

UNIVERSITY OF CAPE COAST

ASSESSING STAKEHOLDERS' PERCEPTION ON HEALTHCARE CLAIMS
FRAUD CONTROL AT TAKORADI MUTUAL HEALTH INSURANCE
SCHEME

BY

ISAAC BRIGHT HURSON

Thesis submitted to the Department of Accounting and Finance, School of
Business, University of Cape Coast, in partial fulfillment of the requirements for
the award of Master of Business Administration Degree in Finance

NOVEMBER 2016

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature..... Date:.....

Candidate's Name: ISAAC BRIGHT HURSON

Supervisors' Declaration

We hereby declare that the preparation and presentation of this thesis were done in accordance with guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature..... Date:.....

Supervisor's Name: PROF. ROSEMOND BOOHENE

Co-Supervisor's Signature..... Date:.....

Co-Supervisor's Name: DR. ISAAC DASMANI

ABSTRACT

The National Health Insurance Scheme is bedevilled with lots of problems. One of such problems is payment of persistent and ever-increasing healthcare claims. This phenomenon, if not properly controlled, may have the futuristic propensity to hamper the smooth running of Takoradi Mutual Health Insurance scheme (TMHIS) in particular and health insurance schemes in the country in general. The main aim of this study was to assess stakeholders' perception on healthcare claims fraud control at Takoradi Mutual Health Insurance Scheme. The study used the correlational study design. A total of 150 respondents made up of staff of TMHS, staff of service providers of TMHIS and staff of the National Health Insurance Authority were interviewed. The main research instrument used to collect data for the study was the questionnaire. Descriptive and inferential statistics such as mean, standard deviation and standard regression were used to analyse the data. The findings of the study show that internal control and communication of claims payment policies did not significantly influence claims fraud. The study, however, found that human resource challenges, compliance with claims payment policies and management oversight responsibilities significantly affected claims fraud control at TMHIS. It was therefore, recommended that TMHIS conduct regular claims verification at provider sites and at the scheme level to rectify any possible claims related anomaly. Furthermore, qualified, adequate and well-motivated staff should be employed to handle claims. Finally, claims should be paid fairly and promptly to avoid manipulation of claims and claims officers by healthcare providers.

ACKNOWLEDGEMENTS

A research enquiry of this magnitude could not have taken place without the assistance and contributions of various individuals. My foremost thanks goes to my principal supervisor Prof. RosemondBoahen whose help in the conduct of this work is immeasurable. I will also have to acknowledge my debt owed the co-supervision Mr. Isaac Dasamani for his insightful contributions and the materials he provided me.

I would also want to extend my appreciation to all faculty of the School of Business of the University of Cape Coast for the immeasurable support they offered me throughout the period of this study. Without the support that they rendered, this study would have been impossible.

To my wife and kids, I also express my sincere gratitude for their patience during the trying period of this study. Without the enduring patience and understanding, I would not have had the peace of mind to conduct this study.

DEDICATION

For my supportive wife, Susana OwusuaHurson

TABLE OF CONTENTS

Content	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE: INTRODUCTION	1
Background to the Study	1
Statement of the Problem	5
Objectives of the Study	7
Research Questions	7
Hypothesis	8
Significance of the Study	8
Delimitations of the Study	9
Organisation of the Study	10
CHAPTER TWO: REVIEW OF RELATED LITERATURE	11
Introduction	11
Theoretical Framework of the Study	11
History & Evolution of National Insurance Scheme	13
Types of Health Insurance Scheme	23

Structure & Functioning of the Health Insurance Scheme	26
National Insurance Scheme Tariff System	32
Health Care Fraud Defined	37
Why Health Care Industry is Vulnerable to Fraud	39
Fraud Techniques and Who Commits Them	42
Claims Administration	46
Financial Processes and Management	48
Budgeting System	49
Expenditure Tracking System	50
Cost Management	50
Anti-Fraud Factors	51
Effect of Anit-Fraud Factors on Healthcare Claims	61
Lessons learnt from Literature Review	62
Conceptual Framework of the Study	63
 CHAPTER THREE: RESEARCH METHODOLOGY	 65
Introduction	65
Study Area	65
Research Approach	67
Research Survey	68
Population and Sampling Procedure	69
Data Collection	72
Research Instrument	73
Measurement of Variables	74

Pre-Test	75
Reliability Test	77
Ethics	78
CHAPTER FOUR: RESULTS AND DISCUSSION	80
Introduction	80
Preliminary Analysis	80
Data Preparation & Analysis	83
Model Specification	85
Internal Control Measures that Governs Activities of Claims Officers	90
The extent to which TMHIS complies with Claims Payment	94
The extent to which Management of TMHIS exercises its oversight	
Responsibility on Claims Payment	97
The effect of anti-fraud Factors on Claims Fraud control at TMHIS	99
CHAPTER FIVE: SUMMARY, CONCLUSION AND	
RECOMMENDATIONS	106
Introduction	106
Summary	106
Conclusions	109
Recommendations	111
Limitations of the study	112
Suggestions for further studies	112
REFERENCES	115
APPENDICES	126

LIST OF TABLES

Table	Page
1 Distribution of Respondents	71
2 Reliability Coefficients for Pretest Data Collected	78
3 Background Characteristics of Respondents	81
4 Correlated Test Result	86
5 Collinearity Statistics	88
6 Internal Control Measures	91
7 Extent to which TMHIS complies with Claims Payment	94
8 Management oversight Responsibility of TMHIS	97
9 Model Summary of Regression Analysis	101
10 Results of Regression Analysis	102

LIST OF FIGURES

Figure	Page
1 Conceptual Framework	63
2 Map of Western Region of Ghana	66
3 Normal Probability Plot	89
4 Scatter Plot	90

LIST OF ABBREVIATION

TMHI	Takoradi MutualHealth Insurance
NHIA	National Health Insurance Authority
WHO	World Health Organisation
MHO	Mutual Health Organization
CBHI	Community Based Health Insurance
CHAG	Christian Health Association of Ghana
HMO	Health Maintenance Organisation
PPO	Preferred Providers Organisation
POS	Point of Service
DMHIS	District Mutual Health Insurance Scheme
PMHIS	Private Mutual Health Insurance Scheme
NHIF	National Health Insurance Fund
PPS	Provider Payment System
NHCAA	National Health Care Anti-Fraud Association
M&E	Monitoring and Evaluation

CHAPTER ONE

INTRODUCTION

Background to the Study

The socio-economic development of a nation, to a very large extent, depends on a healthy population. A healthy people with the requisite skills and knowledge become the backbone through which the development agenda of any society is implemented. Quality and healthy human resource base is therefore cardinal to the attainment of development goals of countries. An unhealthy workforce is likely to spend most of its productive time at the hospital, thus stalling productivity. The development process of any country is stalled when the active human resources is unhealthy and without any cover to protect or insure them should they fall sick. This means the income from their work is what they will rely on in times of sickness. It is in this light that every country in the world places a lot of premium on ensuring an improved health condition for her citizens.

Providing cover for the workforce in the form of insurance means that part of the disposable income of individuals that could have been used to take care of themselves sickness strikes can be used for other activities. Individuals are therefore able to make savings even when they fall sick because the insurance cover is likely to absorb them of any liability or limit their liability. This makes the establishment of health insurance schemes very significant towards the development of any nation. Though countries are putting in a lot of effort to provide quality health care facilities, the problem with most of the developing

countries is that the citizens are unable to access these facilities because they cannot afford (WHO, 2001).

To make these facilities accessible to many people, a system of insurance is provided by governments of most countries. The insurance allows for the citizens to contribute a small amount as premium to enable them enjoy the benefits should they fall sick. The Encyclopaedia Britannica (2003) explains Health Insurance as a pre-payment plan providing services or cash indemnities for medical care needed in times of illness or disability. Health financing or general taxation or social health insurance are generally recognized to be powerful methods to achieve universal coverage with adequate financial protection for all against health care costs. According to Abekah-Nkrumah et al., 2009. Africa has the highest burden of disease in the world yet most of the countries spend less than 50 dollars per person on health. The authors further posit that about 71 percent of health care cost is borne by the patients themselves. This prevents lots of patients from attending the hospital when they fall sick. A social health insurance scheme as suggested by Abekah-Nkrumah et al., (2009) can be the solution to this problem.

From a historical perspective, Germany was the first country to adopt and implement a National Health Insurance. The German chancellor Prince Otto von Bismarck received approval for a compulsory sickness-insurance law in 1883, which was financed by state subsidy (Criel, 2008). NHI has its root in the mutual aid societies called *Jyorei* that started in Japan in 1835, but health insurance law was not enacted in Japan until 1922 (Ministry of Health and Welfare, 2000).

Some of the European countries that run health insurance schemes include: Germany, France, Switzerland, Netherlands and Hungary; In Asia these are: Japan, Taiwan, Korea, Philippines and India; For Latin America: Mexico, Argentina and Brazil; Africa: Tanzania, Kenya, Nigeria, Zimbabwe, Uganda and Ghana. Despite existence of NHI policies, implementation has not been easy for most developing countries due to the huge resources and technical capacity required (Ministry of Health & Welfare 2000).

In 1985 Ghana initiated health sector reforms as part of a broader structural adjustment program aimed mainly at reducing government spending to address budgetary deficits, introducing cost recovery mechanisms through user fees (traditionally known in Ghana as “cash and carry”) and liberalizing health services to allow private sector involvement. The financial aim of the reform was achieved and shortages of essential medicines and some supplies were reduced. However, these achievements were accompanied by inequities in financial access to basic and essential clinical services (Waddington & Enyimayew, 1990). During the 1990s, several community health insurance schemes, popularly called Mutual Health Organizations were developed in Ghana with some external funding and technical support.

Although resource and technical capacity are important prerequisites to successful implementation of NHIS, other issues like political priorities of a country also play a vital role. African countries including Zimbabwe, Uganda and Ghana are currently experimenting different approaches to Health Insurance. As these schemes are still young and evolving, few have yet been systematically

evaluated. In Ghana, a National Health Insurance Scheme (NHIS) was passed into law in 2003 and fully implemented in 2005 (Agyepong&Adjei, 2008; Abor, Abekah-Nkrumah, Sakyi, Adjasi&Abor, 2011). Before these, Ghana's health sector had passed various transformations which started in the early 1970s, there were no out-of-pocket payments in these facilities and healthcare was financed solely from tax revenue in Ghana. However, this was not sustainable in light of the needs of other sectors of the economy, and the government had to find alternatives to this financing mechanism.

The national health insurance scheme was thus established. The establishment of the current national health insurance scheme grew out of an election promise made in 2000 by both the then incoming New Patriotic Party and the ruling National Democratic Congress to abolish the "cash and carry" system and to remove financial barriers to utilization of health care (Daily Graphic Newspaper, 2008). Hence, the establishment of National Health Insurance Act, 2003 (Act 650) by the ruling NPP Government, with the aim of increasing access to health care and improving the quality of basic health care services for all citizens, especially the poor and vulnerable.

The initially defined benefit package under the scheme includes inpatient hospital care, outpatient care at primary and secondary levels, and emergency and transfer services. Each district mutual health insurance scheme also uses its discretion to determine additional benefits a scheme could provide. Beneficiaries of the schemes receive care from accredited service providers including government health facilities, quasi-government, mission and private health

facilities. The law establishing the scheme allows for concurrent operation of District-Wide (Public) Mutual Health Insurance schemes in the one hundred and forty five (145) Metropolitan, Municipal and District Assemblies in Ghana. Also, Private Mutual Health Insurance schemes and Private Commercial Health Insurance schemes are covered by the Act. However, the schemes would only financially support District-Wide (public) Mutual Health Insurance Schemes as a strategy for delivering its pro-poor policy to the under-privileged segment of the society, from both the formal and informal sectors.

Most of the schemes have had financial challenges. Though payments are made from the head office, claims made by the service providers keep soaring (NHIA Claims Report - 2012). For example the Takoradi Mutual Health Insurance Scheme which came into operation in 2004 receives the highest amount of funds reimbursed for healthcare claims payment in the Western Region and in terms of nationwide healthcare claims payment, the scheme is the fifth (NHIA Claims Report - 2012). Several factors account for this. Prominent among them is possibly, payment of fraudulent healthcare claims.

Statement of the Problem

Though the introduction of the Health Insurance Scheme has achieved tremendous success by providing accessible and affordable health care to the people of Ghana and has increased attendance rate tremendously at facilities. However, healthcare claims indebtedness keep on increasing monthly at an alarming proportion (NHIA Clinical Audit Report, 2010). For example a total of

GH¢18.06 million healthcare claims has been paid within a time frame of four years by the scheme (TMHIS, Annual Reports 2009 - 2012). One major challenge facing the National Health Insurance Authority is how to control healthcare claims which are suspected to be submitted in astronomical proportion health (NHIA, Annual Report 2012).

Several studies have been carried out both within and outside Ghana relating health insurance claims. For example Good and Waddington (1994) conducted a study on financing an efficient and effective healthcare system, Apoh-Baah (2010) did a study in Ghana regarding financial sustainability of health insurance in Ghana, Frempong (2011) also did a study on assessing providers' perception on NHIA Medicine List. However, since the inception of Takoradi Mutual Health Scheme, no research has been conducted to investigate the process and procedure of receiving, adjudicating, vetting and paying claims to determine whether or not the scheme is properly managing healthcare claims fraud risk.

It is against this background that this research finds it necessary to assess stakeholders' insight on claims management process at Takoradi mutual health insurance scheme. The current study therefore looks at stakeholders' perception on healthcare claims fraud control at Takoradi mutual health insurance scheme. It tries to obtain opinion of stakeholders' on measures that could be put in place to mitigate any potential healthcare claims fraud.

Objectives of the Study

The main objective of the study was to assess stakeholders' perception on healthcare claims fraud control at Takoradi Mutual Health Insurance Scheme (TMHIS). Specifically the study sought to:

1. Examine stakeholders' perception on existing internal control measures that govern the activities of claims officers of TMHIS;
2. Examine stakeholders' perception on the extent to which TMHIS complies with claims payment as indicated in the control measures;
3. Obtain stakeholders' view on management oversight responsibility of TMHIS on claims processing and payment procedures;
4. Obtain stakeholders' view on effect of anti-fraud factors on healthcare claims fraud control;

Research Questions

To be able to achieve the objectives 1, 2 and 3 of this study, the following research questions were set:

1. To what extent does the existing internal control measures govern the activities of claims officers of TMHIS?
2. To what extent does TMHIS comply with claims payment as indicated in the control measures?
3. To what extent does the management of TMHIS perform their oversight responsibility on claim submission and payment procedures?

Hypotheses

To achieve objective 4 of the study, the following hypothesis were set.

H₁: Internal controls positively influence proper claims management at TMHIS.

H₂: Communication of claims payment policies affects proper claims management at positively.

H₃: Compliance with claims payment policies positively influences claim management at TMHIS.

H₄: Management oversight responsibility in maintaining internal control positively influences proper claims administration at TMHIS.

H₅: Human resources practices positively affect proper claims at TMHIS.

Significance of the Study

The result of the study will help TMHIS in particular, and National Health Insurance Schemes in general to appreciate the need to manage healthcare claims with outmost care and also put in place sufficient measures to control possible claims fraud. Additionally, the study's findings will equip management of TMHIS and other NHI offices with reasonable knowledge to intensify and improve upon education on acceptable practices regarding submission, vetting and payment of healthcare claims. The research will assist the National Health Insurance Authority to come out with concrete policies that will facilitate proper healthcare claims management, thereby making it difficult for anyone to engage in fraudulent claims deals. The results of the research will serve as reference

material for students who will want to conduct further research on healthcare claims fraud control.

Delimitations of the Study

Mutual health insurance schemes are spread all over the country. A study of this kind should have been done to cover all the health insurance schemes within the country in order that a clear and complete nation-wide account could be obtained on this issue of health insurance claims and anti-fraud factors. However, the study covered the Takoradi Mutual Health Insurance Scheme which has 41 accredited health care providers. The providers comprises three (3) Government Hospitals, one (1) Mission Hospital, eight (8) Clinics, three (3) Maternity Homes, fourteen (12) Pharmacy Shops, one (1) chemical shop, ten (10) laboratories and three (3) Community-Based Health Provider Services. This became necessary because, the sheer number of respondents that would have been dealt with in such a nation-wide research would be too large for the researcher to handle, especially within the time frame of this study.

Further, even though many issues do exist within many domains of health insurance, the study delimited the area of interest to claims fraud control. This was to ensure an in-depth study of the phenomenon and to provide interaction that will lead to the adoption of appropriate measures aiming at ensuring effective and efficient running of the various health insurance schemes in general and the Takoradi Mutual Health Insurance Scheme in particular.

Organization of the Study

This thesis has five chapters. Chapter one introduces the study and very importantly establishes the problem. Chapter two reviews the theoretical, conceptual and empirical literature on claims payment, internal control measures, management oversight and anti-fraud factors and its effect on claims fraud. Based on the review, a conceptual framework for the study is deduced. Chapter three focuses on the methodology of the study. It discusses among others, the population, sampling procedures, data collection, measurement instrument, pre-test and data analysis techniques.

In Chapter four, data obtained from the field is analysed and results discussed in accordance with the objectives of the study. Descriptive statistics are employed in analysing business and demographic characteristics whiles mainly advanced statistical techniques are employed in analysing relationships between and among the study's main variables. Chapter five summarizes the findings and conclusions, based on which recommendations are made to improve health insurance claims payment and reduce claims fraud.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This chapter reviews literature on the theoretical foundations of the study as well as conceptual issues raised in prior empirical studies. The review provides the intellectual context for the study, acknowledging and examining prior knowledge on the topic and appreciating modes of presentation and discussions on research findings (Answers.com, 2012). It further identifies areas of consensus and significant debates on relevant issues, helping avoid the replication of errors while better articulating the knowledge gap (Cano, 2013). The chapter begins with a review of theories and conceptual issues regarding health insurance claims fraud, anti-fraud factors and fraud triangle theory. A review of conceptual issues emanating from these theories and captured in prior empirical studies follows. Issues and lessons emanating from the reviews are then discussed, based on which the conceptual framework for the study is constructed.

The Theoretical Framework of the Study

The theoretical framework of this study comprise the fraud triangle theory. Cressey (1973), who was the first to propose the fraud triangle theory, explained that the pressure to commit fraud can be identified with a person's internal motives, but stressed that the presence of financial trouble does not mean that people will be inclined to commit fraud. The fraud triangle theory identified that eliminating opportunity for claims fraud requires maintaining solid internal

controls and communicating policies to employees, vendors, and partner entities. Proactive auditing, frequent claims file peer reviews, and careful verification of all claims and excellent claims payments as foundational requirements that must be supported with sufficient monetary and human resources as well as by top levels of management. Despite different attitudes towards the fraud triangle and its elements suggested by different researchers, its essence has remained unchanged over the years, and it just proves that the research on fraud was, is, and will be relevant in the future

The fraud triangle theory centers on three key factors. These key factors, when present, can lead one to engage in a fraudulent activity. These factors are rationalization, opportunity and motivation (pressure) Turner, Mock and Srivastava (2003) explained that pressure to commit fraud can be identified with a person's internal motives, but stressed that the presence of financial trouble does not mean that people will be inclined to commit fraud. Further, the authors indicated that the pressure can be of three types: a personal pressure to pay for the promoted lifestyle, pressure by the employer to meet the interests of the company in spite of his/her own views or beliefs and the external pressure.

