

## ***Catastrophic and Impoverishing effects of Health Insurance Financing in Ghana***

### **Abstract:**

Healthcare insurance systems are aimed at raising revenue and pooling resources for risk sharing. Out-of-pocket payment for healthcare pushes many households into poverty, especially in the Global South where there are insufficient funds for healthcare financing. Multilevel cross-sectional analyses of nationally representative sample survey consisting of 11,778 households, 4,916 female and 4,568 male adult individuals was used to assess coverage, determinants and barriers to healthcare insurance adjusting for socio-demographic factors. About half (49%) of the households had no member insured, 40% and 31% of females and males respectively had no health insurance cover. There is high dependence on family and friends for insurance premium payment. Direct relationships exist between educational attainment, wealth and insurance coverage. The paper argues that how people access and finance healthcare can lead to poverty especially in regions where there are limited and insufficient means of financing healthcare both at the individual and national level.

**Keywords:** out-of-pocket payment, health insurance, health finance, poverty, Ghana

### **Introduction**

The health and well-being of the population is pivoted on the way healthcare system is financed. In low and middle income countries (also refers to as the Global South), where state and government funding for the healthcare system remains insufficient, out-of-pocket payment for healthcare has become a means to access healthcare delivery services. The struggle to pay for healthcare is estimated to force 25 million households (more than 100 million individuals) into poverty each year (WHO 2005). Poverty and the enemies of health care are said to be imposing

the double burden of disease, disability, and premature death on many societies (WHO 2002) and this is more evident in the Global South where epidemiological and nutritional transition has resulted in the co-existence of both infectious and chronic non-communicable disease and their as co-morbidities (Agyei-Mensah and de-Graft Aikins 2010; Akinyele 2006).

This current study examines the level of health insurance coverage at the individual and household level, the socio-economic and demographic determinants and the barriers of health insurance enrolment as means of accessing and financing healthcare services. How these are link to poverty and it implication on health and economic policies in a developing country. The World Bank (2008) posited that for any health financing coverage, there are generally three interrelated and separate dimensions: the breadth (number of people covered), the depth (the extent of services covered), and the resulting impacts on health outcomes and financial protection against large out-of-pocket expenditure. To ensure equitable access to healthcare delivery services, decisions have to be made at the individual, group, and national levels to pool resources together to spread the financial risks associated with ill health. Healthier populations are known to have relatively higher average income than their counterparts with ill health (Heijmens 2005; van Agt 2000) and illness has huge negative economic impact (Suhrcke *et al.* 2006). Health insurance schemes provide the greater opportunity to spread the financial risks associated with ill health at the point of service delivery.

Conceptually, Grossman (1972) postulated that individuals combine medical care and other market goods with their own time to invest in their health. The decision therefore to invest in healthcare is dependent on other external factors, which are not mutual exclusive. One has to weigh the opportunity cost before investing in healthcare. Enrolment in a healthcare insurance scheme in the developing regions can be explained also by the diffusion of innovation theory proposed by Rogers and Shoemaker (1971). The diffusion of innovation theory describes the

early adoption of unhealthy lifestyles by the educated and wealthy population, while the uneducated poor may adopt these unhealthy lifestyle later. In the same direction, it is postulated here that the adoption of new interventions such as health insurance scheme in a general population will see the educated rich with access and means more likely to adopt and enroll in the healthcare insurance scheme early, with the uneducated poor being late adopters.

### **Healthcare system and health insurance in Ghana**

In 1992, user-fees for healthcare delivery services were instituted in all public health facilities, which sought to remove subsidies on all health services in Ghana (Agyepong 1999; Badasu 2000). This paradigm shift in the health policy in Ghana was on the wheels of the Economic Recovery Program (ERP) and the Structural Adjustment Program (SAP) supported by the donor and development partners of the country. The new health policy saw a significant shift in healthcare cost onto the individual and the household. Perceived association between increased cost of service and quality of service provision (Lavy and Germain 1995; Mwabu *et al.* 1993) resulted in increased hospital attendance after the introduction of healthcare cost recovery in Ghana. However, the cost recovery policies in Ghana led to an increase in self-medication and other behaviours aimed at cost-saving (Asenso *et al.* 1998). Another health seeking behaviour that may result from increase cost of healthcare services is healer shopping (de-Graft Aikins 2005). These behaviours were adopted by the general population as coping strategies for the increased healthcare cost associated with change in the national health policy.

