past years, reports of informal payments (also know as un-receipted or unauthorised payments) to health workers have always been quickly repudiated. Examples of reported informal payments by clients include: Charging for services rendered out-of-working hours; asking patients to pay for drugs which are said not to be in stock; and asking patients to pay for 'better' drugs, said to be not provided under the NHIS. These practice increases the frustration of cardholders. The general thinking is that:

We all accepted that the payment that used to do at the point of service was giving us problems. Sometimes you are brought here on emergency. Illness normally comes at a time that you do not have money. So with the introduction of the NHIS we all rushed to purchase it. Now even with my

[2] Fufu is a local staple food made from cassava or plantain by boiling and pounding into a soft starchy food. It is common with the Akans in the southern part of Ghana

card and I am made to pay moneys for things that I don't just understand. They simply have every plausible reason for asking you pay an amount here. Is it not cash and carry?

In 2010 the NHIA (NHIA News Release, 2010) had to suspend two hospitals in the Ketu District of the Volta region of Ghana due to a number of malpractices including the imposition of co-payments (a practice of asking patients for additional fees to those of the NHIS). Indeed one of the things that fertilised the immediate acceptance of the NHIS in Ghana was the widespread disapproval of the pocket-based payment for healthcare.

Discriminatory delivery of medical services

Complaints of discriminatory attention are pervasive in our health service facilities. The claim of NHIS cardholders is that they are being unfairly discriminated against in the hands of health service personnel, especially nurses. There are claims of prescription of low quality or efficacious drugs (patients are asked to pay for supposedly high quality drugs which are said not to be included in the NHIS drug list).

Time travelling and waiting for service at facility

Another common complaint is the long delay in waiting queues that insured persons are subjected to. These complaints are particularly common in the urban areas and high among formal sector workers. This is understandable as in the urban areas pressure and demands of livelihood activities are particularly sensitive to time.

In an interaction with a group of women in a public hospital in the Eastern Region of Ghana, the overwhelming complaint was that:

We have been stuck on these benches for nearly an hour. When we complain they say they are processing our NHIS cards. Other women who come in even after us get attended to and they leave in less than an hour.

7. Conclusions and making policy suggestions

The 'Cash and Carry System' posed great financial difficulties to access to healthcare. It was to remove these difficulties that the NHIS was implemented. Less than a decade into the implementation of the scheme, cracks are beginning to occur. Coverage has stagnated and growth plateau. A number of districts are already experiencing significant levels of non-renewal of membership. So far most of the existing research in Ghana focus extensively on understanding why people choose to participate or not to participate in the NHIS (Osei-Akoto and Adamba, 2011; Osei-Akoto, 2004; Nketia-Amponsah, 2009), but the reasons that make people dropout or renew their membership are rarely examined. This paper is an invaluable attempt to fill this gap.

High drop-out rates affect the sustainability of district mutual health insurance schemes at least in two perceptible ways; reduces the size of the insurance pool; and give a negative impact on further enrolment and drop-out. A good example that is cited in the literature comes from the Maliando scheme in Guinea Conkakry (Waelkens and Criel, 2004). Dong and others (2009) observed that the Maliando scheme was a scheme that in spite of all efforts at the core of its design had to be discontinued only two years after its foundation due to inability to retain membership. Even though for now we do not have information regarding collapse or dysfunction of any of the district mutual health insurance schemes in Ghana, the experience and collapse of pioneering private commercial health insurance schemes in the country after a few years in operation due to huge claims, fraud and cost escalation (Atim, 2001), need a periodic pause for assessment. As experiences from other areas will show, high drop-out rates endanger CBI sustainability because they enhance the already existing problem of low enrolment. A scheme that continuously loses membership due to non-renewal coupled with low enrolment inevitably translates into inadequate resource mobilization. This represents a great menace for the long term viability of schemes.

The benefits of health insurance are normally seen in two-fold: gains made from avoidance of financial risk by the purchaser; and benefits derived from insurance's ability to make accessible medical care that would otherwise be financially unaffordable. This paper makes an additional point that all these benefits are non-existent if health care services are not available (geographically unavailable) to the purchaser. In my view whilst there would not be any financial risk to avoid for unaffordable health care services, no savings will be made if there are no health care services available or if what is available is so "pressurised" that its use brings dissatisfaction to the consumer. For example, if for anything at all health care purchasers are to travel long distances (lose time and incur transportation cost) or wait long hours (waiting in queues) to purchase health care the net benefit (cost) to both insured and uninsured might not be substantially different to warrant purchase.

One of the most important reasons for dropping out from the NHIS is the payment of out-of-pocket cost for health care even though they are insured. Although the benefit package of the health insurance scheme in Ghana is generous, insured people still incurred out-of-pocket payment for care from both formal and informal sources and for uncovered drugs and tests at health facilities (Nguyen et al. 2011). Even if what insured members paid is significantly less than the uninsured, the unexpected demand for cash from the insured can be frustrating.