The second element of the fraud triangle as described earlier is opportunity. According to Turner, Mock and Srivastava (2003) even if a person has a motive, he/she cannot commit fraud if no opportunities are created. Meaning that the individual must be presented with an opportunity before fraud can be committed by one. The authors explained further that opportunity is mostly affected by a poor control of the company's assets, procedures and accounting and if all the

conditions for fraud are favourable to the employee, fraud is then committed if another element of the fraud triangle – rationalization – is present. Rationalization as accentuated by Duffield and Grabosky (2001) describes the kind of personal excuses given for committing the fraud. The excuses, according to Duffield and Grabosky (2001), range from “borrowing”, “no one will suffer”, “company executives deserve even more”, “because they exploit me”, “this is for a noble purpose”, and others.

History and Evolution of National Insurance Scheme

To better understand the issues under investigation, one needs to be abreast with how the current system of health insurance started. This will help contextualize the issues under discussion. The term health insurance is generally used to describe a form of insurance that pays for medical expenses. It is sometimes used more broadly to include insurance covering disability or long-term nursing or custodial care needs. Ghana’s Ministry of Health (2003), defines health insurance as an alternative health care financing system which involves resource pooling and risk sharing among members. It provides security against loss by illness or injury, financial protection against health related expenses and coverage for out-patient and in-patient care and other specialised types of care.

A health insurance may be provided through a government-sponsored social insurance programme, or from private insurance companies. It may be purchased on a group basis (e.g., by a firm to cover its employees) or purchased by individual consumers. In each case, the covered groups or individuals pay

premiums or taxes to help protect themselves from high or unexpected healthcare expenses. Similar benefits paying for medical expenses may also be provided through social welfare programmes funded by the government. The benefit is administered by a central organisation, most often either a government agency or a private or not-for-profit entity operating a health plan (WHO, 2008).

National health insurance systems are found in many countries, particularly in Europe. Systems of national health insurance frequently are coordinated with other national programmes of social insurance, such as pension programmes, programmes of unemployment insurance, and workers' compensation. Before the development of medical expense insurance, patients were expected to pay all health care costs out of their own pockets, under what is known as the fee-for-service business model (WHO, 2008). However, other alternatives to health care financing were fashioned in order to make health care accessible to the majority of people who need it. This led to the introduction of health insurance as an alternative method of financing health care by patients.

The first country to provide health insurance on a national scale is Germany. In 1883 the German Chancellor Prince Otto von Bismarck obtained passage of a compulsory sickness-insurance law, which was financed by a state subsidy. Various types of national health insurance schemes were adopted by other European countries, including Austria-Hungary later in the 19th century, Norway in 1909, Sweden in 1910, and Great Britain and Russia in 1911. After World War II, the growth of national systems of health insurance in Europe was extensive,

although the amount of benefits, conditions of eligibility, treatment of dependents, and provisions for maternity care varied (WHO, 2008).

In the United States, the concept of health insurance was proposed in 1694 by Hugh the Elder Chamberlin. In the late 19th century, "accident insurance" began to be available, which operated much like modern disability insurance. This payment model continued until the start of the 20th century in some jurisdictions (like California), where all laws regulating health insurance actually referred to disability insurance (WHO, 2008). According to the WHO (2008), the origins of sickness coverage in the United States effectively date from 1890. The first employer-sponsored group disability policy was issued in 1911. The traditional disability insurance evolved into modern health insurance programmes during the middle to late 20th century.

Today, most comprehensive private health insurance programmes cover the cost of routine, preventive, and emergency health care procedures, and also most prescription drugs, but this was not always the case. Hospital and medical expense policies were introduced during the first half of the 20th century. During the 1920s, individual hospitals began offering services to individuals on a pre-paid basis, eventually leading to the development of Blue Cross organisations.

Huber, Hohmann and Reinhard (2002) found that solidarity has always existed in African societies and a number of relationships and groupings exist in which the members rely on each other's solidarity or even pool risks among a larger group. These are collective mechanisms designed to face individual risks, often related to life-cycle events such as birth and death, but also illness, and encompass, in a

wide range, both positive (weddings, baptism, circumcisions) and negative (funeral, illness) events. People come together when members are in financial difficulties, and for social and economic purposes (house construction, to start a business, acquisition of agricultural material, organisation of communal festivities). This contributes to the creation and reinforcement of social networks (Huber et al., 2002).

In traditional rural societies, individuals usually expect a return from any contribution they make. The informal risk-pooling arrangements are commonly based on balanced reciprocity, which is the standard for fairness. Any "gift" must be returned at some future time. Insurance is different as it implicates that the members who will benefit within the near future remain unknown at the time of contribution. In consequence, the majority of members are paying mainly for their protection without any immediate or visible return. (Platteau, 1997 cited in Huber et al., 2002).

The concept of balanced reciprocity is not only valid for the traditional rural society. Also, in modern insurance systems, people expect some return to their investment. Otherwise, their willingness to pay contributions is undermined. The return is not per se a material kind. In Western societies, people value insurance because it reduces their anxiety (Platteau, 1997).

In African societies, provision is made for social risks but hardly ever for health risks. Money is saved to give a dowry when a girl is to be married or food is stored after harvest. It is unusual for people to protect themselves against possible illness that may occur in the future. They will not regularly contribute money for

a problem that is not visible. People do not put money aside for unforeseen illness, which is often seen as a taboo. There is the belief that talking about sickness may even attract it. Solidarity exists especially for emergency cases but people wait until the illness occurs(Platteau, 1997).

The lack of strategies to cope with health risks can be partially explained by the fact that in a situation when people are engaged in survival strategies, health assurance is not the top priority. Other priorities are more important, such as organizing food or school fees for the children. Or people prefer to invest in productive activities. They believe it is better for them to invest money at hand in small business activities than to pay the monthly insurance premium, which they perceive will give them only limited benefit .With any profits made from business investment, they may be more able to purchase, directly, quality care from their preferred health care provider (public or private facility), or traditional healer. A proverb from Burkina Faso states that in an insurance the money sleeps, but in a credit and saving scheme it works for you(Huber et al. 2002).

The challenge for promoters of healthinsurance in sub-Saharan Africa is to transform the foresight for social risks into foresight for health uses the following argumentation to convince community members of the benefits of healthinsurance. That health and illness come in pairs and instead of waiting for the problem to happen again, it is better to enlarge the cycle of people, beyond that of friends and family, who can help. Locally developed healthinsurance systems are often proposed to provide a solution to the specific conditions of the situation of the informal sector workers and their families(Huber et al. 2002).

These systems have received growing attention from donors and governments since the mid-1990s and this has led to the emergence and rapid growth of health insurance schemes. Comparable terms used for local health insurance are: Mutual Health Organisation (MHO), Community-Based Health Insurance (CBHI), and Micro-insurance. The Mutual Health Organisation is widely used in West and Central Africa whereas Community-Based Health Insurance has common usage in East Africa.

Development agencies have until recently concentrated their activities in improving health systems by investing in infrastructure, training and management support on regional and district levels. They have become aware of the limitations of simply improving the level of health care on offer. When evaluating the impact of their activities, the extent of the exclusion of large population groups and the perception by the population of low quality of care on offer became apparent. The importance of developing financing mechanisms, which would enable more equitable access to health care structures, was recognized by all health care stakeholders. (Huber et al. 2002).

Health Insurance like other forms of insurance is a form of collectivism by means of which people pool risk; in this case the risk is incurring medical expenses. It is sometimes used more broadly to include insurance covering disability or long-term nursing or custodial care needs. It may be provided through a government sponsored social insurance program, or from private insurance companies. It may be purchased on group basis (for example, by a firm to cover its employees) or purchased by individual consumers. (Huber et al. 2002).

In each case, the covered group or individuals pay premium or taxes to help protect themselves from high unexpected health care expenses. Similar benefits paying for medical expenses may also be provided through social welfare programs funded by government. By estimating the overall risk of healthcare expenses, a routine finance structure (such as monthly premium or annual tax) can be developed, ensuring that money is available to pay for the health care benefits specified in the insurance agreement. (Ghana Health Insurance Review, 2008).

The benefit is administered by the central organization such as government agency, private business, or not-for-profit entity. A health insurance policy is a contract between an insurance company and an individual or his sponsor. The type and amount of health care costs that will be covered by the health insurance company are specified in advance, in a member contract or “evidence of coverage” booklet. Health insurance is, basically, a promise by an insurance company or health plan to provide or pay for health care services in exchange for payment of premiums. (Ghana Health Insurance Review, 2008).

Evolution of Demand for Health Insurance Schemes

Most community financing schemes have evolved in the context of severe economic constraints, political instability and lack of good governance. Usually, government taxation capacity is weak, formal mechanisms of social protection for vulnerable populations absent, and government oversight of the informal health sector lacking. In this context of extreme public sector failure, community involvement in financing of health care provides a critical, though insufficient,

first step in the long march towards improved access to health care by poor and social protection against the cost of illness (Huber et al. 2002).

Report on investing in health for economic Development, presented by the Chairman of Commission and Director of the Harvard Centre for International Development to the World Health Organization (WHO) on December 20, 2001, stressed that financing schemes are no panacea for the problems of resource mobilization faced by low-income countries. These schemes should be regarded as a compliment to and not as a substitute for strong government in health care financing and risk management related to the cost of illness. Firstly, people have been forced to think about alternative solutions as health care is no longer offered for free at public facilities and the introduction of user fees has had negative effects, especially for the poor.

Secondly, in the context of decentralization, more power has been delegated to the communities, which allows them to also assume more responsibilities in the provision of local public goods. Thirdly, the quite positive experience with credit and financing institutions is leading to a discussion about whether the mutual should enlarge their portfolio to include also insurance products. Finally, the debate in the literature over the cost of illness has shown that health shocks often force households into high-cost risk-coping strategies. Access to insurance could reduce these costs substantially (Weinberger & Jutting 2000; Asfaw et al., 2001).

In the case of Ghana, health insurance came about due to several reasons: In line with the Ghana Poverty Reduction Strategy, the government initiated a

policy to deliver accessible, affordable, and good quality health care to all Ghanaians, especially the poor and the most vulnerable in society. Indeed it is estimated that out of the eighteen percent of the population who require health care at any given time, only twenty percent (20%) of them are able to access it. That means that about eighty percent of people living in Ghana cannot afford to pay for healthcare rendered. This results in delays in seeking health care, non-compliance to treatment, and consequently premature death.

The aim of the health insurance scheme in Ghana is to enable the government achieve its set health goal within the context of the GPRS and the Health sector five year programme of work, 2002-2006 (National Health Insurance Policy Framework for Ghana, 2004). An external evaluation report of Jaman South Health Insurance Scheme (2004) in the BrongAhafo region found that the government's intention to introduce health insurance scheme was to resolve the cost of health care including offsetting the negative effects of the "cash and carry" system, especially its consequences on the poor.

Proposals to set up and run a national health insurance scheme have in fact been around for a long time. Since the early 1980s, various experts (local and international) have been contracted by the Ministry of Health (MOH) to study and make recommendations for the setting up and running of a national health insurance organization. The International Labour Organizations (ILO), World Health Organization (WHO), European Union and London School of Hygiene and Tropical Medicine all provided technical advice at the request of the Ministry.

In August 1995, the MOH received definite proposals from a private consultancy group in a report entitled “A feasibility study for the establishment of NHIS in Ghana”. The study proposed that a centralized national health insurance company be set up to provide compulsory “mainstream social insurance scheme” for (i) all contributors to the Social Security and National Insurance Trust (SSNIT), and (ii) all registered cocoa farmers. The report also recommended pilot “rural-based community-financed scheme” for the non-formal sector but gave no details or indications as to how the MOH was to do this. The major emphasis was on the NHIS.

The objectives were stated in the presidential sessional address of that year when it was noted that “the national health insurance scheme will contribute to resolving the cost of health care. This year, a pilot insurance scheme will be implemented in the eastern region to test the work done so far, as well as the performance of existing rural health insurance schemes so that problems can be identified before implementation begins on a national scale”.

Other sources have it that insurance schemes(local) were started in Ghana by the Christian Health Association of Ghana (CHAG) to respond to the growing unpaid bills that were left as a result of patients inability to pay hospital bills upon discharge from the hospital. The situation of unpaid bills was critical in mission hospitals due to their inability to strictly implement the ‘cash and carry’ policy, as opposed to other providers in the government and private and for profit sector (Aikins, 2005). It clearly states that health insurance concept in Ghana started at the St. Theresa’s Hospital, Nkoranza in the BrongAhafo Region. Later, others

such as St. John of God's Hospital, DuayawNkwanta, Holy Family Hospital Berekum, and St. Mary's Hospital, Drobo, Holy Family Hospital, Nkawkaw and others in the Northern part of Ghana emulated it. Accordingly, it attracted the interest and attention of health authorities and policy makers to consider health insurance as an alternative to "cash and carry" system.

Types of Health Insurance Schemes

According to the Economic History Encyclopedia and Thomason Insurance Health, (2003), there are four main types of Health Insurance Schemes:

Health Maintenance Organization (HMO)

It is a type of insurance plan that focuses on long term care of its insured and is normally less expensive than MMIS. Here the patient has a primary care physician, who is responsible for preventing care and coordinating care for the patient if additional specialists or hospitalization is necessary. This keeps costs down. In addition, limiting choices such as choosing physicians only within a network and not covering services that are deemed unnecessary help to control costs. HMOs are considered managed health care (Bailey, 2008).

Preferred Providers Organization (PPO)

This is similar to the HMO as there is a network of physicians, but it is unlike an HMO in that an insured person is not limited to a specific network of physicians and so can see any doctor they choose. However, co-payments and

deductibles will be less for in-network services. In addition, network physicians determine reasonable charges in cases of out-of-network services. Some people prefer the freedom to choose their doctors and not be limited to a network.

Point of Service (POS)

This is considered as a combination of PPO and HMO. The insured chooses a primary physician and all health care should start with the patient consulting this physician. This is like the gatekeeper system in Ghana. This doctor authorizes a referral to a specialist in or out of the network (in HMOs, specialist must be within the network for the insured to be covered). If the patient sees a specialist without a referral, the insurance company may choose not to pay for the services.

A POS plan is also considered a managed health care plan, but the insured has more options than in HMO. Although employees do not often have a choice in what type of health plan they have, it is important to understand the differences. Some companies do offer several different plans to choose and individuals and those that are self-employed need to be able to choose a plan that fits their needs as well as their budget. In the case of Ghana, the NHIS Act 650 provides for the establishment and operations for only three kinds of health insurance. These are; District Mutual Health Insurance Schemes, Private Mutual Health Insurance Schemes and Private Commercial Health Insurance Schemes.

The District Mutual Health Insurance Scheme (DMHIS)

This is a fusion of two concepts, the traditional social health insurance scheme for formal sector workers and traditional mutual health organizations for the informal sector with a district focus. Thus, the DHMIS will incorporate members from both the formal and informal sectors of the economy. It is a decentralized system with ownership to the members who have made their required contributions. It is social in character because it is not for profit. At the end of the year, surpluses made will be ploughed back into the scheme to reduce contribution levels or increase the benefit package. Thus every district is to establish a Health Insurance Scheme to enable residents in that district register as members (National Health Insurance Act, 2003).

The DHMIS has been designed to ensure transparency, build subscriber confidence and in particular bring insurance to the doorsteps of residents. However, it will be in partnership with government in the form of risk equalization and reinsurance and for catastrophic events.

Private Mutual Health Insurance Scheme

Any group of persons in Ghana may establish and operate a private mutual health insurance scheme which shall not necessarily have a district focus. It may either be community-based or occupational or faith based. It is social in character but this type will not receive subsidy from the government.

Private Commercial Health Insurance Scheme

Private Commercial Health Insurance refers to health insurance that is operated for profit based on market principles. Premiums are based on the calculated risks of particular groups and individuals who subscribe to it. Thus, those with higher risks pay more. The common practice in terms of ownership is that the ownership of the private commercial health insurance schemes resides with a company and shareholders and stocks of the company can be traded on the market just like stocks of the producers of any goods and services (Atim, 2000).

The private commercial health insurance companies will play the role of offering the minimum benefit package and supplementary insurance plans as an add-on for those who so desire and can afford to pay. (National Health Insurance Policy Framework for Ghana, 2004)

Structure and Functioning of the Health Insurance Scheme

In 2003, the 'National Health Insurance Act was passed to operationalize the policy decision to move away from user fees and towards a pre-payment financing mechanism. The Ghanaian National Health Insurance (NHI) is designed to incorporate those in the formal and informal employment sectors in a single insurance system. The government is committed to universal coverage under the NHI, but recognizes that coverage will have to be gradually extended and the aim is to achieve enrolment levels of about 60% of residents in Ghana within 10 years of starting mandatory health insurance.

The basis of the NHI system is district-wide ‘Mutual Health Insurance Schemes’ (MHIS) in each district. The NHI Act explicitly requires every Ghanaian citizen to join either a MHIS or a private mutual or commercial insurance scheme. However, government subsidies will only be provided for those belonging to a district MHIS, thus creating an incentive for people not to ‘opt out’ of the integrated NHI system by purchasing coverage through private insurance organizations.

Those employed in the formal sector are covered through payroll-deducted contributions to the Social Security and National Insurance Trust (SSNIT). Those outside the formal sector are expected to make direct contributions to their district MHIS, which are set at approximately GH¢7.20 per adult per annum for the poor, GH¢ 18.00 per annum for middle-income groups and GH¢ 48.00 per annum for high-income groups. In reality, it has proved difficult to distinguish between income groups and most district MHIS are charging a single flat rate, usually set at the lowest contribution rate, which is creating sustainability concerns. Each adult in a household is expected to become a MHIS member in their own right and pay the necessary contribution, which covers themselves and dependent children under the age of 18.

The National Health Insurance Fund (NHIF) fully subsidizes the contributions of the indigent and the elderly. The NHIF is funded mainly by a NHI levy of 2.5% sales tax on almost all goods and services, a 2.5% payroll deduction for formal sector employees as part of their contribution to the SSNIT Fund and government allocations (including both general tax revenue and donor

funding). The NHIF will allocate funds to each district MHIS in order to transfer the contributions of formal sector workers secured from the SSNIT payroll contributions, partially subsidize contributions for low-income households, fully subsidize contributions for the indigent and serve a risk equalization and reinsurance function.

