THE ROLE OF NHIS IN THE PROVISION OF EQUITABLE ACCESS TO HEALTHCARE DELIVERY
(A CASE STUDY OF BOSOMTWI ATWIMA KWANWOMA DISTRICT)

BY

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DECLARATION

I hereby declare that this dissertation is the result of my own original work towards the Commonwealth Executive Masters of Business of Business Administration and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text and that no part of it has been presented for another degree in this university or elsewhere.

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DEDICATION

This work is dedicated to my late mother, MADAM AKUA OWUSUAA PENYA and Old Vandals Association. (Ashanti Region).

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ABSTRACT

The health status of a nation goes a long way to determine its level of productivity and growth. The objective of the National Health Insurance Scheme (NHIS) is to ensure equitable universal access for all residents of Ghana to an acceptable quality package of health services.

The study examined the role of the NHIS in ensuring equitable and accessible healthcare in the Bosomtwi Atwima Kwanwoma District. The study aimed to examine the barriers to equitable health care delivery, determine the role of NHIS in improving access to health care, find out problems of NHIS and accredited health care providers. In order to achieve the objectives of the study a combination of case study and survey research designs were used in this study.

The findings of the study showed that the NHIS has improved access to health care in the district but in terms of equity in healthcare, there is the need for improvement. Lack of infrastructure and personnel make it difficult for subscribers to access quality health care. The main problems facing the scheme are abuse of the system, poly-pharmacy and prescription of drugs outside the approved drug list (G-RDG). Service providers are saddled with delays in the reimbursement of claims submitted and lower prices of drugs and services on the G-RDG compared to the market.

It is recommended that the NHIA should device new ways of paying service providers such as advance payment in order to boost service delivery and also, management employing additional staff to speed data entry to ensure speedy issuance of ID cards. Accreditation process should be fast tracked as this would reduce the strain on the few accredited health care providers and improve access.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

There is ample evidence that out-of-pocket expenditures prevent people from seeking necessary health care, and that those who do seek health care may incur a tremendous financial burden (van Doorslaer 2006; Xu et al 2003).

In 2005 the Member States of WHO adopted a resolution that encouraged countries to develop health financing systems aimed at providing universal coverage (WHO 2005). The 2004 World Health Report by WHO endorsed the pursuit of universal coverage, and defined as ensuring that population access to needed health services without the risk of financial catastrophe or impoverishment associated with obtaining care:

The fundamental step a country can take to promote health equity is to move towards universal coverage: universal access to the full range of personal and non-personal health services they need, with social health protection. Whether the arrangements for universal coverage are tax-based or are organized through social health insurance, or a mix of both, the principles are the same: pooling pre-paid contributions collected on the basis of ability to pay, and using these funds to ensure that services are available, accessible and produce quality care for those who need them, without exposing them to the risk of catastrophic expenditures. (p. 25, 4).

Increasing access requires coordinated action across three components of financing thus raising sufficient funds, pooling funds to spread risk, and using them to provide and/or purchase services efficiently and equitably. Countries vary tremendously in the extent to which they have been able to move towards universal coverage, and the time it has

taken them to achieve this. The lack of available funds has been one factor, but even in the European countries that have achieved universal coverage, the transition took place over many decades, often taking more than 50 years (Carrin, Mathauer, Xu and Evans 2008). Some countries have moved more quickly in recent times including Costa Rica, Colombia, Mexico, Thailand and Turkey (WHO 2008).

The objectives of health reform in the Americas include improving equity in service delivery, improving efficiency in management, and increasing the effectiveness of actions all of which are necessary to meet the health needs of the population. Within this context, equitable access to effective health services is one of the guiding principles of Latin American and Caribbean health sector reform. Social, economic, and health disparities between different areas and population groups influence the delivery of health care. Underprivileged areas tend to have a higher burden of disease, lower availability of resources, lower financing and access, shortages of health care personnel, lower prestige, and a limited capacity to solve health events that require more complex, technological levels of care; this is described as the inverse health care law (Hart, 1971). Multiple factors related to socioeconomic development and incentives to providers (public or private) influence the supply of services. These factors include the financing of the system, the level of investment in the sector, the training of qualified personnel for the health services, and the allocation and efficient use of existing resources. Measurement and analysis of inequities in access to and financing of health care is both a problem and policy oriented issue, and it can become a tool in the search for solutions to inequities, such as removal of barriers to access, specific investment in health care, and the search for improvement of efficiency and effectiveness of health services.

Ghana over the years, has been struggling in financing quality health care. As Agyapong, (1999) explained, in 1982, a revolving fund for drugs known as "cash-and-carry" was initiated, by which all health institutions were to recover the full cost of drugs and keep this revenue to purchase drugs only. Informal fees with various shades of legality and unauthorized fees were also collected from users. The implementation of the "cash and carry" in some instances led to an increase in self medication because many people could not afford the out-of-pocket user fees demanded at the point of treatment. (Asenso-Okyere, Anum, Osei-Akoto and Adokunu, 1998).

The policy had a clause known as "the Exemption clause". The purpose of the policy was to care for the poor. Consultation, basic laboratory services, essential haematinics, vitamins and anti malarial for pregnant women, Immunizations, services at Child Welfare Clinics, out- and in-patient services for the children (Atim et al, 2001).

Individuals abuse the exemption policy. "Health providers and hospital authorities found themselves in a fix when it is obvious that an elderly person clearly below the exempt age comes to the facility and claims to be above the exempt age. Similarly, mothers were bringing their over-aged children and claimed that they were under the "exempted age". (Atim and Madjiguene, 2000).

The health insurance scheme as it stands now represents an ambitious reform of the health sector, rather than the creation of a new financing mechanism. A number of challenges remain for health planners in Ghana including how to set the appropriate level of contribution from payroll taxes, how to effectively merge the community health funds with the district funds how to set up a regulatory framework, and how to determine an appropriate payment mechanism to reimburse providers. There have been

various issues about the NHIS in various dimensions in various places. The Bosomtwi Atwima Kwanwoma District Mutual Health Insurance has been the focus of attention in this write-up. The concern of this piece is about the role of NHIS in the provision of equitable access to healthcare delivery.

1.2 Problem statement

The health status of a nation goes a long way to determine their level of productivity and growth. Most developing countries have not been able to fulfil health care needs of its poor population. Shrinking budgetary support for health care services, inefficiency in public health provision, unacceptably low quality of public health services, and the resultant imposition of user charges is reflective of state's inability to meet health care needs of the poor. One of the main solutions to lack of equitable and accessible health care is health insurance which basic aim is to ensure quality healthcare for all.

According to Pritchett, (1996) National Health Insurance gives support to effective and equitable health care delivery and protects families from high cost of healthcare. The principle of insurance thus sharing risks by pooling resources and transforming a low-probability, but immense expected loss into certain, but very small loss (Griffin, 1992) is well known in developed countries and frequently used for financing and allocating health care. The need for equitable and accessible health care in Ghana has become a challenge.

The issue of equitability and accessibility in health care delivery in Ghana has become a major concern in ensuring quality health care. The aim of health insurance in Ghana was to enable the government achieve the GPRS and, to give accessible and affordable health care to residents in Ghana with emphasis on the poor and most vulnerable (Ofori-

Birikorang, 2009). In response to this need, National Health Insurance Scheme was instituted in 2003 by an Act of parliament, Act 650.

The introduction of the health insurance scheme has received much praise than chastisement in Ghana. There still remain significant number of Ghanaians who have not had access to the scheme. There are issues of ensuring equitable access to the provision of healthcare delivery. The role of NHIS in ensuring equitable access has been questioned. What has been the growth of membership, number of registration centres, service providers and diseases covered under the scheme? What has been the challenges confronting service providers, clients and scheme operators? Are clients satisfied with the services of the scheme operators and healthcare providers? Attempt to find answers to these nagging questions have necessitated this write-up.

1.3 Objectives of the study

The study had some objectives and the general objectives was to discuss the challenges and obstacles that have effects on the Bosomtwi Atwima Kwanwoma Mutual health insurance scheme in playing an effective role of ensuring equitable and accessible health care delivery to all sorts of people in the district and how challenges and obstacles can be remedied.

The study specifically sought to:

1. Examine the barriers to equitable health care delivery in the Bosomtwi Atwima Kwanwoma District;
2. Determine the role of NHIS in improving access to health care in the district;
3. Find out the factors that militate against the NHIS in improving access to healthcare in the district; and

4. Identify the problems facing NHIS accredited health care providers in ensuring access to quality healthcare in the district.

1.4 Research questions

In order to achieve the objectives set out above, the study was guided by these research questions:

1. What are the access barriers to quality health care delivery in the Bosomtwi Atwima Kwanwoma District?
2. What is the role of NHIS in improving access to health care in the district?
3. What factors hamper the efforts of NHIS in the provision of equitable access to healthcare in the district?
4. What are the challenges of NHIS accredited health care providers in ensuring equitable access to quality healthcare in district?

1.5 Research Methodology

The study was mainly a qualitative study which used the case study and exploratory research designs which took the form of a survey. The study involved two hundred and twenty four (224) respondents made up of two hundred (200) clients, twenty healthcare service providers (20), three (3) staff of the NHIS and the district director of health. The researcher used basically probabilistic and non-probabilistic sampling techniques in selecting the sample for the study.

The researcher used stratified random sampling technique to select the clients and service providers while the purposive sampling technique was used to select the staff and medical director in the district whose job schedules were that they were directly involved in the topic being studied. The primary source of data was obtained from the

clients, service providers, scheme operators and the District Health Director while the secondary data secondary sources were obtained from the scheme's bulletins, publications and workshop and council reports from which membership data and profile were obtained.

The main tools or instruments used for data collection were the questionnaire and interview. The questionnaire was used to obtain data from the clients whilst the scheme manager, service providers and the director of health services were interviewed. The data was presented in frequency distributions, charts and cross-tabulations. Apart from a qualitative description of the results, time series graphs were used to analyze the trend of the growth of membership, registration points and service providers.

1.6 Scope of the study

The national health insurance scheme covers all the districts in the country. However, this study concentrated on the Bosomtwi Atwima District Mutual Health Insurance Scheme and other stakeholders concerned with health care delivery in the district. The study examined health access barriers as well as equity within the district and how the NHIS can contribute to alleviating some of these barriers, find out the factors that militate against the NHIS in improving access to healthcare and identify the problems facing accredited healthcare providers in ensuring access to quality healthcare in the district.

The district epitomises the conditions that pertains in most rural districts in the country and therefore findings from this study can be generalised to a certain extent for some of these rural districts.

1.7 Significance of the study

This study was undertaken since a commitment to the concept of equitable and accessible healthcare delivery is particularly important, considering that ill health is a concern for people living in poverty. They are more likely to get sick, to remain sick for longer, and to lose out on productive activities through illness. This study therefore adds on to the efforts aimed at strengthening universal coverage and reach of healthcare among poor people and other disadvantaged groups. It also intends to provide scheme management and policy makers with insight into the inequities in the healthcare system and how the health insurance can be structured to alleviate some of these inequities. Academically, the study sought to add on to the literature that exist on health insurance and equitable and accessible healthcare as well as serve as a guide for future research.

1.8 Organisation of the study

The study is organised into five chapters. Chapter one examines the background to the study, followed by a statement of the problem that informed such a research and the objectives of the study and research questions which served as a compass for the study. The scope as well as the significance of the study is then stated. How the study is organized, concluded the chapter. Chapter two reviews the theories related to equitable and accessible health care delivery. Chapter three took an in-depth look at the research methodology adopted for the study. The research design, study area, study population and the sampling procedures used to select respondents from the population was discussed. In addition, the sources of data, data collection procedures, instruments, the field work and data processing and analysis were also discussed. Chapter four contains the results and discussion of information that was collected during the fieldwork. The

results are presented in the form of tables, charts and figures. Finally, Chapter five, which is the last chapter, focused on the summary, conclusions drawn from the results and recommendations.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

The various literature and past studies on equitable access to health care are reviewed in this chapter. The chapter commences with a discussion of good health and its importance. This is followed with the concept of equity and accessibility in healthcare delivery. The factors that hinder equity and accessibility in healthcare delivery as well as ways of measuring equity and accessibility in healthcare delivery are examined. Health financing, health insurance and the role of health insurance in ensuring equity and accessibility in healthcare delivery in Ghana is also examined.

