

**Assessment of Service Provider Preparedness and Concerns in
the Process of Implementing the National Health Insurance
Scheme in Ghana: A Study of the Upper West Region**

by

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DECLARATION

This thesis in its original form is entirely mine and has never been submitted to this University or any other institution of higher learning for any award. It is a product of my original work and the study was done in the Upper West Region of Ghana from November 2005 to June 2006

Richard Angwaasuwe Basadi

Date: _____

University of Cape Town

DEDICATION

This dissertation is dedicated to my parents, Mr Basadi Bazimewe and Mrs Fati Anlier Basadi, for their loving care and support from childhood to the present. I also dedicate it to my loving wife Eunice, and two daughters, Pamela and Bernice, for their untiring inspiration, care and encouragement.

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ABSTRACT

This study focuses on assessing health provider preparedness in the move towards the implementation of national health insurance with specific reference to the Upper West Region. The paper uses both quantitative and qualitative methods to review the level of knowledge of health staff on the concept of health insurance, the availability of health professionals, essential drugs, infrastructure and equipment, which are essential for providing quality health care.

Since the 1970s, successive governments in Ghana have struggled with the problem of health care financing. Several types of health care financing strategies have thus been tried, ranging from complete cost recovery through partial cost recovery to fully subsidised medical care. However, these efforts have been plagued by inability to access health care especially by the poorest of the poor, inefficiency in service delivery due to chronic shortage of health professionals, essential drugs and other logistics, as well as bottlenecks relating to sustainability of the health care financing mechanism invoke at any particular time.

Past governments have also considered the idea of introducing health insurance as yet another health financing strategy in the country. This idea however received a greater boost in the post 1985 period against the background of increasing public concerns about the inequities inherent in the system of cost recovery commonly known in Ghana as the "Cash and Carry" system which was introduced in 1985.

Whilst recognising that there is no single perfect health financing system, quite convincing proposals have been made by experts in the field, that a social health insurance programme that has the potential for achieving universal coverage, if well implemented, is less regressive and more equitable in nature than "Cash and Carry" which requires direct out-of-pocket payment at the point of service use. Thus, it was with this rationale that the national health insurance programme

was launched in Ghana in August 2003, with the passage of the National Health Insurance Act (Act 650).

Importantly however, under Act 650, the Ghana Health Service (GHS) has been mandated to provide accessible, affordable and quality health services to clients of health insurance schemes to be established thereof. Providers are thus, an essential part of the insurance programme. Further still, the law provides for provider-purchaser split, where payers and the providers of care are independent of each other. This calls for payers to enter into contracts with accredited providers to provide the agreed minimum benefit package.

Thus, provider preparedness is critical for client satisfaction and ultimately scheme success and viability. However, while there are many established mutual health organisations in Ghana, the attempt to build a National Health Insurance Scheme based upon such organisations is novel. Accordingly, there is not a well-developed body of knowledge in the country to guide the scheme development process with particular reference to the complex nature of interactions between the schemes and their clients and providers of health services for the schemes.

Hence, this study is not only relevant, but also timely as no assessment of provider preparedness has yet been done in the Upper West Region to determine provider's level of knowledge on essential scheme design arrangements, minimum benefit package, provider payment mechanism as well as general logistical preparedness of health facilities in the region.

The main objective of this study is to determine the level of preparedness of health care providers for the implementation of the National Health Insurance Scheme (NHIS) in the Upper West Region (UWR) of Ghana. The subsidiary objectives are to assess the perceptions and knowledge of service providers on health insurance concept, principles and implementation arrangements, to determine provider's level of preparedness in terms of staff availability, availability of essential drugs, infrastructure and equipment, and staff concerns,

in order to make policy recommendations for improving provider preparedness to support the implementation of the NHIS.

The study is a cross-sectional descriptive facility-based study using both qualitative and quantitative data collection methods. Qualitative methods consisting of In-depth Interviews (IDI) and Focus Group Discussions (FGDs) were used to explore perceptions and knowledge of service providers on health insurance concept, principles and implementation arrangements. In-depth interviews were held with key managers at the Regional Health Administration (RHA), District Health Administration (DHA), Regional and District Hospitals, as well as with Health Centre In-Charges, whilst the FGDs were conducted with a cross section of hospital staff. Also, on the basis of checklists, quantitative analysis were performed to assess staffing levels and availability of essential drugs in the study facilities using the staffing norms and Essential Drug List (EDL) established by the Ghana Ministry of Health Staffing Guidelines for Hospitals and Health Centres (2004) and the National Health Insurance Facility Accreditation Manual (2005) as reference points.

The sampling frame used in the study included all public and mission (not-for-profit) health facilities providing primary and secondary level care in the region. The Regional and District Health Administrations, the Regional Hospital and the six district hospitals in the region were purposively sampled. A total of fourteen (14) health centres representing a third of the forty-three (43) health centres in the sample frame were also randomly sampled. Questionnaires were piloted with five participants to pre-test the study instruments. The quantitative data was entered using Epi Info and Excel spreadsheets and descriptive data analysis was performed using Epi Info version 6.04b. Frequency tables and cross-tabulations were generated and the results presented in ranked-score tables and graphs.

The study shows that the knowledge of providers on the National Health Insurance Scheme is remarkably high. For instance, the respondents had adequate knowledge about Act 650, the National Health Insurance Council, types

of schemes permitted to operate under the Act, details of the implementation arrangements, benefit package and provider reimbursement mechanisms. This finding is however not unexpected, given the fact that there has been intensive awareness creation drive, following the passage of the Act in 2003. More so, most of the respondents might have benefited from the scores of health provider training workshops organised by the Ghana Health Service to orientate health staff on the scheme.

In addition, the study found that there is an acute shortage of all categories of health professionals in all the health facilities visited. For instance, except Hain health centre in the Jirapa-Lambussie district, there were no medical assistants in the other thirteen health centres visited. Thus, only 7.1% of the health centres studied met the MOH staffing norm of one medical assistant per health centre. Rather, 92.9% of the health centres are manned by nurses with very limited training and technical competencies. Consequently, the acute manpower shortage imposes severe limitations on the range and quality of services provided at the primary care level.

With regard to facility drug preparedness, the study showed that in terms of the number of drugs available from the EDL, all the six hospitals in the study sample obtained the minimum score of 60% set by the Accreditation Manual (2005), with scores of 87.9%, 84.8%, 81.8%, 70.%, 70% and 60.6%, for Nandom, Jirapa, Tumu, Wa Regional and Nadowli Hospitals respectively. This is very encouraging given the fact that the average tracer drug availability in hospitals in the region stood at 75.6%. However, in contrast, the percentage quantity-in-stock indicator showed a rather dismal performance of the hospitals, with only three hospitals meeting the 60% minimum score.

Compared to the hospitals, the drug situation in the health centres was found to be far worse. The study found that all the fourteen health centres which participated in the study were woefully unprepared. Most of the drugs which are specified in the EDL for health centres were completely out of stock, and the few

which were available were grossly inadequate in terms of quantities required to last for the quarter. Thus, none of the health centres assessed obtained the minimum of 60% drug availability score. Clearly therefore, the health centres can be considered to be grossly ill-prepared compared to the hospitals in the light of the fact that the health centre average drug availability was found to be as unimaginably low as 25.6% compared to 75.6% for hospitals.

In terms of providers concerns regarding the introduction of the scheme, a majority of the participants generally felt that the national health insurance scheme is a good initiative which has the potential to help many people use public health services as the first point of contact when ill. In their view, the scheme will help encourage early treatment seeking behaviour, and also lead to a reduction in the rate of absconders, as patients would no longer be required to pay out of pocket at the time of service use. The respondents indicated that when the scheme is in place, it would obviously bring about an increase in the workload of health workers. However, it would also lead to an overall improvement in service provider satisfaction, because as they put it “more work means more revenue and more lives saved”.

Nevertheless, the question of identifying the poor and indigent for support under the scheme remains a big challenge. Although the Act provides that the poor and indigent be excluded from the payment of premiums, the study found that no practical mechanisms have been put in place to make it easy to identify the poor and the indigent.

Furthermore, the study revealed that politicization of the scheme is a serious concern. It was observed that some leading members of the opposition parties and sections of the media has the tendency of portraying the national health insurance scheme as a mere political gimmick by the ruling New Patriotic Party government aimed primarily at gaining popularity. Moreover, the location of the district scheme offices within the District Assembly offices is perceived by many

people as being political and such actions lead to loss of the neutrality required to make the schemes truly non-partisan. It is important to note that, any attempt to politicize the schemes can have grave consequences for the achievement of the much-desired universal coverage, and indeed for the sustainability of the schemes.

In the light of the numerous limitations in health provider preparedness for the implementation of the scheme, a number of policy recommendations are worth pursuing. With respect to health provider education on the scheme, what is required is the fashioning out of need-based training programmes which are effective in updating the knowledge of middle and senior level health professionals, whilst bringing the lower level personnel up to scratch on the concepts and implementation arrangements of the schemes. There is also the need to adopt an aggressive and broad-based public education strategy which is aimed at extensively and effectively reaching out to the local communities with messages on the scheme.

Moreover, the process of introducing national health insurance as a financing mechanism must include planning for infrastructure, staff recruitment, training and retention. Particularly as the phenomenon of staff shortage in the Upper West Region is perpetuated by its unattractive nature, a two-pronged approach is required; one for attracting staff, and the other aimed at retaining them in the region. Specific short-term policy measures which could be adopted in this regard includes the institutionalisation of salary differentials, deprived area allowance, and overtime allowance for health professionals in the region among others.

In the long-term, specific policy measures aimed at redressing the long standing infrastructural inadequacies which have plagued the region and rendered it relatively unattractive to health professionals ought to be pursued. In the mean

time, steps must be taken to ensure that the cost of capital buildings and equipment is included in fees for services. This ensures that these costs are considered carefully and that the best use is made of scarce capital resources through effective planned preventive maintenance schedules, inventory control and monitoring and supervision.

With regard to strategies for addressing the protracted unavailability of essential drugs in health facilities in the region, it is important first of all for policy makers and implementers to realise that it would be extremely difficult to restrict prescribers and insured patients to only the accredited public facilities and to the EDL. In the developing world generally, and in the Upper West Region in particular, it is a well-known fact that with or without health insurance, the use of drugs is largely shaped by the easy availability of near-by drug shops, to which patients are referred for items lacking in the accredited facilities. The reality is that, many heavily used drugs are in short supply and drugs not found in the accredited health units are sold just outside the gates in drug shops and private clinics. This state of affairs is likely to continue despite attempts to improve supplies at the accredited units and prohibit prescriptions outside the EDL. Hence, there is the urgent need to embark on a massive recapitalisation of public health facilities to give a boost to their drug revolving funds, whilst enforcing strict monitoring and supervision at user points to prevent drug leakages.

There is also the need for an overall increase in resource allocation to fund the health system in the region. This would require a shift from the current population-based resource allocation formula to one which is need-based as a means of addressing the structural imbalances and regional inequities which have been exacerbated under the pooled funds mechanism.

In addition, it would appear that the option of national health insurance as an alternative rather than an additional health care financing mechanism based on a single-insurer model is not viable in an acutely poverty-stricken and largely

informal sector environment. Hence, a more acceptable policy option would be to shift from a monolithic to a composite system which recognises the contribution and role of various stakeholders in achieving universal coverage.

Moreover, in order to overcome the practical challenges with regard to targeting the poor and the indigent for support under the scheme, there is the need for more policy-relevant research on the subject of targeting the poor in order to evolve effective strategies which are suitable for achieving the desired impact in specific settings in Ghana.

Finally, in planning to develop social health insurance, policy makers ought to be aware of the competing interests of many groups in the population. Thus, due cognisance must be given to the fact that lack of consensus and support by the different groups for the new system may have a negative effect on its success. Hence, what is required is for those who are responsible for the design of the scheme, to endeavour to provide adequate information about the planning process to all relevant groups and involve them in discussions before any plans are implemented. It is also crucial to engage in negotiations about specific issues of interest and maintain a high sense of transparency as a way of making the new system more acceptable and making the start-up period easier.

In summary, this dissertation is organised in five main chapters. Chapter One presents the background to the introduction of national health insurance in Ghana, problem statement, the study rationale, aim and objectives and a brief background to the study area. Chapter Two gives an overview of international experiences on national health insurance and related issues. Chapter Three and Four contains the study methodology and results and discussions respectively, whilst the final chapter draws conclusions and makes recommendations on ways of improving health provider preparedness and other related concerns for the implementation of the schemes.

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ACRONYMS

ADHA	Additional Duty Hours Allowance
AIDS	Acquired Immune Deficiency Syndrome
ARVs	Antiretroviral Drugs
BMCs	Budget and Management Centres
CBHIS	Community Based Health Insurance Schemes
CCPDM	Consultative Committee for Programme Development and Management
DANIDA	Danish International Development Agency
DDCO	District Disease Control Officer
DDNS	Deputy Director of Nursing Services
DDHS	District Director of Health Services
DHA	District Health Administration
DHMT	District Health Management Team
DPHN	District Public Health Nurse
DRGs	Diagnosis Related Groups
DWMHIS	District-Wide Mutual Health Insurance Scheme
EDL	Essential Drug List
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GLSS	Ghana Living Standards Survey
GPRS	Ghana Poverty Reduction Strategy
GSS	Ghana Statistical Service
HIV	Human Immune Virus
IDI	In-depth Interview
IGF	Internally Generated Funds
ILO	International Labour Organisation
IMF	International Monetary Fund
LI	Legislative Instrument
LMICs	Low and Middle Income Countries
NHI	National Health Insurance
NHIC	National Health Insurance Council
NHIS	National Health Insurance Scheme
NHS	National Health Service
NR	Northern Region
OPD	Out Patient Department
ORD	Office of the Regional Director
RDHS	Regional Director of Health Services
RHA	Regional Health Administration
RHMT	Regional Health Management Team
SAP	Structural Adjustment Programme
SDHT	Sub District Health Team
SRN	State Enrolled Nurses
SHI	Social Health Insurance
SSNIT	Social Security and National Insurance Trust

TB	Tuberculosis
TBA	Traditional Birth Attendant
TP	Tony Peterson
UER	Upper East Region
URI	Upper Respiratory Infection
URTI	Upper Respiratory Tract Infection
UWR	Upper West Region

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CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND TO THE INTRODUCTION OF NATIONAL HEALTH INSURANCE (NHI) IN GHANA

Financing health care has gone through a chequered history in Ghana. Immediately after independence, health care provided to the population was 'free' in public health facilities. This meant that there was no direct out-of-pocket payment at the point of consumption of health care in public health facilities. Financing of health care in the public sector was therefore entirely through tax revenue. The sustainability of this form of financing became questionable as the economy began to show signs of decline in the 1970s and there were competing demands on the same source. What is important to note also was that, the general tax revenue did not allow for a percentage earmarked for health.

This situation continued until 1985 when the Government was compelled under International Monetary Fund (IMF) conditionalities and Structural Adjustment Programme (SAP) prescriptions to introduce user fees for all medical conditions except certain specified communicable diseases and selected vulnerable groups such as the under-fives, elderly and antenatal services for pregnant women. However the exemption policy was poorly implemented due to poorly defined guidelines and mechanisms to adequately identify eligible beneficiaries and to prevent possible financial leakages. Consequently, in the ensuing years, the standard of health care provision fell drastically. There was acute shortage of essential drugs in all public health facilities. Most importantly, the introduction of user fees resulted in the first observed declines in utilisation rates in public health facilities across the country. In spite of this, the government went ahead to institute full cost recovery for drugs as a way of generating revenue to address the shortage of drugs. The payment mechanism put in place was

termed 'Cash and Carry', and its implementation further compounded the utilisation problem by creating a financial barrier to health care access especially for the poor.

Thus, the current attempts by government to introduce the National Health Insurance (NHI) in Ghana is partly in response to the demands of the Ghana Poverty Reduction Strategy (GPRS) and the Health Sector Five Year Programme of Work, 2002-2006, to ensure the delivery of accessible, affordable and good quality health care to all Ghanaians especially the poor and most vulnerable in society (Ministry of Health 2004a).

The policy is thus borne out of the search for a lasting solution to the challenges of out-of-pocket payment for health care at the point of service delivery, which poses a financial barrier to health care access in the country. Indeed, it is estimated that out of eighteen percent (18%) of the population who require health care at any given time, only twenty percent (20%) of them are able to access it (Ministry of Health 2004a). In essence therefore, about eighty percent (80%) of people living in Ghana who need health care cannot afford to pay out-of-pocket at the point of service use.

Contributing to the debates surrounding the effects of user fees on service utilisation, Nyongator and Kutzin (1999) have also observed that while the upper and middle income persons are better off under a user fee regime because they have access to care that they perceive to be of good quality because of the fee system, the poor are all excluded from using health facilities by formal and informal charges (Nyongator & Kutzin 1999). Thus, the benefits of user fees have been extensively challenged, particularly with respect to equity in access to health care (Gilson 1998; Creese 1991). This often results in delays in seeking health care, non-compliance

to treatment, and consequently premature death especially amongst the poor (Ministry of Health 2004a).

Ultimately therefore, the enactment of the National Health Insurance Act (Act 650) in 2003 was basically a response to the adverse equity impact of user fees. Hence, the vision of government in instituting a national health insurance scheme in the country is to assure equitable and universal access for all residents of Ghana to an acceptable quality package of essential health care. In sum, the policy objective is that, "within the next five years, every resident of Ghana shall belong to a health insurance scheme that adequately covers him or her against the need to pay out-of-pocket at the point of service use in order to obtain access to a defined package of acceptable quality of health services" (Ministry of Health 2004a).

