

**ACCESS TO HEALTHCARE THROUGH NHIS; FACTORS LIMITING
ENROLMENT OF THE POOR UNTO THE NATIONAL HEALTH INSURANCE
SCHEME IN GHANA**

Phoebe Appiagyei

Ghana

53rd Master of Public Health/ International Course in Health Development
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UNTO THE NATIONAL HEALTH INSURANCE SCHEME IN GHANA

A thesis submitted in partial fulfillment of the requirement for the degree of master of public health

By

Phoebe Appiagyei

Ghana

Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements. The thesis: **Access to healthcare through NHIS; factors limiting enrolment of the poor unto the National Health Insurance Scheme in Ghana** is my own work.

Signature:



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Glory be to God for all His endowments.

DEDICATION

I dedicate this achievement to my mother Ms. Victoria Owusu (Deceased) whose encouragement gave me strength at the start of the programme but didn't live to share the joy of completion.

LIST OF ABBREVIATIONS

CHAG	Christian Health Association of Ghana
CHPS	Community-Based Health Planning and Services
GDP	Gross Domestic Product
GOG	Government of Ghana
LEAP	Livelihood Empowerment Against Poverty
MOF	Ministry Of Finance
MOH	Ministry Of Health
NHIA	National Health Insurance Authority
NHIR	National Health Insurance Regulations
NHIS	National Health Insurance Scheme
OPD	Out-Patients Department
PNDC	Provisional National Defense Council
SHI	Social Health Insurance
SSNIT	Social Security and National Insurance Trust
UHC	Universal Health Coverage
VAT	Value Added Tax
WHO	World Health Organization
GDGR	Ghana Diagnostic Related Groupings
FFS	Fee For Service

ABSTRACT

Background: The NHIS law passed in 2003 by the Government of Ghana, guarantees financial protection to access of healthcare for the poor in the society in order to improve their health outcomes. Indigents (core poor) are exempted from premium payment toward enrolment into the scheme. At the end of 2015, only 19.1% of the total poor population in Ghana had been enrolled as indigents. This coverage is suboptimal and a bit counterintuitive given that indigents enjoy premium exemptions.

Objective: To examine demand and supply factors that limit the poor from enrolling unto NHIS and make recommendations to relevant stakeholders on effective ways to address them.

Methodology: A literature review was conducted. Data on indigent enrolment over a five-year period were also analysed. A conceptual Framework was adapted from Panda et al, on a multicounty review of voluntary enrolment unto CBHI.

Findings: Interrelations of factors such as trust, socioeconomic status, scheme related factors, provider related factors and national policy factors influenced decisions of the poor unto enrolment.

Conclusions: The criteria for the selection of the poor was not adequately covering the true poor. Conveniently accessing NHIS and healthcare providers in a friendly client-provider environment will motivate enrolment of the poor and make the NHIS card worth having.

Recommendation: Community Wealth Ranking could be used to identify the true poor for exemptions. Community, NHIS and provider relations in all dimensions must be strengthened.

Key words: Ghana, National Health Insurance Scheme, Indigents, Enrolment, Targeting

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PHOEBE APPIAGYEI

GHANA

INTRODUCTION

Financial access to quality healthcare has been guaranteed by the National Health Insurance Scheme to the poor and vulnerable populations in Ghana. The end to this means is improving the health of the poor. In my eight years field work, as regional monitoring and evaluation officer of the National Health Insurance Authority, I have travelled across the urban and rural parts of the Brong Ahafo region. This has exposed me to actualize the living and health conditions of the poor. The question of why there is premium exemption for the poor yet they are not enrolling intrigued me to examine the factors that limited the enrolment of the poor and indigents unto the NHIS.

This thesis gives me the opportunity to examine the factors that limit the enrolment of the poor and indigents unto the NHIS. Factors identified will give a fair idea of making critical actionable recommendations to the Government of Ghana, NHIA, Health providers on possible ways of address these factors.

CHAPTER ONE: BACKGROUND INFORMATION

1.1 DEMOGRAPHIC PROFILE AND SOCIO-ECONOMIC STATUS

Ghana is a lower middle-income country in West Africa with a population of 27.41 million and a growth rate of 2.3%. It has a Gross domestic product (GDP) of 1,381 US dollars per capita with 24.2% of the population living below the poverty line representing 6.4 million people. About half of the economically active population engage in agriculture. Most of the employed work in the informal sector. The average urban poverty rate is 10.6%, while that for the rural setting is 37.9%. 28.3% of all Ghanaian children live below the poverty line representing 3.65 million children. Additionally, 1.2 million children live in households that cannot provide an adequate meal. Poverty rates are highest in the Upper West region. Greater Accra region records the lowest poverty rates. 23% of the male populations in the urban areas have secondary or higher education compared with 9% of their counterparts in the rural areas. Similarly, 54% of females in the urban areas have secondary or higher education as opposed to 30% in the rural areas. Every Ghanaian belong to one religion or the other. The population is dominated with about 78% Christians, followed by about 16% belonging to the Islamic religion. The population of traditional and those who belong to no religion is represents about 6% of the population. Ghana, like other lower middle-income countries is experiencing rapid urbanization with over 55% of men and women living in the urban areas^{1 2 3}

1.2 GENERAL HEALTH STATUS

The life expectancy at birth for a Ghanaian is 61 yrs with an infant mortality rate of 42 per 1000 live births, Child mortality rate of 19 per 1000 live births and Under 5 mortality of 62 per 1000 live births^{1 3}. Antenatal care coverage for at least four visits was 87% with 73% of births occurring in health facilities and 74% of births attended by Skilled Birth Attendants (SBA)³. Ghana recorded a maternal mortality ratio of 319 per 100,000 live births⁴. The major non-communicable diseases (NCDs) include cardiovascular diseases, diabetes, sickle cell, cancers and asthma. 86,200 people die of NCD's every year out of which 55.5% occurs in persons under 70 years. 8.4million cases of malaria were recorded at the out-patients department (OPD) in 2014⁵. 1.6% of the Ghanaian adult population are living with HIV¹.

1.3 OVERVIEW OF HEALTH SYSTEM

The Ministry Of Health (MOH) is responsible for regulating the health sector of Ghana. As part of its functions, it is involved in the formulation of policies, coordination and regulation of all stakeholders. The Ghana Health Service (GHS) is responsible for implementing government policies and regulations for the public sector. GHS is the main public agency through which health services are delivered to Ghanaians⁶. The private sector is made up mainly of the faith based facilities. For example, Christian Health Association of Ghana (CHAG) and the private for profit (PFP) facilities including traditional healers. Private health providers provide about 55% of all services used by Ghanaians. The Health Facility Regulatory Agency (HFRA) is the body mandated to accredit all health facilities and monitor to ensure that services delivered meet the agreed quality standards⁷

1.4 HEALTH FINANCING

World Health Organisation (WHO) enshrines "...the enjoyment of the highest attainable standard of health is a fundamental right of every human being." The right to such health

should include access to timely, acceptable, and affordable health care of appropriate quality. The Access to health is usually closely related to the right to nutritious food, housing, work, education, non-discrimination, access to information, and participation. According to WHO, access to good health is fundamental to a long lasting socio-economic development and poverty reduction. In the process of doing this, it is important that people are protected from catastrophic expenditure resulting from the cost of healthcare^{8 9}

It has been shown that, the poor in a society are usually the most disadvantage regarding the right to health. The poorest among populations are mostly at high risk of severe illness, early deaths and financial burden due to out-of-pocket (OOP) health expenditure. They are usually the least served as far as quality and affordable healthcare is concerned⁹.

Universal health coverage (UHC) is a goal that aims at guaranteeing that everyone has the needed access to promotive, preventive, curative and rehabilitative care of good quality while protecting them from financial hardship when paying for health services. UHC is very critical in the sustainable improvement of health globally. It has become a major health goal of most countries including Ghana. United Nation member countries have set a target to attain UHC by 2030^{10 11}.

UHC is defined in three dimensions: the proportion of population covered by pooled funds; the package of services covered; and the proportion of direct health cost that is covered by pooled funds. The world health report 2010 summarizes three broad strategies by which UHC can be attained. The first strategy is raising sufficient resources for health. Second strategy is getting most of these resources through pooled arrangements and third by efficient use of these resources by cost effective means and reducing waste¹². There are two main options for attaining universal health coverage. One is through a National Health Service (NHS). In this health financing system, general tax revenue is the main source of funding health services. Healthcare providers under the NHS are usually public. The other option, the Social Health Insurance (SHI) involves mandatory membership of the population. Payroll contributions from workers, self-employed and enterprises are pooled into a social health insurance fund. Contributions are made according to income and do not vary with health status. The state pays contributions on behalf of those who cannot pay for instance the poor and vulnerable groups thus it protects people against financial health burden and is a relatively fair method of financing health care. SHI can own its provider networks. It usually contracts both public and private providers^{13 14}.

Many sub-Saharan African countries have had difficulties raising sufficient funds for healthcare for their people. The Government of Ghana introduced the National Health Insurance Scheme (NHIS) through an act of parliament in 2003 (Act 650), which was revised to Act 852 in 2012. This scheme, which replaced the cash and carry system was to protect residents in Ghana against financial risks of basic health care and to ensure equitable access to quality and affordable healthcare. The reform of the Act turned the semi-autonomous district offices into branch offices of the National Health Insurance Authority (NHIA). The NHIA has established regional offices in all ten regions of Ghana that have oversight responsibility over the District offices^{15 16}. The Ghana National Health Insurance Scheme (NHIS) has a mix of tax-based, social health insurance and voluntary health insurance contributions. By law it is mandatory for all residents but this has not been enforced due to the large informal sector who pay

voluntary flat rate premiums (an amount paid for health insurance coverage). A direct deduction of 2.5% is made from the Social Security and National Insurance Trust (SSNIT) contributions of formal sector workers by the Ministry of Finance into the National Health Insurance Fund (NHIF). The informal sector workers, pay an annual premium of GHS 7-48 (USD 1= 3.75 as at 4/5/16). The National Health Insurance levy is a 2.5% additional tax on Value added tax (VAT) that is charged on goods and services. The Government of Ghana (GOG) pays on behalf of the vulnerable group who are then exempted from paying premiums to access healthcare. The exempt group in the case of the Ghana NHIS include; indigents (too poor to pay or core poor); pregnant women; children under 18 year; SSNIT Pensioners; the elderly above 70 years; and mental health patients^{15 16}. The Ghana NHIS has a large exempt group with the children under 18 alone forming about 48.9% of the total Ghanaian population¹⁷.

The National Health Insurance Authority (NHIA) is the purchaser of healthcare for Ghanaian residents, a separate entity from the health provider in order to increase transparency. It proposes a comprehensive benefit package that covers about 95% of the disease burden in Ghana. Outpatients, Inpatients care, maternity care, eye care, emergency care and essential drugs are included in the benefit package. The National Health Insurance scheme contracts both public and private providers to deliver healthcare services to its enrollees and reimburses them after service delivery and submission of member claim. Provider payment is based on Ghana Diagnostic Related Groupings (G-DRGs), fee-for-service (FFS) and Capitation¹⁵ .

Ghana's first ever law related to health insurance is the National Health Service program which was established under the regime of the first Ghanaian president, Dr. Kwame Nkrumah in 1957. Enrolment unto the NHIS was rapid in the early years but seem to have stalled in recent years. Currently, around 40% of the Ghanaian population are members of the NHIS. The factors that have led to low enrolment include; unaffordability of premium; opportunity cost; long waiting hours at the district offices; delays in provider responsiveness on clients; and poor attitudes of district NHIA officers. The exempt (those who do not pay premium) group who are not burdened with financial cost in enrolling and accessing healthcare do not want to enroll or renew enrolment with the scheme¹⁸

CHAPTER TWO: PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES AND METHODOLOGY

2.1 PROBLEM STATEMENT

Equity has prevailed as a pertinent health sector goal yet inequities across the poor and the rich have always been persistent¹⁹. Direct payment at the health facility while accessing care can greatly affect the economic situation of the poor which may constrain access to other basic daily needs such as food and education^{20 21}. With these developments, global attention turned to providing protection for the poor and vulnerable groups against cost of health care, Ghana NHIS was established with the intention to ensure equitable access to quality health care by all especially the very poor. To achieve this, the NHIS exempts the poor and vulnerable from paying any fee while enrolling unto the scheme^{22 23}.