2.2 Health and its Importance.

Health is a state of physical and mental well-being necessary to live a meaningful, pleasant and productive life. It is also an integral part of thriving modern societies, a cornerstone of well performing economies, and a shared principle (Bryne, 2004). WHO defines health as a state of complete physical, mental and social well-being and not the absence of diseases. (WHO, 2002). It includes physical, social and psychological well-being. A population's health is a primary goal for sustainable development.(Akhtar, 2005).

It has been argued that modern economic progress has been built on good health, longer, healthier, more productive human lives. It is not just quality of life but rather key to economic growth.(Bryne, 2004). Health is also seen as a human right. (Asher, 2004). It is enshrined in the UNDHR and International Covenant on Economic, Social and Cultural Rights (ICSER) and recognised in numerous international and human

rights instruments as in domestic legislation in many countries. Health is central to a community well-being as well as to personal welfare. It has a strong influence on people's earning capacity and is central to people's ability to enjoy and appreciate all aspects of life.(Olujimi, 2007). It is based on a broad definition of health that encompasses medical and public health perspectives. It accords priority to the needs of the poor and otherwise vulnerable and disadvantage groups. (Asher, 2004). It entails specific government obligations regarding health care and the underlying determinants of health as well as obligations to ensure non- discrimination and people's right to participate in relevant decision making. (Asher, 2004).

There is a common misconception that states have to guarantee good health because of their right. However, good health is influence by several factors that are outside the direct control of states such as an individual's biological conditions. (WHO, 2005). Rather, the right to health refers to the right to the enjoyment of variety of goods, facilities, services and conditions necessary for its realisation. This is why it is more accurate to describe it as the right to the highest attainable standard of physical and mental health rather than an unconditional right to be healthy. (WHO,2002).

The WHO's goal of Health for All by year 2000 (HFA 2000) was based on this holistic concept of health. HFA (2000) is a vision, which recognises that health is determined not only by the provision of medical care but also by economic, social, political and environmental variables in the communities in which people live. Unfortunately, for most developing countries, the narrow medical view of equating health with absence of disease and even worse, limiting provision of services to individuals in health facilities is impeding the progress towards good health (WHO, 2006).

According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment and the person's individual characteristics and behaviours. Generally, the context in which an individual lives is of great importance on his life quality and health status. The social and economic environment are key factors in determining the health status of individuals given the fact that higher education levels are linked with a higher standard of life as well as a higher income (WHO, 2006).

According to Anderson, (2004), without good health people may experience debilitating diseases and an unnecessarily short life span. It is fairly easy to achieve good health, but it involves certain changes in life style that are sometimes difficult. Today's diseases are the result of poor lifestyle choices.

Good health is a productive factor in a competitive economy. The cost every time a worker is absent is not just the direct cost of their sickness payments, but also the cost of their replacement by other workers and lower productivity for their employer as a whole. For workplace accidents alone, this cost is estimated to represent 1-3% of GNP a year. At a macro level, health is crucial to raising the activity level of the population. Chronic illness affects about 15% of the working age population in the European Union. This represents a burden not just for sufferers but for those who care for them; about 15 million people in the current EU need the assistance of a third person to fulfil the basic functions of normal life. (Bryne, 2004).

Ill health can affect earnings by reducing wages or limiting participation in the labour force. Currie and Madrian (2005) find that many studies have detected a link between health and the labour market, but that little consensus has emerged about the magnitude

of that connection. They identify three ways in which wages could be damped by poor health: through reductions in productivity; costs for the employer to accommodate the individual; or discrimination. However, in an extensive literature review, they conclude that in general the negative relationship between earnings and health is not primarily the result of differences in wages, but in amount of time worked.

2.3 Accessible Healthcare

Access to health care is an important component of an overall health system and has a direct impact on the burden of disease that affects many countries in the developing world. Measuring accessibility to health care contributes to a wider understanding of the performance of health systems within and between countries which facilitates the development of evidence based health policies.

Accessibility per se is one of the most frequently used terms and yet little defined in urban and regional studies. (Olujimi, 2007). Accessibility has a number of dimensions, thereby making it to face both definitional and measurement problems (Lasker, 1981). WHO defines accessibility as measure of the proportion of the population that reaches appropriate health services (WHO, 2002). Ingram (1971) also defines accessibility as the inherent characteristics or advantage of a place with respect to overcoming some form of friction. In Ingram's definition, location (i.e. a place) is enjoying the access. However, Ingram went a step further by classifying accessibility into two, thus Relative accessibility and Integral accessibility. Relative accessibility measures the degree to which two places or things are connected while Integral accessibility measures the degree of interconnection of points of things in the system (Ingram, 1971).

Hargerstand (1974) also made a distinction between social and physical accessibility. Social accessibility he says connotes the ability to pay (as determine by age and income) to pass the barrier around the supply point consumer wants to reach and physical accessibility as the ability to get transportation facilities which are needed for reaching the supply points at suitable times. (Hagerstand, 1974). The capacity to overcome space is central to all the definitions hence the words "ease" ability to reach and overcoming friction. A bothering question in relation to all the above definition to accessibility is who or what experiences accessibility, the people or location? To Wachs, Kumagai, and Ingram, (1973) it is the location (place) whereas to other scholars it is the people. Accessibility to health care is concerned with the ability of a population to obtain a specified set of health care services, with the concept of "specific" having the potential to vary depending on the policy focus or impact of disease (Oliver & Mossialos, 2004).

Many factors affect a population's ability to access appropriate levels of health care. According to both Penchansky & Thomas, (1981) and Oliver & Mossialos, (2004) these factors can be grouped into three categories of availability, acceptability and affordability and geography. Geographic accessibility often referred to as spatial or physical accessibility is concerned with the complex relationship between the spatial separation of the population and the supply of health care facilities and thus has a strong underlying geographic component. This concept can also be extended to incorporate different types of health intervention (Shengelia et al, 2003). Although it is intuitive that the level of public health of a population may be affected negatively by the distance to

health care services, there remains limited quantitative information regarding this impact (Guagliardo, 2004).

2.3.1 Access barriers

According to Busse et al, (2006) access to health care delivery is usually hindered by several factors. Even where universal access to health services is formally in place, individuals can face a range of barriers hindering the actual utilisation of that service. They added that if persisting inequities in access are to be addressed, it is necessary to look beyond the assumption of universal coverage. Barriers to access of quality healthcare may stem from factors within the health system itself that is at the supply side or be due to patient-related (demand side) aspects.

Supply-side barriers to health care delivery include gaps in population coverage of health insurance, the scope of the public health benefit package, financial factors such as cost-sharing and geographical factors such as distance. In addition, organisational factors, including waiting lists and opening hours as well as lack/appropriateness of information also hinder access to healthcare (Anderson, 2004). Inequality of access at the demand side is related to the characteristics of the potential service users, such as income, age, gender, cultural background, health literacy, or health beliefs. Some access hurdles have relatively more impact on disadvantaged groups than others (Tamsma & Berman, 2004). Examples of these are costs and distance, as well as demand-side factors such as communication skills and health beliefs (Dixon et al, 2003).

Evidence based on the 2003 European Quality of Life Survey suggests income-related inequalities in access existed in all current EU Member States as regards distance, delay, waiting and cost factors. Differences are most pronounced as regards the

proportion of people who indicated that their most recent visit to the doctor was made very difficult by cost factors (Anderson, 2004). The overall picture emerging from the survey is that richer, better-educated people find their way to medical specialists and dentist more easily and more frequent, while people in the lower income brackets tend to use more emergency services.

However, access to general practice services seems fairly equally distributed across income although the poor are more likely to consult them more often. In contrast, the level of pro-rich inequality as regards access to medical specialist increases with the total number of specialist visits. Education appears to be a more important cause of inequality in specialist care than in other health care services (Allin et al, 2005).

2.3.2 Measuring access to health care

Accessibility is more than mere ease of getting to a place (Olujimi, 2007) .Access to healthcare is a variable that does not lend itself to easy observation and measurement. Alternatively, a range of indicators can be used to measure its dimensions, and the various barriers to access. Service utilisation is most commonly used as a proxy measure for access (Allin, 2006). Other indicators of access hurdles such a user charges or waiting times can also be used to measure access to healthcare.

In order to measure access, inequality in utilization of health care must be standardized for differences in need (O'Donnell et al, 2007). In most cases, qualitative aspects of access that may help understand inequalities tend to receive less attention because they cannot be quantitatively measured. For instance, need for services are often ignored or attempts made to measure it by levels of self-reported ill health (Allin et al, 2007). However , personal accessibility measurement does not only include some of the

attributes of locational accessibility (such as distance and road conditions) but also connotes the effects of constraints of movement (such as mode, travel time, waiting time and cost travel in cash) on the individual or groups being considered.(Olujimi, 2007).

This approach is also reflected in the way access is measured within EU related frameworks. While the EU framework shortlist does not include one specific indicator for access, it does include indicators of access barriers such as the population coverage by public insurance and the waiting times for elective surgeries. Indicators of service utilisation are included, even though not specified for differences by socio-economic status as regards uptake. The service utilisation indicators used in measuring equitable access include vaccination coverage for children, breast cancer screening, cervical cancer screening and general medical practise utilisation

Within the EU's social protection and social inclusion process, the following common indicators are especially relevant in measuring access to healthcare. These are unmet need for medical care, unmet need for dental care, population coverage by public insurance infant mortality, life expectancy and self-perceived health (CEU, 2006).

2.4 Equity in healthcare

Equity is an important criterion in evaluating health system performance. Developing a framework for equitable and effective allocation of health depends upon knowledge of service providers and their location in relation to the population they serve (Noor, 2004). The need for a more precise definition of equity in health has arisen in the context of a recent debate between researchers at the World Health Organisation and at a number of academic institutions (Braveman, 1998). Whitehead (1992) defined equity

in healthcare with reference to inequity in healthcare delivery. He explained that equity in healthcare is the absence of inequities. That is, the differences in health that is unnecessary, avoidable, unfair and unjust. She defined equity on three dimensions thus equal access to available care for equal need, equal utilisation for equal need and equal quality of care for all.

For the purposes of operations and measurement, equity in health can be defined as the absence of systematic disparities in health between social groups who have different levels of underlying social advantage/disadvantage (that is, different positions in a social hierarchy). Inequities in health systematically put groups of people who are already socially disadvantaged (for example, by virtue of being poor, female, and/or members of a disenfranchised racial, ethnic, or religious group) at further disadvantage with respect to their health. The concept of health equity focuses attention on the distribution of resources and other processes that drive a particular kind of health inequality. That is, a systematic inequality in health (or in its social determinants) between more and less advantaged social groups, in other words, a health inequality that is unjust or unfair (Leon & Walt, 2001).

Equity was enshrined in the World Health Organization's Alma Ata declaration as one of the pillars of the Primary Health Care (PHC) strategy. Equity in health care and other social amenities is also one of the tenets of the Universal Declaration of Human Rights (WHO, 1946).