A National Health Insurance Council (NHIC) has also been established. It has wide-ranging responsibilities including: registering and regulating all insurance schemes; accrediting providers and monitoring their performance; educating the public in relation to health insurance issues; resolving complaints arising from insurance schemes' members or providers; developing policy proposals on health insurance for submission to the Minister of Health; and managing the NHIF. While some aspects of the NHI operations are still being resolved, Ghana is moving ahead with rapid implementation of this policy initiative.

By 2005, nearly 16% of the population was covered by the NHI. The distribution between different groups of contributors was as follows: 12% formal sector workers/SSNIT contributors; 16% informal sector; 20% indigents; 7% elderly (70 years and above); 1% pensioners; and 44% dependents under 18 years of age. As indicated earlier, no contributions are required for dependents under the age of 18, while most other categories of contributors (other than formal sector workers) are partially or fully subsidized by the Government. The membership composition is also has implications for sustainability, as most of

those covered are not making health insurance contributions (indigents, dependents under 18 years etc.).

Those not yet covered by the NHI continue to use public sector facilities (which receive budgets funded from general tax and donor funds) or mission facilities and pay user fees at these facilities. A number of important issues in relation to the Ghanaian NHI development should be noted. Firstly, the NHI is seen largely as an *alternative* financing mechanism, rather than a source of substantial additional resources. The Government is anticipating devoting as much, if not more, tax revenue (and donor funds) to the health system. These funds will simply be channeled in a different way with funds gradually being redirected from the current Ministry of Health budget allocation channels to NHIF.

It is preferred to the current financing system because it will secure household contributions to health service funding (over and above tax payments) through pre-payment rather than out-of-pocket payment mechanisms. In addition, it is anticipated that exemption of the indigent will be more effective under the NHI than under the current user fee system.

The main reason is that the poverty-stricken will be identified at community level in advance of needing to use a health service, in contrast to the current system of applying for an exemption at the health facility at the time of seeking care. This process will have the added benefit of ensuring that health care providers are not able to identify who is financially contributing to the district MHS and who is not (i.e. who is fully subsidized), as all can be issued with

identical insurance membership cards, which will minimize any service discrimination against the poor.

Secondly, the NHI builds on the well-established tradition of community pre-payment schemes in Ghana. As indicated earlier, there were over a hundred of these schemes in Ghana, which has ensured that many Ghanaians are familiar with health insurance principles and the operation of MHIS. However, the fate of existing community-based schemes was a major concern when the NHI was first announced. The Act clarifies that existing community-based schemes may continue to operate independently, but will not receive a subsidy from the National Health Insurance Fund. Attention has now turned to identifying ways of incorporating existing community-based schemes into the new district-wide MHIS (e.g. to serve as the sub-district office of the district MHIS).

Finally, there is considerable government and donor support to promote successful implementation of the NHI. The NHI was announced as an election promise and it is a promise that the Government is committed to fulfilling. While many donors were initially concerned about the feasibility of such a major and ambitious health care financing restructuring initiative, they have now also committed themselves to providing all possible support for its implementation. However, for the majority of the population who are not yet covered by the NHI, there remains a heavy burden of user fee payments and poor financial access to care.

According to Sikora (2008), there are little delays in obtaining drug approvals, such as market authorization from the European Medical Evaluation

Agency. This means that drugs are available in pharmacies, hospitals and to private patients, but are not available through the NHS. That availability is dependent upon a ruling by the National Institute for Healthcare Excellence (NICE), which may take up to three years. He indicated that if NICE approves the drug, there's no problem. If they turn it down, there's also no problem — the patient can't have it. It's when these drugs that are in limbo between being licensed and being approved that create problems. Sikora postulated that, in addition to cancer drugs, access to care can also be problematic.

Sikora (2008) is however of the view that, the NHS remains popular. According to one study, 73% of Britons reported having confidence in the national health system, a percentage identical to that of Canadians, compared with only 56% of Americans. However, Sikora, who spent two years at the World Health Organization, said that there is no good health care system in the world; every system is struggling. The ideal system, he said, would be a two-tiered scheme in which the government guaranteed certain basic services such as emergency medicine and preventive medicine. Those who wanted more extensive and expensive medical insurance would be able to purchase that coverage on the open market.

National Insurance Scheme Tariff System in Ghana

The sustainability of the NHIS depends to a large extent on a well-designed provider payment mechanism which allows providers to achieve reasonable income, provide quality services and avoid wastage and unnecessary

service provision. With a view to supporting the scheme's long-term sustainability, the National Health Insurance Authority (NHIA) has taken critical steps to pursue reforms in the provider tariff payment.

In 2004, a memorandum of understanding regarding services to be provided and prices to be charged was agreed on by the NHIC and service provider representatives. This memorandum now forms the basis of all contracts between the health insurance schemes and health care service providers (Grub, 2007). Claims are made by the health services and the district schemes pay providers on DRG basis. Drugs are paid on a fee for service basis (McIntyre et al., 2008). Claims processing is a manual process, with some automation in enrollment verifications and claims documentation.

The Old Provider Tariff System

One of the most important linkages in health insurance is the payment system link between the insurance schemes and service providers. Service providers, like most organizations, are interested in maximizing their income. They would like to provide as many tests and treatments as possible, asking patients to come back several times even when it is not necessary, needlessly using expensive equipment they have purchased in order to recover cost. It has often been suggested that without a well-designed provider payment system to curtail these supply-induced demands, any insurance scheme, however well-conceived, might break down.

There are many different methods for paying providers; each one has different effects on quality of health care services, cost containment and administration. The commonly used provider payment methods include the following:

1. Fee for services or itemized per case costing,
2. Daily (per diem) payment,
3. Capitation and
4. Case payment (e.g. Diagnosis Related Group).

At the inception of the NHIS, a provider tariff system, which was based on ‘itemized per case costing’ was adopted for implementation. Under this system, providers were paid a fee for each service, procedure or act provided to patient – consultation fees, accommodation, non-drug consumables, x-ray, laboratory, feeding and so on. The administration of this tariff system, however, faced a lot of challenges.

One of the challenges was the fact that the volume of information required to be provided by the providers brought about prolong vetting of claims and delay in reimbursement. Another was the issue of proliferation of tariffs among the schemes resulting in great variability of the cost of treatment for the same condition in related facilities. The delay in the reimbursement and the fact that diverse prices were charged for similar procedures and investigations provided in similar facilities in the same or in different regions obviously threatened the sustainability of the NHIS.

Another dimension of the problem was that some providers, particularly private ones, did not find the NHI tariff attractive and therefore those who otherwise would have applied for NHI accreditation did not do so. Acceptable rates were important for increasing provider participation, thus reducing congestion at current NHIS accredited facilities.

The New Provider Tariff System

The new tariff system is based on Diagnosis Related Group (DRG) concept. The DRGs are standard groupings of diseases that are clinically similar, have comparable treatments or operations and use similar healthcare resources. Under this tariff system, service providers are paid an already decided all-inclusive flat payment for a patient's treatment according to his/her diagnostic group irrespective of the costs. This payment system has tremendous administrative benefits, as the scheme does not have to scrutinize individual bills. Again, despite the fact that the system can compromise quality of care, as providers may actually skip on relevant treatment to make profits, the incentive for the providers to prescribe extra services is quite limited.

One other benefits of the new tariff is that it provides the service providers opportunities to earn a reasonable income which, if well managed, will go a long way to bridge the current funding gap in the public health facilities. Unlike the previous one, the new tariff is made up of estimated direct and indirect/overhead costs of providing the various services to each patient depending on the patient's diagnostic related group and level of care. The direct cost includes direct

consumable cost for investigations, anesthesia and direct patient care while the overhead cost consists of maintenance of buildings & equipment, vehicle running & maintenance cost, utilities, housekeeping, general administration and indirect labour (casual labour).

The details of the components of the overhead costs are as follows: Building & equipment maintenance cost (minor repairs on official & residential buildings, drive ways, grounds, equipment/plant/machinery), vehicle maintenance and running cost (fuel and lubricants and maintenance of official vehicles), utilities (electricity, water and telephone), housekeeping (cleaning materials, sanitation charges), general administrative and office expenses (printing and photocopying, purchase of publications, bank charges, refreshment, training and conferences, stationery and other office consumables, and indirect labour (casual labour).

It is important to point out that the new tariff covers the full cost of the estimated direct consumables for direct patient care, anesthesia and investigations, and about 80% of the estimated overhead cost for the public health facilities. The implication is that the insurance schemes, in addition to paying for the full cost of the direct consumables for the treatment of the insured patients, also pay a substantial amount for the estimated cost for overhead cost including building and equipment maintenance, housekeeping and utilities in the various public health facilities. In the case of the private and quasi-government facilities, the new tariff covers the full estimated cost of both the direct and overhead costs.

Provider Payment Systems

The provider payment system easiest to administer would be a capitation system where a gatekeeper provider with whom all insured persons would register would be paid a lump sum amount per year for each insured person. This could logically be a primary care provider, i.e. a clinic or a health centre, or a physician in private practice. Inpatient treatment could be paid on a per day or per case basis upon referral by the primary care provider. However, as long as the population coverage is not complete, a parallel fee-for service schedule would have to be maintained for the non-insured users of health care facilities. That fee-schedule might be used to calculate the capitation payments (even if less than full fees might be taken into account in the calculations).

According to Cichon(1999), the payment of private providers – should they be allowed to participate – will be a key steering element in the overall system. If their fees are too high, they are likely to lure staff away from public sector facilities or alternatively push up indirectly staff cost in public facilities. If their fees are too low, the private sector will probably charge under table payments that could have the same effects. The staff crowding-out-effect will not be completely avoidable. However, a minimum supply of medical professionals in the public sector could possibly be achieved by a minimum bonding of professionals after their publicly financed professional education (Cichon, 1999).

Health Care Fraud Defined

It is believed that health care fraud is the most significant reason for the rise in health care costs. It is clear to see why many countries consider this the biggest

cause (WHO, 2001). In America, it is estimated that 25 cents of every dollar being spent on health is supporting fraudulent practices, and that a family of four pays as much as 1,400 dollars per year on health care fraud related costs (Lieberman and Rolle, 1998). Health care fraud has been one of the fastest growing criminal activities of the last decade in the US. Many criminals are abandoning credit card fraud, drug trafficking and other dangerous activities in favor of the safe, lucrative arena of health care fraud (Allmon, 2005; Coccia, 1997; FBI, 1995).

Given the surge in health care expenditures, it is not surprising to find an increase in the number and complexity of schemes devised to steal from the health care system (Morris, 1993). With so much money at stake, it is essential for the Ghanaian people and the Government to explore the reasons why the health care industry is at risk for fraud, how they can minimize the occurrences of fraud, and take positive steps to prevent fraud related costs in the future.

Health care fraud has become a main stream issue (Kalb, 1999). Because of this, the governments of many countries continue to focus on investigating health care fraud with the goal of decreasing its occurrence, and they continue to initiate new policies, and investigative bodies to deal specifically with health care fraud. Health care fraud is a critical issue for the governments for many reasons. Firstly, the government is the principal payer of health care, and health care fraud is a waste of taxpayer money. According to Sage (1999), elimination waste, fraud, and abuse is one of the few steps about which “disparate political ideologies can agree.

They are also in charge of regulating the health care system. Finally, they are entrusted with protecting the people from criminals. Because of these reasons, governments have dedicated many resources towards researching and investigating fraud, and how it occurs with the hope of identifying new ways to fix the problem.

The National Health Care Anti-Fraud Association (NHCAA) of United States has defined health care fraud as “an intentional deception or misrepresentation that the individual or entity makes knowing that the misrepresentation could result in some unauthorized benefit to the individual or the entity or to some other party. This definition encompasses a broad range of activities. Through studying health care fraud cases from the past, investigators have been able to define the specific types of fraud that are committed most often, and have attempted ways to stop them from happening. Offen (1999) has also suggested that the health care industry is more vulnerable to fraud than most other industries, because the medical field is complicated and the lay person does not understand it, and the regulations that govern the health care industry are constantly changing and ambiguous.

Why the Health Care Industry is Vulnerable to Fraud

The Complexity of Medicine

As medicine becomes more technological, payment methods more ambiguous, and health policy becomes more complex, the average American often finds himself/herself left in the dark. Because of this confusion, the health

care industry is highly susceptible to fraud. Most Americans know very little about medicine, which procedures match which diagnosis or how insurance works. Until recently, the patient-doctor relationship was completely unbalanced. The doctor told the patient what to do, and the patient trusted the doctor completely without questioning the doctor's treatment method.(Sultz and Young, 2006).In Ghana People had very little exposure to medicine, so they did not have any other option besides trusting the doctor.(Osei-Akoto, I. 2004).

It is suggested that the average patient still 'has neither the knowledge nor inclination to question a doctor's recommendations" (Morris, 1993). The patient is weak and vulnerable, and just wants to feel better, so the doctor is able to take advantage of this. The physician is able to run pointless tests, try ineffective treatments, prescribe useless medications, and recommend the use of unnecessary equipment while charging it all to a third party payer who is oblivious to the "true" necessity of these things. Medical professionals are responsible for committing 72 percent of health care fraud (Salman et.al. 2004).

The Ambiguity of the Payment System

The rules governing the coverage and reimbursement of medical services are ambiguous and always changing, which makes the rules confusing for all involved, adding more complications and confusion for medical providers, and making excuses easier for those intending to abuse the system. (Morris, 1993). Sometimes medical providers are unaware of the mistakes they make. On the other hand, because of the confusion, providers who intend fraud often rely on the

excuse that it was an accident, and the government has limited means to prove otherwise. Morris (1993) observes that many billing disputes involve complex and ambiguous issues. Government suffers from what economists call information asymmetries.

In other words, in many cases, and especially those involving coding, the government can find it hard to distinguish among proper billing, minor mistakes, and a deliberate effort to skim off small extra payments from a large number of claims” (Stanton, 2001). Medical providers need better training on the correct ways to code, how to read the guidelines, and/or they need to have more options to hire an office administrator who has been trained in coding, third party payment systems, and reimbursement guidelines.

Limited Knowledge on Fraud

According to Sparrow (1996), the United States only began to focus on health care fraud control in the past fifteen years. He indicated that as a result of this, experts know very little about health care fraud control as a science or an art, and that there are not many available experts for guidance in the field, causing action to be taken always the act, and most times too late to have the effect necessary (Sparrow, 1996). Until recently, there have not been any generally accepted fraud audit field standards, leaving investigators to make it up as they went along. The only thing that investigators really knew how to deal with was internal corruption (employee embezzlement), rather than outside corruption (criminal attacks) (Sparrow, 1996). If this is the situation with regards to more

advanced nations such as the United States, one can only imagine the enormity of this problem when it comes to developing nations such as Ghana.

Fraud Investigators Limited Medical Knowledge

Another problem investigators have is challenging health care professionals. Investigators are often some kind of law enforcement who have very little experience in the medical field. When investigators find themselves challenging respected health care professionals they feel greatly disadvantaged (Sparrow, 1996).

Acceptable Targets

The health care system is very complex and part of what makes it so complex is the private third party payers, insurance companies. Insurance companies are often viewed as rich, greedy, exclusionary corporations out to take advantage of the working class (Sparrow, 1996). Often times, because of this view, insurers are regarded by significant segments of the population as socially acceptable targets for fraud (Sparrow, 1996; Coccia 1997).

Fraud Techniques and Who Commits Them

Although fraud between medical professionals and patients is suspected to be the most common type of fraud, it is not the only type. Fraud exists in many areas of the health care system. It is estimated that health care facilities, such as hospitals and prompt care centers, are responsible for 8 percent of health care

fraud, patients are responsible for 10 percent, while the remaining 82 percent is still unknown (Datawatch, 2000). However, it is suggested that health care fraud committed by patients/consumers is increasing (in the case of the United States) as the number of underinsured and uninsured Americans increases (Farber, 1997).

Who Commits Health Care Fraud?

As the health care system expands, becomes more complicated, and involves more people, the acts of fraud committed also continue to become more complicated, involve more people, and encompass many different sectors of the health care system. In order to decrease health care costs, fraud must decrease as well. It is important that we understand the types of fraud that have been committed in the past, so that we may initiate ways to stop those same kinds of fraud from happening in the future. In order to understand how the most common types of fraud are committed, one must recognize how medical professionals and health care facilities are reimbursed for their services.

In most cases, a patient does not pay for a service directly. Most payments to medical professionals and health care facilities are made by a third party payer, whether it is private insurance or a government program like Medicare. The third party payers and the health care providers have come up with a system made up of a series of numbers and descriptors which are used for reimbursement among many other things (Lieberman and Rolle, 1998). This system is known as “coding”. Coding is very complicated, and encompasses more than 500 groups

that include more than 3,500 medical procedures and 12,574 diagnostic codes (Lieberman and Rolle, 1998).

Upcoding

Upcoding occurs when a healthcare provider claims a code that legitimizes a higher reimbursement level than they actually provided (Lieberman and Rolle, 1998). Upcoding is very easy to accomplish, and difficult to detect. All a physician has to do is embellish a patient's diagnosis to justify higher payments from both the patient and the third party payer. It is easy to commit because the patients and the payers know very little about medicine and what the correct diagnosis should be. Upcoding accounts for an estimated 22 percent of health care fraud (Datawatch, 2000).

Phantom Billing

Phantom billing happens when providers charge for services not actually provided to patients (Lieberman&Rolle, 1998). Phantom billing can happen in two different ways. The first happens when a physician codes that a patient has received a procedure, but does not provide the service. This type of fraud is simple to

accomplish, because many patients are unaware of what they are billed for and third party payers often do not share the details with the patients.

The second type of phantom billing takes place when a physician codes a procedure for a non-existent patient. This activity occurs frequently in home care and nursing homes. For example, a nursing home could submit claims for a patient who had died. Phantom billing accounts for an estimated 34 percent of health care fraud in the US (Datawatch, 2000).

Bogus Billing

Bogus billing takes place when a billing code is altered to cover services that are not supposed to be covered (Lieberman&Rolle, 1998). Many providers do this when new drugs and experimental treatments are not yet covered under Medicare or private insurance. Instead, of coding them properly they code them as a similar drug or procedure that they know is currently covered and will be paid for by a third party.

Unnecessary Services

Billing unneeded services happens most in ambulatory care facilities (Lieberman&Rolle, 1998). Routine blood tests, urinalyses, and radiographs can be categorized as unnecessary billing when a patient does not need them, or they are perfectly healthy. These cases are sometimes hard to prove, because physicians can claim they were just erring on the safe side. Billing unneeded services accounts for an estimated 18 percent of health care fraud (Datawatch, 2000).