National Health Insurance Scheme (NHIS) (Act 650) was passed in 2003, with the aim of making healthcare accessible to all. Under the law, the National Health Insurance Authority (NHIA) licenses, monitors and regulates the operation of health insurance schemes in Ghana. There are three main categories of health insurance operating in Ghana. The first and the most dominant is

the district mutual health insurance scheme, which is operational in every district in Ghana. These (the district mutual health insurance schemes) collectively operates as the NHIS. The NHIS is a public or non-commercial scheme and is open to all residents of the country. Under the scheme, members pay an annual premium. The informal sector worker (self-employed) pays the informal sector rates (at least GH¢7.20 (US\$4.80)<sup>1</sup>, maximum of GH¢ 48.00 (US\$32.02)) to register to receive healthcare coverage by NHIS. However, some categories of persons are exempted from premium payment. These are people considered indigent - that is individuals considered too poor, without a job and lacking the basic necessities of life to be able to afford insurance premiums. Dependents of members under age 18 years and persons 70 years and older are also exempted from premium payment. The NHIS receives regular funding from funds accrued to the central government from the National Health Insurance Fund. The sources for the fund come from two-and-a-half percent of social security contributions of Ghanaian workers and two-and-a-half percentage from the Value Added Tax (VAT).

The second category of health insurance comprises the private commercial health insurance schemes, operated by approved companies. The third category of health insurance is known as the private mutual health insurance scheme. Under this, any group of people (say members of a church or social group) can come together and start contributing to cater for their health needs, providing for services approved by the governing council of the scheme. Both the commercial and private mutual health insurance schemes are not entitled to subsidy from the National Health Insurance Fund. Benefits of health insurance scheme are that policyholders can seek healthcare treatment and services from any health facility in the country without paying at the point of delivery unless extra service or drugs are sought (See Text Box 1 and 2). Policyholders can also use their membership cards to purchase prescribed drugs and medications at accredited pharmacies and licensed chemical shops without paying at the point of delivery.

Since the enactment of the NHIS Act in 2003, limited national representative studies have been conducted to assess the coverage and its use in the country. The author envisages that the use of nationally representative sample survey data in this study will provide a platform to assess the NHIS at the national level and highlight the challenges of the scheme for policy reform and scaling-up in the pursuit of universal healthcare coverage and reducing poverty.

## **DATA AND METHODS**

### **Data**

The 2008 Ghana Demographic and Health Survey (GDHS) is the main source of data for this study and is the fifth in the series to be conducted in Ghana. The survey is based on a nationally representative sample and comprises two parallel surveys - household and individual surveys. The 2008 GDHS involved a two-stage stratified probability design sampling technique. The first stage involved selecting clusters from an updated master sampling frame constructed from the 2000 Ghana Population and Housing Census. Systematic sampling with probability proportional to size technique was used to select 412 clusters. The second stage of selection involved a systematic sampling of 30 households listed in each cluster. At the household level, 11,778 households were interviewed while at the individual level, 4,916 women aged 15-49 years and 4,568 men aged 15-59 years were interviewed. The response rates are 99% for household, 97% for women and 96% for men. Information covered under the survey included fertility, family planning, maternal and child health and nutrition, childhood mortality, HIV/AIDS-related knowledge and behaviour, healthy lifestyle behaviour, health insurance coverage and domestic violence. The 2008 GDHS provides a timely opportunity to assess the effect and coverage of the NHIS after its introduction in the country as health policy intervention in 2003.

## **Measurement**

Variables are drawn from both the household and the individual surveys with household level analysis using information on household size, number of household members covered by any healthcare insurance, household wealth quintile (poorest, poorer, middle, richer, richest), and type of place of residence (urban or rural) while the individual level analysis used variables from the individual women and men surveys. Socio-demographic characteristics, insurance coverage, health insurance type, reason for not being registered for health insurance, source of payment for insurance premium, out-of pocket payment of healthcare services, and level of satisfaction of health insurance service(s) were analyzed to estimate coverage and to assess the level of satisfaction with insurance service, and deterrent(s) of enrollment in the health insurance scheme.