It has been suggested that equity is achieved when everyone is assured by receiving an equal quantity of health or when people enjoy equal health. (Ballatine ,1983). The most common characterization of equity as equality is as providing everyone with the same

level of care. In this view it follows that if a given level of care is available to one individual, it must be available to all. Alternatively, if the standard is set low in order to avoid an excessive use of resource, some beneficiaries would have to be withheld from people who wish to purchase them. In other words no one would be allowed to have access to more service or services of higher quality than those available to everyone else even they are willing to pay for those services from personal resources. (Ballatine, 1983) However, insurance coverage does not necessarily guarantee access to appropriate high quality health care particularly for the poor and colour.(Smedley et al,2008). Research on health care inequality suggests that health care can be made more equitable by addressing barriers in several domains: access to health care; health care quality; patient education and empowerment; health care infrastructure; and health care policy and program administration.(Smedley et al,2008)

Health care systems are consistently inequitable, providing more and higher quality services to the well off who need them less than the poor who are unable to obtain them. (Davidson et al,2004). In the absence of a concerted effort to ensure that health systems reach disadvantage groups more effectively, such inequities need not to be accepted as inevitable, for there are many promising measures that can be persued. These include establishing goals for improved coverage in the poor rather than entire population and the use of these goals to direct planning toward the need of disadvantage, empowering poor clients to have a more central role in the health system design and operation. Through the application of these and other measures, it is quite feasible to give equity the central place it deserves in the plans and policies for health and related sectors.(Davidson et al 2004). The notion of equal opportunities to be healthy is

fundamental to the concept of equity in health and closely linked with the concept of equal rights to health. The notion of equal opportunities to be healthy is grounded in the human rights concept of non discrimination and the responsibility of governments to take the necessary measures to eliminate adverse discrimination, in this case, discrimination in opportunities to be healthy in virtue of belonging to certain social (Braveman & Grushin,2002).

2.5 Health insurance

Health insurance has received global recognition among international organisations as the alternative to user fees as a healthcare financing mechanism. For instance, the principles for fair financing in the WHO's 2000 World Health Report, such as revenue collection in the form of prepayment, pooling resources to promote cross-subsidies and strategic purchasing, imply that the main alternative to tax funding should be some form of health insurance (WHO, 2000). The World Bank also explicitly suggests pursuing insurance options, instead of out-of-pocket payments, in its handbook on the health component of Poverty Reduction Strategy Papers (Claeson et al., 2001). Most recently, the 2005 World Health Assembly also passed a resolution encouraging member states to pursue social and other forms of health insurance.

Health insurance is a mechanism for spreading the risks of incurring health care costs over a group of individuals or households (Saltman, Busse, & Figueras, 2004). In their opinion, the definition is not dependent on the nature of the administrative arrangements employed, but on the outcome of risk sharing and subsequent cross-subsidization of health care expenditures among the participants. In the view of Currie & Madrian (2005), an arrangement designed to provide risk sharing for illness related events, and

which is accessible to households in the informal sectors in low-income countries, is a health insurance scheme regardless of the orthodoxy of its operational modalities.

Private voluntary insurance schemes for formal sector workers were mainly concentrated in Southern Africa (particularly South Africa, Zimbabwe and Namibia) although some existed in a more limited format in some East and West African countries (Jutting, 2005). The main challenges to this form of health care financing was the fact that most of them had very limited coverage levels, fragmentation of risk pools and rapid, uncontrolled cost spirals (WHO, 2008). The unpopular nature of private health insurance schemes led to the introduction of community based health insurance schemes in most countries.

The community based schemes on introduction also gained grounds within the same regions in Africa that embraced the private health insurance schemes. Community based insurance schemes were widespread in West Africa and increasingly in East Africa but limited in Southern Africa (Jutting, 2005). Chaudhury & Roy (2008) are of the view that community based health insurance are preferable to out-of-pocket payments since these schemes are funded by annual or more frequent contributions, but do not require payments at the time of using health services thereby lowering financial barriers to access. However, some are advocating these schemes as the new 'one size fits all solution' to the health care financing gap in African countries (previously the 'one size fits all solution' was that of user fees). While there are certainly considerable potential benefits of such schemes, there is still quite weak empirical evidence on what works and what does not.

A survey of literature on community-based pre-payment schemes highlights that population covered by these schemes has remained relatively low and that the most vulnerable households are not currently incorporated (Ekman, 2004). Thus, most of these schemes have small risk pools and limited cross-subsidies. Another critical assessment of such schemes highlights the importance of better understanding how they interact with other elements of the health care financing system (Bennett, 2004). He argues that this is important to ensure that appropriate links are made between prepayment schemes in individual communities and other financing mechanisms to ensure that equitable cross-subsidies within the overall health system are promoted. He added that more work is required to explore how the viability, sustainability and equity contribution of such schemes can be strengthened before these schemes can be introduced on a wide-scale basis as the solution to the health care financing challenges in any particular African country.

Agyepong & Adjei (2008) posited that another option of health insurance that is being considered or introduced in a growing number of African countries is that of mandatory health insurance, often-termed social or national health insurance (where an Act of Parliament makes it compulsory for all or some citizens usually those in formal employment to become members of a health insurance). While there is enormous potential for mandatory health insurance schemes to contribute to improved access to healthcare, there are concerns that a two-tier health system may arise if insurance coverage is not universal. That is, it will result in one system funded through insurance for higher income groups enabling them to purchase a high quality of comprehensive health services and another system funded largely through tax revenue for a

minimalistic package of services for lower income groups (Witter & Garshong, 2009). A two-tiered system reduces the potential for cross-subsidies, particularly between relatively wealthy and poorer groups. A key challenge in moving towards a universal system is to consider at an early stage how those outside the formal sector could be covered.

Some African countries, such as Ghana, have combined social health insurance (SHI) with district-wide community-based pre-payment schemes in order to implement a universal national health insurance system. The contributions of low income households are partly or fully subsidised out of tax and pooled donor funds. There is a risk equalisation between the individual district schemes and formal sector workers (Abekah-Nkrumah, Dinklo & Abor, 2009). While this approach is extremely innovative in the African context, it has many similarities to the insurance reforms introduced in Thailand, highlighting the importance of learning from experience in low- and middle-income countries across continents (Doane, Ofreneo, & Srikajon, 2002). Ghana's ambitious initiative is being closely observed by other African countries and international organisations.

According to Abekah-Nkrumah, Dinklo & Abor (2009), considerable work remains to be done to identify what service benefit package is affordable, sustainable and acceptable before this model can be regarded as being more widely applicable. Affordability is seen in terms of the constraints of feasible member contribution levels, and available government and donor pooled funding subsidy resources. Sustainability is dependent on the effective mechanisms for containing the cost spirals that are prevalent in health insurance systems.

Canada for instance, introduced a system of universal health care coverage over a period of 25 years (1947 to 1972) following a succession of province-led reforms aimed at distributing health services according to need and not ability to pay (OECD, 2008). There are currently 13 single-payer, universal systems of hospital and primary physician care in Canada defined as 'insured services' (Medicare) under the federal Canada Health Act (1984). Provinces must conform to the five principles of the Act (universality, public administration, comprehensiveness, portability, and accessibility) in order to receive federal cash transfers.

Administration of public health services in Canada is highly decentralized reflecting the provincial responsibility for the administration and delivery of most public health care services. The historic arm's-length relationship between government on the one hand and the hospital sector and physicians on the other and recent regionalization reforms in which sub-provincial organizations are now responsible for the allocation of resources for hospital and community health services further contribute to the decentralized nature of health care in Canada (OECD, 2008).

2.5.1 Overview of Ghana's National Health Insurance Scheme

The framework for Health Insurance in Ghana is stipulated in the National Health Insurance Act, 2003 (Act 650). The Vision of NHIS in Ghana is to assure equitable universal access to health care for all residents of Ghana to a package of essential health services of an acceptable quality without out-of-pocket payment being required at the point of service use (National Health Insurance Policy Framework for Ghana, Ministry of Health,2004).The Act also established a National Health Insurance Authority (NHIA), governed by a Council, to regulate the health care system, including the

accreditation of providers, agreeing contribution rates with the schemes, managing the operations of the schemes and National Health Insurance Fund . The Health Insurance Act permits the establishment and operation of three types of health insurance schemes in the country, namely District Mutual Health Insurance Schemes (DMHIS), Private Commercial Health Insurance Schemes (PCHIS) and Private Mutual Health Insurance Schemes (PMHIS).

2.5.2 District Mutual Health Insurance Scheme (DMHIS.

It is a scheme that has been established in every district of the country for residents of the district and is been operated exclusively for the benefit of the members. Currently there are one hundred and forty five (145) districts operational in Ghana. Subscribers to the schemes are required to pay contributions determined by the scheme. However, exemptions are being granted to indigents, pensioners of SSNIT, and SSNIT contributors whose monthly contributions amount to or exceed the minimum monthly contribution required under the DMHIS. The schemes receive support from the National Health Insurance Authority in the form of subsidy for the exempt group and payment of salaries for core staffs. The authority also monitors the operations of the schemes through the regional offices that have been set up. Each scheme has a management team comprising of The Scheme Manager, Accountant, Claims Manager, Management Information Systems Manager (M.I.S), Marketing Manager/PRO and Data Entry Officer. The management team are responsible for the day to day running of the schemes. They are been supported by Care Taker Committees responsible for the approval of the scheme's budget.

The funding sources come mainly from the National Health Insurance Levy (2.5% of V.A.T.). Secondary sources are payroll deductions (2.5% of income) for formal sector employees. Other funds come from donations or loans (Ghana Ministry of Health, 2004a).In terms of membership of the NHIS, the Act establishes that of the formal sector workers is mandatory. However, membership is optional for non-formal sector workers who represent the bulk of the population. For formal sector workers, a payroll deduction of 2.5% is transferred to the NHI fund as part of their contribution to the Social Security and National Insurance Trust (SSNIT) fund. Informal sector workers are charged premium that are income related. Contributions by those outside the formal sector pays a premium that ranges between GH¢ 7.20 and GH¢ 48.00 (Ghana Ministry of Health, 2004a).Currently, there is a waiting period of three (3) months before their health insurance identity cards are given to them to access health care. However, pregnant women and children under five (5) years do not observe any probation or waiting period.

All schemes offer a minimum package of services that is quite comprehensive, covering general outpatient and inpatient services at accredited facilities. The development of the benefits package began with an analysis of national health services utilization data. The data showed that 80 percent of all the illnesses in Ghana were low-cost outpatient services that could be provided at the health post/centre level. The next 15 percent of illnesses, typically delivered at secondary and tertiary centres, were identified as those that cause the most financial distress to society. A final 5 percent of services were the very expensive (such as heart and brain surgery), and others which are not of great public health concern (such as cosmetic surgery). Fertility treatment, Dialysis for

chronic renal failure, organ transplants, non-EDL drugs and VIP wards are excluded (NHIA,2004).

As the system operates now, a registered member under any of the schemes is issued with an identity card which can be used to seek healthcare in any accredited health provider in the country. Treatments are offered without any out of pocket payment unless the card bearer ask for an extra services, like a private ward and other services that are not part of the benefit package. The bills are then sent to the clients' scheme provider, which then pays the money to the hospital. The client can also use the card to get prescribed drugs at accredited pharmacies or licensed chemical shops without paying. (NHIA, 2004).

This is how the system is supposed to work on paper. But there have been reports of some accredited health providers turning patients away, complaining that the public health insurance schemes owes them huge amounts of money(Graphic ,Thursday, May 21, 2009). Whatever district scheme one signs for, that person is entitled to some minimum services. These are:

- Out-Patient Services - general and specialist consultations reviews, general and specialist diagnostic testing including, laboratory investigation, X-rays, ultrasound scanning, medicines on the NHIS Medicines list, surgical Operation such as hernia, repair and physiotherapy.
- In-patient Services - General and specialist in patient care, diagnostic tests, medication-prescribed medicines on the NHIS medicines list, blood and blood products, surgical operations, in patient physiotherapy, accommodation in the general ward and feeding (where available).

- Oral Health - pain relief (tooth extraction, temporary incision and drainage), dental restoration (simple amalgam filling, temporary dressing)
- Maternity Care - antenatal care, deliveries (normal and assisted), Caesarean section, post-natal care
- Emergencies - these refer to crises in health situations that demand urgent attention such as medical emergencies, surgical emergencies, paediatric emergencies, obstetric and gynaecological emergencies and road traffic accidents.

However there are exemptions in the benefit package. The health insurance in Ghana as it stands now, does not entitle anyone to all medical procedures and health services. If one requires any of the following services it must be paid for. These include appliance and prostheses including optical aids, heart aids, orthopaedic aids, dentures etc, cosmetic surgeries and aesthetic treatment , anti-retroviral drugs for HIV\AIDS, assisted Reproduction (e.g. artificial insemination) and gynaecological hormone replacement therapy, echocardiography, photography, family planning, angiography, dialysis for chronic renal (kidney) failure, organ transplants, all drugs that are not listed on the NHIS list , heart and brain Surgery other than those resulting from accidents, cancer treatment other than breast and cervical, mortuary services, diagnosis and treatment abroad ,medical examinations for purposes other than treatment in accredited health facilities (e.g. Visa application, Education, Institutional, Driving license etc) ,VIP ward -accommodation (NHIA, Ghana Ministry of Health, 2004a and 2004b).