Double Billing

Double billing/unbundling occurs when duplicate bills are sent to the same payer or when the bills are sent to different payers (Lieberman&Rolle, 1998). Double billing accounts for an estimated 4 percent of health care fraud (Datawatch, 2000).

Pharmacy Fraud

Pharmacy fraud can take place along two distinct lines. The first instance takes place when a generic brand of drugs is dispensed to a patient while the payer is charged for the brand name, which is more expensive. The difference can then be pocketed. Secondly, a pharmacy can fill prescriptions paid for by a third party, buy them back from the patients, and then sell them to other patients at a higher price (Lieberman&Rolle, 1998). Pharmacy fraud accounts for an estimated 8 percent (Datawatch, 2000).

Claims Administration

Claims administration refers to the process of receiving, reviewing, adjudicating, and paying claims. In many health insurance schemes, the payer is not in a position to manage the claims process, so it is essential that another entity is hired to administer the claims. Claims administration will also vary depending on the model of insurance and provider payment system being implemented.

In insurance schemes where there are claims to be processed, the responsibility for claims submission can fall either on the patient or the provider. In a cashless system, the beneficiary receives a covered service from a provider and does not

pay the provider (other than a possible co-payment or for items that the scheme does not cover). The provider then submits a claim for that service to the claims administrator for payment. In a reimbursable arrangement, the beneficiary seeks services and pays the provider out-of-pocket. The beneficiary then submits the receipt(s) and a claim for that payment to the claims administrator for reimbursement.

Beneficiaries generally prefer the former (cashless) option because the reimbursement option does not remove the financial barrier to accessing care and requires careful tracking of paperwork. Providers prefer the reimbursable arrangement because it reduces their administrative burden and allows them to be paid immediately (rather than waiting for reimbursement from a third party, which can take time). However, reimbursement is much less feasible in resource-constrained settings where the ability to pay up front and submit a claim to an insurer may present logistical challenges.

Considering the advantages and disadvantages of each option is essential to deciding on and developing your insurance scheme design. Whichever submission option, the claims administrator must determine if the claim is an eligible expense under the health insurance policy. This is an area of potential fraudulent behavior. Therefore, the claims administrator must have very clear guidelines on which claims are allowable. Further, the claims administrator often needs to employ physicians or health care professionals to determine if a service was medically necessary and identify mutually exclusive claims.

For example, a claim submitted for payment for both a normal, institutional delivery and for post-abortion care for the same individual should raise a red flag because one person does not need both services for the pregnancy. The claims administrator must investigate to ensure that the right claim was submitted and that fraudulent activity did not occur. Claims investigation is the process of obtaining all the information necessary to determine the appropriate amount to pay on a given claim.

Depending on the model of insurance, the payer and providers will generally agree upon a rate schedule. A rate schedule is the set of fees determined by an insurer or payer to be acceptable for a procedure or service, which the physician agrees to accept as payment in full (this takes into consideration any copayments, co-insurance, or deductible that may be applied). Sometimes the rate schedule includes individual rates per individual service. In other cases, there are fixed, packaged (or case-based) payment rates (such as DRGs) that “prepackage” services. For example, for a woman delivering by cesarean section, the fixed package rate includes all the services needed to perform that procedure (blood, surgery, anesthesia and other drugs, etc.).

Packaged payments require more sophisticated actuarial, accounting, and payment systems but are often preferred for cost-containment purposes. To minimize the number of claims that must be investigated, some insurers require pre-authorization for each service. This is when the provider must solicit the insurer’s authorization to deliver the service to a beneficiary and will be guaranteed payment, assuming no other questions arise. Further, to facilitate

claims administration, it is necessary to establish a coding system by which the provider labels health care services with a numerical identifier that will be recognized by the payer or insurer. There are many different coding systems. Regardless of the system chosen, providers will require training in filling out the claims paperwork to ensure accuracy and efficiency.

Financial Processes and Management

Financial management is critical to ensure adequacy of financial resources to cover operating costs, keep the health insurance funds in financial equilibrium, and ensure transparency for sound monitoring, management, and viability. This includes maintaining an adequate operating reserve to cover known costs, risks, and unforeseeable short-term risks. When there are several stakeholders involved in the implementation of health insurance and potentially multiple sources of income for the scheme (individuals, employers, and government), it is vital that the management and integrity of these funds be maintained to optimize efficiency and effectiveness to ensure its sustainability.

The financial management system should have the following three main elements:

1. A budgeting system to plan for and understand all costs related to the health insurance scheme.
2. An expenditure tracking system to ensure the proper internal controls to manage the flow of funds.

3. A cost management system to ensure payments and costs are in line with what is budgeted for financial viability.

Budgeting System

The budgeting system refers to the planning and budgeting of expenses related to the health insurance scheme. These expenses include administrative costs, marketing costs, legal costs, and claims or benefits costs. It is essential during the planning phases of health insurance that all costs are estimated and planned for to ensure that the revenues collected are adequate to meet the needs of the insurance scheme. If the budget reveals a funding gap, it is crucial that the gap be addressed; this can be done by revising the benefits package, revising premium amounts, reducing administrative costs, and/or taking other actions.

These changes are not easy to make and often take considerable time to address because of contractual obligations and other variables.

Expenditure Tracking System

The expenditure tracking system refers to the internal systems in place to manage the flow of funds. This includes robust accounting and cash management systems as well as internal controls to receive and document the flow of funds and accounts payable. A well-functioning expenditure tracking system is essential for monitoring the use of funds, detecting fraud, and determining areas for cost containment. The expenditure tracking system will also likely be the system that pools all incoming financial resources and manages the use of the resources to

finance the insurance scheme. For example, collections made from the beneficiaries, employers, and government will all be pooled and tracked in the expenditure tracking system.

Cost Management

Cost management refers to the mechanisms by which a health insurance scheme can manage and control resources that are being expended. It is the feedback loop to ensure that expenses are staying within the budgets forecasted. Effective cost management is critical to ensure the viability of the health insurance scheme and includes utilization management, expenditure tracking and reporting, and financial adjustments during implementation of the scheme.

Once a health insurance scheme is established, health care utilization rates will likely increase because of moral hazards and the effectively lower cost to health care consumers. Moral hazard is inevitable when a traditionally costly service for which there is unmet need becomes financially accessible. It is very difficult to forecast the amount of moral hazards a new health insurance scheme will experience, which is why it is critical to manage expenses after start-up and maintain the flexibility to revise program benefits and payment arrangements; adjustments will probably have to be made along the way to stay within budget. For example, a scheme may need to institute co-payments or co-insurance to help generate revenue and limit utilization, or alter the mode in which providers are paid to discourage overprovision of services.

While many stakeholders will provide inputs into the financial management system, it is important that the main managing entity of the scheme (the “owner” of the scheme) be responsible for the overall financial management of the scheme, managing and controlling costs, and making necessary changes to maximize efficiency without compromising quality. When multiple stakeholders are involved in the implementation of the insurance scheme, the managing entity must develop systems for collecting the relevant data on a timely basis. This includes financial data (expenses for services, administration, human resources, etc.), as well as claims and utilization data.

Antifraud Factors

A review of literature identified the following as the antifraud factors which, when present, may influence fraud claims control. These are internal control measures, communication of claims policies, compliance with claims payment policies, management oversight responsibilities and proper human resources management. The next session discusses these antifraud factors.

Internal Control Measures

According to Bell (2009), every company wants to prevent fraud from happening against their organization and most companies will not readily admit that their organizations may be vulnerable to any significant fraud. The author posited that the reality is that many individuals can commit fraud against any organization with clever understanding of the company’s internal controls structures. This means that current economic circumstances motivate people to commit fraud. Bell

(2009) supports the assertion that the motivation for fraud is heightened in today's economy. The author posits that as the price of a gallon of gasoline and the adjustable interest rates on certain home mortgages continue to rise, employment stability and incentive compensation payouts continue to decline, pressures and incentives for individuals to concoct fraud schemes keeps rising.

However, Wolfe and Hermans (2004) are of the view that the motivation to commit fraud depends on the following factors. These are authoritative position or function within the organisation, capacity to understand and exploit the accounting and internal control weaknesses to the greatest advantage, confidence that fraudulent behaviours will not be detected and capacity to effectively deal with stress in order to manage fraud over a long period of time. Rae and Subramanian (2008) also bring in the issue of moral and ethical norms as playing a role in an individual to commit fraud. The authors explain ethics as relating to determining the rightness or wrongness of a behaviour in terms of organizational, legal or societal guidelines. It is important to note individuals with low levels of ethical development have been found to be more likely to commit fraud than those with high levels (Appelbaum, 2006).

From the above discussion there seems to be consensus on the motivation for one to commit fraud even though different authors have come out with different factors. All the factors seem to be rooted in the fraud triangle. Attention needs to be given to fraud as it has been suggested that the cost of fraud is estimated to be relatively high and is rising steadily as there are varied factors which motivate the individual to commit fraud. Appelbaum (2006) accentuates that in order to

successfully address fraud and manage the risk proactively, it is critical for businesses to understand the behavioural root causes of fraud and develop ways to eliminate those causes.

To prevent and control fraud, certain controls will have to be maintained. Bell (2009) lists five key anti-fraud controls that companies can implement and it begins with the tone at the top. These are having an independent and empowered audit committee, conducting detailed risk assessments, promoting the tools for effective reporting of suspicious or inappropriate activities, having an anti-fraud policy and appropriate training and having response to fraud allegations. Besner (2014) also suggests that to reduce the risk of fraud, certain measures need to be put in place.

Besner (2014) indicated that the measures include the establishment of an independent and empowered audit committee, establishment of an anti-fraud policy and training programme, promoting tools for effective reporting of suspicious activities and addressing allegations of fraud swiftly. With respect to internal control measures that should be put in place to prevent or reduce fraud, there seems to be consensus on the measures that should be put in place (Bell, 2009; Besner, 2014). Grayson (1998) also suggests different measures which are also aimed at preventing fraud. Grayson (1998) suggests that, to prevent fraud, one has to implement measurement programmes, use more human scrutiny of payment records and claims processes along with innovative deception detection software, encourage the use of corporate compliance programmes and involve consumers.

Communication of Claims Payment Policies

According to Albrecht (2006), effective communication is an important element of all phases of implementation of antifraud programmes and controls. A company's philosophy on fraud prevention and antifraud programmes and controls should be clearly communicated throughout the organization so that employees are aware of antifraud activities, have a clear understanding of what is expected of them, and know that the organization takes the risk of fraud seriously. These communications should emanate from all levels of the organization and should include communications with external parties when appropriate (including customers, suppliers, and agents).

Hermanson (2004), has the view that a company's code of conduct or ethics is often the first line of communication concerning its philosophy on fraud prevention. However, other communication methods should be used to create awareness of antifraud programmes and controls. He stated that information on antifraud programmes may be communicated through employee handbooks (either printed or online), in company newsletters, company intranet sites, training, and through presentations or discussions led by management. Management's antifraud programmes and controls should also be documented to provide reasonable support for its assessments of the design and operating effectiveness of the controls. The procedures implemented to enable communication and information processes should themselves be controlled to prevent unauthorized access or changes (Wolfe, 2007).

Wolfe (2007) came out with assessment questions pertaining to information and communication activities. His first question bothered on ethics and management's commitment to antifraud programmes and effective control communicated throughout the organization to all employees. He again asked question on whether management have procedures to disseminate and collect information regarding antifraud programs and controls, fraud risks, allegations of fraud, and concerns of improper accounting to and from all levels of the organization and external parties. Another area of concern was whether management assess the design and operating effectiveness of information and communication, and also document its assessment and conclusions adequately regarding operating effectiveness of information and communication. Finally Wolfe (2007) stress the need for organization to ensure that, procedures and activities for communicating information regarding antifraud programmes and controls designed and operating effectively exist.

Bell (2009) points out that as fraud scheme continues over a period of time, the typical perpetrator begins to gain confidence in the fraud scheme and may move on to fraud schemes involving larger amounts. The tolerance of these types of behavior within an organization could also send the wrong message about management's lenience towards employee misconduct and fraudulent behavior. This misunderstanding can be addressed by drafting and publishing an anti-fraud policy that clearly defines fraud and misconduct. This definition of fraud can also include specific, relevant examples of behavior that are not acceptable within the organization. Once the anti-fraud policy is published, periodic trainings can be

held throughout the organization to provide its employees as well all other stakeholders with a forum to discuss the importance of ethical behavior. In addition to defining fraud, this policy can also address how the company intends to respond to fraud and misconduct allegations

Compliance with Claims Payment Policies

American College of Emergency Physicians (ACEP) posits in 2004, that a compliance program is a quality assurance strategy when established and implemented, enforces internal controls and monitors its conduct which in turn prevents fraud. Further, ACEP explains that a compliance program is meant to ensure that an entity will not inadvertently, negligently, or intentionally engage in illegal activity. An effective compliance program establishes a culture that articulates and demonstrates a commitment to legal and ethical conduct and functions to reduce potential penalties associated with committing fraud. A fraud survey report by KPMG (2003) indicated that compliance is one of the factors that mitigates against fraud.

Management oversight Responsibility in the Prevention of Fraud

From the view point of Albrecht (2006), management and other appropriate parties in the company are expected to monitor the quality and effectiveness of antifraud programs and controls. He indicated that monitoring activities and assessments consist of procedures that include independent evaluations of antifraud controls that may be performed by internal audit or other

groups, such as business process owners, and other ongoing monitoring activities that are built into normal recurring operating activities, such as timely reconciliations.

Henderson (2008) postulates that ongoing monitoring procedures are built into normal recurring operating activities and can often be more effective than separate evaluations because they take place in real time. Examples of ongoing monitoring activities according to Henderson (2008) includes, reconciliations of operating and financial reports, regular communications with internal and external parties, regular reviews and recommendations from internal auditors planning and training sessions to solicit feedback.

Wolfe (2007) again came out with some questions that may guide management to design effective and result – oriented questions to fraud risk assessment. Firstly, he inquired whether internal audit and others are actively involved in the monitoring and assessing antifraud programmes and controls. Secondly, he found out whether internal audit activities are adequate for the size and operations of the organization. Another area of interest was whether or not finding and weaknesses identified during monitoring activities are incorporated back into the fraud risk assessment, the design of the control environment and antifraud control activities. Additionally he was of the view that audit committee should have oversight responsibility in the monitoring activities of the organization. Moreover, Wolfe (2007) came out with a point that, management should adequately document its assessments and conclusions regularly regarding the design and operating effectiveness of the monitoring activities.

Howe (2006), is of the view that risk control activities are policies and procedures designed to address fraud and help ensure the achievement of an entity's objectives and that it occurs throughout the organization, at all levels and in all functions. He indicated that antifraud control activities can be preventative and/or detective in nature. Preventative controls are designed to mitigate specific fraud risks and can deter frauds from occurring, while detective control activities are designed to identify fraud if it occurs.

Detective controls can also be used as a monitoring activity to assess the effectiveness of antifraud controls and may provide additional evidence of the effectiveness of antifraud programs and controls. Some of these control activities, according to Howe (2006), may be automated in nature and include information technology (IT) systems. Hayes (2009) stated that if control activities are not already present; management should design and implement additional controls to specifically address the identified fraud risks. Special consideration should be given to the risk of override of controls by management. He added that some programs and controls that deal with management override include; active oversight from the audit committee; whistle-blower programs and a system to receive and investigate anonymous complaints; and reviewing journal entries and other adjustments for evidence of possible material misstatement due to fraud.

Fraudulent financial reporting often involves management override of controls that otherwise may appear to be operating effectively. Special consideration should be given to the risk of override of controls by management such as recording fictitious journal entries or other adjustments, particularly those

recorded close to the end of an accounting period; intentionally biasing assumptions and judgments used to estimate account balances; and entering significant transactions that are outside of the entity's normal course of business that lack economic substance. The fraud risk assessment should be performed without consideration of the existence or effectiveness of internal controls, and should be updated periodically to include changes in operations and revisions to fraud risks identified during monitoring activities of antifraud programs (Riley, 2010).

Kleinman (2011) is of the view that conditions that increases fraud risk may relate to honesty, competence and style of action of company managers. This refers to situations where management structure is dominated by a single person, where there is no effective supervisory board or other supervisory institutions, where there exists improper approach by the company's management to business, risk, and competitive environment, where managers are too confident, and for that matter create giant plans, operate at a huge risk, where managers ignore business planning, accounting, and control, where there exists improper company management action style, where a company's management is incompetent and incapable to make optimal management decisions, where there is the exit disorder management system, unevenly distributed roles and responsibilities of the managers, where there exists disagreements among the company's management, heads of department, and employees and where there exists decreasing working discipline in the company.

Human Resource Management

Kleinman (2011) postulates that conditions that increases fraud risk may relate to the employees of the company. He was of the view that situations where there exists unfavourable relationships among employees, loss of relationship, insufficient level of professionalism, honesty and reliability of employees, long-lasting shortage of employees of some professions and frequent change of accountants, financiers, lawyers, and internal auditors may worsen the level of fraud risk in an organization.

Also where staff do not take a holiday, where employees take responsibility for the functions that could be easily delegated to others, where employees are engaged in full control of a certain activity, where there exists inappropriate distribution of material responsibility among employees, where there exists inappropriate adjustment of rights and duties among employees, poor division of tasks and where employees are dissatisfied with work and behaviour of the management of the company may lead to unacceptable conduct (including fraudulent activities) in an organization (Kleinman,2011).

Antifraud Factors and its Effect on Health Care Claims Fraud

Sparrow (1996) conducted some studies in this area and examined the fraud control apparatus currently used within the health care industry, and assessed the assumptions, policies, and systems that constitute the industry's current approaches to fraud control. The objective was to develop a better understanding of the strengths and weaknesses of existing approaches. Literature searches and

practitioner interviews revealed the fact that fraud control, as a science or art, is scarcely developed and little understood. Little attention has been paid to the issue by academia and as such there is a lack expert guidance in the field. Guiding principles are almost impossible to find in any literature.

Krause (2004) did a study which focused on regulating, guiding and enforcing health care fraud in the United States. The study concluded that current the federal approach to health care fraud fits a three pronged model, which combines regulatory inertia with the proliferation of informal, non-binding guidance and an increasing amount of public and private enforcement. While the latter two mechanisms help fill the informational void left by the cumbersome notice-and-comment rulemaking process, they pose significant disadvantages in terms of providing reliable information to the industry. In short, this model is unsatisfactory because it fails to generate a key commodity for health care providers: clear directions from those who are charged with interpreting and enforcing the fraud laws.

Lessons learnt from Literature Review

Majority of the studies reviewed were done in the United States. There was no consensus as to how to deal with health care fraud. However, different approaches to dealing with health care fraud were suggested by the researchers. Studies in health care fraud were mostly not grounded in theory but were rather based on practical experience after investigations. These lessons will undoubtedly inform the direction and content of this study with specific reference to the conceptual

framework of the study, operational definition of variables, data analysis, presentation and discussion of findings. The following is the conceptual framework of the study.