Exemptions of the poor from payment of user fees while accessing healthcare has been part of Ghana's healthcare system in the past. From the regime of President Nkrumah (1960) through to the Provisional National Defense Council (PNDC) era (1985), there has been successive reforms about exemptions of the poor and vulnerable²⁴. The introduction of exemption policies for the vulnerable groups is part of an overall effort to make healthcare equitable to the entire population. The NHIS Law passed in 2003 as part of health sector reforms also included exemptions for the poor and vulnerable. Enrolment of this category of people onto the scheme was free of charge¹⁶. Low enrolment of the exempt group particularly the poor is one big challenge facing African Countries who have implemented Health Insurance²⁵. Prior to the introduction of the NHIS, the exemption in the health sector did not work well hence many of the people who qualified for exemptions were left out²⁶. Derbile et al, drawing from an empirical study, identified problems arising from application of exemptions for the poor in Ghana under the cash and carry system. Some of the problems that were identified and that led to low enrolment included: low awareness of exemptions among communities particularly exemptions for the poor; difficulty in identifying the poor; extremely low government expenditure for the poor compared with other exemption categories; shortage of drugs; and perceptions of poor quality of drugs associated with exemptions for the poor²⁷. Their study also highlighted awareness of exemptions in a survey done in the northern part of Ghana among community members and health workers. 61% of the respondents did not know about exemptions for the poor. Majority of the respondents (84%) knew about exemptions for pregnant women, children under-five (79%), the aged (62%). Even though 39% knew about exemptions for the poor, majority of them did not know about the eligibility criteria that classified a poor person²⁷. Similar studies have also revealed low public awareness of exemptions as one of the factors that led to low enrolment of the poor²⁸. Various studies have pointed out that, the issue of low enrolment of the poor in the NHIS remains a problem that has not been resolved²⁹.

To ensure that the indigents are correctly identified and exempted from paying during registration, a criterion as contained in the National Health Insurance Regulations (NHIR) was developed to identify them. Some of the characteristics included: persons not having a visible source of income; not having a fixed place of residence; not living with anyone with a fixed place of residence; and not having any identifiable consistent support from another person³⁰.

These criteria were realized to be too stringent and almost excluded all the poor since at the community level it is rare to find people who are homeless^{23 31} as prescribed above. The Ministry of Social Protection was given the responsibility of identifying people as indigents who will then qualify for exemptions under the NHIS. The NHIA also registers members of the Livelihood Empowerment Against Poverty (LEAP), a social intervention programme¹⁶. Despite the arrangements for exemptions for the poor, there is still low enrolment. This becomes problematic because, the section of the poor who are not enrolled either pay out of pocket at the point of accessing healthcare which may lead to catastrophic health expenditure. They may also avoid or delay healthcare which eventually leads to poor health status³².

Despite these attempts by the NHIS to increase enrolment among the poor, various studies point to the reverse as the enrolment among the poor is still disproportionately low. A study in the Upper East Region of Ghana by Akanzili et al, revealed an enrolment rate of 30 % among the poorest quintile compared to the wealthiest quintile which had an enrolment rate of 58.3%³³. This may be partly due to confounding factors such as the rich living more often in urban areas with easier access than the poor. Besides, it also appears strange that the rich who usually have a formal job and as such automatically pay from their SSNIT contributions also have relatively low coverage. In the same study 65.5% of respondent with secondary or tertiary education were enrolled compared to 37% enrolment among those with no education. Deprived districts such as Garu tempene had lower enrolment rate of 30% relative to wealthier districts such as Bolga with higher enrolment rate of 53%³³. Jehu-Appiah et al, on their study; the Equity aspects of the National Health Insurance Scheme in Ghana demonstrated that households in the richest quintiles were significantly more likely (40%) to enroll compared to the poorest quintile (27%) indicating inequitable access to NHIS³⁴.

2.2 JUSTIFICATION

Over the years, a number of studies have looked at the reasons for the low enrolment of Ghanaians unto the NHIS especially among the poor, with crosscutting recommendations. Some of these recommendations have been or are in the process of being implemented. For instance, the NHIA expanded coverage of the poor by registering beneficiaries of existing pro-poor and social interventions in Ghana³⁵. The enrollment and protection of the poor is however still inequitably low. These reasons render it critically important to review the literature on factors limiting the enrolment of the poor unto the NHIS. This will add to the body of knowledge on possible ways to improve the coverage to ensure financial protection of the poor under the NHIS by ensuring equitable enrollment and service provision. The poor and indigent populations are chosen because they are the group that is more likely to suffer catastrophic health expenditure when accessing healthcare without health insurance.

Table 1. National Indigent enrolment

Year	2010	2011	2012	2013	2014	2015
Enrolment(% of total population)	1.4	4.2	4.4	12.1	14.2	13.1
Enrolment(% of indigent population)	6.5	7.5	8.5	17.7	23.5	19.1

Source: NHIA Annual reports, 2010-2015^{35 36 37 38}. World bank population estimations³⁹, Population Census¹⁷, GLSS6 Report⁴⁰.

Table 1 shows an increasing trend in enrolment of indigents. This is still not encouraging, given that an estimated 24.2% of Ghanaians live below the poverty line that is about 6million people according to the 2014 Ghana living Standard Survey(GLSS6)⁴⁰. Given that there is free exemption policy for indigents under the NHIS and a comprehensive benefit package, enrolment of this category is comparatively suboptimal and counterintuitive. This calls for thorough research to further look into the factors that limit the enrolment of the poor, particularly indigents unto the Ghana NHIS.

2.3 OBJECTIVES

2.3.1 Overall Objective

To examine factors that limit the poor and from enrolling and accessing healthcare under NHIS and make recommendations to the GOG, NHIS and Health care providers on how to address these factors.

2.3.2 Specific Objectives

- To describe the functions NHIS in relation to the poor and analyze trends of enrolment of the indigents.
- To analyze demand side factors limiting enrolment of the poor unto the NHIS.
 - Explore people’s views and perceptions about NHIS
 - Explore people’s views and perceptions about NHIS Accredited health providers
- To analyze supply side factors affecting enrolment of the poor unto the NHIS.
 - Scheme related factors limiting enrolment of poor and indigents
 - Provider related factors limiting enrolment of the poor and indigents
 - National Policy related factors limiting enrolment of the poor and indigents

- To make recommendations to GOG, NHIS and Health providers on how to address factors that limit indigents and the poor from enrolling onto the NHIS and accessing health care.

2.4 METHODOLOGY

This thesis is based mainly on literature review. Secondary data from the National Health Insurance Authority was accessed to establish the trends of enrolment of the poor over a 5-year period.

2.4.1 Search Strategy

Literature search on the subject was done through google and google scholar search engines. Searches from Pubmed and VU library was done to retrieve articles relevant to the topic. Database of relevant agencies such as WHO, World bank, MOH Ghana, and NHIA Annual Reports were accessed to obtain factsheets, policies, programmes and reports. Grey literature reports were also used. I also relied on my field experience as a monitoring and evaluation officer of NHIA to make deductions out of the issues I have come across in my fieldwork. Experiences gained during the ICHD course were also applied.

2.4.2 Inclusion Criteria

Only literature published in English language was used. Literature from Ghana, after the implementation of the NHIS (2003) were included. A few others that draws knowledge from implementation of exemptions for the poor before the introduction of the NHIS were also used. Full text articles were used. Literature from Low Middle Income Countries (LMIC) that had success stories on enrolment of the poor was also accessed.

2.4.3 Key Words

Keywords used in search for literature included: Universal Health Coverage, national health insurance Scheme, Ghana, Perception of poverty, targeting the poor, financial risk protection, means testing. Further search was conducted using keywords related to each specific objective. **Table 2 (See Annex)** presents keywords/combinations used to search for literature on each specific objective.

2.4.4 Limitation of The Study

Reliability of various sources of data could not be guaranteed. Available statistics on some health indicators at various websites had some disparities making it difficult to interpret. Current reports on some indicators such as poverty levels in Ghana could not be accessed because they have not yet been published; hence some relevant population figures were used based on assumptions and extrapolations. This study is a review of literature and secondary data and in some cases personal observations. I acknowledge that primary data could have allowed access to key informants to gather information which would have reflected the current situation in my country. Based on this, I acknowledge that there is more scope of research to be done on this subject.

2.4.5 Applied Conceptual Framework

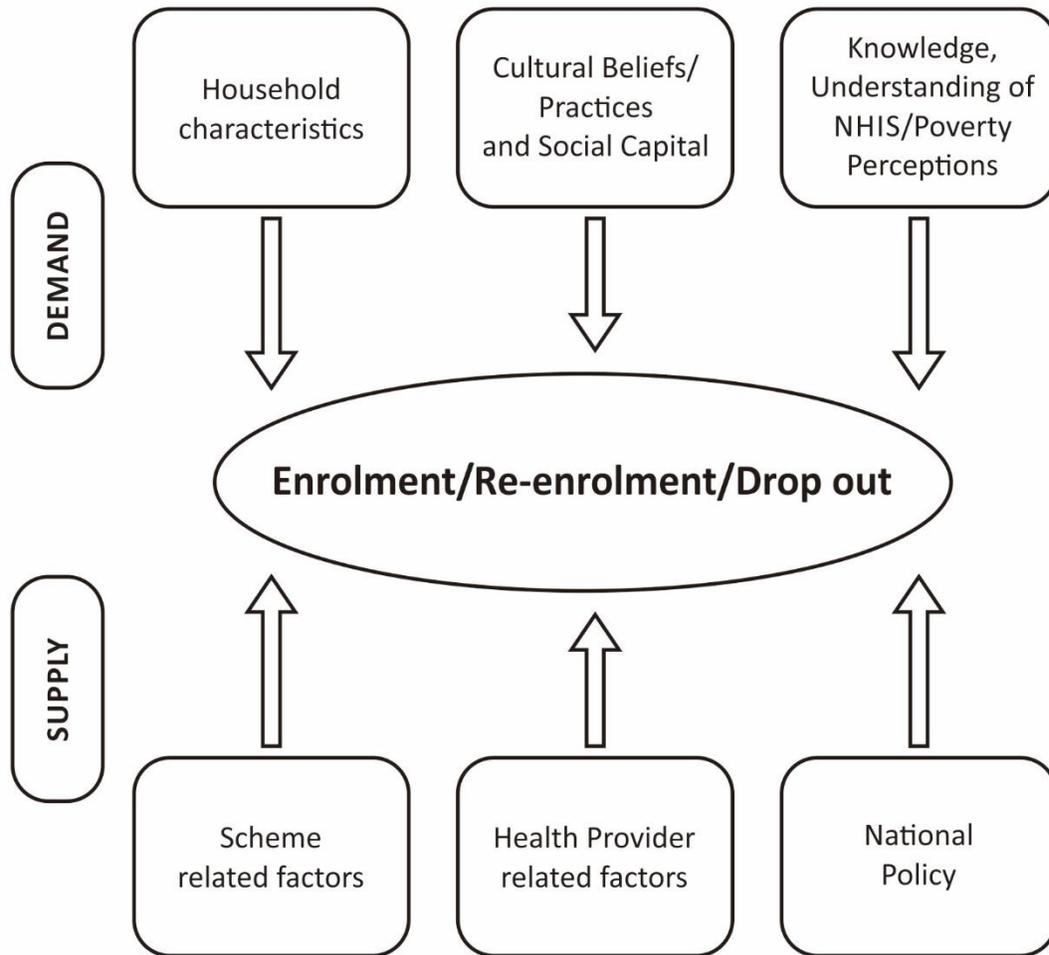


Fig 1. Process to theory of change of factors affecting uptake and enrollment of Voluntary and Community Based Health Insurance.