## **Analysis**

For the determinants, multivariate logistic regression modelling was the main analytical approach. Descriptive analysis was used to describing the characteristics of respondents while analysis of variance (ANOVA) was used to investigate the association between some selected household characteristics like type of place of residence, household size, household wealth quintile and insurance coverage using the F-test statistic to assess the significance or otherwise of the association. Respondent's socio-demographic characteristics - age, marital, working status, educational attainment, and household size as well as household wealth quintile were used as independent variables to predict the outcome variable (insurance coverage). This was done by employing binary logistic regression modelling measuring the outcome variable (insurance coverage) in dichotomous (0=not insured and 1=insured).

## **Result**

### **Socio-economic and demographic characteristics of household**

Almost seven in ten (66.3%) of the households are headed by males (Table 1). The mean age of household head is about 44 years with a median age of 42 years and standard deviation of 16 years. Only 1.4% of the households were headed by individuals aged between 15-19 years whereas 13.3% were headed by elderly adults' age 65 years or older. Less than a third (27.5 %) of the household heads had no formal education with almost three in five (59.8%) having more than primary education. The urban-rural distribution indicates that 52.2% of the sampled households were in rural setting with 21.4% of the households were single member households and 34.1% made up of five or more household members. The mean household size is approximately four with a standard deviation of 2.5. Household wealth quintile showed almost even distribution.

.....Table 1 Percentage distribution of households by household characteristics

### **Health insurance coverage at the household level**

The analysis of variance using F-test statistics revealed a direct relationship between some household characteristics and the number of household members covered by health insurance. The mean household size is approximately four persons while the mean number of household members covered by health insurance is less than 2 persons (1.5) with a standard deviation of 2.1. The mean number of household members covered by health insurance is relatively higher in male-headed households compared to their female counterparts (Table 2). In terms of educational attainment of household head, from primary education to higher, there is upward progression of the mean number of household member insured with advancement in educational attainment. Relatively, more urban household members are insured than rural household. Household wealth

reveals a clear relationship with the mean number of household member insured. As household wealth improves (from poorest to richest), the mean number of household members covered by health insurance progressively increases.

.....Table 2: Analysis of variance between household characteristics and number of household members insured

Examining the interaction effect of household wealth and type of place of residence on health insurance uptake (Table 3) revealed that the mean number of household member insured is relatively higher rural setting than in urban households except among the poorer wealth quintile. Comparison within the type of place of residence also shows the direct relationship between household wealth and the mean number of household member insured.

.....Table 3: Interaction effect of household wealth and type of place of residence on mean number of household members insured

### **Determinants of health insurance coverage**

Comparatively, 1,973 (40.1%) females and 1,415 (31.0%) males had health insurance cover. Individual age in single years was not a statistically significant determinant of female and male adult insurance cover (Table 4). At the household level, there were direct relationship between highest educational attainment, wealth quintile and health insurance coverage. At the individual level, the same factors influence or determine female and male enrolment onto healthcare insurance. These factors are household wealth quintile, educational attainment, marital status and type of place of residence (see Table 4). However, among females, while formerly married women are about 4% more likely to be insured compared to their never married counterparts. In the case of males, formerly married men are less likely to be insured. Females with primary education are less likely to be insured



compared to females with no education. Examining the same factor among males, males with primary education are more likely than their counterparts with no education to be insured.

.....Table 4: Socio-demographic determinants of health insurance coverage among adult  
Ghanaians

### **Healthcare insurance finance and poverty**

Among the individual adults insured, 34.6% of the female paid insurance premium by themselves compared to more than half (53.1%) in the case of male respondents. Significantly, three in five (60.3%) of insured females had their premium paid for by friend or relatives as against 29.3% for their male counterparts. Only 3% and 16.2% of insured females and males respectively had their insurance premium paid for by employers or the Social Security and National Insurance Trust (SSNIT). The remaining are either exempted from paying insurance premium because of old age (70 years and above), pensioned or indigent (poor).

Insured respondents' level of satisfaction under the scheme can be used to predict the future sustainability of the scheme. The results show that 46.5% of insured females rated services under the scheme as better, 40.1% same, 9.9% worse and the remaining 3.4% were not sure or don't know. For the male insured respondents, 52.4% rated service under the scheme better, 33.5% same, 11.0% worse and 3.1% don't know/not sure. Even with 18.1% female and 22.7% males reporting out-of-pocket payment for healthcare services, very high proportion 98.1% and 91.8% females and males respectively plan to renew their health insurance. Those that had no plan to renew their insurance cover advanced reasons such as "have not been sick" "worse quality of care for card holders" "premium expensive" for their decision.