Conceptual Framework of the Study

Based on the fraud triangle theory, three factors when present leads one to commit fraud. These are rationalization, opportunity and motivation. The researcher identified that eliminating these factors leads one to commit fraud

as indicated earlier. Prompt payment of claims, Regular Communication of payment policy, internal controls and communicating policies, and other measures, entities. Proactive

measures, frequent claims file peer reviews, and careful verification of all claims. Prompt claims payments as foundational requirements that must be supported with sufficient monetary and human resources as well as by top levels management. This research therefore concentrates on a conceptual framework

of antifraud measures and their influence on healthcare claims fraud control.

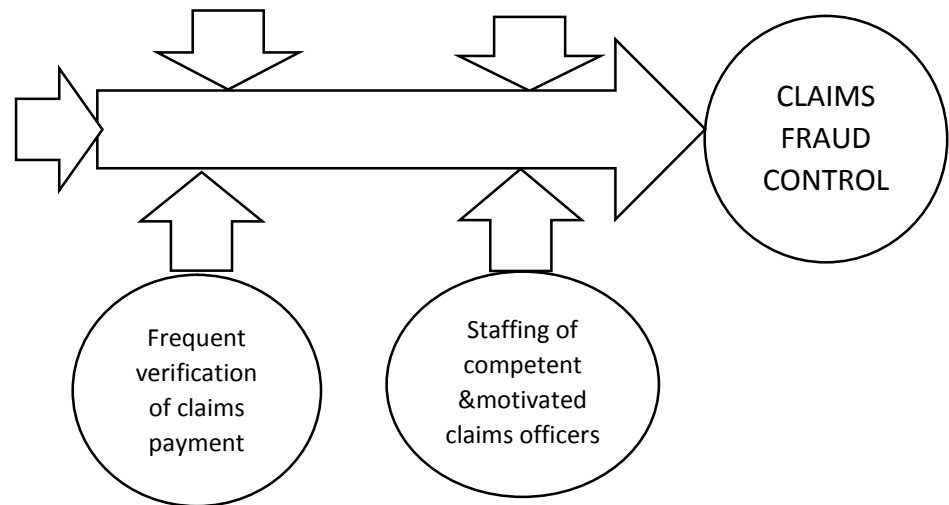


Figure 1: Conceptual framework of the study

Source: Researcher's Construct, Hurson (2014)

The above diagram illustrates the individual and composite influence of antifraud measures on healthcare claims fraud risk management with variables of solid internal control system, communication of claims payment policy, prompt and fair payment of claims, management review of claims files and verification of vetting, processing and payment of claims and proper human resource management as antifraud tools. It presupposes that, if the above mentioned measures are effectively put in place, claims fraud is expected to be brought under control. This will lead to payment of correct figures of legitimate claims payment, quick detection of any possible claims fraud and also shape behavioural change of claimants and claims officers.

Conclusion

This chapter has reviewed literature on theoretical and conceptual issues relating to anti-fraud factors and claims fraud control. Key issues and lessons from the review informed the conceptual framework of the study. The review will further prove beneficial in the methodology, analyses, presentation of findings, discussions, conclusions and recommendations. Chapter Three focuses on the methodology of the study.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter presents the methodology of the study. It presents the chosen methodology, justifying its appropriateness for the study's objectives (Boohene, 2006). It enables comparison with other studies thereby deepening understanding of the work plan while enhancing possible replication of the study in future (Pallant, 2007). It further involves discussions and comparison of the strengths, weaknesses, similarities and differences between the chosen methodology and others, ensuring consistency with accepted academic practice (Tabachnick&Fidell, 2007). This chapter covers discussions on the study area, approaches to research, population as well as sample and sampling procedure. It also discusses the instrument design, pretest, reliability testing, ethics, validity testing, field work, data analyses and limitations of the study.

Study Area

The Takoradi Mutual Health Insurance Scheme came into existence through an Act of Parliament in 2003. The Act, 650 and its accompanying Legislative Instrument 1809 makes it compulsory for each district, municipal or metropolitan area to organize its own Scheme. It is out of this that the Takoradi Scheme came into existence. The Scheme was officially inaugurated in September 2004 while work started in October 2004 to cater for the residents in Takoradi. (Annual Report-Takoradi Sub-Metro Mutual Health Insurance

Scheme). The scheme has forty-one (41) accredited health care providers which comprises three (3) Government hospitals, one (1) mission hospital, eight (8) clinics, three (3) maternity homes, twelve (12) pharmacy shops, six (1) chemical shops, ten (10) laboratories institutions and three (3) community-based health provider services (Accreditation file, 2012 – TMHIS).

Takoradi Mutual Health Insurance Scheme was selected in order to reduce the confounding effects of any disparities in scheme characteristics (Boohene, Sheridan & Kotey, 2008). Secondly, the target population is limited to the Takoradi Mutual Health Insurance Scheme because of time and financial constraints and also for the reason of proximity (Fening, Pesakovic & Amaria, 2008). The restriction of the study to Sekondi-Takoradi is also in line with some studies that were conducted using only one city or state instead of the entire country (Blankson & Cheng, 2005; Blankson et al., 2006; Mahmoud, 2011).

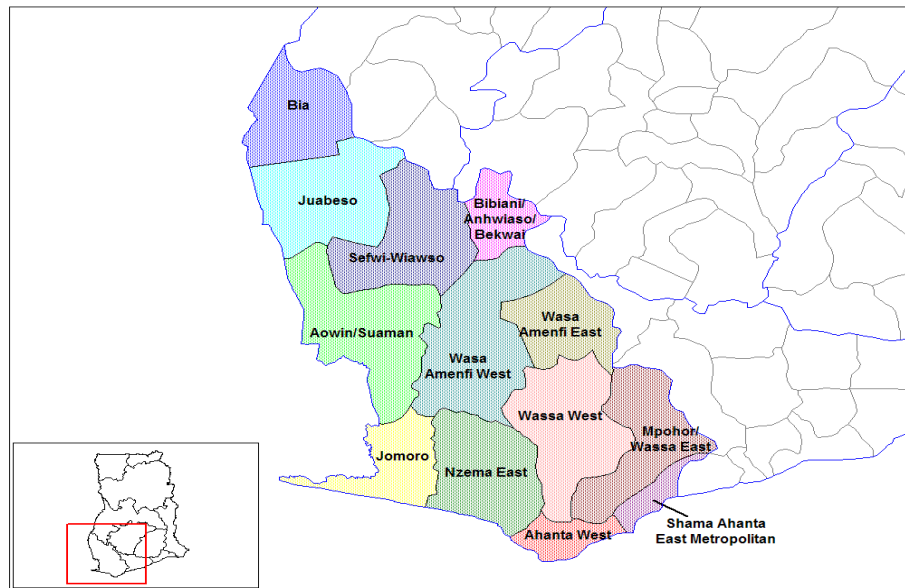


Figure 2: Map of Western Region of Ghana

Source: Wikipedia, Districts of Ghana

Research Approach

The two main approaches to conducting research are quantitative and qualitative (Yates, 2004). The quantitative approach operates by developing testable hypothesis and theories which lend themselves to generalization. It is usually applied in the natural sciences and useful for data of numeric nature. Questionnaires, surveys, personality tests and other standardised research instruments are some of the data collection techniques used under this approach (Burrell & Morgan, 1979).

The qualitative approach on the other hand bases research on systematic protocols. Its techniques, findings, interpretations and conclusions usually reflect the subjective opinion of the researcher. It is suitable where insightful understanding of a situation is needed. Data collection techniques adopted under this approach include observation, case studies, interview guides and reviews of literature (Crotty, 1998). The choice of the approach to be adopted for a particular study will largely depend on the purpose of that study (Bohene, 2006).

Both quantitative and qualitative approaches have their strengths and weaknesses. The quantitative approach is a scientific, fast, easier alternative, enabling statistical analyses of data, generalization of findings, drawing of logical conclusions based on numerical values and comparability of studies (Crotty, 1998; Amaratunga, Baldry, Sarshar & Newton, 2002). Criticism however lies with its rigidity, artificial nature and ineffectiveness in gauging human behavior (Crotty, 1998). The qualitative approach enhances rigour and understanding of complex phenomena while ensuring firm control over the scope and pace of

research (Yates, 2004). It is however time consuming and expensive with its reliance on small samples rendering findings non-generalisable (Crotty, 1998).

To overcome the challenge of choice, some researchers have suggested a combination of both approaches (Amaratunga et. al, 2002; McNeil & Chapman, 2005). This method, known as mixed methods, ensures a balance of the strengths of both approaches. Others suggest, choice should be at the researcher's discretion, depending on the nature of a particular study (Boohene, 2006). Given the particular purpose of this study, the nature and interactions between the variables being examined as well as the need to test hypothesis, the quantitative approach was deemed the most appropriate and therefore adopted. This would aid in drawing inferences and conclusions about the relationships between and among the variables under consideration.

Research Survey

Specifically, the explanatory survey design was adopted for this study. Surveys are a type of research design involving the collection and analysis of large amounts of quantitative data from a sizeable population using descriptive and inferential statistics (Tabachnick&Fidell, 2007). The explanatory survey design was adopted for this study based on a number of reasons.

Firstly, the vast expanse of the Takoradi mutual health insurance scheme necessitated the distribution of instruments to a fairly representative sample drawn from the population of insurance schemes operating under the Takoradi Mutual Health Insurance Scheme, spread across the entire region. Secondly, there was a

need to capture fairly, each of the schemes operating under the Takoradi Mutual Health Insurance Scheme. These called for the adoption of simple and cost effective measures to maximize available resources, an advantage offered by the chosen method. Again, in order to aid the explanation of results and generalisation of conclusions reached, there was the need to compare and analyse responses from the standardised questionnaire, using descriptive and inferential statistics (Saunders, Lewis & Thornhill, 2007). A further reason was the choice of the explanatory survey method by most researchers, whose empirical studies were reviewed in Chapter two.

Population and Sampling Procedure

The population of a study refers to the group that forms the unit of analysis of the study. Malhotra, (1996) opines that the group should possess information relevant to the researcher. According to Rubin and Babbie (2001), target population refers to the theoretically specified aggregation of study elements. For the purpose of this study, the target population (selected stakeholders) consisted of the line managers and the claims officers of TMHIS, administrators and claims officers of 41 service provider sites under the Scheme, NHIA staff of Western regional (Regional manager, monitoring and evaluation officers, ICT officer) and audit staff of NHIA responsible for the TMHIS who are deemed to be adequately knowledgeable in the research topic with regards to their experiences and academic background.

Due to the exclusiveness and smallness of the population of about one hundred and fifty (150), the researcher decided to use the entire target population, as suggested by Zarkovi (2008), as the sample. The target population is limited to some a selected few, because of time and financial constraints and also for the reason of proximity and easy and accurate information accessibility (Fening, Pesakovic&Amaria, 2008). Additionally the population was determined as appropriate in line with some studies that were conducted using only one city or state instead of an entire country (Blankson& Cheng, 2005; Blankson et al., 2006; Mahmoud, 2011).

Furthermore, since questionnaire was the only data collection instrument that was employed by the researcher for the study, the targeted population was within a class that could read and independently respond to the questionnaire. The presence of the researcher in this situation was not required to explain to respondents how the questionnaire should be answered; responses were not likely to be influenced by the presence of the researcher thereby enriching the quality and objectivity of the responses.

The following statistics were obtained from the staff records of management unit of healthcare providers as well as NHIA and as such presents the study with specific information with regards to the population used in this study.

Table 1: Distribution of Respondents

Staff	Population
Healthcare providers (administrators)	42
Healthcare providers (claims officers)	42
Takoradi mutual health insurance scheme	35
Western regional office	16
Clinical Audit – Head Office, NHIA	5
Internal Audit – Head Office, NHIA	10
Total	150

Source: Field Data, Hurson (2014)

Census

All the items in the study population were selected using the census approach. According to Zarkovi (2008), sometimes the entire population will be sufficiently small, and the researcher can include the entire population in the study. This method of data collection is also known as complete enumeration technique or 100% enumeration technique. The census technique is noted as being more accurate, unbiased and totally representative in research exercise with a small population size. The selection primarily depends upon the nature and extent of the enquiry and degree of accuracy desired. He however cautioned that complete enumeration presupposes the existence of certain minimum facilities; such as funds, professional personnel, and sufficient time amongst others. The census technique of data collection becomes advisable to be adopted in a research

work where it is necessary to make complete enumeration in detail of a constituting universe like that of census of population, where it is necessary to have the exact and accurate results and a slight in the result is likely to cause significant damage to results and where the size of the universe is considerably small.

Data Collection

To successfully execute the study, data was required on a number of issues. These included literature on the relevant theories, concepts and their application in empirical studies. Others were the population, location, and operating centres of the Takoradi Mutual Health Insurance Scheme operating in Takoradi. Furthermore, data requirements existed for the three major variables of the study, namely examine existing internal control measures that govern the activities of claims officers of TMHIS, claims payment as indicated in the control measures, TMHIS management oversight responsibility on claims submission and payment procedures, anti-fraud factors and claims fraud control at TMHIS.

Other issues for which data were required were the demographic characteristics academic and knowledge background of respondents. This information may directly relate to the objectives of the study and will make the data more complete and could serve as the basis on which future and new perspectives on claims fraud control in health insurance could be presented. Quantitative and qualitative data were obtained from primary and secondary sources for use in the study. Data on the literature was obtained from secondary

sources including related published and unpublished material from the internet, journals, handbooks, reports and text books. Data on the Mutual Health Scheme were obtained mainly from secondary sources including the internet and publications of the National Health Insurance Authority (NHIA).

Research Instrument

The instrument used for collecting primary data in the study was a self-administered questionnaire and was mainly designed to elicit information from the respondents of the study. Questionnaire was selected for this kind of study because it was a self-report measure which guaranteed confidentiality and therefore more likely to elicit truthful response with regard to the information required from the respondents.

The questionnaire was made up of forty-three(44) items grouped into two main sections; Section A & B. Section A of the questionnaire was sub-divided into five parts – Part I, II, III, IV&V. Part (I) collected data on internal control systems available for healthcare claims payment and was made up of ten (10) items, the second part (II) collected data on the extent to which TMHIS and health providers comply with claims policies which was made up of ten (10) items, the third part (III) collected data on the extent to which claims payment policies are communicated to health provider, this contained six (6) items, the fourth part (IV) collected data on management oversight responsibility over claims vetting, processing and payment and was made up of five (5) items, and the last part (V) collected data on human resource challenges facing claims department of TMHIS

and is made up of six (6) items. Section B of the questionnaire mainly elicited information on demographic details of respondents and was made up seven (7) items.

Section A was measured with open ended questions and a five point Likert-type scale, with the end points being: highest in agreement = 5 and least in agreement= 1. The Likert-scale is a method for measuring people's attitudes by combining their scores on a variety of items into a single index. Scaling is achieved by ensuring that high-scoring and low-scoring individuals differ in their responses on each of the items selected for inclusion in the index and the distance is assumed to be the same between categories (Likert, 1932). Tittle and Hill (1967) posit that the Likert scale is the most widely used method of scaling in the social sciences today.

Perhaps this is because it is much easier to construct and because it tends to be more reliable than other scales with the same number of items. The Likert Scale method of measuring reaction was selected because it is most popular, easy to administer and to score (Borg & Gall, 1989). Also, the scale has been shown to have good reliability and validity. Moreover, respondents readily understand how to use the scale. It however takes longer time to complete than other itemized rating scales.

Measurement of Variables

The framework identifies variables such as solid internal control system, proactive auditing, regular communication of policies, and prompt payment of

claims, effective management oversight responsibility and proper human resource management that influence claims fraud control in an organisation.

Solid control systems -This involves existence of strong processes and procedures for claims payment as well as authorization for access to assets by employees. It also involves proactive auditing and aggressive investigation and prosecution of fraud claims. Again it encompasses establishment of whistleblowing mechanism as well as educational and outreach programs for the general public, especially claimants, alerting them on criminality of insurance fraud and its concomitant penalty.

Regular communication of policies – This involves constant education of employees, service providers and the general public on claims payment policies.

Prompt payment of claims – This involves promotion and provision of timely partial or full payment of claims.

Management oversight responsibility – This involves frequent claims file review and claims verification of processes and payment claims.

Proper humanresource management – This involves recruitment of right number of claims staff who are very competent and well-motivated to handle claims vetting, processing and payment.

Pre-Test

A pretest was undertaken in August 2013 as a prelude to the main study in Koforidua which had similar characteristics with that of the Takoradi Mutual Health Insurance Scheme. Pretests, according to Pallant (2007), are required

ahead of a main survey for the following reasons. Firstly, they ensure that instructions, questions and scale items are clear. They further ensure that potential respondents will be able to understand questions and respond appropriately. Finally, they help to identify and eliminate any questions or items that may offend potential respondents. The pretest for this study involved twenty (20) facilities in the Koforidua municipality. The pretest sample, selected using simple proportions as well as simple random sampling (lottery method), sufficiently included all categories of facilities in the main population.

It also conformed to Saunders, Lewis and Thornhill's (2007) minimum criteria of 10 for pilot studies by students. A fifty-seven (57) item questionnaire was hand-delivered to managers of the 20 selected facilities. Nineteen were retrieved after three weeks. The questionnaire was also given to some scheme managers, claims managers, claims officers, and colleagues for their comments and suggestions after the design. This was done for the purpose of refinement and content validity. After those comments and criticisms, some refinements were made by removing some statements, maintaining many and even adding some statements.

According to Creswell (1994), when one modifies an instrument or combines instruments in a study, the original validity and reliability may be distorted and it becomes important to re-establish validity and reliability. According to Sarantakos (1998), pre-tests are small tests of single elements of the research instruments, which are predominantly used to check eventual mechanical problems of an instruments.

Reliability Test

Reliability of a scale gives an indication of how free it is from random error (Pallant, 2007) or the extent to which the scale produces consistent results if repeated measures are taken (Kent, 2007). Two frequently used indicators of a scale's reliability are test-retest reliability (also referred to as temporal stability) and internal consistency (Tabachnick&Fidell, 2007). While the test-retest may appear a good measure for stable personality traits such as one's entrepreneurial orientation (Pallant, 2007), the likely reluctance of respondents to repeat participation, coupled with time and cost constraints rendered it inappropriate for this particular survey.

Internal consistency on the other hand measures the degree to which all items on a scale, measure an underlying construct (Pallant, 2007). The Cronbach's alpha coefficient (α) with a recommended minimum value of 0.7 is the most common indicator for testing internal consistency (Nunnally, 1978; DeVellis, 2003). Tabachnick and Fidell (2007) and Pallant (2007) suggest an additional requirement of a minimum item-total correlation of 0.3 to ensure that items included in a scale actually measure what the scale intends to. Both measures were adopted in testing for internal consistency reliability of the Likert-scale questions included in the pre-test questionnaire. The tests were run using Statistical Product and Service Solutions (SPSS) version 17.0.