Hence two main types of health insurance schemes have been permitted under the Act to operate in Ghana. These are:

- (a) District Mutual Health Insurance Schemes. The Act provides a system by which there is to be established in every geographical area of a District Assembly, a district mutual health insurance scheme. Residents in these areas are required to seek membership of the scheme in the relevant district in order to obtain the basic health care benefits that will be provided under the Act.
- (b) The Private Health Insurance Schemes which may be commercial or mutual (National Health Insurance Act 2003). Of these, the government has chosen to support the development of the District Mutual Health Insurance Schemes as part of the strategies for delivering its pro-poor policy to the underprivileged segments of society. This however creates potential grounds for opposition from the existing community-based prepayment schemes which are denied government subsidy.

Thus, from the outset, the policy was committed to achieving universal coverage with gradual extension, using a combined approach of social health insurance and community-based prepayment mechanisms to cover both the formal and informal sectors. Nevertheless, the key challenges for pursuing universal coverage include the fact that the informal sector constitutes 70% of the population, of which 40% are estimated to be poor. Additional to this, is the challenge which relates to the willingness to contribute substantial general tax revenue to the health sector. And of course, as indicated earlier, the other critical challenge is the issue of likely opposition from the existing community-based schemes, and the fact that government is confronted squarely with a choice of the trade-off between developing flexibly through the existing community-based schemes in order to accommodate individual community needs on the one hand, and developing in a uniform way through the social health insurance approach on the other hand, which makes integration into a mandatory health insurance system easier (Ministry of Health 2004a).

Fortunately however, the policy enjoys a strong political will, and has received significant commitment from both government and the Ministry of Finance. This is understandable against the background that the launching of a health insurance scheme on a national scale as an alternative, rather than a complimentary scheme to the much criticised 'Cash and Carry', was partly in fulfilment of an election promise.

In terms of premium levels and benefit package, it is anticipated that every person living in Ghana will contribute in accordance with the principle of ability to pay, in order to enjoy a package of health services covering over ninety-five percent of diseases afflicting Ghanaians. Therefore there will be differential contribution levels as a way of incorporating a cross-subsidisation mechanism into the contribution levels, thus making the rich

pay more than the less privileged. Hence, whilst employees in the formal sector will be covered by taking two-and-half percent (2.5%) of their Social Security and National Insurance Trust (SSNIT) Fund, those in the informal sector are expected to contribute a minimum of seventy-two thousand cedis per adult per annum. Adults who are poor will pay ₵72,000 (\$8) per adult per annum, ₵180,000 (\$20) per adult for middle income and ₵480,000 (\$53) per adult for the rich and the very rich. The National Health Insurance Fund will pay on behalf of the indigent. In this context, the indigent refers to the core poor, who are considered unemployed and receive no consistent financial support from identifiable sources (Ministry of Health 2004a). A summary of contributions payable by identifiable social groupings in the informal sector is presented in Table 1.

Table 1: Contributions payable by social groupings in the informal sector

Name of group	Who they are	Annual minimum contributions
Core poor	Adults who are unemployed and do not receive any identifiable and constant support from elsewhere for survival	Free
Very poor	Adults who are unemployed but receive identifiable and consistent financial support from sources of low income	₵72,000 (\$8)
Poor	Adults who are employed but receive low returns for their efforts and are unable to meet their basic needs	
Middle income	Adults who are employed and able to meet their basic needs	₵180,000 (\$20)
Rich	Adults who are able to meet their basic needs and some of their wants	₵477,000 (\$53)
Very rich	Adults who are able to meet their basic needs and most of their wants	

Source: MOH, 2004a

An adult in this context refers to anybody who has attained the age of eighteen years and above. Children below the age of eighteen will have free coverage if both parents are paid-up members of the scheme.

Sources of funding for the National Health Insurance Fund include;

- i) The health insurance levy of 2.5% sales tax on all goods and services except essential items such as drugs on the Essential Drug List, mosquito net, goods for the disabled, water, education, salt, agricultural and aquatic food products in its raw state produced in Ghana, live animals, fishing equipment, just to mention a few.
- ii) 2.5% of the Social Security and National Insurance Trust Fund
- iii) Government funds
- iv) Premiums from informal sector contributors
- v) Investment income, grants and donations.

The National Health Insurance Fund will be used in the following ways;

- i) Fully subsidise indigents
- ii) Reinsurance
- iii) Risk equalisation and
- iv) Provide general subsidies to district-wide schemes.

The act also provides for a quite comprehensive benefit package which includes both out-patient and in-patient care. Examples include basic oral and eye care and full maternity care. There is however a provision for an exclusion list which includes appliances and prostheses, cosmetic surgery, anti-retroviral drugs, fertility treatment, dialysis for chronic renal failure, organ transplants, drugs which are not within the national health insurance Essential Drug List (EDL) and Very Important Person (VIP) wards (National Health Insurance Act 2003).

1.2 PROBLEM STATEMENT

In low-and middle-income countries, one of the most urgent problems is financing and providing health care for the 1.3 billion poor people who live in them. Although 93% of the global burden of disease falls on 84% of the world's poor, only 11% of global health spending (2.8 billion Dollars) occurs in low and middle-income countries (Preker et al, 2002). In most developing countries, the traditionally tax funded systems are unable to generate the needed resources due to lack of robust tax base and a low institutional capacity to effectively collect tax (ILO 2001).

Access to services for the most disadvantaged is usually very poor, further reducing the benefit of already scarce resources for those most in need (Palmer et al. 2004). And as noted by Asfaw (2003) and McIntyre et al. (2005), of all the risks facing poor households, health risk probably poses the greatest threat to their lives and livelihoods.

Consequently, in the past decade, the "health care crisis" led to the emergence of many Community-Based Health Insurance Schemes (CBHIS) in different regions of developing countries, particularly in sub-Saharan Africa including Ghana (Preker & Carrin 2004; Wiesmann & Jutting 2001). In addition, decentralization in governance and the success of community-based micro credit schemes may also have contributed to the emergence of community-based health initiatives designed to improve access to health services through risk and resource sharing (Dror & Jacquier 1999).

Generally, CBHIS are known to share certain common characteristics which include; voluntary membership, non-for-profit character, prepayment of contributions into a fund by members and entitlement to specified benefits. In addition, the role of the community in the design and

running of the schemes is important as well as the institutional relationship to one or several health care providers.

However, there are divergent views with regards to the effectiveness of CBHI in improving poor people's access to health care. Whilst proponents including Ekman (2004), and Dror & Jacquier (1999) argue that CBHI are a potential instrument of protection from the impoverishing effect of health expenditure, and that these schemes are effective in reaching a large number of poor people who would otherwise have no financial protection against the cost of illness. Other studies done by Atim (1998), Bennett et al. (1998) and Criel (1998) are however less optimistic, and cite the potential demerits of CBHI to include the fact that community structures may not necessarily reflect the views of the wider population, and that critical decisions may not take into account the interest of the poorest and they may be excluded from decision making. It has also been argued that the risk pool is often too small, that adverse selection problems arise, that the schemes are heavily dependent on subsidies, that financial and management difficulties arise, and that the over all sustainability seems not to be assured (Atim 1998; Bennett, Creese & Monash 1998 & Criel 1998).

Thus, in the search for mechanisms to counter the ill effects of CBHIS, the Government of Ghana passed the National Health Insurance Act (Act 650) in August 2003, that aims to improve access and quality of basic health care services in Ghana through the establishment of mandatory social-type District-wide Mutual Health Insurance Schemes. The Legislative Instrument (LI1809), which establishes the operational framework for the schemes, has also been passed. In the meantime, implementation steps are rapidly being taken across the country including the formation of Regional and District Technical Committees, sensitisation of community

members, establishment of district scheme offices and recruitment of staff among others.

However, social health insurance, if not well regulated and designed, can create the same health inequities and barriers of access to health care as has occurred under the 'Cash and Carry' and community based prepayment schemes. Thus, adequate knowledge about the level of preparedness of health care providers and information about the availability of essential logistics such as drugs and equipment in both the public and private sectors, including their accessibility and quality are important pre-requisites for the introduction or implementation of a National Health Insurance Programme as is being fashioned out in Ghana.

1.3 STUDY RATIONALE

Under Act 650, the Ghana Health Service (GHS) has been mandated to provide accessible, affordable and quality health services to clients of the schemes. Providers are thus an essential part of the insurance programme. Further still, the law provides for provider-purchaser split, where payers and the providers of care are independent of each other. This calls for payers to enter into contracts with accredited providers to provide the agreed minimum benefit package.

Thus, provider preparedness is critical for client satisfaction and ultimately scheme success and viability. In this light, one could not agree more with Normand and Weber (1994) when they state that health care providers, especially when they have been managed as part of government, tend not to have strong, decentralised management systems, and that if providers are to manage services effectively and fulfil their contracts with health funds properly, their management and technical capacity must be developed. Moreover, there is the need to improve providers' internal

management systems, such as those for financial and management information, and to provide training for managers (Normand & Weber 1994).

However, while there are many established mutual health organisations in Ghana, the attempt to build a National Health Insurance Scheme based upon such organisations is novel. Accordingly, there is not a well-developed body of knowledge in the country to guide the scheme development process with particular reference to the complex nature of interactions between the schemes and their clients and providers of health services for the schemes.

A recent unpublished qualitative study by Cofie and Tetteh (2004) in selected geographic zones of the country has documented that whilst hospital managers had high knowledge about the types of schemes which are permitted under the Act, only a quarter of the respondents knew about the National Health Insurance implementation plans, and that respondents at all levels were unclear about the details of the benefit package, noting that " There is communication gap between policy makers, implementers and beneficiaries" (Cofie & Tetteh 2004, pp.56).

Moreover, experience with the establishment of social health insurance schemes around the world have revealed a number of potential obstacles relating to the cultural, historical and traditional environment, as well as obstacles relating to health infrastructure and administration. For instance, commenting on the experience in Egypt and Thailand, Normand and Weber (1994) have pointed out that a lot of importance needs to be attached to the availability of administrative skills in developing social health insurance. They emphasised that a lack of personnel and training can be more of a constraint than a lack of health service infrastructure, adding that many of the advantages of social health insurance funding are

lost without good administration. Moreover, one key objective of social health insurance is to improve access to health services. This requires that early action is taken to ensure that the services to which insured people are entitled are available, and in places where they can easily gain access to them. Hence, if the health sector is unprepared especially for an expansion in the demand for services, additional funds can simply inflate the price of health services without improving access and this does nothing to meet health policy objectives (Normand & Weber 1994).

Hence, this study is not only relevant, but also timely as no assessment of provider preparedness has yet been done in the Upper West Region to determine provider's level of knowledge on essential scheme design arrangements, minimum benefit package, provider payment mechanism as well as general administrative and logistical preparedness of health facilities in the region.

1.4 AIM AND OBJECTIVES

1.4.1 Main Objective

The main objective of this study is to determine the level of preparedness of health care providers for the implementation of the National Health Insurance Scheme (NHIS) in the Upper West Region (UWR).

1.4.2 Subsidiary Objectives

The subsidiary objectives of the study include;

- I. To assess the perceptions and knowledge of service providers on health insurance concept, principles and implementation arrangements
- II. To determine provider's level of preparedness in terms of:
 - Staffing
 - Essential drugs
 - Documentation

- Infrastructure and equipment
- III. To make policy recommendations for improving provider preparedness to support the implementation of the NHIS.

1.5 STUDY AREA

The Upper West Region is the last of the ten regions to be created in Ghana. It is situated in the north-western part of Ghana and covers an area of 18,476 square Km. The region has a projected population of 627,289 at an annual growth rate of 1.7% from the 2000 national population census figure of 576,583. The female and male distribution is 52% and 48% respectively. Seventy-three percent of the population lives in rural and scattered settlements. The region has a total of eight administrative districts as shown in Table 2.

Table 2: Projected populations for 2005

District	Population
Wa East	55,261
Wa West	83,023
Wa Municipal	103,061
Lawra	95,222
Nadowli	89,990
Sissala East	55,216
Sissala West	37,740
Jirapa/Lambussie	101,857
Region	607,037

Source: Ghana Statistical Service

The region has a low population density of 38 persons per square kilometre, ranging from 13 persons per square Km in the Sissala District to 10 persons per square Km in the Lawra District. It is bordered to the north by Burkina Faso, east by the Upper East Region (UER) of Ghana and south by the Northern Region (NR) of Ghana. Illiteracy in the region is very high. It is estimated that only about 15% of the population is literate. The standards of education have fallen with the result that graduates from the second cycle institutions are not able to qualify to enter tertiary

educational institutions to meet the region's technical manpower requirements in various fields, including the health sector.

The majority of the population is engaged in subsistence agriculture. The erratic rainfall, degraded soils, poor agricultural practices and lack of inputs have resulted in low agricultural productivity. Hence about 68% of the population live below the absolute poverty line of 700,000 cedis per adult per year or less than 2000 cedis per day per adult (Ghana Statistical Service 1998).

Health Profile

The Upper West Region is one of the four deprived regions in the country along with the Upper East, Northern and Central Regions in Ghana in terms of health inequalities. The infant and child mortality rates are 71 and 156 deaths per 1000 live-births as compared to the national rates of 57 and 108 respectively. The maternal mortality ratio is unacceptably high and a greater proportion of this occurs at the community level. The malnutrition rate among the under-five as measured by height-for-age was 35% compared to a national figure of 26% (Ghana Statistical Service 1998).

There is a high disease burden in the region (as shown on tables 3 and 4) of which more than 90% are preventable as they are poverty and environmentally related. Malaria accounts for up to 50% of all outpatient attendants. It is also the major cause for hospital admissions. Outbreaks of epidemics, notably, meningitis, cholera and yellow fever, still occur. Tuberculosis (TB) is re-emerging and with the emerging HIV/AIDS pandemic, this is a major challenge to the development of the region if measures are not taken to check the spread of the twin diseases. The region is among the three regions in the country that still have annual prevalence of leprosy above the elimination target of one per 10,000

population. Furthermore, there is a high prevalence of iodine deficiency disorders, iron deficiency anaemia and vitamin A deficiency disorders.

Table 3: Top 10 causes of OPD Morbidity in the U.W.R (2005)

Disease	Cases	% of Total
Malaria	121,723	49
Upper Respiratory Infections (URI)	18988	8
Disease of the skin	11,618	5
Acute eye infection	10,168	4
Other diarrhoeal diseases	7,094	3
Pneumonia	5,492	2
Accidents	4,843	2
Gastro-intestinal disorders	4,241	2
Anaemia	3,023	1
All other diseases	59,711	24

Source: Annual Report of Upper West Regional Health Services, 2005

Table 4: Top 10 Causes of Hospital Admission in the U.W.R (2005)

Disease	Cases	%
Malaria	7,878	25
Pneumonia	1,466	5
Anaemia	1,423	4
Pregnancy related complications	1,094	3
Asthma/bronchitis/URTI	1,070	3
Accidents	608	2
Gynaecological disorders	598	2
Snake bite	592	2
Hernia	532	2
Others	16491	52

Source: Annual Report of Upper West Regional Health Services, 2005

Health Services Organisation and Infrastructure

The Regional Health Management Team (RHMT) comprises of three main units: Public Health, Clinical Care and Health Support Services units.

These units in conjunction with the Office of the Regional Director of Health Services (ORD) are responsible for strategic planning, resource mobilisation and distribution, training, technical support, monitoring and evaluation of service delivery in the districts.

The district health services are managed by District Health Management Teams (DHMTs). The Eight districts are further demarcated into forty-three sub-districts and are managed by Sub-District Health Teams (SDHTs). The Danish International Development Agency (DANIDA) earmarked funding to the region in the past decade has helped to establish a fairly good network of health centres in most of the districts. There are forty-three health centres and clinics (Government and Mission) and three private maternity homes/clinics. Apart from daily provision of services at these health centres, outreach services are provided from 765 outreach points every month by staff from the health centres.

The region has four district hospitals and a regional hospital which also doubles as the district or municipal hospital of the Wa Municipality as a result of the lack of requisite personnel to run a separate municipal hospital. Hospital infrastructure and equipment also continuous to remain in a deplorable state or in many instances completely lacking.

Human Resource

Health service is a skilled labour intensive industry, and therefore human resource is critical for effective and efficient service delivery. However, the human resource situation in the region continues to remain critical with severe shortage of various cadres of personnel. As at the end of 2005, the total staff strength was made up of 23 doctors (8 Ghanaian and 15 Cuban), 502 professional and non-professional nurses, 231 other technical and 572 non-technical staff spread over the eight districts of the region. There is complete lack of personnel in the areas of Physiotherapy,

Orthopaedic, Internal Medicine, Skin, Dental and Ear, Nose and Throat (ENT).

Table 5: Key Personnel-Population Ratios: 2004 and 2005

Category	2004	2005
Physician-population ratio	1: 22,070	1:50,829
Laboratory Technician-population ratio	1:53,781	1:40,663
Technical officers-population ratio	1:9,101	1:17,427
Pharmacist-population ratio	1:197,207	1:121990

Source: Annual Report of Upper West Regional Health Services, 2005

In the light of the acute shortage of health professionals in the region, their efforts are being complemented by 885 Traditional Birth Attendants (TBAs), 695 community-based surveillance volunteers and 244 guinea worm volunteers who are providing services in their communities with supervision from sub-district health staff. Community participation in health delivery is facilitated at all levels through community representation on various health committees at regional, district and sub district levels.

CHAPTER TWO: LITERATURE REVIEW

2.1 OVERVIEW OF INTERNATIONAL EXPERIENCES

The introduction of compulsory or national health insurance has been part of health care reform in many countries of South East Asia, Central and Eastern Europe, and has come under consideration in a number of African countries. In Germany however, the introduction of social health insurance dates back to 1883 (Barnighausen and Sauerborn 2002).

National Health Insurance (NHI), which is most often used interchangeably with Social Health Insurance (SHI), is generally perceived as a financial protection mechanism for health care, through risk sharing and fund pooling for a larger group of the population. It is popularly known as the “Bismarck Model” (CCPDM Technical Report on Social Health Insurance, 2003; Barnighausen and Sauerborn 2002). However, compared to the British National Health Service (NHS), the formation of the German system was characterised by incremental changes and adjustments during both its formative and mature stages, with small, voluntary, informal risk-sharing schemes as the starting point.