In other to ensure satisfaction to health insurance clients, two sources of policy information are identified. The first is the fact that the policy of decentralisation endorsed in Ghana has meant that public health facilities have become fragmented and that they have to relate to a variety of other

actors. It is expected that these facilities are capable of coordinating the development and implementation of a comprehensive health system involving the active participation in both the conception and execution by other actors. With the implementation of the NHIS, the multi-level interactive role of health service delivery facilities has even mounted. They now have to collaborate with this new but powerful actor for quality service delivery. Their sustenance depends to a large extent on their ability to attract the different actors to their side. Where access to health care is not optimised, it is difficult to recover costs (overhead).

The second policy is source is the power (voice) given to the healthcare purchaser through the health insurance scheme. A traditional argument for social health insurance programmes has been the fact that has to increase the responsiveness of services (Wagstaff, 2007) as members have a stronger entitlement than mere tax-paying consumers (Witter and Garshong, 2009). Consequently health care workers' role has to change dramatically. They now have a dual role in their interest to provide quality health service and also to appreciate clients. This is not only the case for health care workers working in the public sector but also workers in the private sector since in both cases they depend increasingly on the appreciation of the "clients" for their status and income. Health seekers who for long have been seen as the least organised now have a voice (Osei-Akoto et al. 2011). Their individual disenchantment can lead to collective and collaborative disuse of a health facility. With NHIS the era when health service providers view service users as *passive* and *economic* actors must be over.

Like in education where we have School Management Committees (SMC) that includes parents and opinion leaders in the community, we need to begin to include community members in Hospital Management Committees (HMC) to give communities a say in the running of health facilities. NHIS has community health insurance committees (CHIC) with the functions of sensitising community members about the scheme, registration, and cardholders rights and responsibilities regarding the success of schemes. However not all district CHICs are functional and others have indeed comatose right after birth.

This study in my view presents very vital information that is essential for understanding not what motivates people to enrol in the scheme, but what (de)motivates them to renew their membership. This is particularly important because a high rate of non-renewal as a result of disenchantment represents an authentic danger to the sustainability of the scheme. The danger will emanate from two critical sources; a reduction in the size of the insurance pool; and a bearer of negative impact on further enrolment and drop-out rate. The rate of non-renewal in Ghana today is not very frightful. But the reasons for drop-out need sober attention. Unveiling these reasons is therefore an essential

attempt to contribute to the sustenance and general development of the mutual health insurance movement in Africa.

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Appendices

Table 1: Factors influencing drop-out (logistic regression analysis)

Drop-out	Coefficient	Std. Error	Odds Ratio	Std. Error	Z-value	P>|z|
Age of household head	0.057	0.050	1.059	0.053	1.150	0.252
Age of household head squared	-0.001	0.000	0.999	0.000	-1.930	0.054
Number of under 18 years in household	0.221	0.106	1.247	0.132	2.090	0.037
Household size	0.003	0.006	1.003	0.006	0.530	0.599
Household benefitted from scheme	-0.506	0.109	0.603	0.066	-4.650	0.000
Household member hospitalised	-0.008	0.132	0.992	0.131	-0.060	0.954
Female-earner household	-0.194	0.181	0.824	0.149	-1.070	0.284
Number of education persons in household	0.466	0.148	1.593	0.236	3.140	0.002
Insurance Premium	-0.107	0.017	0.898	0.016	-6.160	0.000
Insurance Premium squared	0.000	0.000	1.000	0.000	6.650	0.000
Log of household expenditure	-0.017	0.012	0.984	0.012	-1.380	0.168
Number of persons who are health in household	-0.013	0.090	0.987	0.089	-0.150	0.881
There is a potential migrant in the household	-0.629	0.239	0.533	0.128	-2.630	0.009
Patients seen in a day	0.000	0.001	1.000	0.001	-0.200	0.845
Number of patients seen by a medical doctor	-0.735	0.279	0.480	0.134	-2.630	0.008
Household in a rural area	-0.482	0.220	0.618	0.136	-2.190	0.029
n	=	3100				
Wald chi2(16)	=	112.16				
Prob > chi2	=	0.0000				
Pseudo R2	=	0.36				

Table 2: Marginal effect after logistic regression

Drop-out	Marginal effects	Std. Error	Z-value	P>|z|
Age of household head	0.005	0.005	1.120	0.263
Age of household head squared	0.000	0.000	-1.840	0.066
Number of under 18 years in household	0.020	0.010	1.940	0.052
Household size	0.000	0.001	0.520	0.603
Household benefitted from scheme	-0.045	0.009	-5.170	0.000
Household member hospitalised	-0.001	0.012	-0.060	0.954
Female-earner household	-0.017	0.016	-1.080	0.280
Number of education persons in household	0.042	0.015	2.800	0.005
Insurance Premium	-0.010	0.001	-6.730	0.000
Insurance Premium squared	0.000	0.000	7.590	0.000
Log of household expenditure	-0.001	0.001	-1.320	0.186
Number of persons who are health in household	-0.001	0.008	-0.150	0.882
There is a potential migrant in the household	-0.057	0.023	-2.430	0.015
Patients seen in a day	0.000	0.000	-0.190	0.846
Number of patients seen by a medical doctor	-0.055	0.018	-3.070	0.002
Household in a rural area	-0.047	0.024	-1.960	0.050