Some of the items in the questionnaire were, refined taking away the ambiguity which was experienced during the data collection. Questions on claims fraud control and antifraud were all refined. The entire construct for the scales

ranged between 0.6 – 0.8. The reliability coefficients obtained are presented in Table 2.

Table 2: Computed Reliability Coefficients for Data Collected During Pretest

Questionnaire category	Sample size	Composite Reliability	Cronbachs Alpha
Com	19	0.8573	0.7988
Comp	19	0.7351	0.5065
Fraud	19	0.7698	0.6128
HR	19	0.7799	0.4774
IC	19	0.8823	0.7994
Mgt	19	0.6704	0.4742

Source: Field data, Hurson (2014)

Ethics

In order to ensure strict adherence to ethical standards of research, an introductory letter explaining the intent and authenticity of the study was first shown to the respondents before administering the questionnaire. A clause, assuring respondents of anonymity and confidentiality, was also inserted in the introductory paragraph of the questionnaire. This was further buttressed by the exclusion of questions bordering on the identity of respondents and their respective establishments. The aforementioned steps were taken to ensure

adherence to accepted ethical standards and practices, respect for participants as well as trust and confidence in the integrity of the study.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

The main aim of the study was to find out the perception of stakeholders on healthcare fraud control at TMHIS. As discussed earlier in the previous chapter, the approach to the study was correlation. Regression analysis was used to test the hypotheses formulated for the study and also to find the relationship between communication, compliance, internal control, human resource challenges and management oversight responsibilities. Finally, standard regression analysis was used to find the direction and strength of the relationship between communication, compliance, internal control, human resource challenges, management oversight responsibilities and claims fraud control.

Preliminary Analysis

A preliminary analysis was carried out to examine the background characteristics of the respondents. This was done to explain the characteristics of the respondents that were used in the study. The results are depicted in Table 1 on the next page.

Table 3: Background Characteristics of Respondents

Items	Frequency	Percent
Tmhis	66	44.0
Nhia	27	18.0
Hospitals	6	4.0
Clinics	24	16.0
Chps Compound	9	6.0
Maternity	9	6.0
Pharmacy	9	6.0
Total	150	100
Academic Qualification		
Tertiary	150	100
Age of Respondents		
21-30	60	40.00
31-40	69	46.00
41-50	21	14.00
Job title		
Claim officer	36	24.00
Audit officer	21	14.00
Claim clerk	18	12.00
Pro-assistant	3	2.00

District manager	18	12.00
Public relation officer	6	4.00
Accountant	24	16.00
Nurse	9	6.00
Midwife	6	4.00
Administrator	9	6.00
Length of Service		
1-5 years	29	58.00
6-10	60	40.00
Above 10 years	3	2.00

Source: Field data, Hurson(2014)

Table 1 presents the background characteristics of the respondents used in the study. Respondents were first asked to indicate the institution in which they work. NHIS deals with different institutions which are referred to as service providers. It was therefore prudent to find out which of these institutions the respondents came from. Respondents work with Takoradi Mutual Health Insurance Scheme (TMHIS), National Health Insurance Authority (NHIA), Hospitals, Clinic, Maternity Homes, Pharmacy Shops, Chemical Shops and Chps Zone. With respect to the academic qualifications of the respondents, it emerged that all the respondents have had tertiary education which means that their level of

understanding and ability to respond to the questionnaire were appropriate for such a study.

On the age of the respondents, majority of them were aged between 31-40 representing 46 percent. Forty percent (40%) of the respondents were aged between 21-30 years and 14 percent were aged between 41-50 years. The respondents had varied job titles and had worked in that position for at least 5 years. Some of the respondents were auditors, nurses, midwives, claim officers, audit officers, claim clerks, district managers, public relations officers, accountants and administrators. Fifty eight percent (58%) of the respondents had worked in their current position between 1-5 years, 40% had also worked for between 6-10 years with two percent (2%) working for more than 10 years.

Data Preparation and Analysis

Data preparation was divided into two stages. Firstly, the raw data collected through the questionnaire were edited, coded and converted into the actual variables of interest. Secondly, the variables were checked for other anomalies based on the assumptions made in regression. Upon receipt, each questionnaire was checked carefully for incompleteness and inconsistencies. All copies of the questionnaire were accepted signifying a 100 percent response rate. All the variables were assigned codes to facilitate computer data input. The data, once entered into the data sheets of SPSS 17.0 for Windows, were carefully screened in order to minimize data entry errors. Frequencies for each variable

were checked using SPSS 17.0 for Windows in order to detect the out-of-range values.

Cavana, Delahaye and Sekaran (2001) point out that there are three objectives in data analysis related to a research study; getting a feel for the data, testing the goodness of data and (3) testing the hypotheses developed in the research. The feel for the data provided a preliminary idea of how good the scales were and how well the coding and entering of data have been done. Testing the goodness of data was accomplished by obtaining Cronbach's (1951) alpha or the split half reliability of the measures. The third objective, hypotheses testing, was achieved by using the relevant statistical tests. The results of these tests will determine whether or not the hypotheses are substantiated.

As a preliminary step, once all the data were coded and entered into the system and verified for any visual errors, the following were obtained using SPSS 17.0 for Windows software: communication, compliance, fraud, human resource, internal control, management oversight responsibilities and a correlation matrix of the variables. These statistics helped to get a feel of the data and indicated that the responses range satisfactorily over the scale. The spread of responses was an indication of the variability and lack of bias.

According to Parameshwaran, Greenberg, Bellenger and Robertson (1979), there are three basic requirements of a good measurement; the measurement must be operationally definable, the measurement should be accurate or valid and the outcome of the measurement process must be repeatable (reliability). The measurements of communication, compliance, fraud, human

resource, internal control, management oversight responsibilities used in this research have been adequately explained in the previous chapters. Statistical test of data was carried out to check for normality and linearity of data. Finally, correlation analysis and regression analysis were performed to test the strength of relationships among communication, compliance, human resource, internal control, management oversight responsibilities and fraud claims. The details of these exercises and the corresponding results are provided in the next chapter which is devoted to the analysis and discussion of the study.

Model Specification

To test for the effect of anti-fraud factors on claims fraud control the following regression equation was formulated:

$$Fraud = \beta_0 + \beta_1 IC + \beta_2 Com + \beta_3 Comp + \beta_4 HR + \beta_5 Mgt + \varepsilon$$

Where

IC = Internal control

Com = Communication of NHIA claims payment policy

Comp = Compliance with claims payment policies

HR = Human resource challenges

Mgt = Management oversight responsibilities

β_n = Beta

a_0 = Constant

ε_t = Error Term

With claims fraud being the constant while IC, Com, Comp, HR and Mgt are the explanation variables.

Pallant (2007) explains that before any regression can be relied on, it is necessary to test the assumptions of multivariate regression. The assumptions are multicollinearity, outliers, normality, linearity, homoscedasticity and independence of residuals. To test the assumption of multicollinearity, it was necessary to check that the independent variables (anti-fraud factors) show at least some relationship with the dependent variable (claims fraud control). A correlation test was carried out. The result of the correlation, probability plot, scatter diagram and collinearity diagnosis are depicted in tables 3 and 4, figures 2 and 3. Table 3 depicts the correlation test.

Table 4: Results of Correlation Test

		Fraud	Com	Comp	HR	IC	Mgt
Pearson Correlation	Fraud	1.000	.467	-.420	.450	.407	.528
	Com	.467	1.000	-.254	.476	.753	.596
	Comp	-.420	-.254	1.000	-.268	-.364	-.110
	HR	.450	.476	-.268	1.000	.432	.180
	IC	.407	.753	-.364	.432	1.000	.472
	Mgt	.528	.596	-.110	.180	.472	1.000
Sig.(1-tailed)	Fraud	.	.000	.000	.000	.000	.000

	Com	.000	.	.001	.000	.000	.000
	Comp	.000	.001	.	.000	.000	.090
	HR	.000	.000	.000	.	.000	.014
	IC	.000	.000	.000	.000	.	.000
	Mgt	.000	.000	.090	.014	.000	.
N	Fraud	150	150	150	150	150	150
	Com	150	150	150	150	150	150
	Comp	150	150	150	150	150	150
	HR	150	150	150	150	150	150
	IC	150	150	150	150	150	150
	Mgt	150	150	150	150	150	150

Source: Field data, Hurson (2014)

It can be said from table 3 that all the anti-fraud factors shows a positive and significant relationship with claims fraud control except compliance which shows a negative and significant relationship. (com=0.467, comp= -0.420, HR=0.450, IC=0.407, Mgt=0.528). Table 6 also shows that the bivariate correlations between the independent variables are not above 0.7. This shows the absence of multicollinearity.

However, collinearity diagnosis was also conducted to confirm the results depicted in table 3. The tolerance value for the independent variables ranged between 0.327 and 0.826 which is not less than 0.10; therefore the multicollinearity assumption of regression has not been violated. This is further

supported by the VIF values of between 1 and 3 which is which is well below the cut-off point of 10.

Table 4 in the next page, depicts the collinearity statistics together with the VIF values for the independent variables.

Table 5: Collinearity Statistics

Anti-fraud factors	Tolerance	VIF
Com	0.327	3.061
Comp	0.846	1.182
HR	0.729	1.371
IC	0.395	2.529
Mgt	0.627	1.595

Source: Field work, Hurson (2014)

The other assumptions of regression that is outliers, normality, homoscedasticity and independent residuals were checked using normal probability plot of the regression standardised residual and the scatter plot. From the probability plot, the point lie reasonably straight diagonal line from bottom left to top right showing no major deviations from normality as shown on table 5.

The scatter plot of the standardised residual show a roughly rectangular distribution with most of the scores concentrated on the centre. This shows that the assumptions of regression have not been violated.

The normal probability plot and the scatter plot are both shown on the next page.

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Fraud

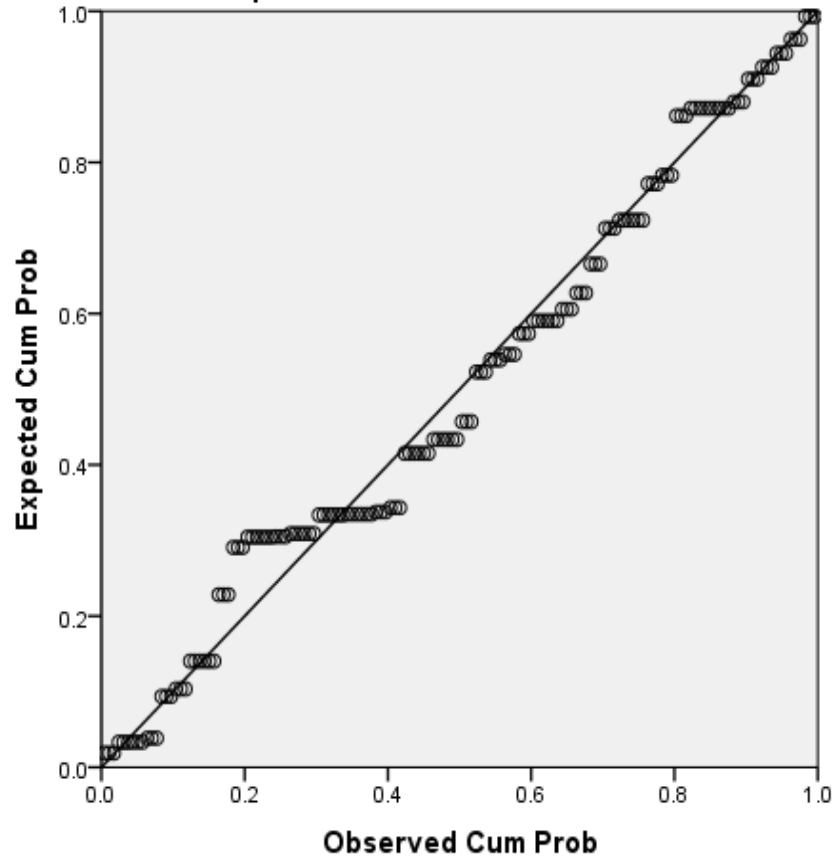


Figure 3: Normal Probability plot

Normal P-P Plot of Regression Standard Residual

Source: Field Work, Hurson(2014)

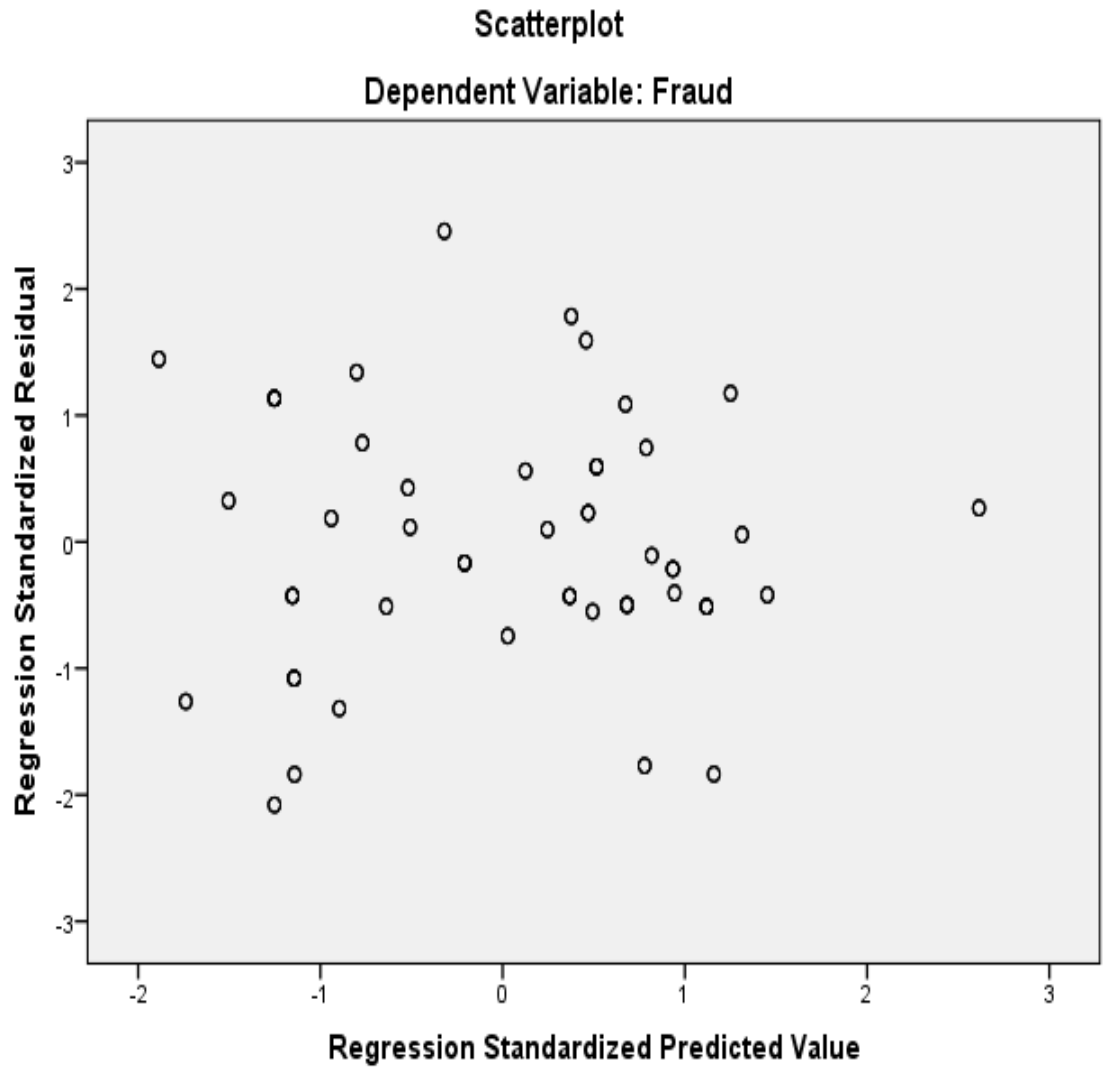


Figure 4: Scatterplot

Source: Field Work, Hurson (2014)

Internal Control Measures that Govern Activities of the Claims Officers

The first objective of the study was to examine the internal control measures that govern the activities of the claims officers of TMHIS. The mean and aggregate mean scores for each of the items were ascertained. The mean scores are presented in Table 6.

Table 6: Internal Control Measures that Governs the Activities of Claims Officers at TMHIS

Items	Mean Score	Least in agreement	Highest in agreement
1. NHIA has strong internal audit / clinical department at TMHIS office	2.86	80.00	20.00
2. Clear and concise claims reporting format exists to guide claims payment processes and procedures	3.53	42.00	58.00
3. Clear and concise claims reporting format exists to guide claims submission processes and procedures	3.82	38.00	62.00
4. Comprehensive claims processing manual exists to guides accounting for claims	3.60	42.00	58.00
5. Claims managers vet, approve and pay claims at the same time.	2.00	78.00	22.00
6. Internal / Clinical Auditors regularly audit claims submission and payment	2.56	80.00	20.00
7. Internal /clinical audit actively and aggressively investigate and prosecute fraud claims	3.46	58.00	42.00
8. Monitoring and evaluation officers regularly conduct claims verification	3.42	6.00	94.00

exercise at provider site			
9. Monitoring and evaluation officers regularly conduct claims verification exercise at scheme	3.38	48.00	52.00
10. NHIA has in place an effective fraud hotline and whistleblowing mechanism that help track down fraudulent activities	2.32	84.00	16.00
Overall \bar{X}		3.095	

Scale (\bar{X}): 0-2.9= Least In Agreement, 3-5= Highest In Agreement

Source: Field Data, Hurson(2014)

The table depicts the responses of the respondents on the internal control measures that govern the activities of TMHIS. The overall mean for the responses is 3.095 which implies that respondents agreed that there exist internal control measures that govern the activities of the claims officers of TMHIS.

Respondents were asked to indicate whether in their opinion, the health insurance authority has strong internal audit/clinical department at TMHIS office. Majority of the respondents least agreed with the question ($\bar{X} = 2.86$, 80.00%). Respondents were asked again whether in their opinion therea clear and concise claims is reporting format to guide claims payment processes and procedures. Majority of the respondents agreed that there exists a clear and concise claims reporting format to guide claims payment processes and procedures ($\bar{X} = 3.53$,

58.00%). Majority of the respondents also agreed to the statement that there exists a clear and concise claims reporting format to guide claims submission ($\bar{X} = 3.82$, 62.00%). Respondents also agreed that a comprehensive claims processing manual exists to guide accounting for claims ($\bar{X} = 3.60$, 58.00%).