Drawing more extensively from experiences around the world using what they called time series data on population coverage, Carrin and James (2004) have presented very revealing evidence with regard to the significance of the incremental approach in achieving universal coverage via social health insurance arrangements. They noted that in Austria, it took 40 years (from 1890 to 1930) to move from 7% to 60% coverage, but another 35-37 years (from 1930 to 1965-1967) to extend insurance to farmers and civil servants, reaching 96% coverage. Likewise in Germany, coverage increased from 10% to 50% in 47 years (from 1883 to 1930). But another 58 years were needed to extend coverage to 88%, drawing in,

among others, the self-employed workers to SHI. In Costa Rica, it took twenty years to reach a population coverage level of 17% in 1961. But then only 5 years were needed to double coverage and thus arrive at 34% population coverage in 1966. The latter increase was an immediate consequence of the law of 1961 which introduced the principle of universality. More than 10 years, however, were needed to again double population coverage; by 1978, the population coverage amounted to 74%. Subsequently, a population coverage level of 83.4% was obtained in 1991: thus, 13 years were required to add a further 10% of the population. Also in the case of Costa Rica, special efforts were needed to extend coverage to the self-employed and the poor low-income population, demanding even longer time periods to systematically enrol these population groups. In Belgium, Israel, Japan, South Korea and Luxemburg, the transition period lasted 118, 84, 36, 26 and 72 years respectively (Carrin & James 2004).

Thus an analysis of the experience with the transition period of the above selected countries with developed SHI schemes clearly points to the fact that all of the 8 countries mentioned above followed an incremental approach, although some took a longer time to develop their systems than others. Those with a fairly extensive transition period, above 40 years, are Germany, Austria, Belgium, Costa Rica, Israel and Luxembourg. Only Japan and South Korea have known a transition period below 40 years. And in all these countries, transition period is used to refer to the beginning of a focus on important developments between the passing of the first law related to health insurance, and the final law voted to implement universal coverage. It is also worth pointing out that in all these countries, the organisational arrangements which were introduced to achieve a systematic expansion of population coverage, as well as the speed of the transition varied from one country to another. However, on the whole, the processes ranged from the steady expansion of

membership in multiple sickness funds, initially run on voluntary basis, to extension of membership steered by a government-driven central health insurance organisation (Carrin & James 2004).

Consequently, it has been noted that one of the great achievements in financing health care during the twentieth century was the move away from direct out of pocket payment and spot market transactions between patients and providers to broad-based insurance and subsidy-based financing. For example, New Zealand has been cited as the first country with a market economy in 1938 to introduce compulsory participation and universal entitlement to a comprehensive range of health services, financed largely through the public sector. The United Kingdom followed a similar path ten years later, with the establishment of the National Health Service (NHS) in 1948. Dror and Preker (2002) have further noted that universal access to health care in many east European countries including Albania, Bulgaria, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, and the former Soviet Union was achieved through similar legislative reforms. They concluded that today, the population in most industrial countries enjoys universal access to a comprehensive range of health services, financed through a combination of general revenues, social insurance, private insurance, and user charges (Dror & Preker 2002).

Thus, following the above developments, it has been estimated that the share of the world's population protected against the catastrophic cost of illness increased significantly during the twentieth century. Global spending on health also grew from 3 percent to 8 percent of global Gross Domestic Product (GDP). Yet, many of the world's 1.3 billion poor still do not have access to effective and affordable drugs, surgeries, and other interventions because of weaknesses in the financing of health services

(World Bank 1993, 1997; World Health Organisation [WHO] 2000; Preker et al. 2002).

It has however been pointed out that in developed country contexts, large segments of the population work in urban settings and in formal employment. Therefore, it is relatively easy to tax such workers at source and to design health care systems that are financed by government or payroll taxes. The policy options for financing health care at low-income countries are, however, more restricted. This is because low-income countries often have large populations in the rural and informal sectors, which limits the effective taxation capacity of their governments. In other words, in most low-income countries, the formal urban employment sector is small relative to the populations in rural areas and in informal employment. In these countries therefore, such populations often have no effective collective arrangements whereby they can pay for health care or obtain protection from the cost of illness (Preker et al. 2002; Arhin-Tenkorang 2001).

Worse still, Preker et al. (2002) have pointed out that even where collective arrangements exist, a related set of problems occurs during the pooling stage of health financing. In his view, pooling requires some transfer of resources from rich to poor, from healthy people to sick people, and from the gainfully employed to the economically inactive, and that without such pooling, people on low incomes are exposed to serious financial hardship when they fall ill. Even in instances where pooling exists, it is often fragmented along income groups, preventing effective cross-subsidies between the higher and lower income groups. Cross-subsidies may also be prevented when fragmentation is based on professional categories, such as creating separate pools for workers and farmers in the same region. Many households become destitute when faced with severe illness that leads to admission to hospital. In the face of

all these constraints therefore, the proportion of the population covered by risk-sharing arrangements is comparatively low at low-income levels (Preker et al. 2002).

Hence, it has further been observed that many low and middle income countries are unable to cope with increasing health expenditure due to the fact that they are still reliant primarily on tax funded finance and out-of-pocket expenditure instead of risk-sharing arrangements to pay for care, thereby exposing themselves to added risk of impoverishment from the double effect of income loss during illness, the high cost of health care, and variations in the prices charged by providers (Dror & Preker 2002). In the Philippines for example, it has been pointed out that the delivery and financing of government health services are far from reaching the entire population and financial and geographical access to health services remains an issue for about half the population. Consequently, in view of market imperfections, the weakness of national health service delivery and financing, and the strength of the private sector, individuals in the Philippines play a large role in their health care, and their financial participation in health care expenditure is estimated to be as high as forty-six percent of the total health care expenditure (Dror & Preker 2002).

The situation is not different in many African countries. In the case of South Africa for example, private sources of funding account for nearly 62% of total health expenditure, and provides care for 23% of the population on a regular basis. Medical schemes are the principal financial intermediaries in the private sector, accounting for almost two-third of total private spending on health services. The private health sector is therefore a significant part of the national health system and plays an essential complementary role to the public health system (Department of Health, South Africa, 1997).

Hence, in low and middle income countries, there are strong arguments in favour of adopting health care financing arrangements that seek to blend social health insurance with community based health financing mechanisms as means to ensure increasing success of providing adequate health care coverage for their populations (CCPDM Technical Report on Social Health Insurance 2003; Atim 1998; Ensor 1999).

Aptly therefore, based on the experience of many European countries including Austria, Belgium, France, Germany, Luxembourg, Netherlands and Switzerland, Busse (2002) has drawn the attention of all countries embarking on the health insurance route, to take into cognisance the fact that, no matter how skilfully the social health insurance or community-financed health system is designed, or how long it has been in operation, and no matter how rich the country is, some sort of subsidisation will always be needed to complement the main system of finance. Pointing out that in Europe, the extent of subsidisation varies from modest to fifty percent of total finance, Busse (2002) has emphasised that “subsidies are the only way of ensuring adequate population coverage, stimulating delivery in otherwise underserved areas, or encouraging the delivery of certain, often public health-related services” (Busse 2002 p.289).

Nonetheless, with regard to financial protection per se, researchers have consistently found that community based health financing mechanisms are effective in reaching low income populations that would otherwise not have financial protection against the cost of illness. For instance, Preker et al. (2002) have reported that in Asia and Africa, experience with the introduction of community based health financing strategies have led to improved financial protection for the poor through the reduction of the scheme members’ out-of-pocket spending, while increasing their use of health care services (Preker et al. 2002).

Furthermore, it has been noted that community based health financing schemes also appear to extend coverage to a large number of rural and low-income populations that would otherwise be excluded from collective arrangements to pay for health care, although there have been reports that the poorest of the poor are often excluded from community financing arrangements, a phenomenon which is predominantly attributable to a lack of affordability.

Nevertheless, in Asia and Africa, experience have shown that the existence of risk-sharing arrangements as well as trust in and local community control over the operations of the schemes such as community participation in fund management, appear to increase enrolment in the schemes. In particular, it was found that although income was a key obstacle to participation by the poorest of the poor, even these people were often willing and able to participate if their contributions were subsidised by public or donor funds and if there was access to good quality services. More so, people were more likely to enrol if client households were directly involved in the design and management of the schemes. In addition, it has been observed that households are also more likely to enrol if the premiums are based on prior assessments of local willingness to pay, and if the benefits included easy access to a network of health providers capable of providing a broad range of both basic health services for frequently encountered health problems, as well as hospital services for those conditions which are more rare but also more expensive to treat.

Thus, Gertler (1998) has noted for instance, that a large number of countries in Asia including China, Indonesia, Malaysia, Mongolia, the Philippines, Thailand and Vietnam have either passed legislation or are considering introducing, expanding or modifying Social Health Insurance,

whilst in Korea, Taiwan and Singapore, coverage is universal (Gertler 1998).

2.2 CHARACTERISTICS OF SOCIAL HEALTH INSURANCE

In principle, SHI involves compulsory membership amongst a larger proportion of the population. Workers, self-employed, enterprises and government pay contributions into a social health insurance fund. The base for workers' and enterprises' contributions is usually the worker's salary. The contributions of the self-employed are either flat or are based on estimated income. Government may provide contributions for those who otherwise would not be able to pay, such as the unemployed and low-income informal sector workers (Carrin & James 2004).

In terms of scheme and health service provider relationship, there are often three options;

- (a) SHI may choose to own its own provider networks which would be well placed to provide a broad range of health services for insured clients.
- (b) It may work with accredited public and private health care providers,
- (c) Or use a combination of both.

Moreover, within SHI, a number of functions such as, registration, collection of contributions, contracting and reimbursement of providers may also be executed by parastatal or non-governmental institutions. This is often referred to as sickness funds, and the reimbursement of providers for services rendered to insured clients can be done in various ways; but drawing on evidence presented by Jegers et al. (2001) in their typology to classify provider payment systems from an incentive point of view, it is worth cautioning that each provider payment mechanism generates various forms of incentives for provider behaviour which can have significant adverse impact not only on the financial operations and

sustainability of schemes, but even more broadly on national health policy goals of quality of care, efficiency and accessibility (Jegers et al. 2001; Atim 2000).

The most common types of provider-payment mechanisms and the kind of incentives they generate are presented in Table 6.

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Table 6: Provider-Payment Mechanisms and Incentives

Payment method	Description	Unit of payment	Impact on quality	Costs & efficiency	Administrative & management systems	Risk sharing & management
Fee for service	Separate fees are charged for each service or treatment, e.g. consultation, tests, drugs (retrospective payment system)	Per unit of service or treatment	Quality impact usually presumed to be good; payment directly related to complexity of case/service	Incentive to produce too many unnecessary services; expensive and maybe wasteful	Requires providers to bill for and record every service performed; also for scheme, this can entail complicated and costly claims processing and monitoring procedures to avoid fraudulent claims	Scheme bears all the risk involved and the provider has no incentive to cooperate with scheme, e.g. to check fraud; risk management. Demands on scheme becomes very high
Simple case payment	Fixed payment for all services involving a single illness episode, e.g. malaria, no matter how many times the patient is seen or attended to (prospective payment system)	Per episode or case of illness	Incentives to reduce cost per case (e.g. discouraging repeat visits) thus potentially impairing quality	Easier and less costly to operate than fee for service; but incentives to lower quality may have negative impact on efficiency	Easier claims processing than fee for service; strict control and monitoring required to ensure cases recorded in right illness categories	Provider bears some risk that illness may cost more than predetermined case fee; the scheme risks that cost of illness may be less than case fee. Risk management demands on scheme fair

DRGs	A case payment system based on a schedule of diagnostic groups used mainly for hospital payments. DRG into which the patient's diagnosis falls, assigned after discharge of patient, determines fee (prospective system)	Per diagnosis group	Incentives similar to simple case payment; also provider incentive to choose only illness having best cost-benefit ratio for provider and refer others	DRGs are complex to set up and operate	Not much cheaper to administer than fee for service; necessity to ensure control means schemes must have good validation and claims management system; providers must collect large amount of information on patient characteristics, diagnosis and procedures	If operated honestly, provider bears same risks as above; main risks for schemes however are ensuring cases are assigned to right groups; making sure patients not needlessly transferred; desired level of quality is maintained
Daily rate or per diem	Used in hospital settings only, the fee covers all services and costs per patient per day (i.e. treatment, drugs, tests, accommodation and feeding, etc.) but some variations exclude care such as surgery (prospective system)	Per patient day	With fixed daily fee, there is incentive to reduce costs which could be at the expense of quality	Could have positive impact on costs but provider may also seek to maximise income by prolonging hospital stays	Very easy to administer; management requirements low; no fee schedules or detailed lists of prices involved; but need to track inpatient days to ensure patients not kept unnecessarily long in hospital	Risk is shared between provider and scheme; main risk management issues are ensuring quality is maintained within the fixed fee, ensuring patient stays are not unnecessarily long

Bonus payment	Payment to a provider who has achieved certain pre-defined objectives, e.g. lowering drugs budget or immunising children/pregnant women (retrospective system)	Lump sum for specified objective, e.g. percentage of target group children immunised	Unless the objective is quality related or unless adequate quality control measures are put in place, attainment of the objective could be at the expense of quality(e.g. needed prescriptions not being given)	Effective for containing costs if the objective desired by the bonus payment is lowering of defined costs	Administration costs depend on existence of registration system for monitoring prescriptions, immunisations, etc. If none exists, it could be too expensive	Main risk management issue is ensuring there is no fraud or manipulation in reporting the progress on attaining the objective; but also that quality is not sacrificed. Therefore payment should be for achieving objective but not proportional to the savings involved.
Budget	Advance payment to a provider for total costs of services to scheme members in a specified time period; in a variable budget, certain end period adjustments are allowed, e.g. to take account of higher than normal morbidity or epidemics (Prospective system)	All services for members in defined period; per prescription or item	Effect on quality is fair; quality may be compromised if provider's need to contain costs lead to substituting cheaper and lower quality treatments	Very good for containing costs; budget may be combined with bonus element where provider shares a portion of savings achieved, or penalised for exceeding cost targets	Easy to set up and operate; no claims processing involved but may require utilisation management to ensure quality service	With fixed budget, provider takes all risk of higher than budgeted costs, and scheme takes risks of reverse; with variable budget, risks shared. Main risk management issues are ensuring that efforts to contain costs by provider do not lead to deterioration of quality

Capitation	The scheme pays the provider a fixed, agreed amount per member for all members of the scheme per month or other period such as quarterly or yearly; provider contracts to provide all the defined care for any member who needs it during the period without extra cost (Prospective system)	Per member per year or other agreed period of time	Works best where schemes or their members have a choice of providers or an effective quality control system in place to ensure that economy of resource use is not at the expense of quality of care, as the schemes or members can switch or sanction providers if they are not satisfied with the quality of care	Very positive effects on cost control; ensures that providers do not stand to gain by providing unnecessary services so keeping costs down. May also promote allocative efficiency by encouraging providers to engage in prevention and promotion activities to maximise their revenue; therefore suitable for primary care providers	Administrative costs could be low; only problems arise when members change providers. But overall management could be complex where quality control mechanisms are to be enforced and skills of providers and schemes not high	Provider assumes all financial risks; scheme faces little risk. Main risk is that of ensuring quality is up to standard. Where no competition exists, requires adequate quality control mechanisms; utilisation management required to prevent under-servicing of members
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Source: Atim, 2000

Another crucial ingredient of social health insurance is that it is based on mutuality, solidarity and support, and thus involves a transfer of resources from relatively richer and healthier people to relatively poorer and sicker people and from adults to children. This is usually referred to as income-related and health-related cross-subsidization, which in the view of McLeod (2005) further entrenches the principles of solidarity and mutuality in a planned social health insurance system. Thus, social health insurance works best when there is a consensus among the population that mutual support is a laudable idea. Therefore, if there is no such consensus, it will be difficult to promote acceptance of the scheme (McLeod 2005).

It has further been argued by McLeod (2005) that, social health insurance is attractive for a number of reasons. These include:

- It serves as a means of reducing the financial burden on the public sector and also mitigates some of the costs of mobilising resources through user fees.
- It can provide a stable source of revenue for services
- The flow of funds into the health sector is visible
- It can help to establish patients' rights as customers of the health care providers
- It combines risk pooling with mutual support, by allocating services according to need and distributing financial burdens according to the ability to pay
- It can operate in pursuance of government health policy goals, whilst maintaining a degree of independence from government and
- It can be associated with efficient provision of health services.

However, the main disadvantages of social insurance financing include; high administrative costs, problems of cost containment as well as problems of ensuring coverage for workers in the informal sector (Normand & Weber 1994).

More so, care must be taken to build in to the insurance design an element of mandatory participation in order to address the obvious problems of adverse selection and cream skimming. The design must also seek to control for moral hazard (Gertler 1998; Atim 2000; Barnighausen & Sauerborn 2002).

With reference to the South African experience for example, it is important to draw attention to the fact that the proliferation of non-indemnity medical insurance in the 1990s led to substantial 'cream-skimming', with many young and healthy members opting out of traditional medical aid schemes, and preferring only to obtain catastrophic health care cover. Thus risk pools of medical schemes have systematically eluded the young and healthy members. The impact has been to reduce or eliminate cross-subsidisation within medical schemes. To avert possible collapse, schemes are compelled to charge even higher premiums to those who remain (especially the old and sickly) at the time when they can hardly afford it. Most of these people inevitably fall back onto the public sector (Department of Health; South Africa 1997).

Thus, drawing from the German experience of SHI for a century and over, Barnighausen and Sauerborn (2002) have cautioned that although a number of low and middle income countries (LMICs) are considering social health insurance (SHI) for adoption into their social and economic environment or striving to sustain and improve already existing SHI schemes, certain lessons or factors need to be carefully considered.