## DISCUSSION

In this article, the level of healthcare insurance coverage among household members and individual adult were estimated using nationally representative survey data. The association between selected household characteristics and healthcare insurance coverage was assessed alongside individual socio-demographic characteristics that predict health insurance coverage. Using source of financing of healthcare insurance premium, the author discusses this can cause and perpetuate poverty both at the household and individual level.

Consistent with the findings of Meng *et al.* 2011, where health insurance coverage is limited in low- and middle-income countries, this study revealed also that relatively fewer individuals are covered by any healthcare insurance. This indicates that greater proportions of Ghanaians are still paying for healthcare services from out of pocket (51%) at the household level, 60% and 69% of females and males. Thus, the country is far from attaining the possible universal healthcare coverage. The implications of out-of-pocket payment for healthcare services are high dependence on limited resources to access and finance healthcare services and products. One out of every four families living in the world's poorest countries is documented to borrow money or sell assets to pay for health care (Kruk *et al.* 2009). Same means of financing health was found by de-Graft Aikins (2007) among persons living with diabetes and analysis of 2003 World Health Survey in Ghana by Tagoe 2010 (unpublished) found that 88.1% of households use current income of household to finance healthcare services. Also in the same study, 16.4% and 13.5% depend on family or friend and borrow to finance healthcare.

Given the fact that the average income of ill health people is relatively lower than their healthier counterparts (Heijmens 2005; van Agt 2000) and also given the negative economic impact of illness (Suhrcke *et al.* 2006), there is a psychological strain on both the infected (persons infected with

disease or ill health conditions) and affected (persons who are indirectly affect by the disease condition by proving care and support to persons living or affected by the disease condition) persons due to dependency on others for support and care. This often results in social exclusion and family abandonment (de-Graft Aikins 2007). Also, other behaviours aim at cost-saving, for example, self medication, healer shopping (Asenso *et al.* 1998; de-Graft Aikins 2005) will be very prevalent.

With improvement in life expectancy at birth in the country [58 years (2000) to 60 years (2009), (WHO 2011)] more of the elderly population will be qualifying under the exemption policy and without the corresponding improvement in the economy, the proportion of the population that will also qualify exemption from premium under the indigent (poor) will significantly increase. This will put a greater strain on the insurance scheme and might affect not only quality of service delivery under the scheme but also coverage of healthcare. However, the means by which individual finance their healthcare expenditure can an indicator of poverty. Continues dependency on informal means to finance healthcare such family, friends and relations will not only be catastrophic to any health financing scheme and health system but will impoverish many more households in the country.

Major deterrents for enrolment of individuals onto the health insurance can be explained partly with Grossman's concept of investing in health. The opportunity cost of investing in one's health as insurance for a period of ill health is out-weigh by meeting the current social and economic demands on the individual. The decision to invest in health (in this case health insurance) is dependent on disposable income (wealth) and the socio-economic and political environment. Economic downturns have the potential to be a barrier for the adoption of new interventions such as health insurance. The consequences are the withdrawal from activities that make demands on household and individual resources. Even though insurance is a mutual benefit for all policyholders, low level of knowledge and understanding of the NHIS (as in the case of Ghana) is an obstacle for

universal coverage of the insurance scheme. Out-of-pocket payment by insured clients at the point of service delivery due to limited services and drug coverage of the insurance policy is also a major factor.

Health insurance is the major means to pool resources together to spread the financial risk of ill health. In the event of an economic downturn, the poor and the socially disadvantaged are at high risk of any negative impact. However, with the relatively low health insurance coverage and resultant out-of-pocket payment for health services, many more households and individuals will be pushed into poverty as identified by WOH 2010. The challenge in the Global South is to make healthcare services available and equitable to all strata of the population. To achieve universal coverage of healthcare there is a need to restructure the current existing health insurance policies to take into account the current epidemiological and nutritional transition. These transitions come with changes in the epidemiology and socio-demographic profile of the countries as life expectancy improves and chronic non-communicable disease emerges in lower age groups (Dorling *et al* 2006, Tagoe 2010).

The high statistically significant association between education, wealth status and being insured is consistent with Rogers and Shoemaker's (1971) diffusion of innovation theory where the educated and the rich adopt new intervention earlier than the uneducated and the poor. Universal access and coverage of healthcare will not only be pivoted on health policy reforms, but, also education and economic empowerment.