Adapted from Panda et al⁴¹.

Fig. 1 shows the conceptual framework used for the literature review. It was adapted from Panda et al, that was developed for the purpose of a multicounty study on enrolment in Community Based Health Insurance (CBHI)⁴¹. This framework basically distinguishes between demand and supply factors that affect (re)enrolment. Though Ghana's NHIS is not a classical type of CBHI, enrolment of the poor is voluntary. This justifies why this framework was used. Demand side and supply side factors can influence positively or negatively individual and households' decision on enrolment. The demand side factors can be grouped under three broad headings namely: Households characteristics; Cultural factors and Social capital; Knowledge and understanding of insurance and Perceptions of poverty. The supply-side factors can be categorized under three main headings namely: Scheme related factors; health provider-related factors; and National Policy.

1. Demand Side Factors

(A) Household characteristics: It is assumed that generally, the more risk averse an individual is, the more insurance coverage they will buy. However, the socio-economic status of individuals and households may determine their ability and willingness to enroll into an insurance scheme. Notwithstanding the fact that the poor may be aware of the benefits of health insurance, economic constraints due to indirect cost or perception of residual cost may limit them from enrolling. In areas where there is high illiteracy rate, unawareness of the scheme, exemptions and the benefits may be limited thereby affecting negatively one's decision to enroll. Cost of enrolment for all individuals from a large household poses economic constraints which could deprive households of their basic needs such as food in the worst case scenario.

(B) Cultural beliefs/Practices and Social Capital: Cultural perceptions on illnesses and diseases can inform individuals' decision on enrolment into the insurance scheme. Social Capital in this framework is explained as informal trust building derived from social connections and interactions. Direct experiences with the scheme and the health services providers or perceptions informed by others can be a crucial drive in influencing one's decision to enrolment. Good individual and community engagements with the insurer and health services providers bring in transparency, build trust and foster a lasting relationship which largely influences one's decision to enroll.

(C) Knowledge and Understanding of NHIS/Perceptions of Poverty: Rationally, people think of healthcare only when they need it. Understanding of the benefits of being insured is an essential factor, which drives one's decision to enrollment. Knowledge on the health risk, risk pooling and cross-subsidization and solidarity principles of health insurance when adequately disseminated, affects households' decision to enroll. The decision to enroll may be challenging for individuals particularly in areas where there is low awareness of insurance coupled with high illiteracy rate. Individuals and households with high health risk are more likely to enroll into the insurance than those with lower health risk because of their expected health needs.

Community perceptions about poverty may influence the decision of the poor to enroll. For instance, when poverty is associated with bad connotations as 'lazy' or 'bad luck', poor people would withdraw from the benefits of exemption arrangements in order to avoid shame.

2. Supply Side Factors

- (A) **Scheme related factors:** Factors such as convenience of location of district office; enrolment process; the price and benefits of insurance; and staff attitudes and transparency also affects individual's decision to enroll. When offices are located far from the communities it serve, affordability of cost of transportation and other indirect cost may be problematic for the poor. Long waiting periods and bureaucracies involved in the entire enrolment process affects especially the decision of the poor to enroll. Poor staff attitude and corruption at the scheme reflects disrespect and less transparency about scheme administration creating mistrust which may affect individual's willingness to enroll.
- (B) **Provider related factors:** Factors such as availability and access (geographical) to good quality (technical and perceived) healthcare; adequacy of service delivery; and staff attitude towards NHIS members may attract or prevent individuals from enrolling with the scheme. These factors work in an inter-related manner to affect the individual's decision to enroll or not to enroll.
- (C) **National Policy:** National level policy and program arrangements is crosscutting between scheme related factors and provider related factors. The National policy refers to decisions and arrangements by the scheme (NHIA head office, Ministry of Health and Government of Ghana) that stipulate how the scheme should be implemented, arrangements made for enrolment of the poor and services delivered to the members. Individual's interactions with scheme and health providers in line with these policies may influence their perceptions and decision to enroll, re-enroll or drop out.

CHAPTER THREE: FUNCTIONS OF THE NHIS IN RELATION TO ENROLMENT ARRANGEMENTS FOR THE POOR

3.1 SELECTION OF THE POOR

The mandate of the National Health Insurance Authority according to the National health Insurance Act 2012 is to ensure that there is equity in healthcare coverage especially for the poor in order to protect them from financial hardship, which may lead to catastrophic expenditure and impoverishment. The end to this goal is to improve the health of the poor¹⁶. The policy stipulates that enrolment of indigents unto the scheme is without any cost burden on the indigent. Criteria as contained in the NHIR were developed to identify the indigents (a subgroup of the poor). An indigent in these criteria is identified as someone who has no visible source of income or unemployment; has no fixed place of residence; lives with a person who is unemployed; and one who does not have a constant source of support from another person³⁰. These criteria were found to be too restrictive and not actionable in that, it excluded almost everyone. Such people defined by the criteria are rare to find in Ghanaian communities. In Ghanaian communities, those living in abject poverty are those without stable jobs and regular income and who cannot afford health insurance for themselves and their households^{23 42}.

In 2011, the NHIA in partnership with the Social Welfare, began to register LEAP beneficiaries in order to expand coverage of the poor. LEAP is a social cash transfer programme that provides cash grant to extremely poor households in Ghana. It is administrated under the Ministry of Gender, Children and Social Protection⁴³. However, this did not yield much results because the LEAP program uses a stringent Means Test for selection which resulted in a small number of beneficiaries^{35 44}.

In 2013, the NHIA identified other existing pro-poor and social intervention programme such as school feeding programme; Children receiving free school uniform; Orphanages, Children in special schools and a lot more. Members belonging to these programmes were then registered. This expanded coverage of the indigents to over one million³⁵. Apart from being exempted from paying premium, an indigent does not pay for registration or processing fee which is paid by other member categories in order to obtain the NHIS card for accessing healthcare. That notwithstanding, there may still be indirect costs (travelling, staying overnight if coming from afar) and there could be opportunity costs as well (waiting time etc.) borne by indigents. Apart from pregnant women and children under 5, all exempt other categories including indigent after been registered and given a national health insurance card, fulfil a one month waiting period before being able to access healthcare³⁰

Category of persons eligible as indigents for registration unto the NHIS

- Beneficiaries of (LEAP).
Some of the criteria for identification by a means test include; Aged 65yrs and above without any form of support; severely disabled without productive capacity; orphaned and vulnerable children; and extremely poor or vulnerable households with pregnant women and mothers with infants⁴⁴ .
- Children who are receiving free school uniform.

These are designated schools under the Ministry of Education per their own criteria in some districts.

- Children benefitting from the school feeding program

These are selected schools in some districts by the Ministry of Social Welfare and Gender protection and Ministry of Education by their own criteria

- Children in Orphanages across the country
- Children who are blind, deaf and dumb in special schools and in the community
- Persons with mental health disorder within mental homes and in the community who can be reached
- Prisoners who are reported poor by the Prison Officers
- Approved list from the Social Welfare Department by their own selection criteria.

3.2 COVERAGE OF THE POOR

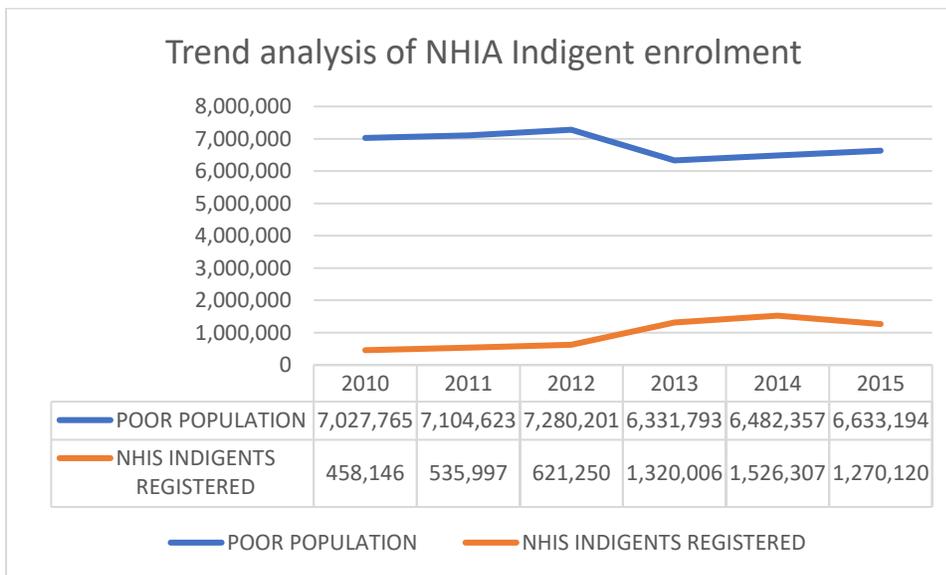


Fig. 2 National Indigents enrolment trends in NHIS, Ghana

Source: NHIA, 2015

Fig 2. shows an increase in number of indigents enrolled from 2010 to 2013. Enrolment seem to have been stable after 2013. In 2013, there was about 50% increase in number enrolled. This could be attributed to the expansion of NHIA coverage to include the poor in some existing social interventions programs in June 2013 such as orphanages; prison inmates; LEAP beneficiaries; mental homes; and children in school feeding and free school uniform programs. Frequent registration exercises for head porters in the country could also be one of the attributable reasons for the increase³⁵. The increase in the number enrolled though commendable, is proportionally inadequate. The average poor population projection was about 7million (2010-2012) and about 6million in 2013 to 2015⁴⁰. Out of 6,633,194 of the poor population, 1,270,120 had been registered as indigents at the end of 2015. Thus 19.1% of the poor population had been registered assuming there are no leakages. The question of

what remains to the remaining 80% of the poor population who have not been registered as indigents remains unanswered. It could therefore be assumed that the unregistered poor may not be aware of premium exemptions or might have been excluded due to insensitivity of the indigent eligibility criteria. Such ones could be constrained with premium payment. Additionally, the uninsured poor who falls sick could be avoiding or delaying seeking healthcare due to financial constraints which may lead to poor health outcomes. As part of the NHIA's corporate objectives, it sought to increase coverage of the poor and indigent to 70% by 2014^{38 35}. Coverage of the poor was 23.5% of the total poor population and 14.2% of the country's population. Realization of this goal as at the end of 2014 was still pending. Efforts have been made to achieve this which included the enrollment of beneficiaries of existing pro-poor interventions in Ghana such as LEAP; enrolment of orphans in orphanages; head porters among others. These efforts have still not yielded much improvements as shown in the stagnating trend (Fig. 2). Plans of devising a new means test for effective identification of the poor is also underway⁴⁵. Deducing from this, the NHIA's mandate of protecting the poor from catastrophic health expenditure has not been fully accomplished given that a large proportion of the poor population have not been registered as indigents.

- Targeting the poor for premium exemption has not been effective over the years yielding low rates of indigent enrolment. Under coverage of the poor and leakages to those who are not supposed to benefit might be pertinent problems with the current selection criteria. Review of the selection criteria (means test) to efficiently reach the poor true in communities is a suggestive way of improving indigent enrolment under the NHIS.

CHAPTER FOUR: DEMAND SIDE FACTORS THAT LIMIT ENROLMENT OF THE POOR AND INDIGENTS UNTO THE NHIS

This chapter examines the demand side factors that could limit the enrolment of the poor and indigent unto the NHIS.

4.1 HOUSEHOLD CHARACTERISTICS

The summary effect of three variables are estimated viz employment and socio-economic status; household size; and education. Socioeconomic status in terms of income/expenditure/wealth quintiles. Socioeconomic status was differently defined by various authors. Some assumed income as socioeconomic status. Others considered that it was a reflection of household expenditure whereas some used the wealth quintiles to represent it. Income, expenditure and wealth are not the same. However, each one of them gives a reflection of socioeconomic status of individuals and households. This made it reasonable then to use these definitions interchangeably as an indicator of socioeconomic status.