2.5.3 Private Mutual Health Insurance Scheme (PMHIS)

With this type of scheme any group of persons resident in the country can form and operate a PMHIS. This type of scheme operates exclusively for the benefit of the members and does not necessarily have a district focus. It is either a community based or occupational or faith based. It is also a social in character but does not receive subsidy from government. (Ghana Ministry of Health, 2004a).

2.5.4 Private Commercial Health Insurance Scheme (PCHIS)

A PCHIS is regarded as a limited liability company under the company's code and considered as a business venture and operates for profit based on market principles. Their premiums are based on calculated risks of particular groups and individuals who subscribe to it. Thus those with higher risk pay more. The ownership of PCHIS resides with company and its shareholders. (Ghana Ministry of Health, 2004a) provides its members with identity card which enables them to access minimum prescribed healthcare benefits.

2.6 The Structure and Geography of Health Services in Ghana

The health of the people of Ghana is the responsibility of the Ministry of Health and Ghana Health Services. The Ghana Health Service and the Teaching Hospital Act 525 of 1996, establishes Ghana Health Services and empowered it to carry out the services in Government health facilities at national, Regional, District and Sub-District levels. The Ghana Health Service (GHS) is a Public Service body. It is an autonomous Executive Agency responsible for implementation of national policies under the control of the Minister for Health. The GHS continue to receive public funds and thus remain within the public sector. However, its employees are not part of the Ghana civil service

and do not follow the civil service rules and procedures. The independence of the GHS is designed primarily to ensure that staffs have a greater degree of managerial flexibility to carry out their responsibilities, than would be possible if they remained wholly within the civil service. Ghana Health Service does not include Teaching Hospitals, Private and Mission Hospitals.

The establishment of the Ghana Health Service is an essential part of the key strategies identified in the Health Sector Reform process, as outlined in the Medium Term Health Strategy (MTHS), which are necessary steps in establishing a more equitable, efficient, accessible and responsive healthcare system. The reforms build on the reorganization of the MOH that began in 1993, which was explicitly designed to set the scene for the establishment of the Ghana Health Service. The reforms also provide a sound organizational framework for the growing degree of managerial responsibility that has already been delegated to districts and hospitals. Themes that were central to the reorganization of 1993 remain important today for the Ghana Health Service, thus careful stewardship of scarce resources, clear lines of responsibility and control, decentralization, and accountability for performance rather than inputs. GHS has the mandate to provide and prudently manage comprehensive and accessible health service with special emphasis on primary healthcare at regional, district and sub-district levels in accordance with approved national policies. (MOH, 2009).

2.6.1 District and Sub-District Levels Healthcare

The primary Health Services are delivered in the context of District and Sub District health system. Currently, services in many communities are delivered through Outreach Programmes. Community based programmes are also provided to the communities. A

Community Clinic or village health unit is usually meant for the treatment of simple cases and providing health education with the help of trained community health nurses and traditional birth attendant (TBAs). Youth and Employment-Health Assistants are also in the system to help.

Sub-District in a geographical area of about 15,000 to 30,000 population is usually served by at least a health centre. It is envisaged that each health centre or clinic has a team of health workers comprises clinicians, public health officer, or medical assistant and a mid- wife. It offers clinical services such as antenatal care, routine immunization, and treatment of illness. District hospitals, which are usually manned by medical officers and provide outpatient and inpatient services, suppose to be the referral points for this sub- district health care. Available records show that the average beds for the District Hospitals is 100 beds (Ghana Statistical Services 2005).

2.6.2 Regional Level Healthcare*:*

The regional level is where special care in broad areas of medicine and surgery are provided. Public health services at this level focused on the technical and logistical back up for epidemiological guidance and in service training for public health workers. The regional hospitals are the ultimate referral points for all facilities within the region. The hospital provides special services such as clinical and diagnostic care in the area of general surgery, obstetric and gynaecologist, dental, eye and psychiatric cares. These regional hospitals are also responsible for research and training as well as the monitoring of the quality health care in the region. Regional hospitals should have at least 200 to 400 beds. Available records show that the average bed a regional hospital in Ghana has is 200 and it ranges from 150 to 250 beds (Ghana statistical service: 2005).

2.6.3 National Level Healthcare

This level constitutes the apex of all specialist and more sophisticated services. The public health service here provides guidelines and protocol for monitoring diseases trends, nutritional survey surveillance and advocacy for Government policy to improve the health of the people. Specialist like Cardiology and vascular surgery are carried out. The national hospital in Ghana, Korle-bu Teaching Hospital, has about 1600 beds and can admit about 3,600 patients per year. Formal health facilities in Ghana are hierarchically organized, and comprise four levels in the urban areas and five in rural areas (Mensah et al. 2010). The health post is the first level provider in the rural areas. Health centres or clinics, district hospitals, regional hospitals and teaching hospitals follow in that order. Perhaps, the most striking feature of Ghana's health system relates to spatial disparity, particularly between northern and southern Ghana, and between rural and urban areas of the country. Moreover, the health care system still suffers some serious challenges such as the dearth in health care professionals caused by a serious drain. (60% of the doctors trained locally in the 1980s have left Ghana; Mensah et al. 2005).

CHAPTER THREE

RESEARCH METHODS

3.1 Introduction

This chapter covers the methodology the researcher used for the study. It covers areas like research design, population, sampling and sampling technique, sources and data collection instruments, methods and unit of data analysis and organizational profile of Bosomtwi Atwima Kwanwoma District Health Insurance Scheme.

3.2 Research design

A combination of case study and exploratory research designs were used in this study. Robson (2002) defines case study as 'a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context, using multiple sources of evidence'. The case study in this research was the Bosomtwi Atwima Kwanwoma District Mutual Health Insurance Scheme.

The survey research design is most frequently used to answer "who, what, where, how much, and how many" questions. The survey was used in this study because it aided the collection of a large amount of data from the population in an economical way. This was done through the administration of questionnaires. The data collected was standardized, allowing for easy comparison. The survey strategy also aided the collection of quantitative data which was analysed using descriptive and inferential statistics. The study was also exploratory or investigative because the researcher tried to find out the role of the Bosomtwi Atwima Kwanwoma District Mutual Health Insurance Scheme in the provision of equitable access to healthcare delivery.

3.3 Study population

The population for the study is made up of all the members, scheme operators and service providers of the Bosomtwi Atwima Kwanwoma District Mutual Health Insurance Scheme. The was made up one hundred and sixty six thousand, six hundred and eleven (166,611) health insurance clients, thirty (30) health insurance service providers, twenty (20) health insurance staff and one (1) district health director.(Field data, 2011)

3.4 Sample size and sampling technique

The sample was all the clients, service providers and scheme operators whose duties fell within the purview of the study who could conveniently respond to questionnaires within the period of the study. As with most studies, the study could not cover the entire population so a sample was chosen. The total sample for the study was two hundred and twenty four (224) respondents made up of two hundred (200) clients, twenty healthcare service providers (20), three (3) staff of the NHIS and the district health director. The researcher used basically probabilistic and non-probabilistic sampling techniques in selecting the sample for the study.

The researcher used simple random sampling technique to select the clients and service providers while the purposive sampling technique was used to select the staff and medical director in the district whose job schedules were that they were directly involved in the topic being studied.

Fifty (50) clients were selected from the NHIS office in Kuntanase where every fifth person who came to renew his or her membership was selected questionnaires were administered. Fifty (50) were also selected from ten (10) health providers. Five (5)

clients were selected from each facility and very fifth person who came to these facilities were selected and questionnaires administered.

The remaining one hundred (100) clients were selected from selected communities in the study area. The communities were grouped into two. Group one included the communities with NHIS health provider accreditation and group two was made up of communities with no NHIS health provider accreditation. Ten (10) communities were chosen from communities with NHIS health provider accreditation and ten (10) from those without. Five people were randomly selected from the twenty communities. Within each community every fifth house within the ten communities were chosen until the sample size was achieved. The managers and the district director of health also by virtue of their position had exclusive information which was very relevant to the study.

3.5 Sources and methods for data collection

The main sources of data for the study were primary and secondary sources.

3.5.1 Primary sources

The primary source of data was obtained from the clients, service providers, scheme operators and the District Health Director sampled for the study.

3.5.2 Secondary sources

The secondary sources were obtained from the scheme's bulletins, publications and workshop and council reports from which membership data and profile were obtained. The internet, books and journals also served as important sources of secondary data for the study.

3.5.3 Data collection tools

The main tools or instruments used for data collection were the questionnaire and interview. The questionnaire was used to obtain data from the clients whilst the scheme manager, service providers and the director of health services were interviewed.

3.5.4 Design and administration of questionnaires

The questionnaire was used to obtain information from the clients of the scheme after careful scrutiny by the supervisor. The questionnaires were designed based on the objectives, research questions and thorough review of literature. The administration of the questionnaires was done with the help of two field assistants who had been introduced to the scheme manager after permission was granted for the conduct of the survey in the district. The other respondents interviewed provided clarifications on issues the questionnaires could not provide in detail.

3.5.5 Response rate

The study selected a total of two hundred and seventy four (274) respondents to respond to the questionnaires and interview guide. Two hundred and fifty (250) questionnaires were given to the clients but fifty (50) of them could not be retrieved. As a result of this, the study involved two hundred (200) clients and twenty-four (24) interviewees thus producing a response rate of 82%.

3.5.6 Limitations and field problems

The study was not devoid of challenges which might have affected the result in one way or the other. There were frustrations on the part of respondents in responding to the questionnaire. Preliminary arrangements were made with the scheme manager and service providers but the situation turned different when the researcher wanted to

retrieve the questionnaires and conduct the interview. Some additional questionnaires were printed because two areas reported of missing questionnaires which aggravated the financial constraints. Research assistants had to visit the areas on several occasions before the questionnaires were retrieved for analysis. This indeed delayed the analysis and the final submission of the entire work. The writer again encountered financial challenges because he had to make numerous visits to the study area to discuss with management seeking permission to use the clients and service providers as subjects for the study. There was also the issue of time constraints.

3.6 Method and unit of data analysis

The data was analysed using the Statistical Package for Social Sciences (SPSS) soft ware. The data was presented in frequency distributions, charts, cross-tabulations. Apart from a qualitative description of the results, time series graphs were used to analyse the trend of the growth of membership, registration points and service providers.

3.7 Ethical considerations

The researcher was very ethical in the conduct of the study. Permission was obtained from the management of the scheme before the area was chosen for the study. There were frequent meetings with the various stakeholders relevant for the study to discuss the mode of administration of the questionnaires. All the necessary materials and sources used in the study have been duly recognised and acknowledged.

3.8 Profile of Bosomtwi Atwima Kwanwoma District Mutual Health Insurance Scheme

The study was undertaken in the Bosomtwi Atwima Kwanwoma District located at the central portion of the Ashanti Region. The major occupation of inhabitants of the

district is agriculture which employs 62.6% of the labour force. Of this, crop farming employs 57.4% and fishing 5.2%. About 44% of those who engage in other occupations still take up agriculture as a minor occupation. The second highest occupation in the district is within the service industry. It employs about 19.1% of the working population. This sector comprises government employees, private employees and other workers. The educated labour force dominates this sector. Industrial activities are undertaken in both small and medium scales. It also employs about 16.7% of the working population. Another category in the occupational structure is trading which employs about 11.3% of the working force. Women dominate this sector. About 56% of the goods are industrial hardware brought from Kumasi and sold within and outside the district. (BAKMHIS, 2009)

Even though it would be very difficult to really assess real unemployment rate to determine its impact on access to healthcare, about 4% of the working age group suffer from seasonal or disguised unemployment. Even though the district is described as a rural district in terms of population and social amenities, its economic characteristics show some urban features. Amongst the 10 predominant diseases in the district, malaria ranks first and it affects about 43% of the district population. There are a number of health facilities that are inequitably distributed in the district. The total number of health institution in the district is 27. Out of this, 15 are public institutions, 7 are mission institutions and 5 are private. (BAKMHIS, 2009)

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This section of the study presents the findings from the questionnaire administered to scheme members and service providers as well as the interview sections with scheme management and district health directorate. The information obtained is summarised in the forms of tables and figures in this section. A discussion of the findings is presented alongside the data obtained.