## **Conclusion**

The finding of this study is an indication of the relatively low levels of health insurance uptake by the Ghanaian adult population at both the household and individual levels. The implication of the low health insurance coverage will have both health and economic consequences at the micro and

macro level. Health expenditure contributes substantially to household impoverishment (Bredenkamp *et al.*, 2011). Individuals will continue to depend on relatives, friends and selling of household assets to finance health expenditure and this will lead to a widening of the health inequality gap within the country. At the national level, the already limited national health system will be over stretched to meet the ever increasing demands.

With rapid behavioural change in the developing region and its risk of expose to chronic non-communicable diseases coupled with evidence that points to the fact that relatively fewer Ghanaian adults adhered to healthier lifestyle behaviour (Tagoe and Dake 2011), more individuals will be exposed to NCDs. Treatment and management of these disease conditions are expensive and often far above the means of the average citizen. Health insurance is the single greatest opportunity to access health care. The lack of education and understanding of some insurance holders on insurance being a policy for resource accumulation and financial risk sharing needs to be given another attention if effective scaling up of the NHIS is to be achieved.

While it is very important to continue to educate and improve the socio-economic status of the population to increase the population acceptance and adoption of the NHIS, institutional framework aimed at improving health service delivery and expanding coverage of service under the scheme will propel scaling up and sustainability of the scheme. The government of Ghana's proposal of one-time health insurance premium payment is vital and needs to be evaluated through a multi-sectorial approach. This is because health and health decisions making is multifaceted and dependent on a wide range of socio-demographic, psychological, economic, political, physical, and environmental factors. Expanding the coverage of health insurance and identifying reliable means to pay for health insurance will avert the increase incidence of poverty across all strata of the population.

**Endnote**

<sup>1</sup> Based on Bank of Ghana exchange rate = GH¢1.00 = US\$1.4992 (30<sup>th</sup> June 2011)

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Table 1 Percentage distribution of households by household characteristics

<b>Household characteristics</b>	<b>Frequency</b>	<b>Number</b>
<b>Sex of head</b>		
Male	66.3	7,810
Female	33.7	3,968
<b>Age of head</b>		
Mean	44.22	
Median	42.00	
Standard deviation	15.97	
<b>Educational attainment</b>		
No education, preschool	27.5	3,242
Primary	12.6	1,487
Secondary	51.4	6,052
Higher	8.5	996
<b>Type of place of residence</b>		
Urban	47.8	5,627
Rural	52.2	6,150
<b>Household size</b>		
Mean	3.78	
Median	3.00	
Standard deviation	2.50	
<b>Household wealth quintile</b>		
Poorest	15.4	1,813
Poorer	19.1	2,250
Middle	21.6	2,548
Richer	22.5	2,646
Richest	21.4	2,520

Source: Computed from GDHS 2008

Table 2: Analysis of variance between household characteristics and number of household members insured

<b>Characteristics</b>	<b>Mean</b>	<b>Median</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Skewness</b>	<b>F</b>	<b>Sig.</b>
<b>Sex of head of household</b>						53.697	.000
Male	1.61	.00	7810	2.299	1.811		
Female	1.31	1.00	3968	1.727	1.783		
<b>Highest educational level attained</b>						57.467	.000
No education, preschool	1.44	.00	3242	2.232	2.210		
Primary	1.12	.00	1487	1.897	2.315		
Secondary	1.52	1.00	6052	2.070	1.710		
Higher	2.23	1.00	996	2.278	1.363		
<b>Type of place of residence</b>						25.537	.000
Urban	1.61	1.00	5627	2.080	1.588		
Rural	1.41	.00	6150	2.168	2.140		
<b>Wealth index</b>						31.055	.000
Poorest	1.33	.00	1813	2.370	2.462		
Poorer	1.30	.00	2250	2.111	2.411		
Middle	1.42	1.00	2548	2.043	1.927		
Richer	1.53	1.00	2646	2.001	1.570		
Richest	1.89	1.00	2520	2.124	1.205		
<b>Total</b>	<b>1.51</b>	<b>1.00</b>	<b>11777</b>	<b>2.128</b>	<b>1.882</b>		

Source: Computed from GDHS 2008

.....Table 3: Interaction effect of household wealth and type of place of residence on mean number of household members insured