First of all, it has to be noted that although small, informal, and voluntary health insurance schemes may serve as learning models for fund administration and solidarity as already noted above, it is worth considering that in order to achieve universal coverage, government action

is needed to formalise these schemes and to introduce a principle of compulsion. Once compulsory health insurance exists for some people, incremental expansion of coverage to other regions and social groups may be feasible to achieve universality.

Second, in order to ensure sustainability of SHI, the mandated benefit package should be adapted incrementally in accordance with changing needs, values and economic circumstances. This is crucial for keeping member loyalty and for ensuring expanding enrolment and sustainability of the scheme.

Moreover it has been pointed out that in a pluralistic SHI system equity as well as risk pooling and spreading can be enhanced if funds merge. Under such arrangements however, it is significant to note that the optimal number of funds will depend on the stage of development of the SHI system, as well as on other objectives of the system including choice and competition. Thus for instance, a risk equalisation scheme may particularly prevent the adverse effects of risk selection, if competition between insurance funds is introduced into the system.

In addition, if social health insurance is so designed as to effectively provide an alternative to state and market regulation, it provides a platform for self-governance and may serve as a source of stability and sustainability as well as a means of decentralising and democratising a health care system.

Finally, costs can be successfully contained under social health insurance arrangements in a fee-for-service system, if cost-escalating provider behaviour is constrained by either political pressure or technical means such as the use of contract negotiations and third party payment mechanisms, just to mention a few. Care must however be taken so as not

to compromise access and quality of care (Barnighausen and Sauerborn 2002).

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CHAPTER THREE: METHODOLOGY

3.1 STUDY DESIGN AND DATA COLLECTION TECHNIQUES

The study is a cross-sectional descriptive facility-based study in which both qualitative and quantitative data collection methods were used. A cross sectional study design was most preferable in this context because it provides an adequate approach for a rather rapid assessment of health provider preparedness with a focus on the level of knowledge of providers on the concept of health insurance, as well as the level of preparedness of health facilities in terms of staffing, drugs and other logistics from a snap short perspective.

Qualitative methods consisting of In-depth Interviews (IDI) and Focus Group Discussions (FGDs) were used to explore perceptions and knowledge of service providers on health insurance concept, principles and implementation arrangements. In-depth interviews were held with thirty six key managers at the Regional Health Administration (RHA), District Health Administration (DHA), Regional and District Hospitals, as well as with Health Centre In-Charges. The choice of IDI as the most preferred instrument to collect information from health managers was based on the assumption that health managers at the various levels of the health care system have the responsibility for policy interpretation, dissemination and implementation. Thus, they are expected to have a fairly thorough knowledge and understanding of health policy issues in general, and with specific relevance to this study, be able to provide specialised information relating to the level of preparedness of their respective facilities as well as the implementation arrangements for the roll out of the schemes.

In addition, FGDs were conducted with a cross section of hospital staff. In all, six focus group discussions made up of between six and eight

participants were held, one in each of the six hospitals in the region. The participants were mainly senior nurses, most of whom are ward and other unit in-charges such as pharmacy, laboratory, X-ray etc., with responsibility for ensuring that the necessary logistics and materials are available for effective functioning of the unit or ward. The essence of the focus group discussions was to encourage free discussion of the themes being explored and also allow for expression of divergent views. They also served to verify responses obtained from the health managers interviews, whilst providing an opportunity to investigate the underlying factors for observed patterns in the responses obtained from the personal interviews.

Also on the basis of checklists, quantitative analysis was performed to determine provider's level of preparedness in all the participating hospitals and health centres. The checklists were designed in a manner that allowed for current staff levels (by category) of the study facilities to be captured. Information on staffing norms for the various facilities was also obtained. The stock levels of selected tracer drugs in the participating facilities were also assessed using a checklist of MOH approved Essential Drug List (EDL) for health centres and hospitals in Ghana.

3.2 SAMPLING

The sampling frame included all public and mission (not-for-profit) health facilities providing primary and secondary level care in the region. The Regional and District Health Administrations, the Regional Hospital and the five district hospitals in the region were all purposively sampled. Fourteen health centres representing one third of the forty-three health centres in the region were also randomly sampled in proportion to the total number of health centres in the respective districts. Thus, in all, six hospitals (Nandom, Lawra, Jirapa, Nadowli, Tumu and Wa Regional), and fourteen health centres (Wallembelle, Kulfoo, Lassia-Tuolu, Poyentanga,

Sombo, Dapuori, Jang, Fian, Zambo, Piiri, Karni, Sabuli, Hain and Ullo) participated in the study.

3.3 VARIABLES

The following key variables were explored in the study.

- Demographic characteristics
- Perceptions and level of knowledge of service providers
- Staffing
- Essential drugs
- Infrastructure and equipment

3.3.1 Determination of Facility Preparedness

Preparedness in the context of this study refers to the degree to which health professionals demonstrate awareness and knowledge on the concept of health insurance. In addition, facility preparedness is measured by the availability of health staff, essential drugs, infrastructure and equipment.

Hence, in assessing the level of provider and facility preparedness, reference was made to the Ministry of Health Staffing Guidelines for Health Centres and Hospitals (2004), and the National Health Insurance Scheme Facility Accreditation Manual (2004). In accordance with the categorisation of the MOH staffing guidelines and the norms stipulated by the accreditation manual cited above, the decision rule for a hospital to be considered fully prepared to be accredited is that it must have a minimum score of 60% in human resource, in terms of medical staff only, and 50% of the other components of staff, i.e. administrative and other support staff. In addition, the hospital must have a minimum score of 60% of its pharmaceutical requirements and 50% general infrastructure.

In the case of clinics and health centres, the facility should score a minimum of 60% in human resource availability in terms of medical staff only, 50% other staff, 60% dispensary services and 50% general infrastructure including essential equipment (Ministry of Health; Ghana 2004c; Ministry of Health; Ghana 2004d).

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3.4 TRAINING OF RESEARCH ASSISTANTS AND PILOT STUDY

The research assistants were taken through a two-day interactive training. The training focused on the research protocol and objectives, community entry skills, and interviewing, note-taking and transcription skills. The research assistants were also taken through the research instruments to enable them have a common understanding of the questions so as to ensure standardisation in the way the questions should be asked.

The structured questionnaires were piloted with 5 participants who were eligible to be recruited in the study, but who are working in health centres and hospitals which were not sampled for the study. This process allowed for any ambiguous questions to be clarified and also gave the investigator an idea of the average length of time it would take for a questionnaire to be administered, as well as improve the reliability of the study instruments. The participants in the pilot also gave their opinion on whether or not the length of time is reasonable as well as on the user friendliness and applicability of the questionnaire. For instance, Methyldopa and Bendrofluazide were removed from the checklist for assessing drug availability at the health centre level because it came to light in the pilot that health centres in the region are manned mainly by nurses and they are not allowed to prescribe the drugs in question and therefore, there is no need to stock them.

The questionnaires from the pilot study were also entered into the data entry screen and a frequency analysis was obtained using the StatCalc facility of Epi Info version 6.04b. This was meant to assist in uncovering any problems, which were likely to arise during the data entry and analysis so as to institute the necessary corrective measures to ensure the validity of the study results.

3.5 DATA MANAGEMENT AND ANALYSIS

3.5.1 Field Editing

The investigator personally undertook field editing and made spot checks during the data collection process. During this process, missing data was identified and the research assistants were required to go back and collect the missing data.

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3.5.2 Coding and Transcription

All the closed-ended questions in the questionnaire were pre-coded whilst the open-ended questions were coded after reviewing the responses and developing a coding manual. The FGDs were tape-recorded and comprehensive notes were also taken during the discussions. The tapes were transcribed and analysed manually.

3.5.3 Data Entry and Cleaning

The quantitative data was entered using Epi Info and Excel spreadsheets. The Excel spreadsheets were specifically used to enter data on the drug stock levels. Missing data was carefully considered and accounted for. Double entry for the quantitative data was done and data cleaning was conducted upon completion of data entry.

3.5.4 Statistical Analysis

Descriptive data analysis was undertaken using Epi Info version 6.04b and Microsoft Office Excel 2003. Frequency and cross-tabulations were also carried out and the results presented in tables and graphs.

3.5.5 Quality Assurance

The following measures were adopted to ensure quality assurance:

- A pilot study was done and relevant amendments made to the questionnaire before data collection.
- The two research assistants who were involved in the data collection had previous experience in data collection methods, and were fluent in English. They were also trained prior to embarking on the field work.
- The investigator personally supervised the field work, undertook spot checks and also carried out field editing of the data.

- In transcribing the FGDs, attention was paid to detail and contextual relevance, whilst double entry of the quantitative data was carried out.

3.6 ETHICS AND COMMUNICATION

Ethical approval was sought from the University of Cape Town Research Ethics Committee. Before the commencement of the study, permission was obtained from the Regional Health and District Health Administrations, and the Regional and District Hospitals and Health Centres involved in the study.

In addition, written consent was obtained from the participants. A consent form was developed in English since it is a facility-based study and the respondents were all health professionals who speak and understand English, and the tools were also administered in English. The participants were informed that participation is voluntary with no inducements, and that they have the right to withdraw from the study at any time, and that refusal to participate in the study will not in any way affect them. They were also assured that any information obtained from them will be kept strictly confidential.

Findings of the study will be disseminated to all stakeholders, including all the health facilities who participated in the study, the National Health Insurance Council and DANIDA. Copies of the summary of findings will be made available to each facility, and health managers will be debriefed during the half-year regional health managers review conference which will be held in the regional capital in mid -July, 2006.

3.7 LIMITATIONS OF THE STUDY

This study was mainly constrained by time and resources. But for time and resource constraints, a total facility survey using the longitudinal type approach would have been most preferable because of the special strengths of longitudinal studies in capturing the trend of events or occurrences over a long period of time. Also it would have been more satisfactory to conduct an inventory of all drugs used in the facilities rather than limit the study to only the tracer drugs. In fact, it would have been ideal to take an inventory of other consumables and supplies as well, since they are absolutely essential for the provision of a complete package of quality health services.

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CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.1 PARTICIPANTS BACKGROUND CHARACTERISTICS

The age of respondents in the study ranged from twenty to sixty-one years. The sixty-one year old respondent is a male nurse who has been deployed on contract as a result of the acute shortage of nursing staff in the region. In terms of the sex composition, there were more female respondents than male. The study finding is however not unexpected because, generally, in Ghana as it obtains everywhere else in the world, there are more female nurses than male, and the in-depth interviews were held with health facility in-charges, most of whom are midwives and State Enrolled Nurses (SRNs).

Table 7: Age and sex distribution of the respondents

Age group	Male	Female	Total
20 – 24	1	0	1
25 – 29	4	0	1
30 – 34	3	1	4
35 – 39	2	1	3
40 – 44	0	0	0
45 – 49	2	5	7
50 – 54	2	7	9
55 – 59	0	7	7
60+	1	0	1
Total	15	21	36

Source: Author

Generally, the respondents in the study sample were very experienced health staff and managers with responsibility of managing the various Budget and Management Centres (BMCs), units and wards in the study facilities. They included health centre in-charges, Deputy Directors of Nursing Services (DDNS), District Disease Control Officers (DDCO), District Public Health Nurses (DPHN), Health Services Administrators, Pharmacists, District Directors of Health Services (DDHS) and the Regional Director of Health Services (RDHS). The number of years served

ranged from a little less than five years to thirty two years, with 33.3% of them having worked for thirty years or more.

Table 8: Summary of number of years in service

Number of years	Male	Female	Total
Less than 5	8	1	9
6 – 10	2	0	2
11 – 15	0	1	1
16 – 19	0	0	0
20 – 25	3	1	4
26 – 29	0	8	7
30+	2	10	12
Total	15	21	36

Source: Author

4.2 PERCEPTIONS AND KNOWLEDGE OF SERVICE PROVIDERS ON HEALTH INSURANCE CONCEPT, PRINCIPLES AND IMPLEMENTATION ARRANGEMENTS

4.2.1 Health insurance concept

A multiple of responses were obtained regarding what the National Health Insurance Scheme is all about. Seventy-eight percent of the respondents defined the NHIS as a group of people contributing money towards their future health; whilst 22% saw the scheme as a replacement of the 'Cash and Carry' system. The results show that the knowledge of providers on the scheme is remarkably high. This finding is not unexpected, given the fact that there has been intensive awareness creation drive, following the passage of the Act since 2003. More so, most of the respondents might have benefited from the scores of health provider training workshops organised by the Ghana Health Service to orientate health staff on the scheme.

4.2.2 The National Health Insurance Act and Council

With regard to the National Health Insurance Act (Act 650) and the Council, 91.7% reported having heard or seen the Act, whilst 83.3% said that they have heard about the National Health Insurance Council (NHIC). In the view of the respondents, the Act establishes the NHIS and the Council, specifies the functions of the Council and the types of schemes which are permitted to operate in the country. In addition, they noted that the Act establishes the insurance levy and the insurance fund and also specifies the administrative procedures for running the schemes. Furthermore, 25% of the respondents mentioned that the Act defines the benefit package, and that the Act also indicates that by the next five years, all Ghanaians must belong to one type of scheme or another. Thus, the respondents demonstrated a high awareness about the vision of the health insurance act to gradually achieve universal coverage for the Ghanaian population. However, 30.6% of the respondents could not remember anything from the Act. And this is particularly regrettable considering the fact that service providers are absolutely critical in the implementation of the scheme.

In terms of the roles and responsibilities of the Council, the respondents were highly knowledgeable. For instance, 50.0% said that the Council has a policy formulation and implementation role; 58.3% mentioned monitoring and supervision, 16.7% mentioned resource mobilisation and distribution, whilst 13.9% and 30.6% mentioned accreditation and registration, licensing and regulation of the schemes respectively. Other roles and responsibilities of the Council as mentioned by the respondents included ensuring compliance with the Act and adherence to agreed standards of care by health providers. Awareness about adherence to agreed standards of care by health providers is particularly useful knowledge, as providers are expected to deliver care and services of an acceptable quality and fee as stipulated in the contract between the scheme and the

provider. However, 5% of the respondents could not remember any function of the Council as indicated in Table 9.

Table 9: Summary of Knowledge on the Roles and Responsibilities of the Council

SN	Indicator	No.	Percentage (%)
1	Policy formulation and implementation	18	22.8
2	Monitoring and supervision	21	26.6
3	Financial resource mobilization	6	7.6
4	Resource distribution	6	7.6
5	Provide accreditation	5	6.3
6	License, register, regulate the schemes	11	14
7	Compliance with the act	3	3.8
8	Ensure that standards are adhered to	5	6.3
9	Don't know or could not remember anything	4	5

Source: Author

It is also worth pointing out that although the respondents demonstrated high knowledge with regards to the roles and functions of the council, it is apparent that they are only familiar with the extremely prominent functions of the Council, and therefore were only able to mention nine out of the sixteen roles and functions stipulated by the Act. For instance, crucially important functions such as dispute resolution, public and health provider education, and care for the indigent among others were not mentioned at all, and yet one would expect service providers to be quite conversant with the dispute resolution procedures as stipulated in the act, since empirical evidence shows that disputes between clients and providers will most certainly occur. For, as pointed out by Atim (2000), conflicts are inevitable in any human institution, because the different backgrounds and expectations of each party tend to create conflicts, and that potential areas of conflict in scheme-provider relations include; fraud and abuse by scheme members, member complaints about the quality of care by service providers, such as staff rudeness or bad reception, provider complaints about aggressive or violent patient behaviour, and provider billing

practices, such as over-billing, charges for non-existent services or services not performed among others (Atim 2000).

4.2.3 Types of Schemes Permitted Under the Act

With regard to how many types of schemes are permitted to operate under the Act, 28 respondents representing 77.8% rightly mentioned that three types of schemes are allowed to operate in the country. They were able to name the three types to include the District-Wide Mutual Health Insurance Schemes (DWMHIS), the Private Mutual and Private Commercial. Only one respondent stated wrongly that four types of schemes were allowed to operate as illustrated in Table 10.

Table 10: Knowledge on Types of Schemes Permitted Under Act 650

Types of schemes	Frequency	Percentage (%)
0	4	11.1
1	2	5.6
2	1	2.8
3	28	77.8
4	1	2.8
Total	36	100

Source: Author

In the view of the respondents, the three types of schemes can be differentiated on the basis of ownership, profit motive, benefit package and government support or subsidy. They noted that whilst the most distinguishing feature of the DWMHIS is the fact that they are government assisted schemes with mandatory participation especially for people working in the formal sector, the Private Mutual and Private Commercial do not receive government subsidy and membership is voluntary. They added that the benefit package of these schemes is not as comprehensive as that of the DWMHIS, and that membership is voluntary and the schemes are owned by paid-up members. The Private Commercial is also driven by profit motive, whilst the DWMHIS and the Private Mutual are not. However, other respondents invariably mentioned one, two and four types

of schemes as presented in Table 10 above. Further still, 11.1% of the respondents indicated that they had no idea about the types of schemes and therefore could not differentiate between them.

Table 11: Major differences between the Types of Schemes

Differences	Freq.	Percentage (%)
Difference due to ownership/Membership	13	30.2
Difference due to profit	13	30.2
Difference due to service package	1	2.3
Difference due to government subsidy/support	7	16.3
Cannot remember	9	21
All	43	100

Source: Author

4.2.4 Implementation Arrangements

On the implementation arrangements for the schemes, the respondents noted that prior to the implementation of the schemes; a number of activities were carried out. These included community sensitisation, training of health providers, scheme staff and premium collectors, establishment of district scheme offices, formation and training of Board of Directors, costing of services and negotiations with service providers, registration of members and premium collection, photo-taking, launching and commencement of service provision to insured members.