Employment and Socioeconomic status

Poverty has been found to be a major cause in low enrolment in SHI⁴⁶. Various studies done in different regions in Ghana suggested that people with lower socioeconomic status were less likely to enroll unto the NHIS. This emphasizes that, socioeconomic status is a major contributory factor to low enrolments^{33 34 47 48 49 50 51 52}. Notably, indigents are exempted from premium payment hence affordability of the premium no longer becomes a barrier. There are however indirect and opportunity cost associated with an indigent's attempt to enroll. Travelling to the NHIA district offices to enroll may not include only transportation cost but walking along some parts of the journey which is common in the rural areas. This becomes a barrier to a proportion of the population who cannot afford these additional cost hence hindering their decision to enroll. In some instances, the travel cost incurred by some household is equivalent to the premium or even more (e.g. transportation cost to the NHIS District Office and some unofficial payments)⁵³. At Barekuma, a rural community in the Ashanti region of Ghana, a study highlighted that, the travel cost incurred per individual per round trip to the NHIA district office to register was about GHS 10 (USD 6.7) at the time of the study⁵³. Supposing two people in a household are to register as indigents, they spend averagely GHS 20 and even more in current situation on travel cost only. Obviously, such individuals will perceive no gains in enrolling considering the indirect cost involved which could constrain their tight budget spent on basic needs such as food for the household. In such a dilemma, health insurance becomes a tradeoff for basic household needs. Regular community registrations can conveniently reach indigents and the poor.

Conventionally, informal sector workers have earnings which should enable them to enroll, however there are some of them in low middle income countries like Ghana who are poor, yet are not selected as indigents for premium exemptions^{27 54}. Informal sector workers who engage in trade, agriculture and fishing may not have a reliable and regular income due to seasonality of these activities and can face challenges with affordability of the premium^{42 53}. These financial variations caused by the seasonal changes may explain why individuals in the lower wealth quintile could not afford to enroll unto the scheme. For these informal sector

workers, the timing of the premium payment could be unfavorable particularly during seasons of the year when there are financial priorities such as payment of children's school fees. Arrangements for premium to be paid when the season favours more income generation is likely to remove the barrier to non-enrolment.

- Indirect cost incurred such as travel cost to the NHIA district office could sometimes be as high as the premium itself. This may create a huge barrier to enrolment among those who qualify as indigents.
- Poor informal sector workers such as those who engage in trade, agriculture and farming may be incapable of enrolling due to financial variability within the seasons.

Household size

Several studies revealed that as the household size increases, the likelihood of enrolling unto the NHIS decreases^{33 47 55}. Opposing to this, Jehu Appiah et al, in their study on who is enrolling and who is not in Ghana NHIS, found out that, larger households were more likely to enroll than smaller households³⁴. Same study emphasized that the indigents have better access to NHIS than the poor. There may however be confounding here. Bigger families are often found in poorer communities where income may be lower and limited access to healthcare. Majority of the studies indicated that large household was less likely to enroll. Increasing size of household is coupled with increasing responsibilities such as provision of food, children's education and other basic needs. Increased spending on these commodities may increase the financial burden on such households especially those in the lowest wealth quintile, making health insurance unaffordable. Notwithstanding the exemption policy for indigents, indirect cost incurred in enrolling all members of the household could sometimes be problematic because it constrains their financial budget and could deprive them of their basic needs. For the poor who do not enjoy the exemption, enrolling all household members puts a huge burden on their financial budget hence the less likelihood of enrolling. Some households therefore selectively prioritize health insurance cover for some members of the family especially the vulnerable ones like women and children⁴⁷. Again, convenient ways of registering indigents and poor households should be of a high considerations.

- Large households, whether they enjoy premium exemption or not incur indirect and other additional cost on all the members. The total cost if too constraining on their budget may discourage them from enrolling.
-

Education

Many studies have identified low educational level as a major contributing factor to low NHIS enrolment rates in Ghana NHIS^{33 34 47 48 56}. The level of education emerged as a factor that determines an individual's decision to enroll. All the studies negatively correlated with low educational level to NHIS enrolment. These findings correspond with enrolment rates among tertiary level South African women and their counterparts with low level of education⁵⁷. This confirms the expectation that education endows individuals with skills and knowledge, providing better understanding of the insurance principles and their health risk, which informs their decision to enroll as cited by Akazili et al, 2012³³. Higher education is expected to lead

to employment which generates income translating into affordability for the health insurance cover. Increased knowledge about insurance principles and ability to pay are potential predictors of high enrolment rates and vice versa.

- Drawing from the aforementioned, low educational levels suggest individual's inability to adequately understand insurance principles and health risk. This could negatively affect individual's decision to enroll.
- Less education intuitively translates to lower employment rates resulting in low socio economic status and the inability to enroll as indigents or the poor taking into consideration, the direct cost and indirect cost involved with enrolment

4.2 CULTURAL /TRADITIONAL BELIEFS AND SOCIAL CAPITAL

This involves the sociocultural aspects that negatively influence the community's decision to enroll onto the NHIS; trust and support derived from social networks can affect enrolment onto the NHIS. Communities interact based on their belief systems. Such interactions build trust and support⁵⁸.

Cultural Beliefs

Cultural beliefs about illnesses, health insurance and healthcare delivery to a considerable extent affects one's attitude towards enrollment and health seeking behaviour. A study done by Gyasi et al, brought out the fact that, a section of Ghanaians including rich and poor preferred the use of traditional medicine because it was assumed to be natural hence has low or no side effect compared to orthodox medicine. The preference for traditional medicine over orthodox medicines is attributed to the belief that, traditional medicine is made from herbs, leaves and trees and does not contain any form of chemicals as conventional medicine does hence it is safe to use⁵⁹. Findings on values and preference of health beliefs as part of the traditions of women in Northern Ghana were that most of the women in these communities preferred to give birth at home in order to be able to use their herbs which they believe enhance safe delivery whose usage otherwise will not be allowed at the health facilities⁶⁰. The formal health services conflict with these cultural practices. What is considered a culturally normal practice may not be acceptable in the formal healthcare. This could demotivate such women from enrolling onto the NHIS since it contracts only a network of formal healthcare. This finding is consistent with practices among some women in other parts of Africa who believed that pregnancy is a test of endurance therefore preferred traditional birth procedures formal⁶¹. Even when there were complications during labour, these cultural practices were still performed. They only sought formal healthcare in the event when it failed. Certain cultures find services rendered by traditional healers culturally acceptable because these healers are close to them, understand their cultural background and language^{62 63}. Members in the community usually prefer culturally acceptable healthcare. For instance, certain cultures consider examinations done by male health professionals as exploitative and disrespectful particularly in maternal healthcare⁶⁴. The Ghanaian culture displays respect for the vulnerable including pregnant women, the aged and the poor. The use of disrespectful words and culturally unacceptable demeanor of some health professions meted out to clients especially pregnant women, the aged and the poor become a major barrier to their decision on

enrolment unto the NHIS. In certain cases, health professionals used abusive language to describe poor people and their appearances⁶⁵. Fenny et al, in their study on factors that contribute to low uptake of NHIS in Ghana identified that the powerplay exist in families. In these families, it was the traditional role of the man to take pertinent decisions like healthcare for the family. Women had to seek permission from their husbands regarding decisions to enrolment and seek healthcare⁶⁶. Such dominance in household decisions, could exclude some members of the family from enrolment unto the NHIS. Studies done in neighbouring countries Benin revealed that, some communities preferred to support individuals financially only when they were sick rather than to health insurance⁶⁷. In another study, communities perceived health insurance or setting money aside for healthcare as inviting diseases or illness⁶⁸. Enrolling unto the NHIS implies setting money aside to take care of future disease occurrence. It also suggest inviting disease since it's objective is for accessing healthcare should it occur. Certain cultures believe that this practice invites sudden diseases and illnesses unto an individual therefore it is not good to talk about diseases or buy health insurance⁶⁸. Poor individuals, including indigents or rich Individuals with such cultural orientation may refuse to enrol.

Trust

Trust precedes an individual's decision to enrol or not to enrol with the NHIS. People's trust in health insurance is strengthened when the scheme can ensure that premiums paid correspond with the stated benefits in the policy and quality healthcare is rendered⁶⁹. Level of trust among community members and trust in healthcare provider affects the decision to enrol unto the NHIS and in healthcare utilisation as suggested by a number of studies. A study on improving health insurance coverage in Ghana highlighted findings on negative practices of health providers such; under supply of prescribed medicines; and taking monies from clients who attended the health facilities outside working hours. These built clients mistrust for healthcare providers and reduced confidence in the NHIS leading to individual's decision not to enrol or re-enrol⁴². Fenenga et al, studied on social capital and active membership of NHIS in Ghana and showed that people with lower levels of trust in health service in terms of provider-client relationship and health worker attitudes were less likely to enrol unto the NHIS⁷⁰.

Mistrust may be developed when derived benefit is not as promised by the policy such as delay and frustration in acquiring insurance card, poor quality of care in relation to poor attitude provider attitude among others. Individuals who encounter bad experiences at the scheme and the health providers share these among family and community members. Information spreads fast in communities especially those with strong social ties because people listen to one another. Such bad experiences about scheme and health providers when shared with others build a negative perception which may persist in the community for a long time. Opinions of peers are always important. As humans, we tend to conform to what we see others do. This could negatively affect individual's decision to enrol. This could work the other way round when people have good experiences. Andrzejewski et al, also observed that, informal social networks such as market place had influence on health knowledge which affects individual's decision to enrol⁷¹. These types of social capital have potential effects on dissemination of health knowledge and health insurance. low levels of trust among community

members about NHIS and its contracted health providers negatively affects one's decision to enrol^{51 71}.

The poor and the vulnerable in the society are supported by social groups such as extended families, friends and the larger community. Strong social ties, solidarity and good leadership are positive factors that influence individual's decision to enrol. For the poor, financial support for enrolment and assistance for administrative procedures at the NHIS district offices and health facilities is sometimes obtained from members of the family and their social networks. These suggest that the decision to enrol and to seek healthcare to a large extent is influenced by social networks⁵¹. Indigents and the poor who lack these influential factors may have no motivation to enrol.

- Strong cultural beliefs and practices about health and healthcare delivery if not in line with formal healthcare practices are a major hindrance to enrolment of all including the poor and indigents
- Social networks and interactions in societies build trust, solidarity and support among community members. When negative stories about the scheme and health providers are peddled in the community, members lose confidence and trust in the scheme and its contracted health providers. These negatively affects people's decision to enrol into the NHIS.

4.3 KNOWLEDGE AND UNDERSTANDING OF NHIS/PERCEPTIONS OF POVERTY

Understanding of risk pooling, redistribution and health risk principles informs people on the benefits of the NHIS hence motivating them to enrol. The way people perceive the poor status may either isolate them or give them the confidence to present themselves as indigents for exemptions.

Knowledge and Understanding of NHIS

In the Ashanti region, a study highlighted poor level of awareness and basic knowledge of NHIS among the inhabitants who would not enrol because they did not usually fall sick⁷². Similarly, in some parts of the Central, Eastern, Brong Ahafo and the Northern regions people were not enrolling because they claimed they rarely fell sick and on occasions when they fell sick, they resorted to herbal medicines for cure. As a result of non-usage of the insurance card to access benefits of the NHIS, some refused to renew their cards when it expired. This may suggest their low level of knowledge on the risk pooling principles of the NHIS⁶⁶. Tawiah's study among slum dwellers in Agbogbloshie, a suburb in the Greater Accra region showed that, majority of the household's expenditure was used on luxury goods rather than investing same amounts in their health insurance⁴⁷.