Household wealth quintile	Type of place of residence					
	Urban			Rural		
	Mean (Std. Error)	95% Confidence Interval Lower Bound Upper Bound		Mean (Std. Error)	95% Confidence Interval Lower Bound Upper Bound	
Poorest	1.028 (.248)	.543	1.513	1.258 (.052)	1.157	1.359
Poorer	1.464 (.124)	1.221	1.706	1.238 (.048)	1.144	1.332
Middle	1.369 (.064)	1.244	1.494	1.489 (.055)	1.381	1.596
Richer	1.476 (.049)	1.380	1.571	1.738 (.077)	1.586	1.890
Richest	1.879 (.045)	1.791	1.967	2.304 (.132)	2.046	2.563

Table 4: Socio-demographic determinants of health insurance coverage among adult Ghanaians

Variables	Female		Male	
	B	Exp β (S.E)	B	Exp β (S.E)
<b>Constant</b>	-1.722	0.179 (.213)***	-2.599	0.074 (.213)***
<b>Age</b>	.003	1.003 (.004)	.007	1.007 (.003)
<b>Marital status</b> (Never married)				
Currently married	.415	1.514 (.090)***	.340	1.405 (.081)***
Formally married	.043	1.044 (.138)	-.330	0.719 (.190)
<b>Highest educational attainment</b>				
(No formal education)				
Primary	-.107	0.898 (.101)	.117	1.124 (.146)
Secondary	.451	1.569 (.091)***	.374	1.453 (.126)**
Higher	.812	2.251 (.177)***	1.379	3.972 (.164)***
<b>Working status</b> (Not working)				
Currently working	-.006	0.994 (.080)	-.150	0.861 (.096)
<b>Type of place of residence</b> (Urban)				
Rural	.221	1.247 (.080)**	.095	1.099 (.089)
<b>Wealth quintile</b> (Poorest)				
Poorer	.073	1.075 (.111)	.283	1.328 (.132)*
Middle	.380	1.462 (.115)**	.562	1.754 (.137)***
Richer	.697	2.007 (.123)***	1.023	2.782 (.142)***
Richest	.781	2.184 (.134)***	1.058	2.880 (.154)***
<b>Household size</b>	.073	1.076 (.054)	.074	1.077 (.013)***

Reference category = (Superscript)

\*\*\*P < 0.001    \*\*P < 0.01    \*P < 0.05.

R<sup>2</sup>= (Female =0 .059; Male =0 .111)    -2 log likelihood (Female =6403.704; Male – 5267.965)

Total N: Females = 4,916, Males = 4,557

Source: Generated from Ghana DHS, 2008.

Table 4: Source of insurance premium payment by sex of respondent

<b>Source premium payment</b>	<b>Female (%)</b>	<b>Male (%)</b>
Yes, respondent paid for self	33.1	54.5
Yes, paid by relative/friend	61.6	29.5
Yes, paid by employer/SSNIT	2.9	14.7
No, exempt as elderly (+70)/pensioner	0.1	0.1
No, exempt as indigent (poor)	0.1	0.2
No, other	2.4	1.1
<b>Total</b>	<b>1,987</b>	<b>1,391</b>

Source: Generated from GDHS, 2008

**Text Box 1: Services**

- Out-patient services – general and specialist consultations reviews, general and specialist diagnostic testing including, laboratory investigation, X-rays, ultrasound scanning, medicines on the NHS Medicines list, surgical operations such as hernia repair and physiotherapy.
- In-patient services – General and specialist in patient care, diagnostic tests, medication-prescribed medicines on the NHS medicines list, blood and blood products, surgical operations, in patient physiotherapy, accommodation in the general ward and feeding (where available).
- Oral health – pain relief (tooth extraction, temporary incision and drainage), dental restoration (simple amalgam filling, temporary dressing)
- Maternity care – antenatal care, deliveries (normal and assisted), Caesarean section, post-natal care
- Emergencies – these refer to crises in health situations that demand urgent attention such as medical emergencies, surgical emergencies, paediatric emergencies, obstetric and gynecological emergencies and road traffic accidents.

**Text Box 2: Excluded services**

- Appliance and prostheses including optical aids, heart aids, orthopaedic aids, dentures etc.
- Cosmetic surgeries and aesthetic treatment
- Anti-retroviral drugs for HIV
- Assisted Reproduction (e.g. artificial insemination) and gynecological hormone replacement therapy.
- Echocardiography
- Photography
- Angiography
- Dialysis for chronic renal (kidney) failure
- Organ transplants
- All drugs that are 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 (e.g. Visa application, Education, Institutional, Driving license etc)
- VIP wards (accommodation).