4.2 Background characteristics

The background characteristics that the study examined have been categorised according to respondents, the health insurance scheme, the service providers and the scheme members.

The Bosomtwi Atwima Kwanwoma District Mutual Health Insurance Scheme was established alongside 45 schemes during the first phase of the implementation of the government's vision of providing a social health care delivering system to replace cash and carry and was launched on 30th August, 2005.(Progress Report, BAK MHIS,2006) The scheme currently has staff strength of 20 made up of the Scheme Manager, Accountant, Management Information System Manager, Claims Manager, Public Relations Officer, Data Entry Clerk, 6 Temporary staff and 7 National Service Personnel. The scheme has accredited 30 health facilities within the district to provide services for the scheme. They include 26 hospital/clinics/health centres, 2 pharmacies/chemical shops and 2 diagnostic centre/laboratories.

The data obtained from the questionnaire administered to members of the scheme and used indicated 32 percent of the respondents have been using the services of the scheme for the past five years. These individuals joined the scheme when it was launched in the year 2005.

Table 4.1 Year of enrolment by scheme members

Year	Frequency	Percent
2005	32	16.0
2006	16	8.0
2007	24	12.0
2008	40	20.0
2009	48	24.0
2010	32	16.0
2011	8	4.0
Total	200	100.0

Source: Field data, May 2011

Most of the respondents as indicated in Table 1 have been registered members of the scheme for more than 3 years were therefore in a position to give responses on their experiences using the NHIS as a means for settling bills associated with their healthcare. Only 4 percent of the respondents sampled have been using the service of the scheme for less than a year. Among the 200 individuals sampled for the study, 88 of them making up 44 percent had their family members enrolled as members of the NHIS. The remaining 56 percent had none of their family members enrolled with the scheme.

4.3 Barriers to equitable and accessible health care delivery

The only way by which a scheme member can access health care services under the NHIS is the possession of a valid health insurance identity card. In this regard, all scheme members were asked whether they have a valid health insurance identity card and they all answered in the affirmative. This means that all the 200 members could access health care under the scheme. The study however went further to examine how long it took scheme members from paying their premiums and being given access to health through the issuance of a valid ID card. The data obtained is displayed in Figure 1.

Figure 1: Time lapse between premium payment and ID card issuance

Source: Field data, May 2011

It can be seen from Figure 1, that most members of the scheme had to wait for more than three months from payment of premiums and issuance of valid ID cards. Sixteen percent of scheme members indicated that they had to wait for four months before they

could access services under the scheme whereas 44 percent had to wait for more than four months. Although 40 percent of the members had to wait for 3 months before being issued with ID cards to access service under the scheme, management asserted that this 3 months waiting period was part of the agreement between the client and the scheme. They however, corroborated the assertion by some clients that they had to wait for over four months before being issued with ID cards.

The waiting period between payment and issuance of ID card makes the services of the scheme inaccessible to clients although they have fully paid their premiums. Management explained that it was not a deliberate effort of the scheme to restrict clients access to health delivery by delaying the issuance of the ID since the delay was due to operational problems. They added that the inability of the scheme to enter all registration forms into the database on time and the centralisation of the printing of ID cards within the country accounted for the delays.

Another barrier to equitable health care is the cost of the health care relative to incomes of individuals. The health insurance scheme was introduced to curb this. However, the health insurance scheme involves the payment of premiums which can also be a barrier to equitable health care. Members were made to provide their monthly gross household incomes so that they can be compared with the premiums paid under the NHIS to determine whether the premiums paid relative to incomes of members is creating access barriers. Table 2 shows the monthly gross household incomes of members.

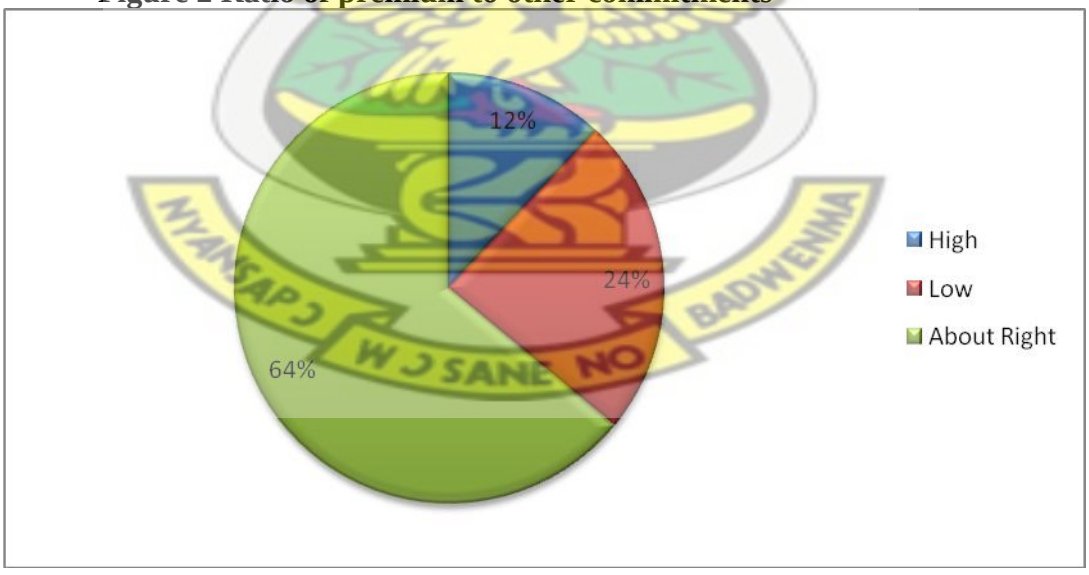
Table 4.2 Monthly gross household incomes of members

Income	Frequency	Percent
Up to GH¢50	24	12.0
GH¢51 to GH¢200	144	72.0
GH¢300 to GH¢500	24	12.0
GH¢501 to GH¢1,000	8	4.0
Total	200	100.0

Source: Field data, May 2011

The findings as presented in Table 2, indicated that most households monthly income were between GH¢50 and GH¢200. Members of the scheme who were within this category were 72 percent. Only 4 percent of members were in a high-income category.

Figure 2 Ratio of premium to other commitments



Source: Field data, May 2011

In terms of the amount spent on premium in relation to other commitments, 24 percent of members were of the opinion that the premium was a high percentage of their income relative to other household commitments. In all, 64 percent of scheme members stated that the ratio of the premiums they paid to the income and commitment was in the right proportion. This means that the premium paid by members largely does not serve as an access barrier in accessing healthcare services. The remaining 12 percent who were in the high-income bracket were of the view that the premium paid for their health insurance was low in relation to other expenses they incur.

Notwithstanding the possession of a valid NHIS card, access barriers to healthcare can exist if there are no health facilities within the town or village that members reside. It became known during the study that 76 percent of members had a health facility within their towns/villages while the remaining 24 percent had no health facility within their towns/villages. The health facilities present within the towns and villages ranged from chemical shops, private clinics, government clinics and hospitals as well as mission hospitals.

The type(s) of health facility present in the town/village of members is presented in Table 3. It can be seen from Table 3 that although majority of members had health facilities within their town/village, chemical shops/pharmacies was the most prominent health facility. Chemical shop/pharmacies were cited by 24% of respondents as the only health facility present within their town. The presence of the chemical shop/pharmacy in these towns in a way does not improve access to health care since members cannot obtain service from these pharmacies unless they are accredited. Even if they are

accredited, members per the requirements of the NHIS ought to have visited a hospital or clinic and obtained a prescription from that facility before they can have access to the services of these pharmacies or chemical shops.

Table 4.3 Health facilities available to members

Health Facility	Frequency	Percent
Private Clinic Only	16	8.0
Chemist/Pharmacy only	48	24.0
Government Hospital Only	8	4.0
Government Clinic Only	24	12.0
Mission Hospital Only	8	4.0
Private Clinic and Pharmacy	8	4.0
Private Clinic and Government Hospital	8	4.0
Pharmacy and Government Clinic	16	8.0
Pharmacy and Government Hospital	8	4.0
Private, Government Clinic/Hospital and Pharmacy	8	4.0
No Health Facility	48	24.0
Total	200	100.0

Source: Field data, May 2011

Government clinics and hospital accounted for about 16 percent of the health facilities present within the towns of members. These hospitals and clinics are managed by the Ghana health services and therefore have automatic accreditation with the NHIS. All other things being equal, members staying within the locality of these clinics and hospital would have access to healthcare delivery services provided by these clinics and

hospitals as long as they have a valid NHIS card.

In terms of equitable healthcare, it could be seen although some members had access to hospital and clinics within their locality, the services that these hospitals provided could not be compared to those provided by teaching hospitals like Komfo Anokye and Korle Bu. This means that although all members in the same category pay the same premium, members leaving closer to teaching hospital may receive certain services that others leaving within this district would not have access to unless they are referred to these hospitals. This creates some sort of inequity in the health services received by all members of the NHIS. In terms of access barriers due to the distance between members location and the nearest health facility, it could be seen from the data obtained and presented in Table 4 that distance to a large extent does not pose an access barrier to members of the scheme.

Table 4.4 Distance between home and health facility

Distance	Frequency	Percent
Less than 1km	40	20.0
2 to 3 km	88	44.0
4 to 5 km	24	12.0
6 to 10 km	24	12.0
Above 10 km	24	12.0
Total	200	100.0

Source: Field data, May 2011

As shown in Table 4, 44 percent of the respondent lived about 2 to 3 kilometres from the health facility whereas 20 percent lived less than a kilometre from other health facilities. This means that member's access to these health facilities may not be deterred

by the distance they would have to cover before getting to the health facility. It is worth noting however, that 12 percent of the scheme members lived over 10 kilometres from health facility and these individuals may face access barriers especially in areas where the means of transport are not well developed.

Access to quality healthcare can only be assured if there are enough health facilities for scheme members to attend as well as enough practitioners within the facilities to attend to the patients. Based on the statistics provided by the district health directorate, it can be seen that hospitals/clinics/maternity homes grew by only 1.2 percent between 2005 (when the NHIS was launched in the district) and 2009. Pharmacies and chemical shops increased by 15.3 percent within the same period whereas laboratories and diagnostic centres also increased saw an increase of 2.8% within the same four-year period.

The district directorate believed that bottlenecks in the reimbursement of claims by NHIS to service providers did not encourage most entrepreneurs to enter into the provision of health care service. They explained most of the new health facilities that were established within the district over the period were owned by either a mission or an NGO. They added that incomes in the district in general are not high enough for people to pay for private healthcare hence a disincentive to entrepreneurs with profit motive from entering into the provision of healthcare services within the district.

The current doctor-patient ratio in the district as provided by the health directorate stood at 1:21147 while that of the nurse-patient ratio stood at 1:1623. The directorate explained that the doctor-patient ratio has been increasing over the years since they have had only a marginal increase in doctors. On the part of the nurses, there had been

significant increase in the number of nurses posted to health facilities within the district but the effect of this increment has also been nullified by the increment in the population and the increased hospital attendance since the inception of the NHIS.

4.4 Role of NHIS in improving access to health care

Given the access to health care barriers identified, the study sought to examine the role the Bosomtwi Atwima Kwanwoma health insurance scheme in providing members access to quality health care in the district. The development in the number of members registered under the scheme goes a long way to buttress the fact that the scheme is improving access to healthcare. The number of members registered with the scheme has seen a continuos increase since inception to date. All these card bearers of the scheme can access healthcare under the scheme and in most cases would not have to make any upfront payment.