Contrary to these studies, Jehu-Appiah et al, in their study somewhere in the Central and Eastern regions of Ghana pointed out that, majority regarded the NHIS as an advance payment towards health needs. Households in their study showed good understanding of risk sharing principles of the NHIS. Only a small portion regarded it as free health delivery by the government. They similarly recorded that, some people did not renew their NHIS because they did not access healthcare in the previous years. The healthy were less likely to enrol⁵⁶. Again, a study in the Central and Eastern regions, brought to light inhabitants fair knowledge about the insurance as prepayment towards healthcare. She however showed in her findings that, the people did not understand the risk sharing and redistribution principles of the

insurance in the sense that, they did not value the need to pay same premium given that individuals had different levels of healthcare needs⁴². In a study to understand the perceptions of the socially excluded in the NHIS conducted in the three ecological zones of Ghana, Asante et al, made observations such as high awareness of the NHIS yet there was poor knowledge about its concepts. Respondents regarded health insurance as something for the poor and sick suggesting their poor knowledge in risk pooling and sharing principles of the NHIS⁷³. In the Upper east region, respondents of a study done by Dalinjong et al, demonstrate that, with NHIS subscription, one doesn't have to make direct payment while accessing healthcare. The prepayment principle of the NHIS was well understood by this population⁷⁴. In the Brong Ahafo and Northern regions of Ghana, respondents of a study understood NHIS on the view that it covered medical care for the low-income households and individuals who could not afford high cost of healthcare at the point of access⁴⁸.

When healthy people are not motivated to enrol onto the NHIS because they don't usually fall sick, it demonstrates inadequate knowledge on risk perception. In risk pooling, both the high and low health risk individuals are pooled into a general fund from which they are reimbursed when there is need of healthcare thus the cost of illness is shared among all the members of the fund¹³. There is cross subsidization between the rich and the poor, the healthy and unhealthy. Knowledge and understanding of NHIS principles in terms of risk pooling and redistribution influences people's decision to enrol. People's decision not to enrol based on the reasons such as: good health status and rarely fall sick; health insurance is for the poor and sick could be due to low literacy and information among the population. Low enrolment and refusal to enrol could be attributed to people's low understanding of the NHIS. Even though decision to enrol is a demand side factor, it can be facilitated by increased information dissemination and education on NHIS principles and functions, a supply side factor.

- Exemptions for the poor under the NHIS may be laudable and a motivating factor for enrolment of particularly the indigents. However, if they are not educated on the concepts and principles of the insurance and health risk to improve their understanding they will see no gains in enrolling.

Perceptions of Poverty

Individual's perceptions about poverty centered on indicators such as employment, ability to put children and retain them in school, food availability, physical appearance, assets ownership and health seeking behaviour. Other perspectives on poverty were on income, inability to meet the daily needs of the family. Some others described poverty from the individual factors and the structural factors. Some communities described poverty as a condition which has varying degrees of expression in terms of material resources and financial stability which could be temporal or permanent. In one of the farming communities, poor people were described as those who did not have farmlands or had just a small piece of land. In another farming community, the people attributed poverty to laziness especially for the strong and healthy who simply did not want to farm on their own lands or work on other people's farms to earn an income. Similarly, the fishing community perceived poverty as seasonal. However, the urban community regarded the poorest as the unemployed or those who engaged in casual jobs such as construction site laborers earning them very minimal wages. Children from the poorest households did street hawking to supplement the low household income. Regarding education of children it was revealed that, the poorest are those who could not afford children's education beyond primary level and if they did, their children attended public schools. Considering availability of food and appearance as a measure of poverty, the communities described the poorest as those who could not afford three square meals and often ate one heavy meal a day to sustain them for the rest of the day. Others also perceived the poorest as those had unkempt appearance due unaffordability of change of clothes. Some communities also characterized the poor people as those who lived in mud houses and shared bathroom and toilet facilities with other households. They possessed few

assets such as radio, a mat and a few cooking utensils. These various opinions were highlighted by Ayeetey et al, in their study on community perceptions on poverty⁷⁵.

Kotoh's study among a community, noted poor individuals as those who have unstable source of income and lived on the benevolence of society. It also highlighted that the poor struggled to feed themselves and to survive. The poor in this study were also described as those who could not afford the NHIS premium⁴². A study done among head porters in Ghana associated poverty with deprivation of basic necessities of life, political alienation and social deprivation of community activities⁷⁶. Certain communities related poverty to poor income management, laziness, bad luck and God's will⁷⁷. Castillo et al, studied on perceptions of poverty in Ghana among social work students. Some of the social work students associating poverty with people who did not want to work. Others attributed poverty to the inadequate social and structural factors. Another section perceived that poverty is due to lack of individual's motivation⁷⁸. The National Health Insurance Law (LI 1809) defines the poorest category as those who are unemployed with no visible source of income, no fixed place to stay, living with people who are unemployed and people who do not have a consistent support from another persons¹⁵.

The community settings and the groups among which the studies were conducted highlights differences perceptions of poverty. This is to show that, poverty has an individual, social and contextual dimension. The community perception of poverty suggested that even people who were employed could be poor at a point in time due to seasonal changes as in the case of the fishing community. Poverty was therefore not directly linked to unemployment in most of the communities but to low and inadequate earnings for supporting the households. Similarly, poverty was associated with social and structural factors because it is assumed that, people may put in their best to earn a living for themselves and their households with the available resources yet challenges outside the domains of their control such as instability in country's economic situation could plunge them into poverty⁷⁸. While the urban communities placed more emphasis on income as an indicator of poverty, the rural settings put greater emphasis on social and environmental factors. The rural communities also attributed bad luck and God's will to poverty which could have been possibly influenced by cultural and religious beliefs⁵⁶⁷⁷. These perceptions to a large extent may affect people's decisions to enrol especially in the case when poverty is attributed to bad luck or laziness. Laziness, thus persons not wanting to work and less motivation as an indicator of poverty may be attributed to the reasoning that poor people do not put in much effort to keep themselves out of poverty. No one would want to be labelled as having bad luck or being lazy. These perceptions can affect the willingness of the poor in accessing the exemption for indigents. These perceptions may not always match with the eligibility criteria applied by the NHIS, apart from the criteria being less sensitive and specific. This may affect the acceptability of the criteria.

- The community perceptions about poverty is totally different from the NHIS criteria for selection of Indigents. From the community perspectives, many people could be poor but may not satisfy the selection criteria for indigent exemption by the NHIS because it may not match their perceptions.
- The NHIS indigent eligibility criteria is a little too sensitive that it is not covering all the poor in the communities.
- Some of the community views on poverty could be adopted by the NHIS for better coverage of the actual poor in order to improve its sensitivity and avoid leakages.
- The poor being labelled lazy or having bad luck may isolate a number of people from presenting themselves as indigents for premium exemptions because of shame hence their refusal to enrol

CHAPTER FIVE: SUPPLY SIDE FACTORS THAT LIMIT ENROLMENT OF THE POOR AND INDIGENTS UNTO THE NHIS

The supply side factors that limit the poor and indigent enrolment include: Scheme related factors; Provider related factors; and factors related to National Policy. These work interrelated to affect individuals experience with the NHIS and the credentialed health providers and their decisions to enrol.

5.1 SCHEME RELATED FACTORS

The scheme defines who pays and who are eligible for exemptions; designs the benefit package; contracts health providers for service delivery to its members; develops provider payment mechanism and modalities; claims management; and establishes stakeholder engagements. The scheme is implemented at the national level, the regional level (10 regions) and the district level (158 districts)¹⁶

Who is exempted?

The NHIS membership registration is categorized as follows: Informal; SSNIT contributors or formal sector workers; SSNIT Pensioners; children under 18years; the Aged (above 70years); Indigent; pregnant women and security services. The aged, pregnant women children under 18 and Indigents are exempted from premium payment and can access healthcare without any limits while their NHIS card is active¹⁶. There is also no cost sharing including copayments, coinsurance or deductibles at the point of accessing healthcare⁷⁹. The membership enrolment is subject to an annual renewal and a waiting period of one month for individuals who fail to renew a month before the expiration of the membership card (previously three months). Except for pregnant women and children under 5, all new registrants including indigents have a one month waiting period before accessing healthcare with the card **Error! Bookmark not defined**. Apart from list of members submitted by the social welfare who qualify for indigent registration, the NHIA district offices cannot use their own discretion to identify a potential member who walks to the office to register. Even when all evidence shows that such a person is poor and cannot afford the premium, the office will have to refer this person to the social welfare for assessment and certification. This poses a huge challenge to the poor who are not aware of the arrangements with the social welfare and walk directly to the district office to present themselves for premium exemption. In the case of indigents and the defaulters of timely annual membership renewal, the district office do not have the mandate to waive off the one month waiting period to allow access to healthcare. Such defaulters while accessing healthcare would have to pay out of pocket. These administrative hurdles become major barriers for enrolment of the poor and indigents as people may not want to go through it. One administrative office where indigents could be identified and registered at the same time could make things easier and simpler.

Membership

Registration and renewal of membership takes place at the NHIA District offices and other designated sites such as, workplace, schools, homes and hospitals. An instant biometric identification card is issued out after all certification has been done. With this NHIS card, members can access NHIS credentialed facilities when ill. The implementation of the instant biometric card registration has improved card production for members of the NHIS³⁵.

However, frequent interruptions of network connectivity and shortage of consumables stalls its smooth operation and sometimes prolongs the entire process. Clients who travel from far and near to register sometimes experience long waiting hours at the district offices. In worst case scenario some pass the night at the offices when it goes some days. This to a considerable extent may discourage individuals particularly the poor and indigent who may have financial constraints in commuting back and forth to the district offices to have themselves registered. Registered members are provided with a booklet that contains members rights, obligations and privileges. They are also given a list of credentialed health facilities within their area of residence where they can access healthcare. Education is given to the registered members on the benefits, obligation, how to identify credentialed providers and procedures for lodging a complaint. These materials are written in English and may not be understood by all. All members are to renew their membership at the NHIS District offices including the poor and indigents one month before its expiry for continuity of healthcare access. **Error! Bookmark not defined.** The annual renewal of the card may be problematic for uneducated clients especially the indigents some of whom may not remember the date of expiry and only get to know at the point of accessing healthcare. They may end up paying out of pocket constraining them financially or completely avoid healthcare which leads to poor health outcomes. The one month waiting period for the indigents may also be a barrier for enrolment because, within this period, financial cost incurred due to access to healthcare must be borne by the indigent or the poor. District office staff responsiveness to clients such as poor customer relations and poor staff attitude towards the poor and indigents who may be uneducated to understand the many questions asked as part of the registration process can also be a barrier limiting enrolment. In moments when district offices experience interruptions in network connectivity slowing down biometric registration, staff client interaction is very key in assuring clients trust and confidence in the scheme.

Benefit Package

The NHIS has a comprehensive benefit package which is the same for all members including indigents thus ensuring horizontal equity among all its subscribers. The benefit package covers about 95% of the disease burden in Ghana at all healthcare levels. These include: outpatient and curative services; medicines on the essential medicine's list as published in the NHIS medicine's list; inpatient services; emergency care; maternity services; oral health; symptomatic and opportunistic infections due to HIV and AIDS. The benefit package excludes services such as cancer treatments (only breast and cervical cancer are included in the package); organ transplants; cosmetic treatments and parallel government programs such as TB and HIV and Aids anti-retroviral medicines⁷⁹.

Credentialing

The National health Insurance Act 2003 (Act 650)¹⁵ gives the NHIA the mandate to credential healthcare providers to ensure accessible healthcare of good quality to its subscribers. A minimum set of criteria is outlined in the credentialing tool which healthcare providers need to satisfy before being considered for credentialing. The NHIA credentials health facilities that have been certified by their primary regulators and are allowed to operate example; HFRA, CHAG, Pharmacy Council etc. A total of 3,822 health facilities across the different levels had been credentialed between July 2009 and December 2013³⁵. The different levels of credentialed facilities include: CHP Zones (Community-Based Health Planning and Services); Chemical Shops; Clinics; Dental Clinics; Diagnostic Centres; Eye Clinics, Health Centres, Laboratories, Maternity Homes, Pharmacies, Physiotherapy, Polyclinics; Primary, Secondary

and Tertiary Hospitals; and Ultrasound. Ownership by government represented 54.3% facilities credentialed, private ownership represented by 39.5%, ownership by faith based or mission represents 5% and 1% representative of the Quasi government such as the Military Hospitals. These number of credentialed facilities are disproportionately distributed across the ten regions of Ghana. The most densely populated region in Ghana, Ashanti had the highest number of credentialed facilities (619), followed by the Eastern region (514). Greater Accra region in which the capital city is located had 440 credentialed facilities. The Upper west and Upper East regions, among the poorest regions in the country had 195 and 211 credentialed facilities respectively^{17 40 35}.