It is however important to note that whilst the knowledge level of the respondents was quite high with respect to the preparatory activities and implementation arrangements for the schemes, they had no clear sequence or order in which the activities should occur. More so, coordination from national to regional and district level, as well as the role of technical support was completely missed in the range of implementation arrangements mentioned by the respondents, and yet evidence on the ground suggests that, already, in regions such as the Brong Ahafo,

Eastern and Upper West Regions, regional coordination has played a large role in the rapid development of insurance schemes in these regions.

4.2.5 Benefit Package and Provider Payment Mechanism

With regard to which services are covered under the scheme, it was remarkable to find that all the respondents rightly mentioned that both hospital and primary health care services are covered including specific services such as deliveries and caesarean sections. In the view of the respondents, such a comprehensive benefit package is no doubt relevant in addressing the diverse health needs of people in the region which has both rural and urban populations. They however noted that this calls for increased resource allocation to the health sector to ensure that the right type of service is available to meet each need.

With respect to how providers will be reimbursed for services rendered to scheme members, an overwhelming 97.8% of the respondents were conversant with the claims compilation, submission and reimbursement process as stipulated in the Legislative Instrument (LI1809). They explained that bills for insured members are supposed to be compiled monthly and submitted to the district scheme office by the second week of the ensuing month. The bills are then vetted by the claims manager and other scheme staff, and subsequently, payment is made by cheque to the health institution within two weeks.

Consequently, the study found that the provider-payment mechanism as described by the respondents is a retrospective payment system, based on the fee-for-service model. Thus, as cited earlier in the literature review section, this knowledge is useful in managing the potential provider incentives including the tendency to provide too many unnecessary services which are expensive and may be wasteful. On the other hand, such a payment system imposes a greater documentation strain on the

already overburdened health staff, as they would be required to bill for and record every service performed so as not to lose revenue. Nevertheless, knowledge about the type of provider payment mechanism in any kind of health insurance programme is extremely useful as a major instrument of cost containment.

4.2.6 Exclusion List

The knowledge of the study participants with regard to the existence of an exclusion list was also explored. Majority of the respondents (94.4%) said that there is an exclusion list to the services which are covered under the scheme. However, 28.6% of them indicated that they can not remember which specific services are excluded. For those who remembered which services are excluded, examples mentioned included plastic, brain and heart surgeries, medical examinations for purposes other than that of aiding diagnosis, anti retroviral drugs (ARVs), chronic illnesses, prosthesis and mortuary services. The others are liver transplant, artificial insemination, complications resulting from self induced abortion, cardiac operations, urinary dialysis and rehabilitation.

Indeed, the study found that providers had very high knowledge about the exclusion list as contained in the Act. Providers knowledge about the exclusion list is not only essential for negotiating contracts with the schemes, but also draws attention to the important fact that when considering ways of developing health services for the introduction of social health insurance, it must be borne in mind that entitlement to services funded by insurance will not cover all health care needs. Thus, a way must be found to give priority to those with the greatest needs.

Table 12: Summary of the Exclusion List

Exclusion list	Freq.	%
Plastic/Cosmetic surgery	11	12.0
Brain Surgery	9	9.8
Heart Surgery	6	6.5
Medical examination	6	6.5
Anti retroviral drugs for HIV	10	10.9
Chronic diseases like cancer	5	5.4
Appliances and prosthesis	8	8.7
Mortuary services	5	5.4
Organ transplant	8	8.7
Artificial insemination	4	4.3
Self inducement (Abortion)	7	7.6
Cardiac Operation	4	4.3
Urinary dialysis	4	4.3
Rehabilitation	2	2.2
Cannot remember	3	3.3
All	92	100

4.2.7 Gate-keeper Arrangements and Co-payments

With regard to whether, there are gate-keeping restrictions on the use of hospital services, 86.1% of the respondents answered in the affirmative. They explained that it is mandatory for both insured and non-insured clients to follow the normal referral channel except in emergency conditions, by first reporting to a primary health care facility or health centre, and then obtain a referral where the attending nurse finds that the condition is beyond his/her competencies and skills, and the logistics and equipment available at that level. In their view, gate-keeping is absolutely essential for reducing overcrowding in the already understaffed referral hospitals, and that it makes health services more accessible and affordable, particularly for those in the rural areas who do not have to bear transport costs in travelling to the district or regional hospital to seek care for ailments such as uncomplicated malaria which can be effectively treated at the primary health care facility.

However, 13.9% said that there were no gate-keeping restrictions citing the case of the Wa Regional Hospital as a classical example of a health facility where it is practically impossible to enforce strict referral channels or procedures, because it serves both as a district and regional hospital to its catchment population.

On co-payments, 94.4% noted that all the services listed under the benefit package are paid for in full by the scheme and that no co-payments are made by the insured client. However, 5.6% of the respondents were emphatic about the existence of co-payments. They explained that such co-payments come in the form of payment for prescriptions not listed on the scheme's essential drug list, or drugs which are unavailable in the pharmacies and dispensaries of the accredited health facilities, and have to be bought from private pharmacy shops which has no contractual agreement with the scheme. Such payments tend to impact on consumer behaviour and on the distribution of health care costs. This presents a potential source of resentment among scheme members, and is particularly worrying as the legislative instrument for regulating the implementation of the schemes (LI1809), prohibits cash reimbursement to individuals who pay out of pocket for prescription drugs which are bought outside the schemes' accredited pharmacies.

4.3 PROVIDER'S LEVEL OF PREPAREDNESS

4.3.1 Human Resource Situation (Staffing)

Table 13 presents detailed results on staff availability in the districts from which the study health centres were sampled. As earlier observed in the introductory chapter, the study found that there is an acute shortage of all categories of health professionals in all the health facilities visited. For instance, except Hain health centre in the Jirapa-Lambussie district, there

were no medical assistants in the other thirteen health centres visited. Thus, only 7.1% of the health centres studied met the MOH staffing norm of one medical assistant per health centre. Rather, 92.9% of the health centres are manned by nurses with very limited training and technical competencies. Consequently, the acute man-power shortage imposes severe limitations on the range and quality of services provided at the primary care level.

Although it may be argued that the phenomenon of poor staffing in the health sector is a country wide problem and not peculiar to the Upper West Region where this study was conducted, evidence from available data indicates that the Upper West Region is one of the most deprived and worse affected among the ten regions of the country in terms of health man-power. For example, the patient-doctor ratio in the region stands at 1: 50,829 compared to 1: 25, 000 in the Ashanti Region. Thus, the study results are consistent with the observation made in the Second 5-Year Health Sector Programme of Work (2002-2006) to the effect that human resource management has been a major challenge, with problems of staff retention and their distribution in relation to health needs, especially in the northern regions (of which Upper West is a part) and remote areas (MOH 2002).

Thus, with the observed staffing inadequacies as presented in Table 13, there is no gain saying that the District Health Administrations and health centres are far from being adequately prepared to support the implementation of the schemes. With as low as staff availability scores of 30%, 40%, 33%, 30% and 30% for Jirapa-Lambussie, Wa West, Sissala East, Lawra and Nadowli districts respectively, it is clear that none of the facilities studied has met the minimum of 60% staff availability score set by the National Health Insurance Scheme Facility Accreditation Manual (2004). Indeed, one of the District Directors of Health in an in-depth

interview summarised the poor staff situation as follows: “ *The staff are simply not there. The few who are there are quite aged and overstretched*”.

The percentage availability of staff in health centres as well as hospitals was calculated using the norms and actual number of staff at post as follows:

$$\frac{\text{Total No. of staff in institution} \times 100}{\text{Expected No. of staff (norm)}}$$

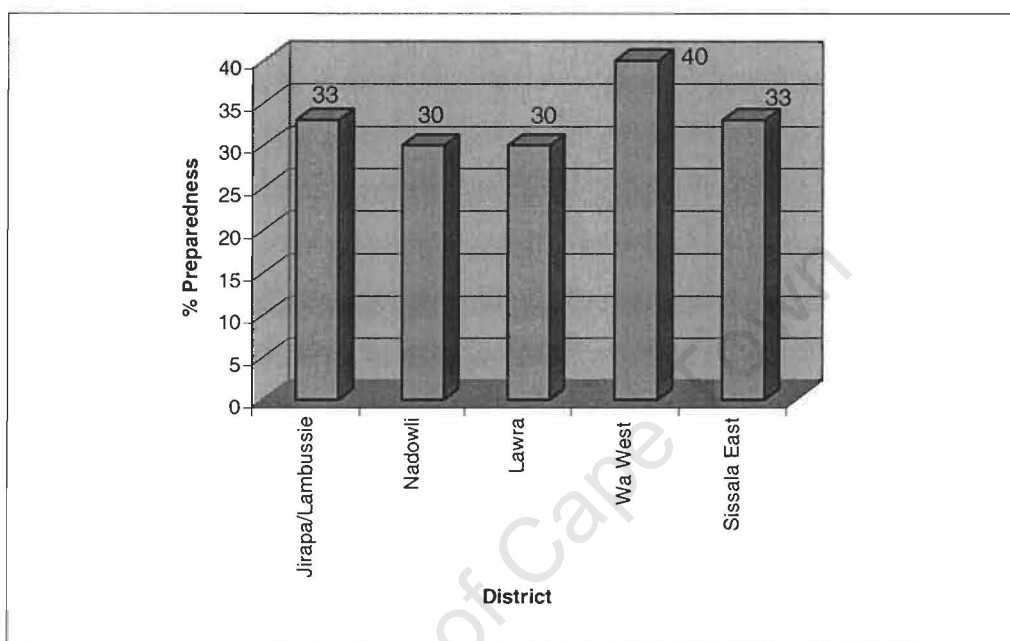
Table 13: Staff % availability by District – January 2006

STAFF CATEGORY	Norm by health facility	District % Availability				
		Jirapa	Wa West	Sissal East	Lawra	Nadowli
Medical Assistant	1	25	0	0	0	0
Professional nurses	3	67	67	67	67	83
Aux. nurses	3	0	0	0	16.7	0
Clinic Attendant	2	63	75	50	75	63
Dispensor	1	0	0	0	0	0
Technical officer/field technician	1	0	50	50	50	0
Medical Records	1	25	0	0	0	0
Cleaner	1	25	50	50	0	0
Driver	1	0	50	0	0	0
Watchman	1	100	100	100	0	75
Total	15	33	40	33	30	30

Source: Author

In terms of staff availability ranking by district, Wa West ranked highest with 40%, followed by Jirapa-Lambussie and Sissala East with 33% each, and Nadowli and Lawra districts ranked the least with 30%.

Figure 1: District Staff Availability Ranking - January, 2006



Responses obtained from in-depth interviews conducted with health managers cited a mirage of factors which account for the acute staff shortage in the region. It was generally felt that health professionals refuse posting to the region because it is unattractive in terms of social and financial incentives. For instance, relative to the other regions in the country, social services such as schools, health care, recreational amenities and transport and telecommunication facilities are generally poor and inadequate. Added to this is the fact that public servants of same rank countrywide receive same salary, thus, health professionals are usually unwilling to accept postings to the Upper West Region, which unlike the other regions, lack opportunities for health staff to engage in other private jobs in order to earn extra income. The respondents also noted that opportunities for professional development are also limited if not

non-existent in the region, thereby making personnel posted there more disadvantaged.

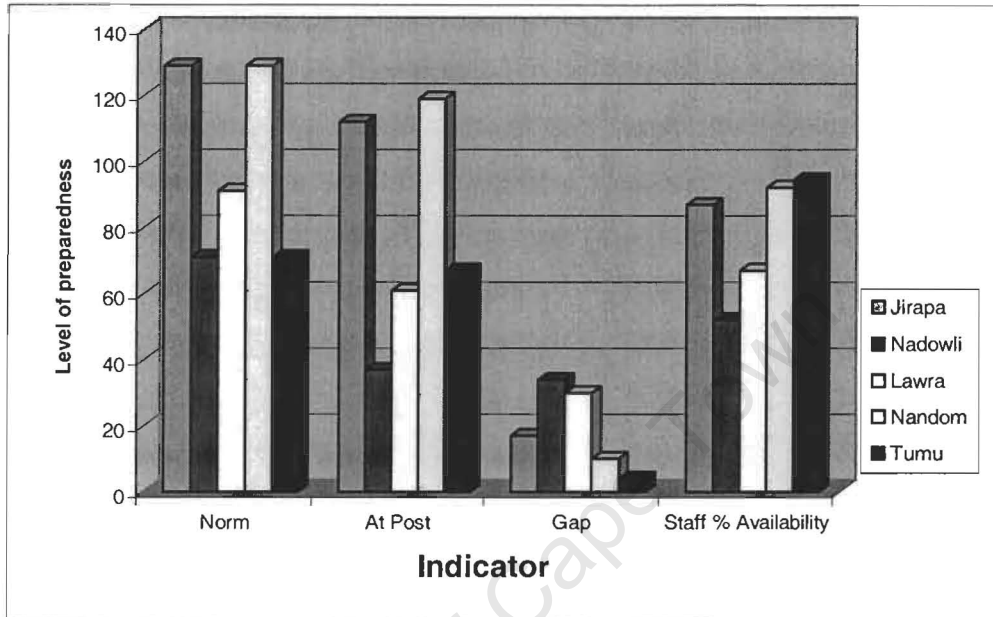
With respect to hospitals, although the percentage staff availability as indicated in Table 14 points to a good picture, a more careful analysis as presented in Figure 3 indicates that a larger proportion of the staff is non-technical. Except Nadowli hospital which scored below 60%, all the other hospitals scored above 60% bringing the average hospital staff availability to 80.1%. In particular, the findings revealed that Tumu hospital with 94.4%, Nandom hospital (92.2%) and Jirapa hospital (86.6%) had significantly higher percentages than the average.

Table 14: Staff % availability by hospital (all categories combined)

Hospital	Norm	At Post	Gap	Staff % Availability
Jirapa	129	112	17	86.8
Nadowli	71	37	34	52.1
Lawra	91	61	30	67.0
Nandom	129	119	10	92.2
Tumu	71	67	4	94.4
Wa Regional	277	244	33	88

Staff availability ranking for the five district hospitals is presented in Figure 2. However, note that Wa regional hospital was excluded in this ranking so as not to skew the comparison, because being a regional hospital, it has different norms and staff requirements compared to district hospitals. Among the five district hospitals, Tumu hospital ranked highest with 94.4%, followed by Nandom hospital (92.2%), Jirapa hospital (86.8), Lawra hospital (67%) and Nadowli hospital (52.1%).

Figure 2: Staff Availability Ranking by Hospital – January 2006



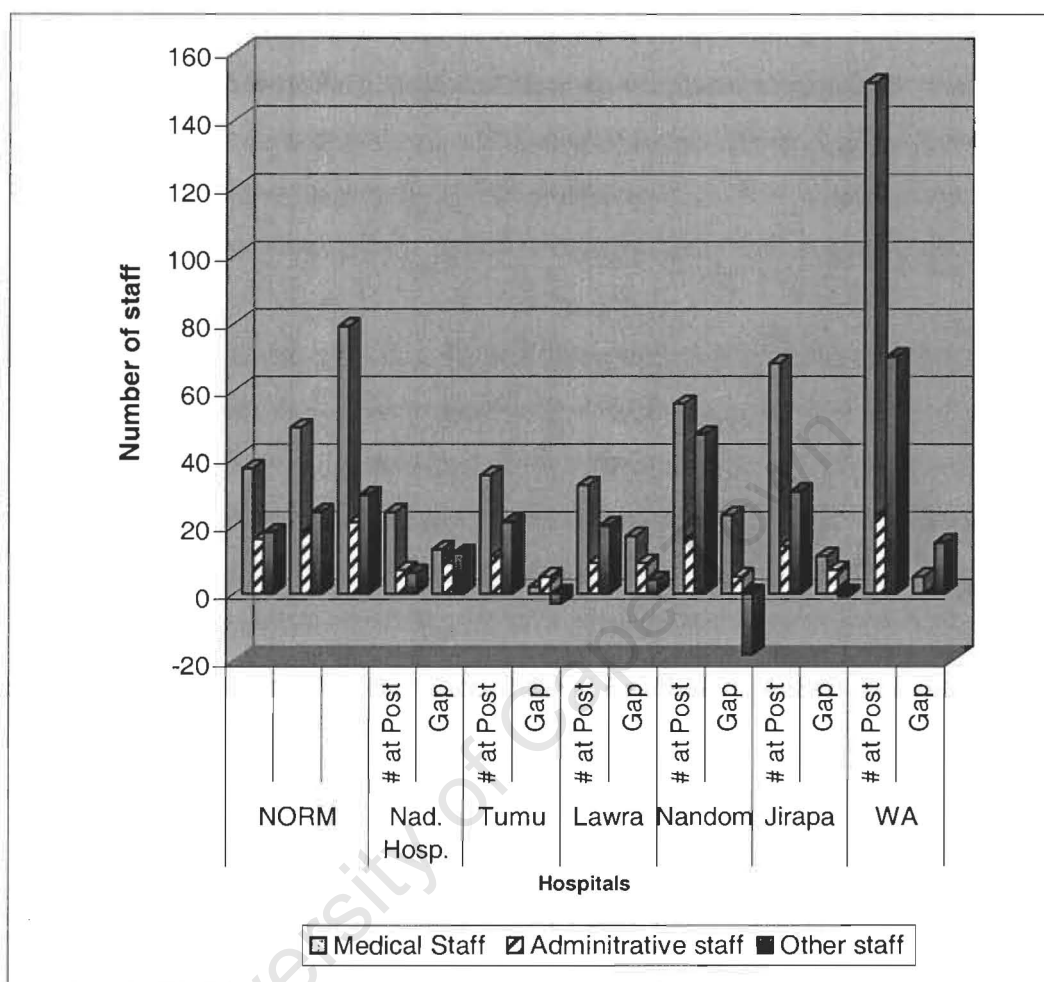
However, in assessing the level of health facility preparedness in terms of staffing, using the percentage availability of all categories of staff combined may not be an adequate measure. More importantly, issues of appropriate staff mix in the various hospitals being assessed need to be taken in to consideration, since health care as an output, results from a complex mix of processes and skills. Hence, Figure 3 highlights the relative proportions of the three major staff categories including medical, administrative and other support staff in each of the study hospitals.