The trend in registration and issuing of ID cards to members as displayed in Table 5 shows an increasing membership of the scheme on year-by-year basis. The data for instance shows an increase in registration of pregnant women of about 110 percent from the year 2008 to 2009 a year after the free maternal care was introduced. All these newly registered pregnant women could access healthcare without having to make an out-of-pocket settlement for the services received at the health facility.

Table 4.5: Registration trend from the year 2006 to 2009

	PERIOD			
CATEGORY	2006	2007	2008	2009
Informal	14073	34796	58015	69858
SSNIT contributors	1060	3682	7482	9289
SSNIT pensioners	14	34	76	98
Children under 18	10856	26109	49000	65193
Pregnant women	0	0	3346	7022
70 years and above	3046	7396	11784	14848
Indigent	63	172	296	303
TOTAL	29112	72189	129999	166611

Source: Field data, May 2011

4.4.1 Trend in the number of registration points and service providers

The role of NHIS in increasing access to healthcare cannot be over-emphasized. It could be seen from the figure below that the number of registration points has increased over the period under review. In the year 2005, there were 23 registration centres which increased to 34 in 2006 and then to 47 in 2007. Within two years, the number of registration centres had more than doubled. This is attributable to the numerous campaigns and education by the scheme. The increase in registration centres is proportional to the increase in the membership which shows increase in access.

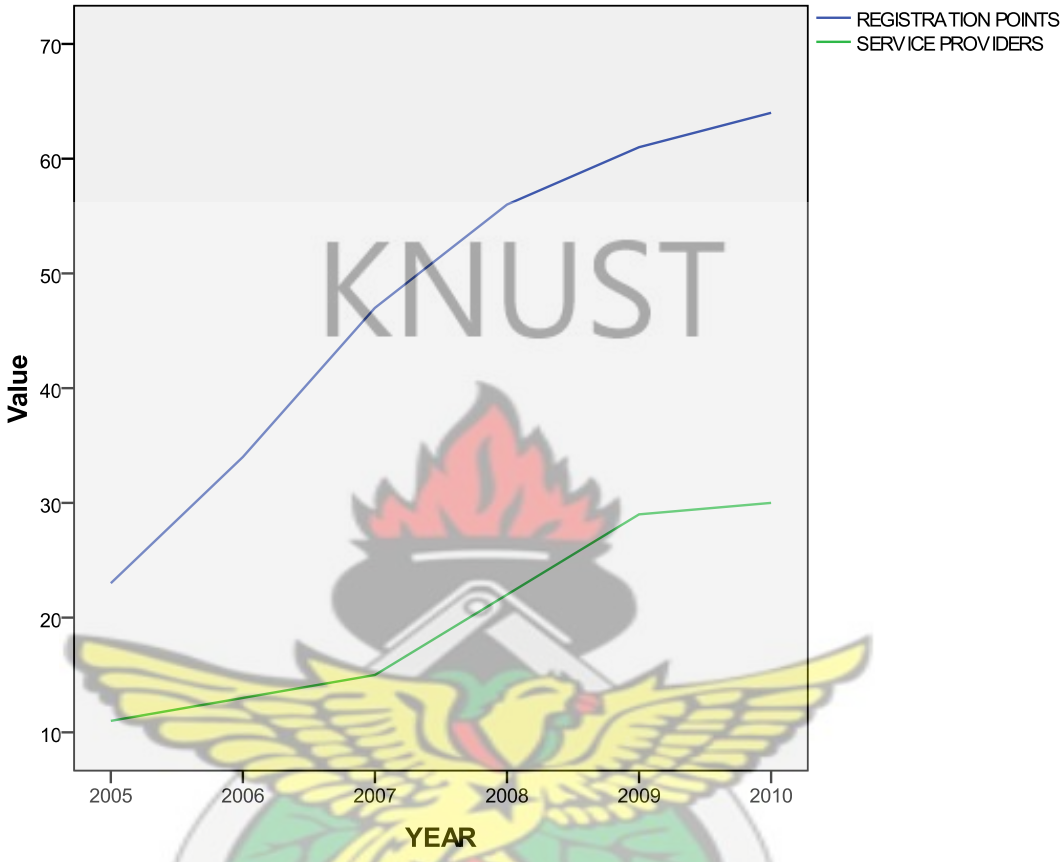
In the year 2008, there were 56 registration centres which increased to 61 in 2009 and then a marginal increase to 64 in 2010. There is no doubt that the number of registration

centres has increased significantly over the period thus confirming people's acceptance of the scheme.

The number of service providers has also increased over the period being studied. Starting with 11 service providers in 2005, the number has steadily increased to 13 and then 15 in 2007 and as at 2010, the scheme could boast of 30 service providers to serve the clients of the scheme. The superimposed graph shows that although the number of service providers and the number of registration centres have both increased at increasing rates, the number of registration centres showed more increases. Such a situation has the benefit of increasing access to healthcare but brings a lot of work for the scheme operators. There are cost implications to meet the demands or claims of the increasing clients.

The result has something to do with the submissions of Chaudhury & Roy, (2008) who argued that insurance schemes have to be considered in relation to the contribution they make towards universal access, horizontal and vertical equity and efficiency within a country. Indeed what is being experienced is an indication of increasing access to universal equitable healthcare.

Figure 3 Number of registration centres and service providers



4.4.2 Medical bills of scheme members

The scheme members sampled for the study indicated that within the past twelve months they had been taken ill or a member of their family had been taken ill and they used the NHIS card in paying for the health service. The period that they or their family members had been indisposed ranged from 3 days to two weeks or more. In order to examine the role of the NHIS in the service they received, these respondents were asked about their medical bill and whether the NHIS covered the entire bill. The cost medical services provided to members as stated by them are provided in Table 6.

It can be seen from Table 6, that most of the members were not aware of how much they would have paid for the health care services in the absence of the NHIS. The members who did not know their total bill and the percentage being settled by the NHIS accounted for 56 percent of the total sampled scheme members.

Table 4.6 Medical bills of scheme members

Medical Bill	Frequency	Percent
GH¢5 to GH¢15	8	4.0
GH¢16 to GH¢30	24	12.0
GH¢31 to GH¢50	16	8.0
GH¢51 to GH¢75	16	8.0
GH¢76 to GH¢100	8	4.0
GH¢101 to GH¢200	16	8.0
Do not know	112	56.0
Total	200	100.0

Source: Field data, May 2011

In all, 24 percent of these scheme members claimed the NHIS settled their entire medical bill whilst the 76 percent asserted that they had to make additional payment. The same trend is repeated among those who had been admitted at hospitals or other health facilities. Among the 112 scheme members who stated that they or members of their family covered under NHIS have been admitted to hospital in the past twelve months, about 43 percent had their bills covered entirely by the NHIS. The remaining 57 percent claim they had to make additional payments for some health service provided to them.

Given that these members average monthly household incomes are not that large, scheme members were made to provide the additional contribution they had to make towards their healthcare although they are registered members of the NHIS. The additional payments they made to cover out-patient or admission services are shown in Table 4.7.

Table 4.7 Additional amounts paid by scheme members

	Out Patient Services		Admission Services	
	Frequency	Percent	Frequency	Percent
Less than GH¢5	8	4.0	8	4.0
GH¢5 to GH¢15	56	28.0	8	4.0
GH¢15 to GH¢30	56	28.0	-	-
GH¢30 to GH¢50	8	4.0	16	8.0
GH¢50 to GH¢75	16	8.0	8	4.0
GH¢75 to GH¢100	8	4.0	8	4.0
GH¢100 to GH¢200	-	-	8	4.0
GH¢200 to GH¢500	-	-	-	-
More than GH¢500	-	-	8	4.0
NHIS covered entire bill	48	24.0	136	68.0
Total	200	100.0	200	100.0

Source: Field data, May 2011

As indicated earlier in this chapter, about 72 percent of scheme member's monthly household incomes ranged between GH¢50 to GH¢200. This means that most household would spend all or more than 50 percent of the monthly income on medical

services although they are valid members of the NHIS. These additional amounts paid by scheme members are a serious barrier to access to health care, a problem that the NHIS is supposed to curb. In Table 6 for instance, about 12 percent of scheme members spent between GH¢50 to GH¢200 as additional payment when they or members of their household were admitted at the hospital.

On the part of service providers and the district health directorate, respondents from both categories asserted that the NHIS has improved access to quality health care in the district. Some private service providers asserted that their facilities have been improved to provide quality healthcare because of the NHIS. They explained that the stringent requirements for accreditation by the NHIA resulted in the upgrade of some of their facilities and the procurement some new equipment to provide quality healthcare.

The district health directorate also asserted that the introduction of the NHIS has resulted in the sharp rise in hospital attendance within the district. The records provided by the directorate indicated that although attendance to health post saw a marginal increase of about 8.7 percent in 2005 when the NHIS was introduced in the district, the figure shot up to about 68.4 percent increment in 2009. They added that maternal attendance to the hospitals more than doubled in 2008 and 2009 when the free maternal care policy was introduced by the government under the NHIS.

4.5 Problems facing the NHIS in improving access to healthcare

Management of the NHIS in Bosomtwe Atwima Kwammoma district are of the view that the health insurance is the best way to bridge the access and equity gap in the provision of quality health care in the district. They however, concede that scheme in

the district is faced with certain challenges that are derailing the efforts at ensuring accessible health care among the inhabitants of the district. According to them major challenges facing the scheme in improving access to quality health care include multiple attendances (over utilization of healthcare facilities by members), fraudulent activities by providers and members of the Scheme, extensive prescription of branded drugs outside the Essential Medicine List (EML) by providers and inappropriate referral from Primary Healthcare Facilities to the Regional Hospital. It also includes poly pharmacy practices by healthcare providers, non cooperative attitude by the public healthcare staff and delay in re-imbursement of Healthcare Providers as a result of delay in the release of funds by the NHIA.

They explained that service providers, like most organizations, are interested in maximizing their income. They therefore provide as many tests and treatment as possible, asking patients to come back several times even when it is not necessary, needlessly using expensive equipment they have purchased in order to recover cost. This they claim is an abuse of the system and management have instituted measures to try to curb the practise.

Management ranked poly pharmacy as the main problem facing the district, this was followed by irrational prescription by health providers, over billing and impersonation respectively. They added that the operations of the scheme in the district have been laden with certain challenges that threaten the scheme in ensuring access to quality healthcare within the district. Management explained that scheme members sometimes feign illness to collect medicines for relatives who are not registered members of the scheme and this result in over-utilisation of the system.

Other challenges cited by management include health shopping and multiple prescriptions (poly pharmacy) by patients, non-conformance to standard treatment protocols and the NHIS approved list on treatment and prescriptions. In terms of accreditation, they explained that although there private clinics and chemical shops within the district, few have been accredited resulting in pressure on the few accredited facilities. They added that most of these health facilities do not meet the basic requirements for accreditation as stipulated by the NHIA.

4.6 Problems facing NHIS accredited health care providers

The first challenge among most these service providers had to do with the accreditation process and the time taken to obtain accreditation. Two out of the six health service providers sampled for this study were government facilities and therefore were given automatic accreditation on the launch of the scheme. The remaining four service providers claim it took more than six weeks for the NHIS after inspection of their facility and all the due diligence to provide them with their letters of accreditation. Some of the challenges they encountered in the accreditation process include excessive time taken to train staff of the facilities and the operations of the scheme and the administrative bureaucracies.

The main problem of the service providers with the NHIS is the time taken for them to be reimbursed for the services provided to members. All the providers claim it takes between five to six weeks for their claims to be reimbursed and this affects their ability to pay for services that they have also procured. They added that some of them have to source other funding since they procure their drugs and equipments on cash basis. Some

providers even stated that the last time they were reimbursed for claims submitted was in January meaning the NHIS owed them claims submitted for the past four months.

All the service providers also raised concerns about the Ghana Diagnostic Related Groups (G-GRG) list being used by the NHIS. Their main concern had to do with the prices of drugs on the drug list. They were of the view that the prices quoted by the NHIA on the drug list is below the market price and drugs with high efficacy have been omitted from the list due to the cost of those drugs. They asserted that this among other issues affected their ability to provide quality healthcare to members of the scheme.