Table 4. Accessibility mapping of Health facilities in rural Ghana district⁸⁰

	District Hospital	Health Center	CHP Compound
High access zone areas (km) ¹	36km	<8km	<5km
Moderate access areas (km) ²	54km	8-16km	5-8km
Low access zone areas (km) ³	72km	>16km	>8km

¹Health Facilities with the highest visits, ²Health Facilities with moderate visits, ³Health Facilities with the least visits

The average distance travelled to a district hospital (referral centre) is between 36km-72km. A lower level CHP compound and Health Centre can be accessed between an average distance of 8-16km. This shows how sparsely distributed health facilities are in rural Ghana. Access by majority of the people is by walking especially where there are bad road networks⁸⁰. The disproportionately distributed health facilities may not reach all subscribers particularly rural dwellers many of which may be poor. This may be a limiting factor to their enrolment unto the NHIS.

Claims Administration and Payment Mechanism

The scheme contracts health providers who successfully go through the credentialing process. Healthcare providers are reimbursed by a mix of payment mechanism. Capitation (for preferred primary providers) though not in all parts of the country and D-RG's are used for Out-Patient, Inpatient and specialized care. Medicines are paid based on fee for service³⁰. Claims are made within specific guidelines for reimbursement^{15 42}. The NHIA district offices are responsible for claims administration. This entails receiving claims from credentialed healthcare Providers for services rendered to NHIS members, vetting and approving for payment. Claims processing can however be very slow. Health providers can wait sometimes for about 6months before they are reimbursed⁸¹.

Stakeholder Engagement

The NHIA offices engage its stakeholders (Community, healthcare provider) in regular review meetings to deliberate on achievements, challenges and best ways of improving the scheme. They also provide support visits to the healthcare providers to educate them on claims administration and render feedback on vetted/ rejected claims and payments **Error! Bookmark not defined.** Disputed claims and delays in claims when not well communicated could build mistrust on the provider side for the NHIA. This dissatisfaction could be translated

into poor attitudes towards the members of the scheme and sometimes withdrawal of services such as happened with CHAG facilities in 2013.

5.2 PROVIDER RELATED FACTORS

Health provider related factors align with geographical availability of health facilities; quality of care; service delivery adequacy; availability of medicines; and provider attitudes.

Availability of health facilities

Geographical availability of health facilities, their location, human resources and the infrastructure and services of public health facilities are provided by government of Ghana and its ministry in charge of health infrastructure development⁸¹. Though the health sector medium term goals highlighted an increase in the number of health facilities, it did not fail to acknowledge the poor access particularly in the rural areas and northern Ghana⁸¹. Other studies have also highlighted inadequacy and lack of access to health facilities in some communities in Ghana^{52 55 66}. Sometimes the unpassable and unmotorable nature of the roads due to rains deter community members from accessing the health facilities⁸². These are potential barriers to enrolment unto the NHIS since its full benefits may not be reaped especially when there is difficulty accessing healthcare⁵⁵.

Inadequate health facilities may result in overburdening of the few ones available. Patients may have to experience long waiting hours^{56 42}. A typical example is in the Asunafo South District in the Brong Ahafo Region of Ghana with a total population of 117,449 where there is no District Hospital⁸³. People in the District will have to be referred to Asunafo North District Hospital which is about 58.9km away from the district to seek advanced medical care such as surgeries and other complicated emergencies. The absence of health facilities with basic services such as laboratory and scan could be a major factor likely to prevent people from enrolling in rural districts **Error! Bookmark not defined.**

Quality of care and Service Delivery

The NHIA credentials primary level up to tertiary level health facilities (public, private, faith based and quasi government) who offer the various healthcare services such as laboratory services, scan, clinical care, pharmacies, maternity care, physiotherapy and diagnostics³⁵. Drugs that are not available for treatment of certain diseases are prescribed for the NHIS member to collect from credentialed chemical and pharmacy shops. NHIS members are also referred out for services that are not available at the facility where they are seeking care. In some instances, they are asked to pay for services and medicines that are part of the benefit package^{52 42 66}. The poor and indigents may find the additional cost of services and medicines to be purchased outside unaffordable and dissatisfied with the use of the NHIS card. Underived full benefits of the NHIS may be a barrier to decisions to enrolment and re-enrolment particularly by the poor.

The NHIA supports health providers to improve quality of service through its credentialing and post credentialing exercises carried out by the quality assurance department at the national level. The regional offices also conduct monthly monitoring of healthcare providers on quality of care (perceived and technical) to ensure improvement in healthcare provision and health outcomes of its members³⁵. Some studies have shown that, NHIS members have been dissatisfied with quality of care rendered by some health providers. These health providers gave preferential treatment to non members of the NHIS but for the NHIS members,

they were exposed to worse treatment such as long delays and poor staff attitude^{56 42 84}. At the healthcare provider site while seeking care, the NHIS member goes through several processes for claims generation for reimbursement. The delays experienced by the NHIS members may be due to the claims generation compared to the non-insured who do not go through such processes. There has been increased workload of health staff as a result of high attendance of NHIS members. Staff motivation might not have been commensurate with the workload, this may be the reason for poor attitudes meted out on NHIS members⁵². Claims reimbursed to public health providers forms over 80% of their internally generated funds which is used in expansion of healthcare facilities such as infrastructure and equipments⁸⁵. Delays in reimbursement sometimes results in denial of services to NHIS members and unofficial charges by health providers⁶⁶.

5.3 NATIONAL POLICY DESIGN

The National Policy refers to NHIS decisions and program arrangements such as Legislative and administrative arrangements outlining how the scheme should be implemented. According to the design of the national Policy, The National Health Insurance Authority is responsible for financing the District Health Insurance offices, determines who pays and who is exempted, accredits and contracts healthcare providers and chooses a provider payment mechanism with its agreed modalities for reimbursement of claims to its health service providers. Funds for running the day to day activities of the NHIA district offices flows from the National level (NHIA). Staff recruitment is centrally managed by the National level. Logistics and consumables for the card production is centrally supplied to all its ten regional offices for further distribution to the districts in the regions. Irregularities and failure to execute these responsibilities affects the proper functioning of the scheme, the district offices and the service providers¹⁶. The NHIA's financial challenges affects operations of the District offices and the health service The major challenge with the NHIA is timely reimbursement of its healthcare providers. This frustrates the NHIA district offices and health providers¹⁸. The long delays have effects on provider responsiveness towards clients and provider adaptive mechanisms to cope such as copayments or threats not to serve insured clients. This is likely to reduces confidence individual's including indigents confidence and trust in the scheme eventually influences negatively their decision to enrol.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSION

Enrolment is always the consequence of a mixture of demand and supply factors which are driven by policy and its implementation. The selection criteria for the indigents under the NHIS has shown to be too stringent and practically unworkable either that it is too sensitive or too specific resulting in leakages or undercoverage. Expanded interventions such as registration of members of existing pro-poor and social intervention programs has still not helped in achieving the NHIA's corporate objective of expanding indigent coverage to 70% of the eligible population. Differing perceptions about poverty from the perspective of the community and the NHIS policy led to undercoverage of the poor. By the NHIS criteria, it was rare to find such people in the communities. Acceptability then becomes a problem and the poor may not present themselves for exemptions. Engaging the community in identifying the poor for premium exemption is key for better coverage.

Demand-side factors such as socioeconomic status, employment, household size and education negatively affect enrolment by the poor. Though indigents are exempted from premium payment, the indirect cost involved in terms of travel cost and other opportunity cost towards enrolment constrains their budget on basic needs such as food. Informal sector workers such as farmers, fishermen and traders may be poor but excluded from premium exemptions due to the poor sensitivity of the criteria. Income of informal sector workers are vary due to seasonality of farming activities and irregular earnings. For such category of workers, unaffordability of the premium may not be the major challenge but the timing of premium collection may be unfavourable hence their inability to enrol.

Social interactions are interwoven with cultural norms and practices. What community members believe in is highly valued and shared among each other. Social connections and networks establish solidarity and support for each other resulting in trust. Trust among community members may result in holding strongly unto distrust about NHIS and health providers influencing decisions to enrolment particularly for the poor who depend mainly on the support of families, friends and community at large. Dependency and trust derived by the poor in social networks suggest that acceptability of NHIS and health services must be strengthened to enhance enrolment. Better experiences with NHIA and service providers will foster a good relationship and understanding resulting in community's trust and confidence in the scheme.

Supply factors go a long way to influence demand-driven factors. Scheme related factors such as exemption criteria, long registration process and long claims processing time leading to delays in reimbursement to the service providers often have ripple effect on enrolment decisions on the general population. The poor may be more affected because they are the most vulnerable. Improving provider payments may indirectly influence how providers will approach and treat the members.

Availability and geographical access to health facilities is a key dimension considered when one wants to enrol unto the NHIS. In communities that have no hospitals, referral centres or only far to reach health facilities especially in the rural areas coupled with bad road networks, inhabitants may not be motivated to enrol unto the NHIS given the fact that they will not enjoy the full benefits of the scheme. Indigents and the poor are the worst affected in such situations. Inadequacy of services and shortage of drugs partly due to delays in

reimbursement to health service providers dissatisfy subscribers (members of the health insurance) who have to utilise the needed services at an extra cost. The poor may have to trade off budget for basic needs such as food for these services. Poor quality of care in relation to long delays at the health facilities and poor client-provider relationship affect general enrolment but the poor in particular, due to their vulnerability.

National policy and implementation are crosscutting issues among supply and demand factors. Responsiveness of the policy to address consumer perceptions on the functioning of the health system is as important as addressing ineffective strategies. Outcomes of this influence enrolment of the poor since they are more likely to suffer the ill consequences.

Drawing from these conclusions if adequate accessed to NHIS registration centres and health facilities are guaranteed and addressed, the poor will be motivated to enrol. They will also gain confidence in the scheme when they can enjoy the full benefits by accessing good quality healthcare in terms of minimum waiting time, friendly and acceptable provider attitudes. These make it worth having the NHIS card which will not delight the poor alone but the entire Ghanaian population. Quality of care does not change overnight, neither does attitudes but it remains valid to make gradual contributions to this end.

6.2 RECOMMENDATIONS

POLICY MAKERS

- Criteria for selecting indigents that are sensitive enough to identify the true poor and minimise leakages should be considered. Community wealth ranking (CWR) which is based on community's own perceptions of the poor could be adopted and developed for selection of indigents. This method, applied in one of the districts in Burkina Faso increased membership of the poor from 1.1% in 2006 to 11% in 2007. It was proven to be cost and time efficient and acceptable by the community⁸⁶.
- Structured community engagement should be an integral part of health policy directions to help promote service accountability to clients and strengthen community cohesion which is likely to build trust and confidence in the NHIS programme as in the case of South Africa; where the government has devolved power to communities and created a more patient-focused and community-oriented National Health Insurance⁸⁷.

NHIA AND MINISTRY OF HEALTH (MOH)

- NHIA and MOF should strongly petition the Government of Ghana for deductions from SSNIT contributions and NHIL to go directly into the NHIF rather channelling it through the Ministry of Finance (MOF). This is partly the reason for the long delays in claims reimbursement. The MOF does not release these deductions on time. The NHIA could also advocate for an increase of the formal sector SSNIT contribution to 5% in order to increase its fund base for particularly indigents. This policy recommendation was adopted by South Korea and Taiwan while they were Low Middle Income Countries (LMIC) to raise their funds for efficient claims reimbursement⁸⁸.