Respondents however least agreed to the following: claims managers vet, approve and pay claims at the same time, internal/clinical auditors regularly audit claims submission and payment, TMHIS has in place an effective fraud hotline and whistleblowing mechanism ($\bar{X} = 2.00$, 78.00%; $\bar{X} = 2.56$, 80.00%; $\bar{X} = 2.32$, 84.00 respectively). Majority of the respondents further agreed to the following on internal control measures at TMHIS: internal/clinical audit actively and aggressively investigate and prosecute fraud claims, monitoring and evaluation officers regularly conduct claims verification exercise at provider sites, monitoring and evaluation officers regularly conduct claims verification exercise at scheme ($\bar{X} = 3.46$, 58.00%; $\bar{X} = 3.42$, 94.00%; $\bar{X} = 3.38$, 52.00 respectively).

The findings support the claims of Wolfe and Hermans (2004) who are of the view that the motivation to commit fraud depends on a number of factors of which weakness in the internal control is prominent. Though an internal control mechanism exists at TMHIS, in the opinion of respondents, there are weaknesses in the control mechanism. This is reflected in the finding that respondents generally were of the view that the implementation of the mechanism for control and detection of claims fraud was not the best. It was confirmed by the researcher

that internal control based on the perception of respondents, was not too strong at TMHIS.

The Extent to which TMHIS complies with Claims Payment

The second objective of the study was to find out from stakeholders in their opinion, the extent to which TMHIS complies with claims payment as indicated in the control measures. The mean and aggregate mean scores for each of the items were ascertained. These are presented in Table 7.

Table 7: The Extent to which TMHIS complies with Claims Payment as indicated in the Control Measures

Items	Mean Score	Least in agreement	Highest in agreement
1. NHIA promptly pays claims to healthcare providers.	1.40	98.00	2.00
2. TMHIS abides by NHIA claims payment policies.	4.28	4.00	96.00
3. NHIA consistently checks compliance with its claims payment policies	3.42	10.00	90.00
4. Acceptable tariff is timely sent to providers to ensure proper charging of healthcare claims	2.80	84.00	16.00

5. NHIA conducts consistent provider satisfaction survey regarding claims payment	2.08	74.00	26.00
6. Complaint desks is available at all providers sites for registration of grievances on claims related issues	1.62	92.00	8.00
7. Quick remedial platform has been established to address claims payment related issues	2.22	66.00	34.00
8. Incidence of claims officers compromising with providers to defraud the system do not occur	4.12	12.00	88.00
9. Incidence of abuses are not found on the part of providers to defraud the system	3.26	36.00	64.00
Overall \bar{X}		2.71	

Scale (\bar{X}): 0-2.9= Least In Agreement, 3-5= Highest In Agreement

Source: Field Data, Hurson(2014)

Table 7 depicts an aggregate mean score of 2.71 for the responses. Thus based on their perception, respondents least agreed to the statement that NHIA complies with claims payment as indicated in the control measures. However, there were some individual items within this general theme area that the respondents agreed

with. The individual means for the responses within this general theme area are discussed below so as to reveal the details with regards to this variable

Respondents least agreed that NHIA promptly pays claims to healthcare providers ($\bar{X} = 1.40, 98.00\%$). However, when asked whether TMHIS abides by NHIA claims payment policies, almost all the respondents agreed to the statement ($\bar{X} = 4.28, 96.00\%$). Respondents also agreed that NHIA consistently checks compliance with its claims payment policies ($\bar{X} = 3.42, 90.00\%$). Respondents least agreed to the following: acceptable tariff is timely sent to providers to ensure proper charging of healthcare claims, NHIA conducts consistent provider satisfaction survey regarding claims payment, complaint desk is available at all provider sites for registration of grievances on claims related issues, quick remedial platform has been established to address claims payment related issues ($\bar{X} = 2.80, 84.00\%$; $\bar{X} = 2.08, 74.00\%$; $\bar{X} = 1.62, 92.00\%$; $\bar{X} = 2.22, 66.00\%$ respectively).

However, respondents agreed that incidence of claims officers colluding with providers to defraud the system do not occur ($\bar{X} = 4.12, 88.00\%$) and incidence of abuses are not found on the part of providers to defraud the system ($\bar{X} = 3.26, 64.00\%$). The general interpretation with regards to this finding is the NHIA complies with the guidelines and laws regarding the implementation of the Scheme, especially so when it comes to the implementation of measures that mitigate claims fraud.

The Extent to which Management of TMHIS exercises oversight Responsibilities on Claims Submission and Payment Procedures

Another objective that the study sought to fulfil was to find out from stakeholders how they appraise management oversight responsibilities on claims submission and payment procedures. Respondents were asked questions to enable the study assess TMHIS management oversight responsibilities on claims submission and payment procedures. The disaggregate mean and aggregate mean scores for each of the items were ascertained. The disaggregate mean scores of items used in assessing TMHIS management oversight responsibilities on claims submission and payment procedures are presented in Table 8.

Table 8: Management oversight Responsibilities on Claims Submission and Payment Procedures at TMHIS

Items	Mean Score	Least agreement	Highest agreement
1. Management of TMHIS conduct monthly claims verification provider site	2.62	54.00	46.00
2. Management of TMHIS monthly conduct claims payment verification at the scheme level	2.80	50.00	50.00
3. TMHIS conducts monthly claims file peer review	1.48	72.00	28.00

Table 8 continued

4. Management of TMHIS has the requisite skills and knowledge to handle claims related issues	3.42	10.00	90.00
5. Effective online claims submission system exists to facilitate immediate review.	2.02	76.00	24.00
Overall mean	2.47		

Scale (\bar{X}): 0-2.9= Least In Agreement, 3-5= Highest In Agreement

Source: Field Data, Hurson(2014)

Table 8 depicts the responses of the respondents on assessing management oversight responsibilities on claims submission and payment procedures. The aggregate mean for the responses is 2.47 which means that respondents least agreed that management were performing their oversight responsibilities on claims submission and payment procedures. According to Albrecht (2006) management and other appropriate parties in companies are expected to monitor the quality and effectiveness of antifraud programs and controls. This finding therefore implies that management are doing very well in the performance of this very important duty when it comes to claims fraud prevention and control. However, there were some individual items within this theme area that the respondents agreed with. The individual mean for the responses are discussed. Respondents least agreed that management of TMHIS conduct monthly claims verification at provider site ($\bar{X} = 2.62, 54.00\%$).

Respondents were split in their opinion on whether management of TMHIS conduct monthly claims payment verification at the scheme level ($\bar{X} = 2.80$, 50.00%). While others believed they conducted monthly claims verification at provider site others least agreed. Respondents also indicated that they least agreed that management of TMHIS employed an effective online claims submission systems to facilitate review ($\bar{X} = 2.02$, 76.00%). However, respondents highly agreed that they had the requisite skills and knowledge to handle claims related issues. The implication of this finding is that some other factors, which may include a lack of motivation or a desire to commit fraud (Stats, 2001), may account for the negligence in terms of handling claims issues.

The Effects of Anti-Fraud Factors on Claims Fraud control at TMHIS

Examining the effect of anti-fraud factors on claims fraud control at TMHIS was one of the key objectives of this study. The anti-fraud measures comprised management oversight responsibility, compliance with claims payment, internal control system, human resource management and communication of payment policies to health service providers. The analyses therefore dealt with the influence of each dimension of anti-fraud factors on claims fraud control by testing a hypothesis formulated for that purpose.

As recommended by Leech, Barrett and Morgan (2005), the multiple regression technique was used in analysing the fourth objective for two major reasons. Firstly, the technique permits the concurrent entry of different predictor variables into a model, enabling the basing of analyses, findings and conclusions

on a single scenario (Leech, Barrett & Morgan, 2005). Secondly the results generated by this technique indicate the separate contribution of each predictor variable to the total variance in a dependent variable (Pallant, 2007). The following is the regression equation used.

$$Fraud = \beta_0 + \beta_1 IC + \beta_2 Com + \beta_3 Comp + \beta_4 HR + \beta_5 Mgt + \varepsilon$$

Where

IC = Internal control

Com = Communication of NHIA claims payment policy

Comp = Compliance with claims payment policies

HR = Human resource challenges

Mgt = Management oversight responsibilities

β_n = Beta

a_0 = Constant

ε_t = Error Term

With claims fraud being the constant while IC, Com, Comp, HR and Mgt are the explanation variables.

Table 9: Model Summary of Regression Analysis

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.700 ^a	.491	.473	.72840

Predictors: (Constant), Mgt, Comp, HR, IC & Com.

The model, as shown in Table 9 presents all five dimensions of anti-fraud control claims and how they affect claims fraud. Anti-fraud control was the predictor variable and claims fraud control as the dependent variable. Assessment was based on the beta (β) values, co-efficient of determination, and the corresponding significance levels (p-values).

As illustrated in the conceptual framework and evidenced in the beta values in Table 10, all five anti-fraud factors contributed uniquely to explaining variances in claims fraud control. Management oversight responsibility made the most significant contribution to claims fraud (β : .458; Sig: .000) while internal control with a negative beta significantly contributed the least (β : -.308; Sig: 0.000). Human resource also contributed significantly to claims fraud (β : .304; Sig: .000). The other remaining dimensions of anti-fraud factors – communication and internal control – contributed insignificantly to claims fraud (Sig. > .05).

Table 10: Results of Regression Analysis

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.
	B	Beta		
	Std. Error			

(Constant)	-2.007E-006	.059		.000	1.000
Com	.026	.104	.006	.250	.803
Comp	-.308	.065	-.297	-4.761	.000
HR	.304	.070	.289	4.360	.000
IC	-.072	.095	-.067	-.760	.449
Mgt	.458	.075	.433	6.098	.000

a. Dependent Variable: Fraud

Source: Field Work, Hurson(2014)

To examine the effects that anti-fraud factors have on claims fraud, five hypotheses were formulated. Hypotheses 1 was formulated for this purpose. It read: ‘Internal controls positively influence claims fraud control at TMHIS’. The standard multiple regression technique was used for the analysis. As shown in Table 10, internal control mechanism insignificantly affected claims fraud control at TMHIS, meaning effective control measures do not account claims fraud control at TMHIS ($\beta = - 0.072$; Sig. = 0.449). The implication of the above is that internal control does not have a significant influence on claims fraud control. Hypothesis 1 was thus rejected.

This finding contradicts the model illustrated in the conceptual framework as well as the assertion by Wolfe and Hermans (2004) who are of the view that the motivation to commit fraud depends on a number of factors. These are authoritative position or function within the organisation, capacity to understand and exploit the accounting and internal control weaknesses to the greatest

advantage, confidence that fraudulent behaviours will not be detected and capacity to effectively deal with stress in order to manage fraud over a long period of time.

Hypothesis 2 also sought to evaluate how 'Communication of claims payment policies affects claims fraud control at TMHIS'. As shown in Table 10, communication of claims payment policies insignificantly affected claims fraud control at TMHIS, meaning communicating claims payment policies does not account for claims fraud control at TMHIS ($\beta = 0.026$; Sig. = 0.803). Thus, communicating claims payment policies does not significantly affect claims fraud at TMHIS. Hypothesis 2 was rejected.

This finding however, contradicts the model illustrated in the conceptual framework as well as the assertion by Albrecht (2006) who posits that effective communication is an important element of all phases of implementation of antifraud programs and controls. A company's philosophy on fraud prevention and antifraud programs and controls should be clearly communicated throughout the organization so that employees are aware of antifraud activities, have a clear understanding of what is expected of them, and know that the organization takes the risk of fraud seriously.

Hypothesis 3 was stated as 'Compliance with claims payment policies negatively influences claims fraud control at TMHIS'. As shown in Table 10, compliance with claims payment policies negatively and significantly affect claims fraud at TMHIS, meaning the more TMHIS complies with claims payment policies, claims fraud is likely to reduce ($\beta = -0.308$; Sig. = 0.000). This means

that complying with claims payment policies will significantly reduce claims fraud at TMHIS. Hypothesis 3 was thus accepted since the beta showed a negative relationship with the dependent variable – claims fraud control. This finding however, buttress the model illustrated in the conceptual framework as well as the assertion by KPMG (2003) which did a survey in 2003 and found out that compliance is one of the mitigation measures to reduce fraud.

The fourth Hypothesis was stated as ‘Management oversight responsibility in maintaining internal control negatively influences claims fraud control at TMHIS’. As revealed in Table 10, management oversight responsibility in maintaining internal control shall reduce fraud at TMHIS, meaning as management performs their oversight responsibility, claims fraud is likely to reduce at TMHIS ($\beta = 0.458$; Sig. = 0.000). What this finding reveals is that management performing their oversight responsibility rather increases the chances of fraud being committed at TMHIS since there is a positive significant relationship between the two variables.

Hypothesis 4 was thus rejected since the beta showed a positive relationship with the dependent variable – fraud. This finding however, implies that management of TMHIS are not performing their oversight responsibility which has the potential to mitigate against claims fraud as posited by Albrecht (2006), who insists that management and other appropriate parties in the company are expected to monitor the quality and effectiveness of antifraud programs and controls.

The fifth hypothesis was stated as human resources challenges negatively affect claims fraud control at TMHIS. As shown in Table 10, human resource challenges affect claims fraud control at TMHIS, meaning challenges facing human resource account for claims fraud at TMHIS ($\beta = 0.304$; Sig. = 0.000). The above finding therefore means that if human resource continues to be challenged, there is the likelihood of fraud rising at TMHIS. Hypothesis 5 is thus accepted.

This finding however, buttress the model illustrated in the conceptual framework as well as the assertion by Kleinman (2011) who indicated that condition that increases fraud risk may relate to the employees of the company. The author was of the view that situations where there exist unfavourable relationships among employees, loss of relationship, insufficient level of professionalism, honesty and reliability of employees, long-lasting shortage of employees of some professions and frequent change of accountants, financiers, lawyers, and internal auditors may worsen the level of fraud risk in an organization. This means that TMHIS is also challenged with some of the unfavourable conditions mentioned by Kleiman (2011).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The concluding chapter of this study opens with a summary of the objectives of the study, its methodology and data analyses techniques. It proceeds with a summary of the key findings pertaining to each objective and the conclusions drawn from them. Specific recommendations, emanating from the findings and conclusions and relevant for consideration by the TMHIS, are then made for the TMHIS and their parent body the NHIA. The chapter ends with some suggestions for further research.

Summary

The main purpose of this study was to assess stakeholders' perception on healthcare claims fraud control at Takoradi Mutual Health Insurance office. Specifically, it sought firstly solicit the views of stakeholders' on the effectiveness of the existing internal control measures that govern the activities of claims officers of TMHIS. The second objective was to ascertain stakeholders' views on the extent to which NHIA complies with claims payment as indicated in the control measures. The third objective gathered information on stakeholders' assessment of TMHIS management oversight responsibility on claims submission and payment procedures. While the fourth objective also sought to examine stakeholders' perception on the effect of anti-fraud factors on claims fraud control at TMHIS.

From a population of 150 respondents selected from all the facilities under TMHIS, a census was used since the number of facilities was not huge and was easily accessible by the researcher. Following a successful pre-test, self-administered questionnaire developed from a thorough review of the existing literature and tested for reliability, was distributed to respondents. The instrument bordered on the background characteristics of the respondents as well as the anti-fraud factors and fraud.

Data on the background characteristics of the respondents were analysed quantitatively using descriptive statistics including frequencies, percentages, and cross tabulations. Analyses on the relationships between the independent variables anti-fraud factors (management oversight responsibilities, compliance with claims payment, human resource challenges, communication and internal control) and the fraud were done using standard regression techniques. Statistical Product and Service Solutions version 17 (SPSS 17.0) was utilized for the data analyses. A summary of the key findings of the study follows.

The first objective examined stakeholders' views on the existing internal control measures that govern the activities of claims officers of TMHIS; the main issues that emerged were:

1. TMHIS does not have an internal audit department. Internal auditors do not regularly audit claims submission and payment, no effective fraud hotline and whistleblowing mechanism exist to help track down fraudulent activities at TMHIS

2. There is a clear and concise claims reporting format that guides the payment and submission of claims at TMHIS
3. Monitoring and evaluation officers regularly conduct claims verification at provider sites and at the schemes under the TMHIS and also the internal audit actively and aggressively investigate and prosecute fraud claims.

Examining stakeholders' perception on the extent to which TMHIS complies with claims payment as indicated in the control measures was the second objective. It emerged that:

1. TMHIS least complied with the claims payment as indicated in the control measures.
2. No consistent provider satisfaction survey is done regarding claims payment.
3. Complaint desks are not available at all provider sites for registration of grievances on claims related issues
4. No remedial platform has been established to address claims payment related issues

The main findings with respect to stakeholders' assessment of TMHIS management oversight responsibilities on claims submission and payment, were as follows:

1. Management of TMHIS does not conduct monthly claims verification at provider sites and at the scheme level
2. Management of TMHIS does not conduct monthly claims file peer review

3. No effective online claims submission system exists to facilitate immediate review.

The fourth objective sought to obtain stakeholders' opinion on effect of anti-fraud factors on claims control at TMHIS. Four hypotheses were formulated. The major issues that emerged from the findings were:

1. Communication of claims payment policies did not significantly affect fraud at TMHIS
2. Compliance with claims payment policies negatively affected fraud claims at TMHIS
3. Human resource challenges positively affected claims payment at TMHIS.
4. Internal control mechanisms, though negatively influenced claims fraud, it was not significant.
5. Management oversight responsibilities positively affected claims fraud at TMHIS.

Conclusions

The following conclusions are drawn based on the findings of the study. For the first objective, it is concluded that in spite of the lapses in the internal control measures put in place at TMHIS, there exist an internal control mechanism that helps to check claims fraud at TMHIS. With regards to the second objective, it is concluded that the level of compliance with claims payment at TMHIS was weak, though it is proven that as the level of compliance increases, the likelihood of one committing fraud is reduced.

Regarding the third objective, management of TMHIS was found to relax to some extent in exercising its oversight responsibilities regarding the claims payment. Though it has been proven that there exist some relationship between management exercising their oversight responsibilities and the extent to which fraud can be reduced. With respect to the fourth objective which sought to test four hypothesis, it is concluded that communication of claims payment policies do not significantly affect claims fraud; compliance with claims payment significantly affected claims fraud; human resource challenges significantly affects claims fraud; internal control did not significantly affect claims fraud at TMHIS; management oversight responsibilities significantly affected claims fraud at TMHIS.

In summary, it is concluded that per stakeholders' perception, compliance with claims payment policies, management oversight responsibilities and human challenges are the factors that are likely to influence claims fraud at TMHIS. Failure to comply with claims payment policies is a motivation for one to commit fraud with respect to claims payment, and management relaxing their oversight responsibilities can also lead to one engaging in fraudulent activity. Additionally, as insufficient, unqualified and aggrieved claims officers are left to man the claims department of TMHIS, the likelihood of incidence of fraudulent activity is high.