Other challenges facing service providers include the slow nature of the software provided by the NHIS to check the validity of NHIS cards. Some service providers claim it is very slow to validate the authenticity of an ID card when the necessary information is inputted into the system. They claim this result in the build up of queues within the hospital and delays the service provision period. Others claim that although the NHIS has improved access to healthcare, some scheme members abuse the system by visiting the hospital upon the slightest discomfort. This they claim put a strain on the infrastructure and personnel of the health facilities.

Finally, the NHIS according all categories of respondents have improved access to healthcare. Members of the scheme overwhelmingly agreed that the NHIS has improved their access to health care. More than 76 percent of the scheme members stated that the NHIS has improved their access to healthcare. They also agreed that they are satisfied with the services of the NHIS. As shown in Table 8, those satisfied with the services

they received from the various health service providers using the NHIS constituted 64 percent of the respondents.

Table 4.8 Level of Satisfaction with NHIS services

Level of Satisfaction	Frequency	Percent
Not satisfied	24	12.0
Satisfied	128	64.0
Very Satisfied	48	24.0
Total	200	100.0

Source: Field data, May 2011

Although 24 percent were also very satisfied with the services they are currently receiving under the NHIS, some were not satisfied with the services and this accounted for 12 percent of scheme members.

The service providers and district health directorate also acknowledged the contribution of NHIS in ensuring access to quality healthcare. Service providers all agreed that the NHIS is an appropriate guarantee for healthcare delivery within the country. Some of the reasons provided by them for this assertion include the fact that members of the scheme seek early treatment for diseases and this has reduced the number of complicated cases they had to attend to due to delay in seeking medical attention.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This final chapter of the study provides a summary of the major findings as well as the conclusions that can be drawn from these findings are presented in this chapter. It concludes with recommendations to policy makers, management of NHIS and scheme members on how to ensure that the NHIS plays a vital role in the provision of accessible and equitable healthcare.

The study aimed to examine the barriers to equitable health care delivery, determine the role of NHIS in improving access to health care, find out the factors that militate against the NHIS in improving access to healthcare and identify the problems facing NHIS accredited health care providers in ensuring access to quality healthcare in the Bosomtwi Atwima Kwanwoma District. In order to achieve the objectives of the study a combination of case study and survey research designs were used in this study. The case study design was used since it involves an empirical investigation of a particular contemporary phenomenon within its real life context, using multiple sources of evidence. The survey was also used in this study because it aided the collection of a large amount of data from the scheme members in an economical way. This was done through the administration of questionnaires. The data obtained was subjected to various statistical analyses so that valid deduction could be made out of it.

5.2 Summary of findings

With respect to the first objective which sought to access barriers to quality health care delivery in the district, the key findings are that the time taken between payment of

premium and issuance of NHIS card is an access barrier for NHIS members. Although management agrees with clients that issuance of cards take three months, registered members usually receive their cards after four months or more.

Additionally, premiums paid by members of NHIS do not pose much of an access barrier for most members as they claim it is a right proportion of their incomes. Also the absence of health facilities especially clinics/hospitals pose a serious access barrier to healthcare to NHIS registered inhabitants of the district. Furthermore, the ratio of doctors to patients and nurses to patients is still very high at 1:21147 and 1:1623 respectively.

Lastly the marginal growth in health facilities of 1.2 percent for hospitals and 2.8 percent for laboratories coupled with increasing population in the district poses as an access barrier.

The second objective sought to assess the role of NHIS in improving access to health care in the Bosomtwi Atwima Kwanwoma. The issues that emerged are that on the whole, attendance at health facilities have increased due to the introduction of NHIS thereby improving access to healthcare. Again attendance in hospitals increased by about 68.4 percent due to the NHIS and this figure further increased with the introduction of the free maternal care. Also the number of registration centres, membership and service providers have increased at increasing rate over the period being studied thus indicating an increase in access to equitable healthcare delivery.

The third objective sought to explore factors that militate against the NHIS in improving access to healthcare in the district. The main problems hampering the

schemes effort at improving access to health care include multiple attendances (over utilization of healthcare facilities by members), fraudulent activities by providers and members of the scheme, extensive prescription of branded drugs outside the essential medicine list by providers and inappropriate referral from primary healthcare facilities to the regional hospital. It also includes poly pharmacy practices by healthcare providers, non cooperative altitude by the public healthcare staff; and delay in re-imbursement of healthcare providers because of delay in the release of funds by the NHIA.

The final objective sought to identify problems facing NHIS accredited health care providers in ensuring access to quality healthcare in the district. The main problems the service providers include the bureaucracies and red tape in the accreditation process,the time taken between submission of claims and reimbursement by the scheme hampers their business. Again the low prices of drugs and services on the NHIS G-DRG list relative to what pertains to the market, slow online ID card validation process that leads to build up of queues in the health centres and the over utilisation of the NHIS by scheme members.

5.3 Conclusion

The barriers to equitable health care delivery in the Bosomtwi Atwima Kwanwoma district emanates from several sources. In the first place, the absence of health facility in certain parts of the district and the marginal growth in the number of health facilities within the district hamper access to health care. Apart from infrastructure, the personnel to provide the health care service is also inadequate. The doctor to patient ratio in the district continues to worsen as well as the nurse to patient ratio. Incomes are low within

the district and this prevents inhabitants from seeking healthcare from certain facilities thereby bringing about inequity in the healthcare services that inhabitants receive. Although the NHIS is one of the main ways of bridging the problems of inaccessible health care, not everybody can access healthcare under the scheme due to inability to pay premium. Even for those who are able to pay the premium, the time lapse between registering and the issuance of ID creates an access barrier.

Notwithstanding these bottlenecks in the operations of the NHIS in the district, scheme members, the district health directorate and the health service providers all concur that the NHIS has improved access to healthcare in the district. The service providers and the health directorate provided figures that indicate sharp increment in hospital attendance from the launch of the NHIS to date. Notable among this improvement in access to health care is the free maternal programme. Figures from the health directorate indicated that the attendance for pre and post natal healthcare has more than doubled since its inception. Service providers also claim that the services they provide to patients have improved since they became accredited. They stated that in the accreditation process, they were made to upgrade certain facilities in their centres and although this came at a cost, it has improved their service delivery.

The efforts of the NHIS in improving access to healthcare have not been without challenges. Management asserted that the problems facing the scheme include poly pharmacy, irrational prescription by health providers, over billing and impersonation. They added that the operations of the scheme in the district have been laden with certain challenges that threaten the scheme in ensuring access to quality healthcare within the

district. Management explained that scheme members sometimes feign illness to collect medicines for relatives who are not registered members of the scheme and this result in over-utilisation of the system. Other setbacks include non-conformance to standard treatment protocols on the NHIS approved list of treatment and prescriptions.

Finally, health service providers in the Bosomtwi Atwima Kwanwoma district have certain challenges that hamper their ability to provide equitable and accessible healthcare. Notable among them are delay in reimbursement of claims submitted, bureaucratic processes in getting accreditation and lack of the needed health personnel to provide services required by the inhabitants, low cost of drugs on the drug list provided by the scheme to operate within.

5.4 Recommendations

Based on the findings and conclusions of the study, it is recommended that hospital and health facilities should make known to scheme members their entire medical bill and the proportion being covered by health insurance. This would enable members appreciate the cost that the scheme bears on their behalf and thus, enrol most of their family members. Currently, most members are unaware of their medical bills and the proportion being absorbed by health insurance.

Secondly, management of the NHIS in the district must collaborate with the available health facilities and educate them on the relevance and measures they have to put in place to get accreditation. This would reduce the strain on the few accredited health care providers and improve access.

Thirdly, management of the district Bosomtwi Atwima Kwanwoma Mutual Health Insurance Scheme should ensure speedy data entering of records of inhabitants who

register with them. They can arrange for additional staff in order to speed up the issuance of the ID cards process.

Lastly, the NHIA should device new ways of paying service providers; they can adopt a advance payment system which would provide the health care providers with enough funds to provide quality health care.

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APPPENDIX I

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

QUESTIONNAIRE FOR SCHEME MEMBERS

The purpose of this questionnaire is to obtain data on the role of the National Health Insurance in the provision of equitable access to quality healthcare. Data collected would be used solely for academic purpose and respondents are assured of the observance of the strictest form of confidentiality.

Section A: Background

1. Have you registered for the NHIS?

YES [ ] NO [ ]

2. In which year did you enrol in the NHIS?

3. Do all members of your family belong to the NHIS?

YES [ ] NO [ ]

4. If not all members belong to the NHIS, why have others not joined?

Section B: Equitable Access

5. Do you have a valid NHIS card?

YES [ ] NO [ ]

6. If YES, how long did it take you to obtain the card?

a. One Month [ ]

b. Two Months [ ]

c. Three Months [ ]

d. Four Months [ ]

e. More than Four months [ ]

7. Please estimate your total gross monthly household income

1. [Up to GH₵50] 2. [GH₵50 to GH₵200] 3. [GH₵200 to GH₵300]

4. [GH₵300 to GH₵500] 5. [GH₵500 to GH₵1,000] 6. [GH₵1,000 to GH₵2,000]

7. [GH₵2,000 to GH₵5,000] 8. [GH₵5,000 to GH₵10,000] 9. [More than GH₵10,000]

10. [Do not know]

8. Do you have access to a health delivery facility in this town/village?

YES [ ] NO [ ]

9. What types of facilities are available to you? (tick all boxes that apply, multiple response)

1. Private clinic [ ]
2. Chemist/Pharmacy [ ]
3. Government clinic [ ]
4. Government Hospital [ ]
5. Mission Hospital [ ]
6. Herbalist [ ]
7. Others (give details) [ ]

10. How far is the nearest health facility from your home?

1. [Less than 1km] 2. [2-3km] 3. [4-5km] 4. [6-10km] 5. [Over 10km]

11. During the past twelve months did you or any member of your family fall ill?

YES [ ] NO [ ]

12. How long did it last?

1. [Less than 3 days] 2. [Up to 7 days] 3. [More than 7 days]

4. [Two weeks and more]

13. Which health facility did you patronise?

1. [Private Clinic] 2. [Chemist/Pharmacy] 3. [Government Clinic]

4. [Government Hospital] 5. [Mission Hospital] 6. [Herbalist]

7. Others (give details)

14. How much was your bill?

1. [Nothing] 2. [GH₵5 - GH₵15] 3. [GH₵16 - GH₵30]

4. [GH₵31 - GH₵50] 5. [GH₵51 - GH₵75] 6. [GH₵76 - GH₵100]

7. [GH₵101 - GH₵200] 8. [GH₵201- GH₵500] 9. [More than GH₵500]

10. [Don't know]

15. Were you able to settle the entire bill with the NHIS card?

YES [ ] NO [ ]

16. If not the entire bill, how much did you have to pay?

1. [Less than GH₵5] 2. [GH₵5 - GH₵15] 3. [GH₵16 - GH₵30]

4. [GH₵31 - GH₵50] 5. [GH₵51 - GH₵75] 6. [GH₵76 - GH₵100]

7. [GH₵101 - GH₵200] 8. [GH₵201- GH₵500] 9. [More than GH₵500]

10. [Don't know]

17. Have you or any member of your household been on hospital admission during the past two years?

YES [ ] NO [ ]

18. If yes, for how long was the admission period?

1. [Less than 1 week] 2. [Between 1 & 2 weeks] 3. [More than 2 weeks]

19. How much was your bill (estimate)?

1. [Nothing] 2. [GH₵5 - GH₵15] 3. [GH₵16 - GH₵30]
4. [GH₵31- GH₵50] 5. [GH₵51- GH₵75] 6. [GH₵76 - GH₵100]
7. [GH₵101 - GH₵200] 8. [GH₵201- GH₵500] 9. [More than GH₵501]
10. [Don't know]

20. Were you able to settle the entire bill with the NHIS card?

YES [ ] NO [ ]

21. If not the entire bill, how much did you have to pay?

1. [Less than GH₵5] 2. [GH₵6 - GH₵15] 3. [GH₵16 - GH₵30]
4. [GH₵31- GH₵50] 5. [GH₵51 - GH₵75] 6. [GH₵76 - GH₵100]
7. [GH₵101- GH₵200] 8. [GH₵201- GH₵500] 9. [More than GH₵500]
10. [Don't know]

Section C: Challenges with NHIS

22. What is your perception on the quality of treatment at the medical facility used? Would you say you were satisfied or not?