NHIA HEADOFFICE, REGIONAL AND DISTRICT OFFICES

- For informal sector workers who earn income but cannot afford the cost of premium, flexibility of payment such as monthly, quarterly or half yearly can be arranged for them at the District level. Another way is to conduct registration exercise at the bumper season of farming and fishing activities when premium payment will be less constraining. Spreading of premium payment over a year for household in Ugandan health insurance greatly facilitated coverage of the poor⁸⁹. However proper administrative and accountability checks must be put in place.
- The Regional and District NHIA offices could appeal to political and religious groups to create a fund that can financially support the poor and indigents in covering travelling and other indirect cost incurred in registration and healthcare access. Community members and churches in Rwanda supported enrolment of the poor, widows and orphans by paying their premium which resulted in an increase in membership of the scheme⁹⁰. The Ghanaian community is dominated by various religious groups and movements who believe in the principles of solidarity and help for the needy hence it will be feasibility and acceptability.
- The NHIA is rolling out capitation on incremental bases as a payment method for out-patient care. In the short term for the service providers who are not yet on the apitation grant, a calculated percentage could be paid to them in advance based on their claims submission trends and the rest reimbursed after submission of claims to improve health provider related factors. Particularly for private health providers who depend solely on NHIS reimbursement for payment of staff remuneration, purchase of drugs and other consumables, this will minimise shortages and improve provider-client relations.

NHIA REGIONAL, DISTRICT OFFICE AND HEALTHCARE PROVIDRES

- Bottom-up engagement of community, healthcare providers and health insurance managers could be an important intervention and policy direction towards improving quality health care and ensuring accountability. Discussions on the value of local health system and addressing complaints of the population will build trust. Active community engagement in maternal healthcare delivery yielded improved quality of care and achieved a reduction in maternal and perinatal mortality in Burkina Faso⁹¹. Community engagement can be integrated at the district, regional and national levels of the NHIA and the health provider institutions.
- The NHIA regional offices should be more focused on monitoring quality of care particularly provider attitudes toward clients in their routine monitoring of health facilities. Lesson from my 8 years' experience as a monitoring and evaluation officer shows less focus on provider client centeredness. Such monitoring could be done jointly with the GHS. In the long term, client satisfaction surveys should be incorporated into the program of work of the NHIA Regional Offices. Regular funds for this exercise should be made readily available by the NHIA's National Office.

ANNEX

Table 2. Search Table

Objectives	Sources	Key words
<ul style="list-style-type: none"> To describe the functions of NHIS in relation to the poor and to analyse trends of indigent enrolment 	Peer reviewed literature from <ul style="list-style-type: none"> VU library Pubmed Biomed Central Grey literature reports <ul style="list-style-type: none"> WHO Worldbank Ministry of Health(Ghana) Institutional reports 	SHI, means test(MT), enrolment, community, perceptions, Poverty, National Health Insurance, Ghana, targeting the poor
<ul style="list-style-type: none"> To analyse Demand side factors that limit enrolment of the poor and indigent unto the NHIS 		Household size, education, employment, socio-economic, education and health insurance, household characteristics and health insurance, social capital, trust, cultural beliefs, traditional beliefs, knowledge, perceptions, health risk, perceived quality of care, enrolment
<ul style="list-style-type: none"> To analyse Supply side factors that limit enrolment of poor and indigent unto the NHIS 		National Health Insurance scheme, Community-based health Insurance(CBHI), Health Provider, Out-of-pocket payments, quality of care, perceived quality, reimbursement, provider payment mechanisms, membership, enrolment, benefit package, credentialing
<ul style="list-style-type: none"> To make recommendations to GOG, NHIS and Healthcare providers on how to address the factors that limit the enrolment of the poor and indigents from enrolling unto the NHIS and accessing healthcare 		Enrolment, CBHI, Effective coverage of the poor, Universal Health Coverage, Low middle income Countries, Attainment of UHC

Table 3. PROPORTION OF POOR REGISTERED AS INDIGENTS UNDER NHIS, GHANA

YEAR	PROJECTED POPULATION	PROJECTED POOR POPULATION	NHIS REGISTRATION	% POOR POPULATION REGISTERD
2010	24,658,823	7,027,765	458,146	6.5
2011	24,928,503	7,104,623	535,997	7.5
2012	25,544,565	7,280,201	621,250	8.5
2013	26,164,432	6,331,793	1,320,006	17.7
2014	26,786,598	6,482,357	1,526,307	23.5
2015	27,409,893	6,633,194	1,270,120	19.1

NOTE: The National population figures was based on Worldbank Projections. The Projections of the poor population was based on estimates given that 28.5% of National Population were poor from 2010-2012 and 24.2% of National population were poor from 2013-2015 according to Ghana Living Standard Survey. The assumption is that any change will be minimal and not make much of a difference.

REFERENCE

- ¹ World bank: World Development Indicators database: Ghana country profile. 2015. Internet: http://databank.worldbank.org/data/Views/Reports/ReportWidgetCustom.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&inf=n&zm=n&country=GHA . Accessed 19/06/17
- ² Cooke E, Hague S, McKay A. The Ghana Poverty and Inequality Report: Using the 6th Ghana Living Standards Survey.
- ³ Ghana Statistical Service: 2014 Demographic and health survey key findings. 2015. Internet: <http://dhsprogram.com/pubs/pdf/sr224/sr224.pdf> . Accessed 19/06/17
- ⁴ Bongaarts J. WHO, UNICEF, UNFPA, World Bank Group, and United Nations Population Division Trends in Maternal Mortality: 1990 to 2015 Geneva: World Health Organization, 2015. Population and Development Review. 2016 Dec 1;42(4):726-.
- ⁵ Ghana Health Service. Annual report. 2014.
- ⁶ Aseweh Abor P, Abekah-Nkrumah G, Abor J. An examination of hospital governance in Ghana. Leadership in health services. 2008 Feb 8;21(1):47-60.
- ⁷ Ministry of Health. Health Sector Medium Term Development Plan 2014-2017. 2014 Oct 1.
- ⁸ World Health organization : Health and Human Rights, Fact sheet N°323. December 2015: internet: <http://www.who.int/mediacentre/factsheets/fs323/en/> . Accessed 18/06/2017
- ⁹ Ssenyonjo M. Economic, social and cultural rights in international law. Bloomsbury Publishing; 2009 Jul 3.
- ¹⁰ WHO. World Health Assembly Resolution 58.33. Geneva: World Health Organization. 25/05/2005: internet - <http://apps.who.int/medicinedocs/documents/s21475en/s21475en.pdf> Accessed : 18/06/17
- ¹¹ Kutzin J. Health financing for universal coverage and health system performance: concepts and implications for policy. Bulletin of the World Health Organization. 2013 Aug;91(8):602-11.
- ¹² World Health Report 2010- internet: <http://www.who.int/bulletin/volumes/91/8/12-113985/en/>. Accessed 21/06/17
- ¹³ Carrin G, James C, World Health Organization. Reaching universal coverage via social health insurance: key design features in the transition period.
- ¹⁴ Doetinchem O, Carrin G, Evans D. Thinking of introducing social health insurance? Ten questions. Background Paper. 2010;26
- ¹⁵ NATIONAL HEALTH INSURANCE ACT, 2003

¹⁶ NATIONAL HEALTH INSURANCE ACT, 2012. Act 852

¹⁷ Ghana Population Census 2010- Internet:

http://www.statsghana.gov.gh/docfiles/publications/2010phc_children_adolescents_&young_people_in_Gh.pdf. Assessed 21/06/17.

¹⁸Agyepong IA, Abankwah DN, Abroso A, Chun C, Dodoo JN, Lee S, Mensah SA, Musah M, Twum A, Oh J, Park J. The “Universal” in UHC and Ghana’s National Health Insurance Scheme: policy and implementation challenges and dilemmas of a lower middle income country. *BMC Health Services Research*. 2016 Sep 21;16(1):504.

¹⁹ O'Donnell O, Van Doorslaer E, Wagstaff A, Lindelow M. Analyzing health equity using household survey data: a guide to techniques and their implementation. Washington, DC: World Bank; 2008

²⁰ McIntyre D, Thiede M, Dahlgren G, Whitehead M. What are the economic consequences for households of illness and of paying for health care in low-and middle-income country contexts?. *Social science & medicine*. 2006 Feb 28;62(4):858-65

²¹Leive A, Xu K. Coping with out-of-pocket health payments: empirical evidence from 15 African countries. *Bulletin of the World Health Organization*. 2008 Nov;86(11):849-56C

²² World Health Organization: Sustainable health financing, universal coverage and social health insurance. In *World Health Assembly Resolution: WHA58.33*. Geneva: World Health Organisation. 2005.

²³ Kotoh AM, Van der Geest S. Why are the poor less covered in Ghana’s national health insurance? A critical analysis of policy and practice. *International journal for equity in health*. 2016 Feb 25;15(1):34.

²⁴ Agyepong IA, Adjei S. Public social policy development and implementation: a case study of the Ghana National Health Insurance scheme. *Health policy and planning*. 2008 Mar 1;23(2):150-60.

²⁵ Musango L, Dujardin B, Dramaix M, Criel B. Profile of members and non members of mutual health insurance system in Rwanda: the case of the health district of Kabutare. *Tropical medicine & international health: TM & IH*. 2004 Nov;9(11):1222-7.

²⁶ Atim C, Grey S, Apoya P, Anie SJ, Aikins M. A survey of health financing schemes in Ghana. Bethesda, Md. Partners for Health Reform, Abt Associates. 2001

²⁷ Kanchebe Derbile E, van der Geest S. Repackaging exemptions under National Health Insurance in Ghana: how can access to care for the poor be improved?. *Health policy and planning*. 2012 Oct 12;28(6):586-95.

²⁸Garshong B, Ansah E, Dakpallah G, Huijts I, Adjei S. A study on factors affecting the implementation of the exemption policy in Ghana. *Bulletin of Health Information*. 2002;1(2&3):22-31.

-
- ²⁹ Jehu-Appiah C, Aryeetey G, Spaan E, Agyepong I, Baltussen R. Efficiency, equity and feasibility of strategies to identify the poor: an application to premium exemptions under National Health Insurance in Ghana. *Health Policy*. 2010 May 31;95(2):166-73
- ³⁰ National Health Insurance Regulations. 2004: internet - <http://www.social-protection.org/gimi/gess/RessourcePDF.action?ressource.ressourceId=11967> . Accessed 10/06/2017.
- ³¹ Tipple G, Speak S. Definitions of homelessness in developing countries. *Habitat International*. 2005 Jun 30;29(2):337-52.
- ³² Yates R. Universal health care and the removal of user fees. *The Lancet*. 2009 Jun 13;373(9680):2078-81.
- ³³ Akazili J, Welaga P, Bawah A, Achana FS, Oduro A, Awoonor-Williams JK, Williams JE, Aikins M, Phillips JF. Is Ghana's pro-poor health insurance scheme really for the poor? Evidence from Northern Ghana. *BMC health services research*. 2014 Dec 14;14(1):637.
- ³⁴ Jehu-Appiah C, Aryeetey G, Spaan E, De Hoop T, Agyepong I, Baltussen R. Equity aspects of the National Health Insurance Scheme in Ghana: Who is enrolling, who is not and why?. *Social Science & Medicine*. 2011 Jan 31;72(2):157-65.
- ³⁵ NHIA. 2013 Annual Report. 2013. Internet- <http://www.nhis.gov.gh/files/2013%20Annual%20Report-Final%20ver%2029.09.14.pdf> (Accessed 9/8/2017).
- ³⁶ NHIA. 2010 Annual Report. 2010. Internet- [http://www.nhis.gov.gh/files/8\(1\).pdf](http://www.nhis.gov.gh/files/8(1).pdf). (Accessed 9/8/2017).
- ³⁷ NHIA. 2011 Annual Report. 2011. Internet- <http://www.nhis.gov.gh/files/annualreport2011.pdf>. (Accessed 9/8/2011).
- ³⁸ NHIA. 2012 Annual Report. 2012. Internet- <http://www.nhis.gov.gh/files/2012%20NHIA%20ANNUAL%20REPORT.pdf> (Accessed 9/8/2017).
- ³⁹ Worldbank. Population Indicators 2010-2015. Internet- http://databank.worldbank.org/data/reports.aspx?Code=SP.POP.TOTL&id=1ff4a498&report_name=Popular-Indicators&populartype=series&ispopular=y (Accessed 7/8/2017).
- ⁴⁰ Ghana Statistical Service. Ghana Living Standards Survey Round 6 Main Report. 2014.
- ⁴¹ Panda P, Dror I, Koehlmoos T, Hossain S, John D, Khan J, Dror DM. What factors affect uptake of voluntary and community-based health insurance schemes in low-and middle-income countries. A Systematic Review and Meta-Analysis. Delhi: 3ie Systematic Reviews—SR4/1009 Review, the International Initiative for Impact Evaluation (3ie). 2015.
- ⁴² Kotoh AM. Improving health insurance coverage in Ghana: A case study. African Studies Centre, Leiden; 2013.