Thus, as indicated in Figure 3, it was not unexpected that all the hospitals except Wa regional and Jirapa failed to obtain the 60% minimum score for medical staff as stipulated by the accreditation manual. Jirapa hospital scored 65% availability of medical staff, while Wa regional hospital obtained over 140%. A number of reasons explain the observed

differences in medical staff availability in the two hospitals. In the case of Jirapa hospital, it could be partly due to the fact that there is a nursing training school which is located within the hospital. This gives the hospital an added advantage in terms of its nursing staff. With respect to Wa hospital, the reason is that it is located in the regional capital which is better endowed with infrastructure and other social amenities as earlier mentioned, and thus adds to its attractiveness.

Overall therefore, the study shows that the staff situation in the hospitals is uncomfortably poor, thereby creating weak hospital based services to support primary level care. Thus, the staffing gaps revealed by the study needs to be urgently filled if the implementation of the scheme is to yield maximum benefits. As pointed out by Normand and Weber (1994), it is important to consider that the health insurance funds will need qualified staff in order to function properly, just as it is important to have qualified health providers to guarantee quality care for members of the schemes (Normand & Weber 1994).

Figure 3: Staff Availability Ranking by Hospital According to the Major Classifications - January, 2006



4.3.2 Drug Preparedness

Regular availability of drugs in health care facilities is a basic component of a well functioning health care system from the perspective of both policy makers and providers, and as pointed out by Jitta et al. (2002) the availability of drugs is often considered the most important element in quality of health care in rural African settings (Jitta et al. 2002). Thus, in assessing the level of provider preparedness, it was imperative for this study to consider the stock availability of thirty-three essential drugs in hospitals and twenty-three essential drugs in health centres using the

essential drug list of 2005, approved by the Ministry of Health of Ghana (Ministry of Health 2005). In doing so, the indicators used included both the number of drugs available out of the total list of essential drugs and the quantity of drugs in stock in the health facility on the day of the visit. The specific drug-by-drug norms in hospitals were obtained through interviews with the hospital pharmacist in-charge, and in the health centres, from the health centre in-charge. The norms were determined based on the utilisation and quarterly drug consumption patterns of the facilities assessed.

The percentage availability of number of essential drugs and quantity in hospitals as well as health centres were calculated as follows:

$$\text{Percentage availability of EDL} = \frac{\text{No. of essential drugs available} \times 100}{\text{Total number of essential drugs}}$$

$$\text{Percentage quantity availability} = \frac{\text{Quantity of drug available} \times 100}{\text{Expected quantity (norm)}}$$

With reference to hospitals, the study showed that in terms of the number of drugs available from the EDL, all the six hospitals in the study sample obtained the minimum score of 60% set by the Accreditation Manual (2005), with scores of 87.9%, 84.8%, 81.8%, 70.%, 70% and 60.6%, for Nandom, Jirapa, Tumu, Wa Regional and Nadowli Hospitals respectively. This is very encouraging given the fact that the average tracer drug availability in hospitals in the region stood at 75.6%. However, in contrast, the percentage quantity-in-stock indicator showed a rather dismal performance of the hospitals, with only three hospitals meeting the 60% minimum score. These are Jirapa (90.2%), Nandom (78.9%) and Lawra (61.4%). Regrettably, Wa hospital which serves both as a district and the only referral hospital in the region failed to meet the minimum mark with a score of as low as 41.7%. This sordid picture no doubt, presents a worry

as such laxities in drug availability poses a great threat to quality of care in general and for the successful implementation of the national health insurance scheme in particular.

Furthermore, syrup chloroquine in particular, and its substitute syrup amodiaquine, which are critical for the treatment of malaria in infants, were totally out of stock in all six hospitals, except Tumu which had just a half of its syrup amodiaquine requirement for the quarter. At the beginning of 2005, a formal announcement was made for the change in Ghana's antimalarial medicines policy from chloroquine based therapy to use of a combined dose of amodiaquine and artesunate. However, evidence of gross inadequate stocks of amodiaquine and artesunate in the study hospitals as shown in Table 15, seems to suggest that there are problems with defining the pharmaceutical needs and costs of the selected replacement antimalarial required to supply the formal health sector with adequate medication volumes to support the medicines policy change.

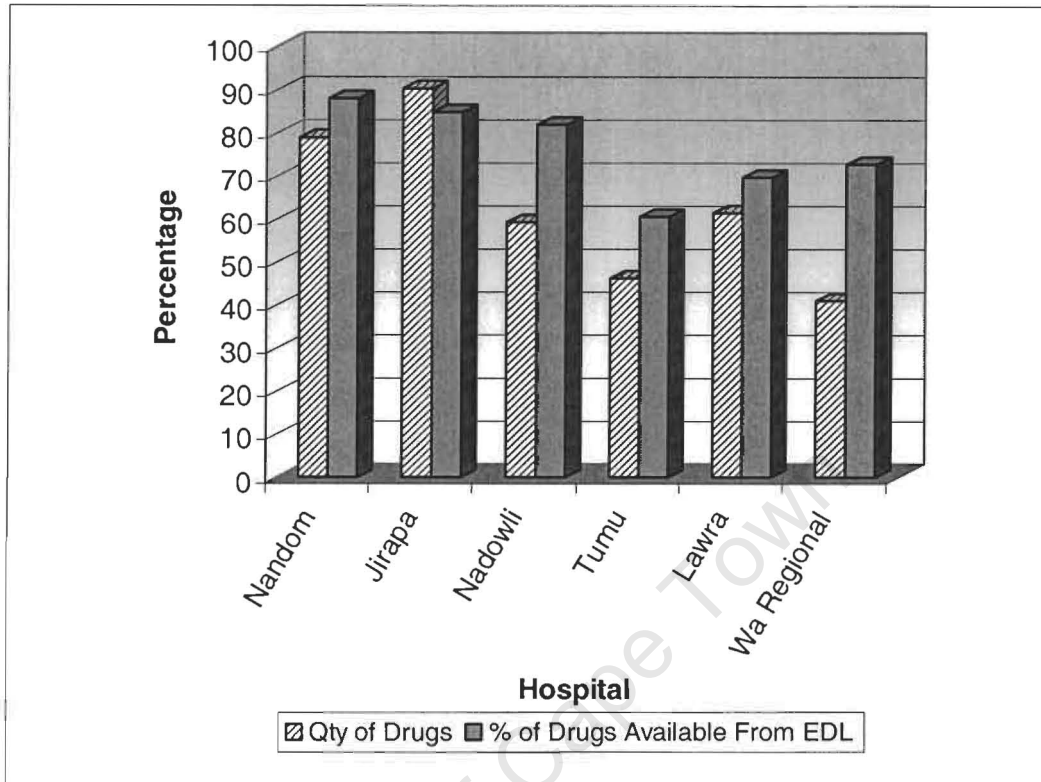
However, it is important to point out that such lapses are undesirable against the background that malaria is one of the leading causes of morbidity and mortality in Ghana, particularly among children under five years of age and pregnant women. The shortage of antimalarials is also a serious setback to the Roll Back Malaria (RBM) programme which is aimed at providing effective, affordable, acceptable and available antimalarial medicines that would enhance prompt and effective treatment of malaria episodes within twenty-four hours of onset of illness.

Table 15: Hospital Drug Preparedness (% Availability)

DRUG	HOSPITAL	Nandom	Jirapa	Nadowli	Tumu	Lawra	Wa Regional
Tab Acetylsalicylic Acid		100	100	0	100	120	100
Cap Amoxicillin		76.6	72.5	41.7	0	106.25	38.9
Susp. Amoxicillin		72.6	100	416.7	0	15.3	23
Tab Bendrofluazide		170	180	0	0	0	0
Inj Chloroquine		17.9	16	40	0	200	200
Syr Chloroquine		0	0	0	0	0	0
Tab Chloroquine		15.2	31.4	36.7	100	50	0
Tab Co-trimoxazole		350	106.7	0	100	100	41.7
Susp. Co-trimoxazole		48.4	80	36.7	100	50	0
Tab Ferrous Sulphate		97.6	0	38.9	0	0	0
Tab Folic Acid		78.7	49.3	30	48	0	35
Tab Mebendazole		200	320	42	100	100	26
Tab Nifedipine		125	215	56	0	83.3	26
Tab Metronidazole		70	16	26.7	40	66.7	8.3
Susp. Metronidazole		68.7	72	66.7	0	0	0
Tab Paracetamol		51	26.7	18.5	50	62.5	50
Syr Paracetamol		17.3	5.1	60.4	0	66	28
Methyldopa		35.7	40	150	0	0	0
ORS		120.3	200	37.5	0	85.7	146.7
Tetracycline eye ointment		0	260	41.7	100	0	98.4
Inj Adrenaline		100	300	72.2	100	66.7	33.3
Inj Aminophylline		30	0	73.3	0	0	33.3
Inj Anti-Snake Serum		145	132.1	116.7	85	91.7	12
Inj Benzyl Penicillin		9.3	40	60.7	0	116.7	290
Dextrose 5%		65.5	69	45	50	125	32
Saline 0.9%		15.2	159	0	50	106.7	29.3
Inj Choramphenicol		0	0	24	100	0	81.7
Injection Hydrocortisone		93.8	100	71.4	100	66.7	20
Inj Hydrazaline		100	156.25	300	200	200	10
IV Metronidazole		274.2	106.7	15	7	100	12.2
Tab Artesunate		29.2	12	16.7	12.5	20	0
Tab Amodiaquine		25	10	22	33.7	27.8	0
Syr Amodiaquine		0	0	0	50	0	0
Quantity of drugs (%)		78.9	90.2	59.3	46.2	61.4	41
% Availability of EDL		87.9	84.8	81.8	60.6	70	70

In terms of ranking, Jirapa hospital ranked highest, followed by Nandom hospital, Nadowli hospital, Lawra hospital, Wa regional, and Tumu hospital in descending order. Thus, from the ranking, it would appear that the mission hospitals, which includes Jirapa and Nandom hospitals are better prepared in terms of drug availability, compared to the government hospitals (Nadowli, Lawra, Wa and Tumu), although this study did not specifically investigate the underlying factors for the relative performance of the different types of facilities. It is a subject that requires further research.

Figure 4: Ranking of Hospital Drug Preparedness



Generally however, the main reason for non-availability of essential drugs in the health facilities is lack of funding. The study found that drug funds in the facilities were depleted, thus making it impossible for the prompt re ordering of drugs to boost the depleted stocks. The respondents blamed this phenomenon on the governments' exemption policy. They explained that under the policy health institutions are required to provide services free of charge to children under-five years of age, pregnant women, the elderly (70 years and above) and paupers, and submit the bills to government for reimbursement. Unfortunately, however, allocation of government funding for exemptions has always been insufficient. Consequently, exemption bills have remained unsettled for several months, thus resulting in the depletion of the financial resources of health facilities which are largely dependent on Internally Generated Funds (IGFs) to operate. For instance, one of the health centre in-charges put it

this way *“All our money is locked up in exemptions and I am not sure if we can ever be refunded fully to pay up our indebtedness to the Regional Medical Stores”*.

Table 16 presents the results of assessment of drug availability in the health centres. Compared to the hospitals, the drug situation in the health centres was found to be far worse for the same reasons as cited above. The study found that all fourteen health centres which participated in the study were woefully unprepared. Most of the drugs which are specified in the EDL for health centres were completely out of stock, and the few which were available were grossly inadequate in terms of quantities which would be sufficient to last for the quarter. Thus, as indicated in Table 16, none of the facilities assessed obtained the minimum of 60% drug availability score. Clearly therefore, the health centres can be considered to be grossly ill-prepared compared to the hospitals in the light of the fact that the health centre average drug availability was found to be as unimaginably low as 25.6% compared to 75.6% for hospitals.

In particular, the drug situation was very poor in Wallembele and Kulfuo health centres, where only 4.2% and 8.6% respectively, of the drugs on the EDL were found to be available. This finding deserves special mention because both health centres were sampled out of the total of five health centres in the Sissala East District, and although the study did not include the other three health centres in the district, it is very unlikely that their drug situation would be any better as the source of drug supply would be common to all health centres in the district. The other poor performing health centres included Dapuori health centre (6.1%) and Sombo health centre (11.2%), both in the Nadowli district, and Hain (14%) in Jirapa-Lambussie district. Thus, the acute shortage of essential drugs in primary health care facilities does not only make nonsense of the provision for strict adherence to the gate-keeper arrangements as set out in the Act,

(since most clients would be compelled to ignore the referral system in search of quality care), but also constitutes a big threat to the successful implementation of the scheme in the region.

Table 16a: Health Centre Drug Preparedness (% Availability)

Drug	Walembelle	Kulfuo	Lassia Tuolu	Poyentanga	Sabuli	Hain	Ullo
Tab Acetylsalicylic Acid	20	100	0	10	16.7	0	0
Cap Amoxicillin	0	0	33.3	50	0.5	37.5	33.3
Susp. Amoxicillin	0	0	58.3	16.7	0	0	0
Inj Chloroquine	0	9	125	40	26.7	16.7	2.5
Syr Chloroquine	10	0	12.5	0	0	5	0
Tab Chloroquine	20	10	100	0	13.3	66.7	46.7
Tab Co-trimoxazole	0	50	83.3	100	1	3.3	270
Susp. Co-trimoxazole	0	0	16.7	20.8	0	25	0
Tab Ferrous Sulphate	0	0	16.7	0	50	16	0
Tab Folic Acid	0	3	100	0	8.3	0	0
Tab Mebendazole	0	0	50	20	50	50	0
Tab Nifedipine	0	0	0	0	50	0	0
Tab Metronidazole	0	4	0	150	3.3	0	80
Susp. Metronidazole	0	0	75	5	0	0	0
Tab Paracetamol	20	6.7	16.7	133.3	6.7	0	0
Syr Paracetamol	27	5	0	266.7	1	36	0
ORS	0	0	0	0	1	25	14
Tetracycline eye ointment	0	0	90	50	30	40	0
Inj Anti-Snake Serum	0	6.7	40	86.7	0	0	110
Tab Artesunate	0	0	0	0	0	0	0
Tab Amodiaquine	0	0	0	0	0	0	0
Syr Amodiaquine	0	0	0	0	0	0	0
Anti Rabies Vaccine	0	0	0	0	0	0	0
Quantity of drugs (%)	4.2	8.6	35.5	41.3	39	14	24.2
% availability of EDL	21.7	39.1	60.9	65	45	55	35

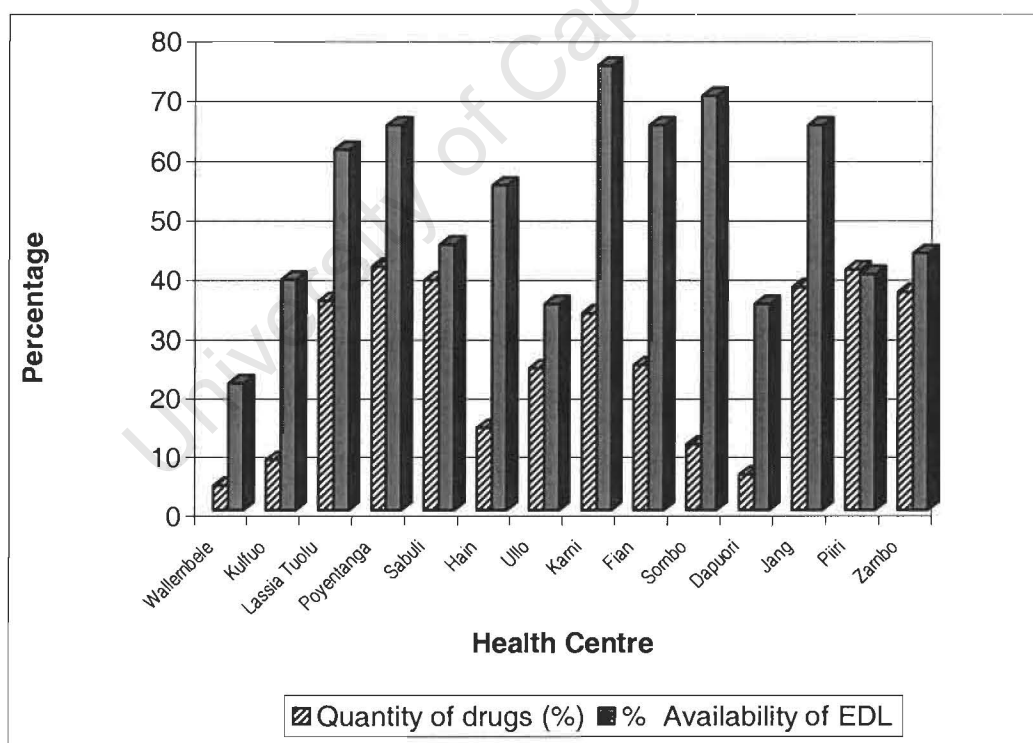
Table 16b: Health Centre Drug Preparedness (% Availability)

Drug	Karni	Fian	Sombo	Dapuori	Jang	Piiri	Zambo
Tab Acetylsalicylic Acid	45	13.3	80	0	100	200	25
Cap Amoxicillin	0	85	54.8	0	50	25	50
Susp. Amoxicillin	25	0	0	0	30.8	160.7	73.3
Inj Chloroquine	1	26	76.7	13.3	0	0	100
Syr Chloroquine	100	0	22	0	0	0	0
Tab Chloroquine	50	55	180	25	25	200	200
Tab Co-trimoxazole	60	74	79.8	66.7	0	200	100
Susp. Co-trimoxazole	66.7	83.3	0	0	133.3	0	0
Tab Ferrous Sulphate	60	0	0	10	0	0	0
Tab Folic Acid	60	0	0	10	133.3	0	0
Tab Mebendazole	70	0	160	0	100	100	100
Tab Nifedipine	90	0	0	0	0	0	0
Tab Metronidazole	50	20	104.8	11.7	100	50	0
Susp. Metronidazole	0	58.3	0	0	22	2.5	7.5
Tab Paracetamol	4	3.3	0	0	16.7	0	0
Syr Paracetamol	36.7	65	0	0	57.5	0	0
ORS	50	50	0	2.9	0	0	100
Tetracycline eye ointment	0	25	0	0	70	0	96
Inj Anti-Snake Serum	0	10	140	0	30	0	0

Drug	Karni	Fian	Sombo	Dapuori	Jang	Piiri	Zambo
Tab Artesunate	0	0	0	0	0	0	0
Tab Amodiaquine	0	0	0	0	0	0	0
Syr Amodiaquine	0	0	0	0	0	0	0
Anti Rabies Vaccine	0	0	0	0	0	0	0
Quantity of drugs (%)	33.4	24.7	11.2	6.1	37.8	40.8	37
% availability of EDL	75	65	70	35	65	40	43.5

With regard to ranking, there were marked variations in the performance of health centres. For example, with reference to the percentage availability of drugs from the EDL, Karni health centre ranked highest with 75% while Wallembelle health centre ranked least with as low as 21.7%. In the case of percentage quantity of drugs available, Poyentanga ranked highest with 41.3% while the least was once again Wallembelle health centre with 4.2%. Thus Wallembelle health centre fared the least in both indicators.