1. Not at all satisfied [ ]
2. Not satisfied [ ]
3. Indifferent [ ]
4. Satisfied [ ]
5. Very satisfied [ ]

23. What problems do you encounter in the use of the NHIS card in paying for health services?

……

24. As a member of the scheme do you consider the amount you spend on the premium in relation to your other commitments as

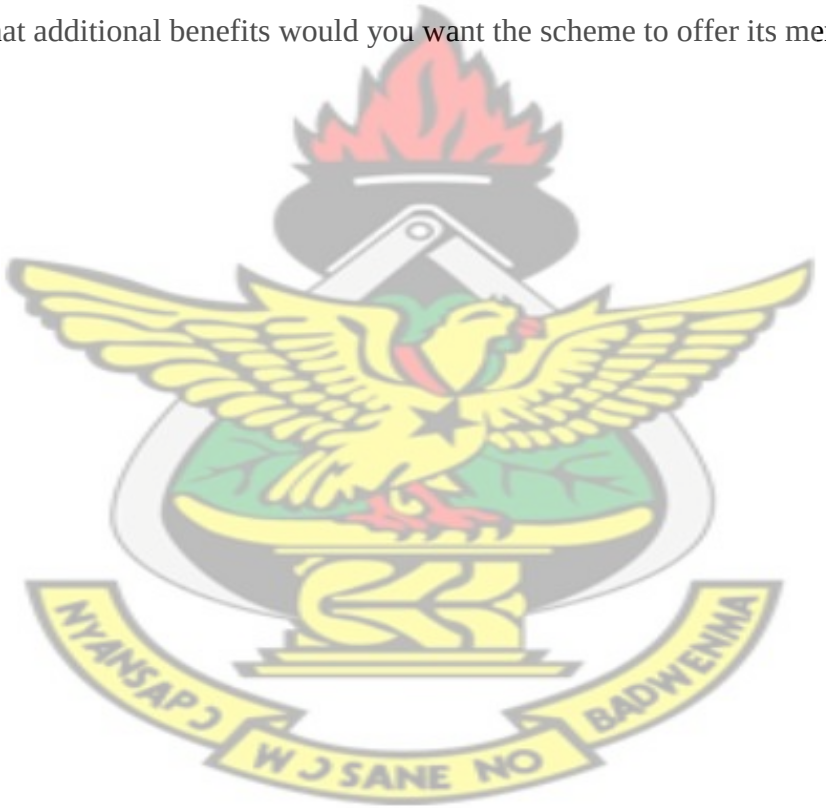
1. [High] 2. [Low] 3. [About right] 4. [Don't Know]

25. Has your membership of the NHIS improved your access to health care?

YES [ ] NO [ ]

Please explain your answer

26. What additional benefits would you want the scheme to offer its members?



APPENDIX II

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

STRUCTURED INTERVIEW GUIDE FOR SCHEME MANAGER

The purpose of this questionnaire is to obtain data on the role of the National Health Insurance in the provision of equitable access to quality healthcare. Data collected would be used solely for academic purpose and respondents are assured of the observance of the strictest form of confidentiality.

Section A: Background

1. When was the Atwimma-Bosomtwe MHIS established?

2. What is the staff strength of the scheme?

3. How many service providers have been accredited by the scheme to provide services?

Service Providers	Number
Hospitals/Clinics/Maternity homes	
Pharmacies/Chemical Shops	
Laboratories/Diagnostic Centres	

Section B: Equitable Access

3. How many were the registered members the scheme between the year 2006 to 2009?

Year/Sex	2006	2007	2008	2009	TOTAL	
Male						
Female						
TOTAL						

4. How many registered members had ID cards and could access healthcare (valid members)?

Year/Sex	2006	2007	2008	2009	T0TAL	
Male						
Female						
TOTAL						

5. How many registered and valid members are below 18 years and above 60 years?

	Age Group	2006	2007	2008	2009	TOTAL	
Registered Members	Below 18						
	Above 60						
Valid Members	Below 18						
	Above 60						
TOTAL							

6. What is the waiting time, in terms of premium payment and issuance of card?

a. Two weeks [ ]

b. Three weeks [ ]

c. Four Weeks [ ]

d. Five to Six Weeks [ ]

e. More than Six weeks [ ]

7. What accounts for the delay in the issuance of NHIS cards?

Section C: Problems facing the NHIS

8. What are the major means by which individuals abuse the NHIS?

9. Please rank the following problems in order of frequency? (1-Most frequent… 4-Less frequent)

a, Poly pharmacy [ ]

b, Over billing by some service providers [ ]

c, Irrational prescriptions by health Professionals [ ]

d, Impersonation [ ]

e, Others (Please specify) ……[ ]

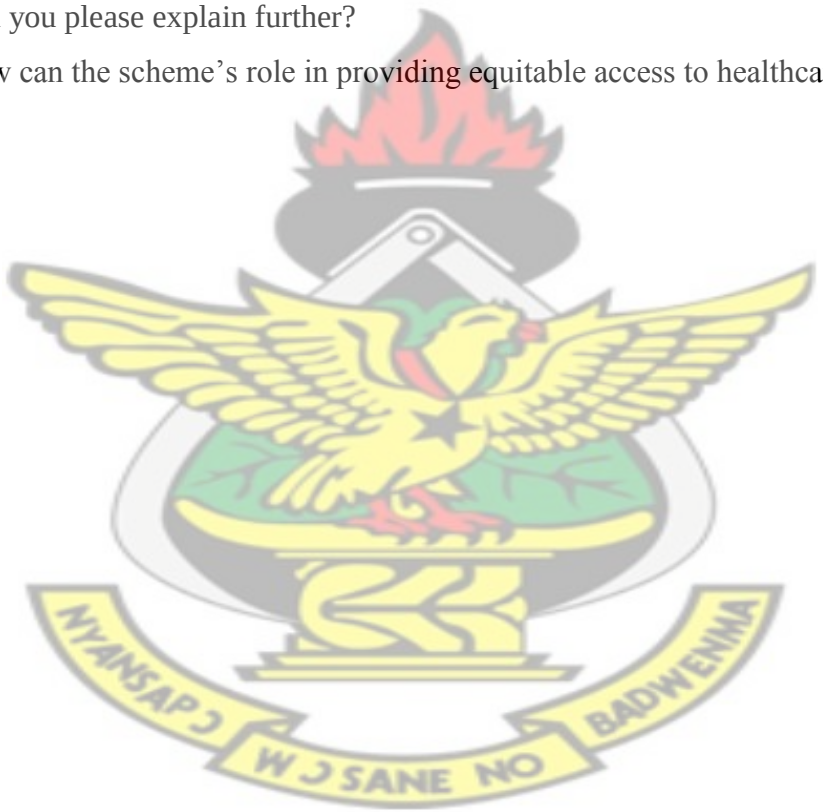
10. What accounts for the delay in the payments of claims to Accredited Service Providers?

11. Can the scheme be sustained financially to provide access to quality healthcare?

YES [ ] NO [ ]

12. Can you please explain further?

13. How can the scheme's role in providing equitable access to healthcare be improved?



APPPENDIX III

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

STRUCTURED INTERVIEW GUIDE FOR SERVICE PROVIDERS

The purpose of this questionnaire is to obtain data on the role of the National Health Insurance in the provision of equitable access to quality healthcare. Data collected would be used solely for academic purpose and respondents are assured of the observance of the strictest form of confidentiality.

Section A: Background

1. In which year were you accredited as an NHIS service provider?

2. How long did it take your institution to obtain accreditation?

   a. Two weeks [ ]

   b. Three weeks [ ]

   c. Four Weeks [ ]

   d. Five to Six Weeks [ ]

   e. More than Six weeks [ ]

   f. Automatic Accreditation (Government facility) [ ]

3. What challenges did you encounter in the accreditation process?

4. What is the staff strength of your organisation?

Section B: Equitable Access

5. What has been the impact on ability to procure medicine (Quality & Quantity)?

6. What has been the impact on impact of NHIS on Attention to/admission of Members?

7. In what ways has the NHIS improved the services you provide?

8. What has been the growth rate in terms of people who patronise the services of your institution?

Year/Sex	2005	2006	2007	2008	2009	**TOTAL**
Male						
Female						
TOTAL						

9. Did your membership of NHIS as a service provider had any effect on the growth rate in 8?

YES [ ] NO [ ]

Please explain your answer?

Section C: Problems facing the NHIS Service Providers

10. How long does it take schemes to reimburse your claims?

f. Two weeks [ ]

g. Three weeks [ ]

h. Four Weeks [ ]

i. Five to Six Weeks [ ]

j. More than Six weeks [ ]

11. What challenges do you have with the Ghana Diagnostic Related Groups (G-DRG) drug list?

12. What other challenges do you have with the NHIS as an accredited service provider?

13. Is the NHIS Appropriate to Guarantee Quality Health Care Delivery?

YES [ ] NO [ ] and Why?

14. How can the scheme's role in providing equitable access to healthcare be improved?

APPENDIX IV

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

QUESTIONNAIRE FOR DISTRICT HEALTH DIRECTORATE

The purpose of this questionnaire is to obtain data on the role of the National Health Insurance in the provision of equitable access to quality healthcare. Data collected would be used solely for academic purpose and respondents are assured of the observance of the strictest form of confidentiality.

1. What has been the number of the following health facilities in the district for the past five years?

Health Facility	2005	2006	2007	2008	2009	**TOTAL**
Hospitals/Clinics/Maternity						
Pharmacies/Chemical						
Laboratories/Diagnostic						
Others						
TOTAL						

2. What has been the number of the following Health Practitioners in the district for the past five years?

Health Practitioners	2005	2006	2007	2008	2009	**TOTAL**
Doctors						
Nurses/Medical Assistants						
Pharmacist/Lab. technicians						
Others health officers						
TOTAL						

3,What has been the number of hospital attendance/s for the following years?

2005	2006	2007	2008	2009

4, What has accounted for the increase in hospital attendance from 2005 in the district?

5, What are the reasons for weak/poor gatekeeper system in health care delivery the district?

6, What accounts for the lack of doctors and other medical personnel in the district?

7,What has been the reason/s for the poor distribution of health facilities in the district?

8,. What are the reason/s for poor state of infrastructure, necessary facilities and equipments in health facilities in the district?

9, What problems face the district in terms of the provision of health care

10, Give any suggestion/s that can be put in place to ensure equitable access to health care delivery in the district?

APPENDIX V

LIST OF HEALTH PROVIDERS

No,	FACILITY	TYPE	LOCATION
1	Hospital	Public	Kuntenase
2	Hospital	Mission	Pramso
3	Clinic	Public	Piase
4	Community clinic	Public	Tetrefu

5	Methodist	Mission	Aburaso
6	Community	Public	Trede
7	Clinic	Public	Ahenema Kokoben
8	Clinic	Public	Kwanwoma
9	Methodist Clinic	Mission	Bebu
10	Methodist Clinic	Mission	Amakom
11	Clinic	Private	Beposo
12	SDA	Mission	Konkoma
13	Methodist clinic	Mission	Brodekwano
14	Methodist clinic	Mission	Nyameani
15	Health centre	Public	Jachie
16	Health centre	Public	Trabuom
17	Maternity home	Private	Sawua
18	Health centre	Public	Apinkra
19	Maternity home	Private	Aputuogya
20	Clinic	Public	Abono
21	Clinic	Public	Sawua
22	Clinic	Private	Feyiase
23	Health centre	Public	Nyamiani No. 1
24	Clinic	Public	Nweneo No. 1
25	Clinic	Public	Sawua
26	Maternity home	Private	Esereso
27	Clinic	Public	Foase
28	Charmar Pharmacy	Private	Aputuogya
29	Erikay Pharmacy	Private	Esreso
30	Triscare scan centre	Private	Kuntenase