⁴³Livelihood Empowerment Against Poverty. Internet- <http://leap.gov.gh/>. (Accessed 13/8/2017).

⁴⁴Eligibility Criteria-Livelihood Empowerment Against Poverty. 2008. Internet- <http://leap.gov.gh/eligibility-criteria/> .(Accessed 13/08/2017).

⁴⁵ NHIS. System for Identifying the Poor. 2016. Internet- <http://www.nhis.gov.gh/News/nhis-system-for-identifying-the-poor-goes-electronic-4076>. (Accessed 13/08/2017).

⁴⁶De Allegri M, Sauerborn R. Community based health insurance in developing countries. *BMJ: British Medical Journal*. 2007 Jun 23;334(7607):1282.

⁴⁷Tawiah EK. *Factors Influencing Enrolment in the National Health Insurance Scheme among Slum Dwellers in Agbogbloshie* (Doctoral dissertation, University of Ghana).

⁴⁸ Owusu-Sekyere E, Chiaraah A. Demand for Health Insurance in Ghana: what factors influence enrollment?. *American Journal of Public Health Research*. 2014 Jan 23;2(1):27-35.

⁴⁹Sarpong N, Loag W, Fobil J, Meyer CG, Adu-Sarkodie Y, May J, Schwarz NG. National health insurance coverage and socio-economic status in a rural district of Ghana. *Tropical medicine & international health*. 2010 Feb 1;15(2):191-7.

⁵⁰ Kuuire VZ, Tenkorang EY, Rishworth A, Luginaah I, Yawson AE. Is the Pro-Poor Premium Exemption Policy of Ghana's NHIS Reducing Disparities Among the Elderly?. *Population Research and Policy Review*. 2017 Apr 1;36(2):231-49.

⁵¹ Dixon J, Tenkorang EY, Luginaah I. Ghana's National Health Insurance Scheme: helping the poor or leaving them behind?. *Environment and Planning C: Government and policy*. 2011 Dec;29(6):1102-15.

⁵² Witter S, Garshong B. Something old or something new? Social health insurance in Ghana. *BMC International health and human rights*. 2009 Aug 28;9(1):20.

⁵³ Manortey S, Alder S, Crookston B, Dickerson T, VanDerslice J, Benson S. Social deterministic factors to participation in the National Health Insurance Scheme in the context of rural Ghanaian setting. *Journal of Public Health in Africa*. 2014 Feb 4;5(1).

⁵⁴ Gajate-Garrido G, Owusua R. The national health insurance scheme in Ghana: Implementation challenges and proposed solutions.

⁵⁵Kusi A, Enemark U, Hansen KS, Asante FA. Refusal to enrol in Ghana's National Health Insurance Scheme: is affordability the problem?. *International journal for equity in health*. 2015 Jan 17;14(1):2.

⁵⁶ Jehu-Appiah C, Aryeetey G, Agyepong I, Spaan E, Baltussen R. Household perceptions and their implications for enrolment in the National Health Insurance Scheme in Ghana. *Health Policy and Planning*. 2011 Apr 18;27(3):222-33.

-
- ⁵⁷Kirigia JM, Sambo LG, Nganda B, Mwabu GM, Chatora R, Mwase T. Determinants of health insurance ownership among South African women. *BMC health services research*. 2005 Feb 28;5(1):17.
- ⁵⁸ Ahern MM, Hendryx MS. Social capital and trust in providers. *Social science & medicine*. 2003 Oct 31;57(7):1195-203.
- ⁵⁹Gyasi RM, Asante F, Yeboah JY, Abass K, Mensah CM, Siaw LP. Pulled in or pushed out? Understanding the complexities of motivation for alternative therapies use in Ghana. *International journal of qualitative studies on health and well-being*. 2016 Jan 1;11(1):29667.
- ⁶⁰ Akum FA. A qualitative study on factors contributing to low institutional child delivery rates in Northern Ghana: the case of Bawku Municipality. *J Community Med Health Educ*. 2013;3(6):1-9.
- ⁶¹Kyomuhendo GB. Low use of rural maternity services in Uganda: impact of women's status, traditional beliefs and limited resources. *Reproductive health matters*. 2003 May 31;11(21):16-26.
- ⁶² Peltzer K, Friend-du Preez N, Ramlagan S, Fomundam H. Use of traditional complementary and alternative medicine for HIV patients in KwaZulu-Natal, South Africa. *BMC Public Health*. 2008 Jul 24;8(1):255.
- ⁶³ Holst L, Wright D, Haavik S, Nordeng H. The use and the user of herbal remedies during pregnancy. *The Journal of Alternative and Complementary Medicine*. 2009 Jul 1;15(7):787-92
- ⁶⁴Kretchy IA, Owusu-Daaku F, Danquah S. Patterns and determinants of the use of complementary and alternative medicine: a cross-sectional study of hypertensive patients in Ghana. *BMC Complementary and Alternative Medicine*. 2014 Feb 4;14(1):44.
- ⁶⁵Faith J, Thorburn S, Tippens KM. Examining CAM use disclosure using the behavioral model of health services use. *Complementary Therapies in Medicine*. 2013 Oct 31;21(5):501-8.
- ⁶⁶Fenny AP, Kusi A, Arhinful DK, Asante FA. Factors contributing to low uptake and renewal of health insurance: a qualitative study in Ghana. *Global Health Research and Policy*. 2016 Nov 22;1(1):18.
- ⁶⁷ Turcotte-Tremblay AM, Haddad S, Yacoubou I, Fournier P. Mapping of initiatives to increase membership in mutual health organizations in Benin. *International journal for equity in health*. 2012 Dec 5;11(1):74.
- ⁶⁸De Allegri M, Sanon M, Sauerborn R. "To enrol or not to enrol?": A qualitative investigation of demand for health insurance in rural West Africa. *Social Science & Medicine*. 2006 Mar 31;62(6):1520-7.
- ⁶⁹ Schneider P. Trust in micro-health insurance: an exploratory study in Rwanda. *Social science & medicine*. 2005 Oct 31;61(7):1430-8.

-
- ⁷⁰ Fenenga CJ, Nketiah-Amponsah E, Ogink A, Arhinful DK, Poortinga W, Hutter I. Social capital and active membership in the Ghana National Health Insurance Scheme-a mixed method study. *International journal for equity in health*. 2015 Nov 2;14(1):118.
- ⁷¹Andrzejewski CS, Reed HE, White MJ. Does where you live influence what you know? Community effects on health knowledge in Ghana. *Health & place*. 2009 Mar 31;15(1):228-38.
- ⁷² Ackah C, Owusu A. Assessing the knowledge of and attitude towards insurance in Ghana. *InResearch Conference on Micro-Insurance* 2012 Mar.
- ⁷³ Asante FA, Arhinful DK, Kusi A. Who is excluded in Ghana's National Health Insurance Scheme and why: a social, political, economic and cultural (SPEC) analysis. *Health Inc-Towards equitable coverage and more inclusive social protection in health*. 2014.
- ⁷⁴ Dalinjong PA, Laar AS. The national health insurance scheme: perceptions and experiences of health care providers and clients in two districts of Ghana. *Health economics review*. 2012 Dec 1;2(1):13.
- ⁷⁵ Aryeetey GC, Jehu-Appiah C, Kotoh AM, Spaan E, Arhinful DK, Baltussen R, van der Geest S, Agyepong IA. Community concepts of poverty: an application to premium exemptions in Ghana's National Health Insurance Scheme. *Globalization and health*. 2013 Mar 14;9(1):12.
- ⁷⁶ Yeboah MA. Urban poverty, livelihood, and gender: Perceptions and experiences of porters in Accra, Ghana. *Africa Today*. 2010;56(3):42-60.
- ⁷⁷ Asiedu C, Dzokoto VA, Wallace D, Mensah EC. Conceptions of poverty and wealth in Ghana. *International Journal of Business and Social Science*. 2013 Aug 1;4(9).
- ⁷⁸ Castillo JT, Asante S, Dwumah P, Barnie JA, Becerra D. Ghanaian BSW Students' Perceptions of Poverty and Social Welfare Policies in Ghana. *Advances in Social Work*. 2013 Feb 28;14(2):477-500.
- ⁷⁹ Otoo N, Awittor E, Marquez P, Saleh K. Universal Health Coverage for Inclusive and Sustainable Development: Country Summary Report for Ghana.
- ⁸⁰ Agbenyo, F., *Journal of Transport & Health* (2017), <http://dx.doi.org/10.1016/j.jth.2017.04.010>
- ⁸¹Ministry of Health. Health Sector Medium Term Development Plan 2014-2017. 2014. Internet-
http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/ghana/hsmtdp_2014-2017_final_draft_9_oct.pdf. (Accessed 12/8/2017).
- ⁸² O'Connell TS, Bedford KJ, Thiede M, McIntyre D. Synthesizing qualitative and quantitative evidence on non-financial access barriers: implications for assessment at the district level. *International journal for equity in health*. 2015 Jun 9;14(1):54.
- ⁸³Asunafo South District Assembly. The Composite budget of the Asunafo South District Assembly for 2016 Fiscal year. 2016. Internet-

<http://www.mofep.gov.gh/sites/default/files/budget/Asunafo%20South.pdf>. (Accessed 15/08/2017).

⁸⁴Adei D, Osei KV, Diko SK. An Assessment of the Kwabre District Mutual Health Insurance Scheme in Ghana. *Current Research Journal of Social Sciences*. 2012 Sep 25;4(5):372-82.

⁸⁵ NHIA. 2015 Annual Report.

⁸⁶ Souares A, Savadogo G, Dong H, Parmar D, Sié A, Sauerborn R. Using community wealth ranking to identify the poor for subsidies: a case study of community-based health insurance in Nouna, Burkina Faso. *Health & social care in the community*. 2010 Jul 1;18(4):363-8.

⁸⁷ Setswe G, Witthuhn J. Community engagement in the introduction and implementation of the National Health Insurance in South Africa. *Journal of Public Health in Africa*. 2013 Jun 25;4(1).

⁸⁸Tangcharoensathien V, Wibulpholprasert S, Nitayaramphong S. Knowledge-based changes to health systems: the Thai experience in policy development. *Bulletin of the World Health Organization*. 2004 Oct;82(10):750-6.

⁸⁹Basaza R, Criel B, Van der Stuyft P. Low enrolment in Ugandan Community Health Insurance Schemes: underlying causes and policy implications. *BMC health services research*. 2007 Jul 9;7(1):105.

⁹⁰Pathé Diop F, Butera JD. Community-Based Health Insurance in Rwanda.

⁹¹Hounton S, Byass P, Brahim B. Towards reduction of maternal and perinatal mortality in rural Burkina Faso: communities are not empty vessels. *Global health action*. 2009 Nov 11;2(1):1947.