Figure 5: Ranking of Health Centre Drug Preparedness



4.4 PROVIDERS' CONCERNS

This section was qualitatively explored by means of focus group discussions held with a cross section of nursing staff in the six hospitals studied, and also by conducting in-depth interviews with key health managers including the Regional Director of Health Services, District Directors, Hospital Superintendents and health centre in-charges. As the foot soldiers in the implementation process, the essence of this section was to document staff attitudes and views relating to what they perceived to be the key challenges or concerns for the implementation of the schemes.

Generally, a majority of the participants felt that the national health insurance scheme is a good initiative which has the potential to help many people use public health services as the first point of contact when ill. In their view, the scheme will help encourage early treatment seeking behaviour, and also lead to a reduction in the rate of absconders, as patients would no longer be required to pay out of pocket at the time of service use. The respondents indicated that when the scheme is in place, it would obviously bring about an increase in the work load of health workers, however, it would also lead to an overall improvement in service provider satisfaction, because as they put it "more work means more revenue and more lives saved".

Staff Shortage and Work Overload

One of the key concerns expressed by the participants is staff shortage and consequent overload of work for the health worker. The respondents complained that the already over stretched staff would have to cope with increased patient attendants, since patients will no longer be required to pay out of pocket at the time of seeking care. Additionally, as provided for in the contract with schemes, it is the responsibility of health

staff to verify the validity of card-bearing members as means of checking free rider behaviour among other types of fraud.

More so, some of the health centre in-charges described their facilities as “one-man-stations”. What they meant by this was that, there is only one staff in the health centre and is tasked with the responsibility of providing a broad range of primary health care services including daily OPD consultations, dispensing, dressings and injections, antenatal care, deliveries, child welfare, outreach services and compilation of daily service and financial reports among others. The same staff needs continuing education and in-service training to upgrade his or knowledge and skills for professional development. Thus, most often, the staff is called to workshops or short courses in the district or regional capital, and sometimes outside the region. This often results in the temporary closure of the health facility, and hence poses a big challenge for the provision of the much desired quality health care and the twenty-four hour service availability requirement of the Ghana Health Service protocol for hospitals and health centres.

Drug Availability

In all the facilities visited, the respondents raised a concern about the lack of drugs in the facilities. They noted that this phenomenon is hampering the provision of quality services as most drugs which are prescribed would have to be bought by the patient in pharmacy shops outside the hospital, most of which may not have adequate storage facilities for preserving drug potency, or even worse still, they may sell expired drugs to the unsuspecting patient. Thus, in the view of the respondents, the acute shortage of drugs in health facilities is a major concern as it poses a big threat to the successful implementation of the schemes.

Staff Motivation

With respect to staff motivation, it was the concern of the respondents that both financial and material incentives currently provided for health workers by the government are woefully inadequate to boost the morale of the perpetually overworked health staff. Whilst acknowledging that the provision of cars on hire purchase for personal use by senior health staff and the payment of Additional Duty Hours Allowance (ADHA) serve to motivate staff, there is still a lot more government can do. They pointed out that the amount paid to health staff as ADHA is not only inadequate, but is also paid at irregular times. Moreover, in their view, it is the desire of every health worker to own a house of his or her own upon retirement from active service, and that the current efforts by government to motivate health staff ought to be expanded to include housing, regular in-service training, as well as scholarships for staff to pursue short and long courses abroad in order to attain the professional advancement needed for improvement in the quality of care they deliver.

Documentation

The need for detailed and accurate documentation of all transactions and service delivery processes and costs incurred in treating insured members was recognised by all the respondents. They appreciated the fact that by virtue of the contractual agreements entered into with the schemes, inaccurate documentation and recording of service costs can result in wrong bills being rendered invalid by the scheme office, and this may lead to loss of revenue to the health facility. More so, service providers and the schemes are legal entities and can therefore sue or be sued for inappropriate conduct including lack of clarity of bills, fraud and neglect among a host of others.

In the view of the respondents however, the introduction of the schemes have imposed extra work on the already few health staff since no

additional records assistants have been recruited. They explained that separate entries have to be done for insured and uninsured clients thereby increasing the number of patient documentation sheets, registers, and folders among others. The other related concerns include the fact that the records assistants have not been trained on how to handle insurance-type data. More so, in most of the hospitals, computers and accessories needed for effective and efficient data management are inadequate, whilst in the health centres none exist. Therefore, documentation is entirely manually done, thus resulting in gross inefficiencies in data management and numerous data storage and retrieval problems.

Patient Attitude

Another concern expressed by the respondents related to the possibility of experiencing rude and uncooperative behaviour by insured patients. They noted that once people prepay for their health care, there is the tendency for them to have very high expectations for quality of care, including a reduction in waiting time and selection of treatment options among others.

One of the participants in the FGD held with staff in Wa Regional Hospital summarised the situation as follows *“With this health insurance, if care is not taken, the patient will become the expert while the expert becomes the patient, or even worse, the patients will become our bosses”*.

However, in the face of crippling constraints facing health facilities such as acute staff shortage, lack of essential drugs, logistics and equipment as earlier discussed, health providers in the study facilities are no doubt grossly under prepared to cope with patient demands. In the view of the respondents therefore, such constraints are likely to engender rude and inpatient client behaviour as insured patients may expect to receive

special and more prompt treatment over and above their uninsured counterparts.

Provider and Public Education

Furthermore, the respondents complained that provider and public education on the scheme was not being given the due attention. In their view, most of the training workshops and sensitisation fora particularly in the health sector are often targeted at senior staff to the exclusion of middle and lower level personnel. They mentioned in particular that record clerks and OPD staff who constitute the front desk personnel have neither received any formal training or orientation on health insurance. This often results in conflicts between staff and insured patients who report to health facilities for care. Such disagreements and conflicts often arise over the payment for OPD card and other preliminary fees which are charged prior to consultation, examination and medication.

In addition, the respondents identified a number of gaps in the nature and scope of public education programmes currently being carried out by the district scheme personnel, regional and district health insurance task teams, politicians and government functionaries. According to the respondents, public awareness campaigns are largely concentrated in urban areas whilst the rural populations remain largely untouched. The messages are also largely disseminated in English which is a very unsuitable and ineffective medium of communication amongst a largely illiterate and non-English speaking population. Consequently, public awareness about the scheme, especially in rural areas remains low. Rural dwellers are therefore largely uninformed about the procedures for becoming a member, premium levels, services covered by the scheme, waiting period between enrolment and eligibility for benefits, as well as the procedures for accessing health services.

Benefit Package and Scope of Schemes

With regard to the benefit package and scope of the schemes, the concern of the respondents was that, although it is desirable to have a comprehensive benefit package for members of the scheme, it is equally important to take into account the range of services health facilities at the various levels of care are capable of providing. In other words, a realistic package needs to be decided upon given the economic constraints and the limitations placed on what services can be practically made universal. They pointed out that some of the services which are specified under the benefit package, particularly those requiring specialist care cannot be provided in health facilities in the region due to lack of specialist.

Infrastructure and Equipment

In all the facilities visited, respondents expressed concern regarding the poor state of infrastructure and the acute shortage or complete lack of essential equipment. For instance, the study found that except in Wa regional hospital, a crucially life-saving investigation such as liver function test can not be conducted in any of the five district hospitals visited due to lack of equipment. In addition, 50%, representing three out of the six hospitals studied, had no ultrasound facilities as well as laboratory and X-ray equipment. Although, in the remaining three hospitals, these equipment were available, they are old and break down very frequently. Other essential equipment which were generally not available or found to be inadequate included patient trolleys, tubes, forceps, oxygen cylinders, suction apparatus, and theatre tables among others.

More so, in majority of the health centres in particular, there were no delivery sets, and as reported by one of the midwives in-charge at the health centre, *"most often, we have to improvise our own instruments and delivery equipment in order not to lose the confidence our clients have in us. Already, we are competing with the Traditional Birth Attendants (TBAs)*

to increase the number of deliveries we conduct in a year compared to the TBAs, and so, we can not turn a women who is in labour away from our facility simply because government has not provided the centre with a delivery set". The respondents also expressed concern about the lack of communication equipment such as TP radios for ease of communication with ambulance services in order to facilitate referral of cases in times of emergency.

With regard to infrastructure, the situation in the health centres was much better, compared to the hospitals, although in two out of the fourteen health centres visited, it was found that the injection room also served as delivery room as well as for detaining patients who are under observation, thus creating problems for patient privacy. The situation was worse in the case of the hospitals where the study found that they all had limited space resulting in congestion in the wards. In some of the hospitals for example, the respondents likened the injection room to a garage where clients wait in long queues for their turn. In such conditions, client privacy is severely compromised. Worse still, in two of the six hospitals visited, the study found that due to inadequacy of space and perhaps improper lay out, there is a combined ward which is referred to as general ward where both surgical and medical cases as well as patients suffering from chronic and infectious diseases are all admitted. This obviously poses a big challenge for the quality of patient care, and also has serious implications for cross infections.

Administrative Constraints

A number of concerns were also raised by the respondents regarding administrative constraints facing provider institutions as well as the district scheme offices. In particular, the study found that administrative bottlenecks relating to inefficient procurement practices in provider institutions pose a big threat to the successful implementation of the

schemes. It was observed that although standardised procurement plans were in place in all the hospitals visited, the plans existed as mere documents. Several constraints inhibited the implementation of the plans. Key among these were inadequate and late release of funds, and sometimes lack of commitment by management to implement the plans, thus, resulting in adhoc procurement practices and huge debt build up in the hospitals. Consequently, service provision is frequently hampered by erratic supply of drugs and other logistics such as gauze, cotton wool, disinfectants among others, all of which are vital for the delivery quality health services to support the implementation of the schemes.

With regard to the district scheme offices, concerns of administrative constraints as expressed by the respondents relates to inadequate transport and communication facilities for the scheme staff to carry out public awareness campaigns and registration of members. In addition, there were concerns regarding the inadequacy of logistics such as computers and accessories, cameras, films and lamination machines in the scheme offices. In the view of the respondents, such administrative constraints largely account for the observed delays in processing member identity cards, and the poor quality of identity cards being produced by the scheme offices.

Politicisation of the Scheme

Another phenomenon which the respondents considered as a serious concern in the process of implementing the scheme is what they described as politicization of the scheme. They pointed out that some leading members of the opposition parties and sections of the media has the tendency of portraying the national health insurance scheme as a mere political gimmick by the ruling New Patriotic Party government aimed primarily at gaining popularity. Moreover, the respondents considered the location of the district scheme offices within the District Assembly offices

as being political and that such actions lead to a loss of the neutrality required to make the schemes truly non-partisan. In their view, any attempt to politicize the schemes can have grave consequences for the achievement of the much-desired universal coverage, and indeed for the sustainability of the schemes.

CHAPTER FIVE: CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusions

Health care reforms including partial and full cost recovery and the introduction of social health insurance meant to reduce drug inadequacies, increase access to care and guarantee the provision of quality care, though desirable, can only work if the system is introduced in appropriate circumstances. Moreover, there is strong evidence to show that formal health insurance schemes cover only a marginal proportion of the population in low-income countries, and due to economic constraints, lack of good governance and institutional weaknesses, formal social protection especially for the vulnerable segments of the population is usually widely absent. In particular, the lack of health facilities and professionals in rural and remote areas tends to limit access to health care for people living in those areas.

Consequently, a decision not to proceed with the introduction of social health insurance is sometimes sensible, because if the conditions are unsuitable, introducing social health insurance can lead to higher costs of care, inefficient allocation of health care resources, as well as inequitable provision and dissatisfied patients. More so, it can also make it more difficult to realize the potential advantages of social health insurance in the

future when the population have not forgotten the ill impact of the first attempt.

Thus, the main thrust of this study was to investigate the appropriateness of some of those circumstances with a particular focus on the level of preparedness of health providers with regard to their level of knowledge on social health insurance, the availability of staff, essential drugs, infrastructure and equipment among others, and to make recommendations for improving health provider preparedness to better assist in the implementation of the schemes.

With respect to the level of knowledge of providers on health insurance concept, the study showed an overall high level of knowledge although this was not unexpected, as most of the study participants were middle and senior health professionals who had the opportunity to participate in workshops and seminars meant to orientate health staff in preparation towards the implementation of the schemes. Thus, the real and urgent challenge in service provider education remains with extending training workshops and orientation programmes to lower level personnel who are equally important stakeholders in the implementation process. There are also gaps with the public education strategy which appears to have focused largely on urban and elite segments of the population to the neglect of the rural dwellers in the region. Such a strategy is counter effective in meeting the policy objective of achieving universal coverage.

Again, experiences of countries such as Germany, Costa Rica and Egypt, just to mention a few, which have implemented social health insurance programmes have shown that the availability of health staff is another crucial ingredient for the successful implementation of health insurance schemes. Unfortunately however, this study has revealed that the operations of health facilities are seriously constrained by an acute shortage of staff in both primary health care facilities and hospitals. The

situation is particularly worrying given the fact that the shortages are worse felt in the area of medical staff who are key to the delivery of quality care. The study therefore, clearly shows that none of the facilities strictly speaking qualifies to be accredited going by the decision rule of the National Health Insurance Scheme Facility Accreditation Manual (2004) which sets the minimum score of 60% medical staff availability as the minimum requirement for accrediting health centres and hospitals.

Moreover, the study findings also demonstrate that by implication, it is practically impossible for the obvious reason of lack of health care professionals, to fully implement the rather ambitious benefit package set out in the Legislative Instrument (LI1809) for regulating the schemes and health care providers. It also means that aspects of the scheme design features which relate particularly to gate-keeping arrangements for ensuring cost containment and distributing work load evenly between primary health care and the referral levels to ensure a reasonable balance between primary and secondary care, as well as the quest for the provision of quality care for insured members would by no means be negatively impacted upon.

This study also unearthed the phenomenon of increased work load of health staff resulting from the shortage of health personnel to cope with increasing health care utilisation and documentation brought in the wake of insurance. The inadequacy in staff motivational packages currently implemented by government was also highlighted.

In addition to acute staff shortage, the study shows that there is also a serious challenge to the provision of quality health care, posed by persistent inadequacy in drug supply to health facilities in the region. The study points out that health facilities (health centres and hospitals combined) are operating averagely with only 50.6% of the minimum

requirement stipulated in the accreditation manual. When considered separately, the drug situation in health centres is even far worse with only 25.6% average drug availability mark. This is clearly unacceptably low, given the assumption that utilisation of health services would be triggered and perhaps double under insurance, once the constraint of out-of-pocket payment at the point of service use is removed.

Furthermore, it would appear that adequate preparations in terms of funding and drug needs assessment of health facilities was not thoroughly carried out prior to the introduction of the antimalarial drug policy change from chloroquine based treatment to artesunate-amodiaquine. This is evident from the lack of smooth transition as marked by the simultaneous lack of both alternative antimalarials in the facilities reviewed.

Another major area of focus for the study was to assess the concerns of service providers on a range of issues affecting their operations and which could have an impact on the implementation of the schemes. The study found that inadequate infrastructure and equipment was of particular concern. Majority of the facilities continue to operate without basic equipment or improvised equipment, whilst infrastructure in most of the hospitals in particular are in a deplorable state and have not seen any expansion or rehabilitation for decades. The result is overcrowded hospital wards, long queues at dispensaries and injection rooms, and consequently, an increase in-patient waiting time, unsatisfactory inpatient care and loss of patient privacy. Internally, the factors which account for the deterioration of infrastructure and breakdown of useful equipment include; weak inventory control, non-involvement of users in the planning process, poor planned preventive maintenance and inefficient and ineffective operational procedures including poor monitoring and supervision. The main external factor which is beyond the means of the facilities themselves is inadequate funding of the health sector.

Lastly, one would have to concede the fact as pointed out by Normand and Weber (1994) that there is politics around social health insurance. Surely, as it pertains anywhere else in the world, there is politics surrounding the national health insurance programme in Ghana not only at the national level, but also at the sub-group level. For instance, health care providers used the introduction of the NHIS as a platform for seeking better remuneration and incentive packages to match with the expected increase in workload. Also formal sector employees are questioning the basis for their compulsory and mandatory participation in the scheme. Furthermore, the opposition parties perceive the introduction of the National Health Insurance Levy as an additional sales tax, and have used it as a political tool to incite the taxpayer and the Ghanaian public at large to demonstrate against the introduction of the levy.

In summary therefore, it is prudent to point out that the current health care system in the Upper West Region is characterised by inadequate health professionals, acute drug shortages and inadequate health care financing. The National Health Insurance scheme was launched in August, 2003, but additional to the constraints already highlighted above is the fact that there are too many poor people in the Upper West Region who can not pay the premiums as set out in Table 1, given the fact that 68% of the population live below the absolute poverty line of $\text{¢}700,000$ (\$77.7) per adult per year (Ghana Statistical 1998). Hence, with current arrangements under the national health insurance programme which appears to ignore the role of community prepayment mechanisms whilst promoting the single-insurer model, the attainment of universal coverage would be an uphill task.

5.2 Recommendations

In order to overcome the existing limitations in health provider preparedness for the implementation of the schemes, a variety of recommendations are worth considering.

With respect to health provider education on the scheme, what is required is the fashioning out of need-based training programmes which are effective in updating the knowledge of middle and senior level health professionals, whilst bringing the lower level personnel up to scratch on the concepts and implementation arrangements of the schemes. An aggressive and broad-based public education strategy is also needed in order to extensively and effectively reach out to the local communities with messages on the scheme which are packaged in simple form and adapted to the local dialects commonly spoken in the communities.

Again, the process of introducing national health insurance as a financing mechanism must include planning for infrastructure, staff recruitment, training and retention. Particularly as the phenomenon of staff shortage in the Upper West Region is perpetuated by its unattractive nature, a two-pronged approach is required; one for attracting staff, and the other aimed at retaining them in the region. Specific short-term policy measures which could be adopted in this regard includes the institutionalisation of salary differentials, deprived area allowance, and overtime allowance for health professionals in the region as means of supplementing their stagnant incomes.

In the long-term, specific policy measures aimed at redressing the long standing infrastructural inadequacies which have plagued the region and rendered it relatively unattractive to health professionals ought to be pursued. This would entail effective lobbying at national level for the establishment of an earmarked infrastructural development fund for road improvement, refurbishment of hospitals and clinics, improvement of

educational and telecommunication facilities and procurement of essential medical equipment and the establishment of private housing units for the benefit of health professionals and their families in the region.

In the mean time, it is also generally a good policy to ensure that the cost of capital buildings and equipment is included in fees for services. This ensures that these costs are considered carefully and that the best use is made of scarce capital resources through effective planned preventive maintenance schedules, inventory control and monitoring and supervision.

With regard to strategies for addressing the protracted unavailability of essential drugs in health facilities in the region, it is important first of all for policy makers and implementers to realise that it would be extremely difficult to restrict prescribers and insured patients to only the accredited public facilities and to the EDL. In the developing world generally, and in the Upper West Region in particular, it is a well-known fact that with or without health insurance, the use of drugs is largely shaped by the easy availability of near-by drug shops, to which patients are referred for items lacking in the accredited facilities. The reality is that, many heavily used drugs are in short supply and drugs not found in the accredited health units are sold just outside the gates in drug shops and private clinics. This state of affairs is likely to continue despite attempts to improve supplies at the accredited units and prohibit prescriptions outside the EDL. The question which comes to mind therefore is which of these sources of drugs is more reliable?

Hence, in order to address this dilemma, there is the urgent need to embark on a massive recapitalisation of public health facilities to give a boost to their drug revolving funds, whilst enforcing strict monitoring and supervision at user points to prevent drug leakages. Thus, dialogue and realism are needed in order to create policies that respect both good

medical treatment standards and the concerns of frontline workers and their patients.

There is also the need for an overall increase in resource allocation to fund the health system in the region. This would require a shift from the current population-based resource allocation formula to one which is need-based as a means of addressing the structural imbalances and regional inequities which have been exacerbated under the pooled funds mechanism. One way to do this would be via government subsidies to cover operating deficits of health facilities in the region, subsidies to cover health costs of certain groups especially the poor and vulnerable, and subsidies to cover certain investment costs in order to influence resource allocation on the basis of ensuring adequate population coverage and stimulating service delivery in otherwise underserved areas such as the Upper West Region.

In addition, it would appear that the option of national health insurance as an alternative rather than an additional health care financing mechanism based on a single-insurer model is not viable in an acutely poverty-stricken and largely informal sector environment. Hence, a more acceptable policy option would be to shift from a monolithic to a composite system which recognises the contribution and role of various stakeholders in achieving universal coverage. In this respect, micro insurance units and community prepayment mechanisms are part of the picture and needs to be promoted irrespective of their weaknesses, because they have a great potential, particularly among the millions of people in the informal sector.

Moreover, although it might appear so theoretically appealing to stratify the population into income groups and upon that basis assume that the indigent can be clearly and easily identified and supported as stipulated by the LI (LI1809), there are often enormous practical challenges with

targeting the poor and indigent. Thus, more policy-relevant research on the subject of targeting the poor is required in order to evolve effective strategies which are suitable for achieving the desired impact in specific settings in Ghana.

Also, in order to attain an effective referral system for the purposes of achieving cost control and redistribution of work load and staff burden among others, there is the need to adopt an aggressive policy which is aimed at redressing the balance between primary and secondary care. As emphasized by Normand and Weber (1994) this need has been recognised in many country policies and strongly supported by WHO through the Alma Ata declaration, although it has been very difficult to change the emphasis in practice. Nonetheless, the development of high-quality primary care requires facilities, equipment, staff training and, most of all, career structures and status for primary care staff which match those in secondary and tertiary care. Thus, those responsible for licensing health care professionals need to ensure that primary care is seen as a different, rather than an inferior option to working in a hospital (Normand & Weber 1994).

Finally, in planning to develop social health insurance, policy makers ought to be aware of the competing interests of many groups in the population. Thus, due cognisance must be given to the fact that the lack of consensus and support by the many groups (as cited earlier) in support of the new system may have a negative effect on its success. Hence, what is required is for those who are responsible for the design of the scheme, to endeavour to provide adequate information about the planning process to all relevant groups and involve them in discussions before any plans are implemented. It is also crucial to engage in negotiations about specific issues of interest and maintain a high sense of transparency as a way of making the new system more acceptable and making the start-up period

easier. Clearly, not all demands can be met, but it is better to be aware of potential conflicts to the eventual implementation of the plans.

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REFERENCES

Arhin-Tenkorang, D. 2001, *Health insurance for the informal sector in Africa – design features, risk protection, and resource mobilisation*, HNP Discussion Paper, World Bank, Washington, DC.

Asfaw, A., 2003, *Cost of illness, demand for medical care, and the prospect of community health insurance schemes in the rural areas of Ethiopia*. Frankfurt: Peter Lang Eds.

Atim, C. 1998, *Contribution of mutual health organisation in financing, delivery and access to health care*, Partnerships for Health Reform Technical report no.18, Abt Associates Inc, Bethesda MD.

Atim, C., 2000, *Training of trainers manual for mutual health organisations in Ghana*, Partnerships for Health Reform, Abt Associates Inc, Bethesda MD.

Barnighausen, T. & Sauerborn, R., 2002, One hundred and eighteen years of the German health insurance system: are there any lessons for middle- and low-income countries? *Social Science and Medicine*, 54, pp. 1559-1577.

Busse, R., *Role of Subsidies in Microinsurance: Closing the “Recovery Gap” in Social Re Insurance A New Approach to Sustainable Community Health Financing*, (eds) Dror, D. M. & Preker, A.S., The World Bank, Washington, D.C., pp. 277-291.

Carrin, G. & James, C. 2004, Reaching universal coverage via social health insurance: key design features in the transition period. *Health Policy and Financing Issue Paper*, EIP/FER/FOH/PIP.04.1, WHO/EIP, Geneva.

Cofie P & Tetteh I.E., 2004, *Provider’s Readiness and Concerns for the Implementation of the National Health Insurance Scheme*. (Unpublished).

Consultative Committee for Programme Development and Management (2003). *Report of the technical discussions on Social Health Insurance held during the*

40th Consultative Committee for Programme Development and Management (CCPDM), September 5, 2003.

Creese, A.L., 1991, User Charges for Health Care: A Review of Recent experiences. *Health Policy and Planning* 6(4): 309-19.

Department of Health, South Africa (1997). *Reforming Financing of Private Health Care In South Africa: The Quest For Greater Access And Efficiency*. A Draft policy Document. Pretoria.

Dror, D.M., & Preker, A.S., 2002 (eds), *Social Re Insurance A new Approach to Sustainable Community Health Financing*. The World Bank, Washington, D.C.

Dror, D. M., & Jacquier C., 1999. Micro-insurance: extending health insurance to the excluded. *International Social Security Review*, 52(1), 71-98.

Ekman, B., 2004, Community-based health insurance in low-income countries: A systematic review of the evidence. *Health Policy and Planning*, 19(5), 249-270.

Ensor, T., 1999, Developing health insurance in transitional Asia. *Social Science & Medicine* 48(199) 871-879.

Gertler, P.J., 1998, On the Road to Social Health Insurance: the Asian Experience. *World Development* 26(4): 717-732.

Ghana Statistical Service 1998, Demographic and Health Survey, 1998. Accra, Ghana.

Ghana Health Sector Five Year Programme of Work (2002-2006). Accra, Ghana.

Ghana Poverty Reduction Strategy (GPRS), 2002-2004. Accra, Ghana.

Gilson, L., 1998, *Government Health Care Charges: Is Equity Being Abandoned?* EPC Publication 15. London School of Hygiene and Tropical Medicine, London.

Jegers, M., Kesteloot, K., De Graeve, D., & Gilles, W. 2001, A typology for provider payment systems in health care. *Health Policy*, 60: 255-273.

Jitter, J., White, S. R., & Nshakira, N. 2002, The availability of drugs: what does it mean in Ugandan primary care. *Health Policy*, 65(2003) 167-179.

Jutting, J. P. 2003. Do community-based Health Insurance Schemes Improve Poor People's Access to Health Care? Evidence From Rural Senegal. *World Development*, 32, No.2, 273-288.

McIntyre, D., Thiede, M., Dahlgren, G., & Whitehead, M. 2006. What are the economic consequences for households of illness and of paying for health care in low-and middle-income country contexts? *Social Science and Medicine*, 62: 858-865.

McLeod, H. D., 2005, *Mutuality and Solidarity in South Africa*. Paper prepared for sessional meetings of the Actuarial Society of South Africa and accepted for the South African Actuarial Journal, 2005. Final version from the author.

Ministry of Health 2004a, National Health Insurance Policy Framework For Ghana. Accra, Ghana.

Ministry of Health 2004b, *Revised Policy Framework for the Establishment of Health Insurance in Ghana*. Accra, Ghana.

Ministry of Health 2004c, Staffing Guidelines. Accra, Ghana.

Ministry of Health 2004d, National Health Insurance Scheme Facility Accreditation Manual. Accra, Ghana.

Ministry of Health 2005, Annual Report of the Upper West Regional Health Services. Accra, Ghana.

Nyonator, F. & Kutzin, J., 1999, *Health for some? The effects of user fees in the Volta Region of Ghana*. Oxford University Press, Oxford.

Palmer, N., Mueller, D., Gilson, L., Mills, A., & Haines, A. 2004. 'Health Financing to promote access in low income settings – how much do we know?'. *Lancet*, 364: 1365-1370.

Preker, A.S., Carrin, G. (eds) 2004, *Health Financing for Poor People: Resource Mobilisation and Risk Sharing*. The World Bank, Washington, D.C.

Preker, A.S., Carrin, G., Dror, D., Jakab, M., Hsiao, W. & Arhin-Tenkorang, D. 2002, Effectiveness of Community health financing in meeting the cost of illness. *Bulletin of the World Health Organisation* 2002;80:143-150.

Wiesmann, D., & Jutting, J. 2001, Determinants of viable health insurance schemes in rural sub-saharan Africa. *Quarterly Journal of International Agriculture*, 50(4), 361-378.

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5.2 APPENDIX 1: DATA COLLECTION INSTRUMENTS

CHECKLIST FOR ASSESSING FACILITY PREPAREDNESS

STAFFING LEVELS* (REGIONAL HOSPITALS)

NAME OF FACILITY :

DATE OF VISIT :

STAFF CATEGORY	NORM	NO. AT POST	SHORTFALL	EXCESS
Medical Officer/ Specialist	9			
Professional nurses	90			
Aux. nurses	60			
Dental	6			
Pharmacy	10			
Administration	8			
physiotherapy	2			
Laboratory	6			
Radiology	3			
Med. Records	6			
Catering	10			
Stores	3			
Laundry	8			
Transport	3			
Revenue Collector	4			
Orderlies/Labourer	26			
Ward Assistant	10			
Maintenance	1			
Anaesthetist	2			
Mortuary	2			
Security	5			
Total	274			
INDICATORS				
Average Bed Occupancy	132			
Average OPD Attendance	268			
Average Daily Adm.	70			

*: According to MOH Staffing Guidelines

CHECKLIST FOR ASSESSING FACILITY PREPAREDNESS

(A) STAFFING LEVELS (DISTRICT HOSPITALS)

NAME OF FACILITY :

DATE OF VISIT :

STAFF CATEGORY	NORM	NO. AT POST	SHORTFALL	EXCESS
Medical Officer/ Specialist	2			
Medical Assistant	1			
Professional nurses	15			
Aux. nurses	10			
Dental	1			
Pharmacy	2			
Administration	2			
Laboratory	3			
Radiology	2			
Med. Records	4			
Catering	5			
Stores	2			
Laundry	3			
Transport	2			
Revenue Collector	1			
Orderlies/Labourer	8			
Ward Assistant	3			
Maintenance	1			
Anaesthetist	1			
Mortuary	1			
Security	2			
Total	71			
INDICATORS				
Average Bed Occupancy	70			
Average Daily OPD Attendance	91			
Average Daily Adm.	21			

CHECKLIST FOR ASSESSING FACILITY PREPAREDNESS

(B) STAFFING LEVELS (HEALTH CENTRES)

NAME OF FACILITY :

DATE OF VISIT :

STAFF CATEGORY	NORM	NO. AT POST	SHORTFALL	EXCESS
Medical Assistant				
Professional nurses				
Aux. nurses				
Clinic attendant				
Dispensary				
Technical Officers (DC, Nutrition, Leprosy etc.)				
Total				

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CHECKLIST FOR ASSESSING FACILITY PREPAREDNESS

(A) ESSENTIAL DRUGS AVAILABILITY* (Regional & District Hospitals)

NAME OF FACILITY :.....

DATE :.....

GENERIC NAME	QUANTITY REQUIRED	QUANTITY IN STOCK	SHORTFALL	EXCESS
Tab. Acetylsalicylic Acid 300mg				
Cap. Amoxicillin				
Susp. Amoxicillin				
Inj. Chloroquine				
Syr Chloroquine				
Tab. Chloroquine				
Tab. Co-trimoxazole				
Susp. Co-trimoxazole				
Tab. Ferrous Sulphate				
Tab. Folic acid				
Tab. Mebendazole				
Tab. Nifedipine				
Tab. Metronidazole				
Susp. metronidazole				
Tab. Paracetamol				
Syr Paracetamol				
Tab. Methyldopa 250mg				
Oral Rehydration Salt				
Tetracycline eye ointment				
Inj. Adrenaline				
Inj. Aminophylline				
Inj. ASS				
Inj. Benzyl Penicillin				
Dextrose 5%				
Saline 0.9%				
Inj. Choramphenicol				
Inj. Hydrocortisone				
Inj. Hydrazaline				
IV Metronidazole				
Tab. Artesunate				
Tab. Amodiaquine				
Syr Amodiaquine				

*: According to MOH approved Essential Drugs List for Regional and District Hospitals.

CHECKLIST FOR ASSESSING FACILITY PREPAREDNESS
(B) 23 ESSENTIAL MEDICINE AVAILABILITY* (HEALTH CENTRES)

NAME OF FACILITY :

DATE OF VISIT :

NAME OF DRUG	QUANTITY REQUIRED	QUANTITY IN STOCK	SHORTFALL	EXCESS
Tab. Acetylsalicylic Acid 300mg				
Cap. Amoxicillin				
Susp. Amoxicillin				
Inj Chloroquine				
Syr Chloroquine				
Tab. Chloroquine				
Tab. Co-trimoxazole				
Susp. Co-trimoxazole				
Tab. Ferrous sulphate/ fumerate				
Tab. Folic acid 5mg				
Tab. Mebendazole				
Tab. Nifedipine				
Tab. Metronidaxole 200mg				
Tab. Paracetamol				
Syr. Paracetamol 500mg				
Oral Rehydration Salt (ORS)				
Tetracycline eye ointment				
Inj ASS				
Tab. Artesunate				
Tab Amodiaquine				
Syr. Amodiaquine				
Anti Rabies Vaccine (ARV)				

*: According to MOH approved Essential Medicines List for the Health Centre.

IN-DEPTH INTERVIEW (IDI) AND FOCUS GROUP DISCUSSION (FGD) GUIDE FOR HEALTH MANAGERS, HEALTH CENTRE IN-CHARGES AND NURSES

Participants background information

Gender :.....
Age :.....
Rank :.....
Position/Title :.....
No. of years in service :.....
Date of Interview :.....

Section A: Knowledge on concept of health insurance, Act 650 and the National Health Insurance Council (NHIC)

- What is the National Health Insurance Scheme all about?
- Have you heard about the National Health Insurance Act (Act 650) and the NHIC?
- Have you seen and or read the Act? What can you say about it?
- What are the main roles and responsibilities of the NHIC?

Section B: Types of schemes

- What types of schemes are permitted to operate under the Act?
- What are the main differences between these schemes?

Section C: Implementation plans

- What are the implementation plans for the roll out of the schemes as set out in the Act?

Section D: Benefit package

- What services are covered in the schemes benefit package? Hospital only? Primary care only?, both?
- How about specific services such as attended deliveries, Caesarean sections, surgery etc?