As our health care system evolves and gets more complicated, the ways that fraud is likely to be committed evolve and becomes more complex. New and efficient measures need to be put in place to mitigate the risk of its occurrence.

Recommendations

Based on the key findings and conclusions presented above, TMHIS is advised to:

1. Conduct regular claims verification at provider sites and at the scheme level.
2. Establish well equipped internal audit department to scrutinize claims processing and payment.
3. Conduct claims file peer review exercise with sister offices to copy acceptable practices.
4. Establish an effective online claims submission system to facilitate immediate review
5. Provide complaints desk at all provider sites for registration of grievances on claims related issues
6. Conduct consistent and regular provider satisfaction survey on claims administration.
7. Establish quick remedial platform to address claims payment related issues before they get out of proportion.
8. Comply adequately with policy governing claims processing and payment in order to win the confidence of stakeholders.
9. Communicate claims related information regularly to stakeholders to keep them abreast with acceptable standards.
10. Invite external auditors regularly to conduct compliance audit on claims processing and payment.

11. Recruit adequate number of competent and well-motivated claims officers to vet and scrutinize claims at both the district office levels and provider sites.
12. Pay claims promptly in order to avoid the temptation of over statement of claims by some service providers with the view of defraying cost of financing long overdue outstanding claims.
13. Organize regular refresher courses for management to facilitate effective and efficient supervise the administration of healthcare claims.

Limitation of the Study

The confinement of the study to the Takoradi municipal health insurance scheme renders the findings, conclusions and recommendations applicable mainly to this group of facilities. Secondly, reliance on managers and proprietors of facilities as key respondents raises questions bordering on possible bias, particularly with respect to fraud and the mechanisms in place to check it. Most managers or proprietors may not want to expose themselves as not being effective. The use of close ended as well as Likert Scale type questions restricted the amount of information obtainable from respondents.

Suggestions for Further Studies

The findings of the study have given certain indications with regard to possible directions for further research. The research framework developed for this study could be expanded and modified to include potential influence of anti-fraud

measures on not only claims fraud but financial fraud in general. This study suggests that it is time to open up serious research into fraudulent activities capable of hindering the sustainability of health insurance scheme in the country and further examines the role of health insurance officers and healthcare providers in particular and other stakeholders in general.

Furthermore, this study concentrated on healthcare claims fraud that could be committed by claims officers and healthcare providers in the absence of solid anti-fraud measures. It did not discuss any potential claims fraud that could be committed by other officers including accounts officers, ICT officers, PROs and district managers. Future research can be conducted to include the activities of the aforementioned officers in the study sample. Moreover, the study employed the census method to interview certain predetermined respondents.

Even though 150 respondents were interviewed, the figure covered only line managers and assistants of TMHIS, selected few staff of each of the forty-one (41) healthcare providers of TMHIS and very minute NHIA staff. It is expected that future research be conducted with a different sampling method and expanded sample size to cover significant proportions of all relevant stakeholders. Information to be gathered from such a sizeable amount of respondents is capable of giving a reliable general opinion on the subject matter for use by policy makers.

Finally, the study was limited to operation of only Takoradi Mutual Health Insurance Scheme, one of the health insurance offices in the Western region. Operational characteristics may differ between health insurance offices in the

Western region and those located outside the Western region. Thus, it is possible that findings on potential effects of anti-fraud measures and healthcare fraud control at Takoradi health insurance office could not be generalizable to all health insurance offices in Ghana. It would be beneficial to replicate this study with health insurance offices in other regions of Ghana and the findings compared so that a more general conclusion can be made.

REFERENCES

- Abekah-Nkrumah, G et al, (2009). Financing the health sector in Ghana: A review of the budgetary process. *Europa Journal of Economics*, 256-289.
- Adomah, Y. L. (2009, December Tuesday). Increases in the cost of medicines- threat to NHIS. *Daily Graphic*, p. 3.
- Agyapong, I. A., & Adjei, S. (2008). Public social policy development and implementation: Health policy and planning. *Qualitative Method in Organizational Research*, 12-27.
- Albrecht, W. S., Howe, K. R., & Romney, M. B. (1984). Deterring fraud: The internal auditor's perspective. *Institute of International Research Foundation*.
- Albrecht, W. S., Romney, M. B., Cherrington, D. J., Payne, I. R., & Roe, A. J. (1982). *How to detect and prevent business fraud*. London: Prentice-Hall.
- Albrecht, W. S., Williams, T. L., & Wernz, G. W. (1995). *Fraud: Bringing the light to the dark side of business*. Burr Ridge: Irwin.
- Allmon, A. (2005). Deception detection. Intelligent software keeps medicare fraud in check. *Healthcare informatics: the business magazine for information and communication systems*, 22(10), 62.
- Anandarajan, A., & Kleinman, G. (2011). The impact of cognitive biases on fraudulent: the Leeson case. *International Journal of Behavioural Accounting and Finance*, 40-55.

- Appelbaum, P. S. & Szmukler, G. (2006). Treatment pressures, leverage, coercion, and compulsion in mental health care. *Journal of Mental Health*, 17(3), 233-244.
- Appoh- Baah, B. (2010). *Financial sustainability of Health Insurance in Ghana. A case study of MpohorWassa East Mutual Health Insurance*. Kwame Nkrumah University of Science and Technology, Ghana.
- Arhin-Tenkorang, D. (2001). Mobilizing resources for health: The case for use of fees revisited. *Working paper, Harvard University*, (pp. 20-40).
- Arhin-Tenkorang, D. C. (1995). *Rural health insurance: A viable alternative to user fees*. London: Unpublished thesis, London School of Hygiene and Tropical Medicine.
- Atim, C. (2000). *Training of trainers manual for mutual health organisations in Ghana*. Accra: ABT Associates Inc.
- Atim, C. (2001). A survey of health financing schemes in Ghana. *Journal of Insurance*, 12-27.
- Atim, C. (2001). *A survey of health financing schemes in Ghana*. Accra: ABT Associates Inc.
- Authority, N. h. (2009). *Annual report, Eastern Region*. Accra: Ministry of Health.
- Authority, N. H. (2009). *Annual report, New Juaben Municipal health insurance scheme, Eastern region*. Accra: Ministry of Health.

- Authority, N. H. (2011). *Revised national health insurance medicines list*. Accra: Ministry of Health.
- Babbie, J. (2001). Toward a new classification of nonexperimental quantitative research. *Educational Researcher*, 30(2), 3-13.
- Bailey, K. (2008). *Methods of social research*. Simon and Schuster.
- Barrows, D. (2003). *Policy analysis and implementation*. York: York University Press.
- Bell, E., Merrick, J., Vibe, M., Omar, H. A., & Ventegodt, S. (2009). Ethics and holistic healthcare practice.
- Besner, J., Oelke, N. D., & Carter, R. (2014). The evolving role of nurses in primary care medical settings. *International journal of nursing practice*, 20(6), 629-635.
- Biegelman, N. T., & Bartow, J. T. (2012). *Executive roadmap to fraud prevention and intel control: Creating a culture of compliance*. London: Wiley.
- Blankson, C., & Ming-Sung Cheng, J. (2005). Have small businesses adopted the market orientation concept? The case of small businesses in Michigan. *Journal of Business & Industrial Marketing*, 20(6), 317-330.
- Boohene, R., Sheridan, A., & Kotey, B. (2008). Gender, personal values, strategies and small business performance: A Ghanaian case study. *Equal Opportunities International*, 27(3), 237-257.

- Bressler, M. S., & Bressler, L. A. (2007). A model for prevention and detection of criminal activity impacting small business. *The Entrepreneurial Executive*, 23-36.
- Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organisational analysis* (Vol. 248). London: Heinemann.
- Cassell, C., & Symon, G. (1994). Qualitative research in work contexts. In C. Cassell, & G. Symon, *Qualitative research in organizational research* (pp. 1-13). London: Routledge.
- Charles, P. K., & Christopher, P. (2006). Religion in the workplace and implications for financial fraud and organisational decision making. *Journal of Management, Spirituality and Religion*, 305-318.
- Cichon, S. (1999). *Modeling in health financing-compendium of qualitative technique for health care financing*. Geneva: ILO.
- Coccia, R. (1997). Seeking a Cure for Health Care Fraud. *Business Insurance*, 31.
- Crotty, P. L., McGrath, J., Berrebi, D., Diebold, J., Adida, C., & Altieri, D. C. (1998). Developmentally regulated expression of the novel cancer anti-apoptosis gene survivin in human and mouse differentiation. *The American journal of pathology*, 152(1), 43.
- Criel, B. (1998). District-based health insurance in Sub-Saharan African Part 1: From theory to Practice. *Studies in health services organisation and policy*, 9. Anwerp, Belgium

- Grayson, C. J. & O'dell, C. (1998). If only we knew what we know: Identification and transfer of internal best practices. *California management review*, 40(3), 154-174.
- Cressey, D. R. (1973). *Other people's money: A study in the social psychology of embezzlement*. Montclair: Patterson-Smith.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. New York: Routledge.
- Dominey, J., Fleming, A. S., Kranacher, M. J., & Riley, M. J. (2012). The evolution of fraud theory. *Issues in Accounting Education*, 555-579.
- Duffield, G. M., & Grabosky, P. N. (2001). The psychology of fraud. *The Australian Institute of Criminology*.
- Europe, W. R. (2006). Approaching health financing policy in the WHO European Region. *WHO Regional Committee for fifty sixth session* (pp. 11-14). Copenhagen: WHO.
- Fisher, E. (2008). The Impact of Health Care Fraud on the United States Healthcare System. *School of Public and Environmental Affairs*, 2(4), 1-4.
- Frankfort-Nachmias, C., & Nachmias, D. (1992). *Research methods in the social sciences*. New York: St. Martin's Press.
- Frempong, O. (2011). *Assessing stakeholders' perception on National Health Insurance Scheme Medicine list in the new Juaben Municipalities*. Nkrumah University of Science and Technology, Ghana.

- Ghana, G. O. (2003). *National health insurance act*. Accra: Government of Ghana.
- Ghana Health Insurance Review (2008). *Annual Report*. Accra: National Health Insurance Authority
- Giddens, A. (1996). *Sociology*. New York: Polity Press.
- Goodman, H., & Waddington, C. (1994). *Financing Health Care*. UK: Oxfam Press.
- Greenberg, J. (1997). A social influence model of employee theft: Beyond the fraud triangle. *Behaviour and Human Decision Processes*.
- Greenberg, J. (2002). Who stole the money and when? Individual and situational determinants of employee theft. *Organisational Behaviour and Human Decision Processes*, 985-1003.
- Grub, A. (2007). *Ghana social security scheme for health*. Accra: GNeMHO.
- Krause, J. H. (2004). Healthcare fraud and quality of care: a patient-centered approach.
- Health, M. O. (2002). *Financial analysis report for the national health insurance scheme*. Accra: National Parliament of Ghana Press.
- Holtfreter, K., Reisig, M. D., Piquero, N. L., & Piquero, A. R. (2010). Low self-control and fraud: Offending, victimization and their overlap. *Criminal Justice and Behaviour*, 188-203.
- Howe, M. A., & Malgwi, C. A. (2006). Playing the ponies: A \$5 million embezzlement case. *Journal of Education for Business*, 82(1), 27-33.

- Huber, G., Hohmann, J., & Reinhard, K. (2002). *Mutual health insurance (MHO) five years experience in West Africa; concerns, controversies and proposed solutions, Bonn: GTZ*
- ILO. (2001). *Exploring the feasibility of global social trust*. Geneva: ILO.
- Kalb, P. E. (1999). Health care fraud and abuse. *JAMA*, 282(12), 1163-1168.
- Kassem, R., & Higson, A. (2012). The new fraud triangle model. *Journal of Emerging Trends in Economics and Management Sciences*, 191-195.
- Kleinman, G. & Anandarajan, A. (2011). The impact of cognitive biases on fraudulent behaviour: the Leeson case. *International Journal of Behavioural Accounting and Finance*, 2(1), 40-55.
- Lakis, V. (2012). Problems of loss estimation and substantiation in companies. *Current Issues of Business and Law*, 319-334.
- Lasalle, R. E. (2007). Effects of the fraud triangle on students' risk assessment. *Journal of Accounting*, 74-87.
- Libermann, A., & Rolle, R. (1998). Alleged Abuses in Health Care in the 1990s: A Critical Assessment of Causation and Correction. *The Health Care Manager*, 17(1), 1-11.
- Morris, L., & Thompson, G. W. (1999). Reflections on the Government's Stick and Carrot Approach to Fighting Health Care Fraud. *Ala. L. Rev.*, 51, 319.
- McIntyre, D. (2007). *Health insurance in Ghana: Country case study*. London: Millenium Publishers.

- McIntyre, D., Garshong, D., Mtei, B., Thiede, F., Akazili, M., & Meheus, G. (2008). *Beyond fragmentation and toward universal coverage; insights from Ghana, South Africa and the United Republic of Tanzania*. New York: Bulletin of the World Health Organisation.
- Mladovsky, P., & Mossialos, E. (2007). A conceptual framework for community-based health insurance in low-income countries: Social capital and economic development. *International Journal of Insurance*, 24-39.
- Ministry of Health Ghana and welfare (2007): "Health insurance system, available at accessed (23rd November 2007)".
- MOH. (1999). *Health sector 5 year programme of work (1997-2001): 1998 review*. Accra: Ministry of Health.
- NHIA. (2012). *Annual Report*. National Health Insurance Authority, Ghana
- Nyman, J. A. (2003). *The theory of demand for health insurance*. MA: Stranford University Press.
- Offen, M. L. (1999). Health care fraud. *Neurologic clinics*, 17(2), 321-333.
- Organization, W. H. (2000). *The world health report 2000: Health systems-improving performance*. Geneva: World Health Organization.
- Osei-Akoto, I., Blanchet, N. J., & Fink, G.,(2012). The effect of Ghana's National Health Insurance Scheme on health care utilisation. *Ghana medical journal*,46(2), 76-84.

Pallant, J. F., & Tennant, A. (2007). An introduction to the Rasch measurement model: an example using the Hospital Anxiety and Depression Scale (HADS). *British Journal of Clinical Psychology*, 46(1), 1-18.

Pesakovic, G., AppiahFening, F., & Amaria, P. (2008). Relationship between quality management practices and the performance of small and medium size enterprises (SMEs) in Ghana. *International Journal of Quality & Reliability Management*, 25(7), 694-708.

Pfister, J. (2009). The individual level: Managing organisational culture for effective internal control. *Current Issues of Business and Law*, 145-158.

Rezaee, Z. (2005). Causes, sequences and deterrence of financial statement fraud. *Critical Perspectives on Accounting*, 277-298.

Sage, W. M. (1999). Fraud and abuse law. *JAMA*, 282(12), 1179-1181.

Salma, G., Khoja, S., Scott, R. E., Casebeer, A. L., Mohsin, M., Ishaq, & A. F. M., (2007). e-Health readiness assessment tools for healthcare institutions in developing countries. *Telemedicine and e-Health*, 13(4), 425-432.

Sikora, D. M., Hartley, S. L., & McCoy, R. (2008). Prevalence and risk factors of maladaptive behaviour in young children with autistic disorder. *Journal of Intellectual Disability Research*, 52(10), 819-829.

- Soroka, S. N. (2007). *Canadian perceptions of the health care system*. Toronto: McGill University Press.
- Sparrow, M. K. (1996). Health care fraud control: understanding the challenge. *Journal of Insurance medicine-New York-*, 28, 86-96.
- Stanton, T. H. (2001). Fraud-and-abuse enforcement in Medicare: finding middle ground. *Health Affairs*, 20(4), 28-42.
- Subramaniam, N., & Rae, K., (2008). Quality of internal control procedures: Antecedents and moderating effect on organisational justice and employee fraud. *Managerial Auditing Journal*, 23(2), 104-124.
- Sultz, H. A., & Young, K. M. (2006). *Health care USA: Understanding its organization and delivery*. Jones & Bartlett Learning.
- Turner, J. L., Mock, J. T., & Srivastava, P. R. (2003). *An analysis of the fraud triangle*. The University of Memphis working paper.
- Tabachnick, B. G., Fidell, L. S., & Osterlind, S. J. (2001). Using multivariate statistics
- Takoradi Mutual Health Insurance (2009-2012). *Annual Report*, Western Region Ghana.
- Waddington, C. J., & Enyimayew, K. A. (1990). A price to pay, part 2: The impact of user charges in the Volta Region, Ghana. *International Journal of Health Planning and Management*, 287-312.
- Welfare, M. o. (2004). *Legislation instrument on national health insurance*. Accra: National Parliament of Ghana Press.

WHO. (2001). *Macroeconomics and health: Investing in health for economic development*. Geneva: WHO.

WHO. (2008). *Health systems: Improving performance*. The World Health Organisation, 2008. Geneva.

Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *The CPA Journal*, 74(12), 38.

Yates, J. R. (2004). A model for random sampling and estimation of relative protein abundance in shotgun proteomics. *Analytical chemistry*, 76(14), 4193-4201.

Yu, F., & Yu, X. (2011). Corporate lobbying and fraud detection. *Journal of financial and Quantitative Analysis*, 18-65.

Zarkovic, S. S. (2008). Note on the history of sampling methods in Russia. *Journal of the Royal Statistical Society. Series A (General)*, 119(3), 336-338.

APPENDICES

Appendix 1: Questionnaire

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING & FINANCE

QUESTIONNAIRE ON STAKEHOLDERS PERCEPTION ON HEALTHCARE CLAIMS FRAUD CONTROL AT TAKORADI MUTUAL HEALTH INSURANCE SCHEME

Dear Sir/Madam,

This questionnaire aims at soliciting information for a research work being undertaken to examine stakeholders' perception on healthcare claims fraud at Takoradi Mutual Health Insurance Scheme in partial fulfilment of the requirement for Master of Business Administration Degree in Finance. Your opinions are important to the study and any information you provide will be treated as confidential and for academic purpose only. Thank you for your co-operation.

SECTION A

Part I: COMMUNICATION OF CLAIMS PAYMENT POLICY

The statements below are used to find out the extent to which TMHIS communicates claims payment policies to its stakeholders.

Please select by ticking (√) the appropriate number to indicate your level of agreement of each statement.

5=Strong Agree (SA) 1 = Weak Agree (WA)

	S A				WA
1. NHIA has laid down policies governing claims submission	5	4	3	2	1
2. Claims policies are written in clear and understandable language	5	4	3	2	1
3. Copies of NHIA claims policies have been made available to all scheme offices & providers	5	4	3	2	1
4. TMHIS has taken the necessary steps to explain claims policies to providers	5	4	3	2	1
5. NHIA claims policies are flexible & reviewable periodically to meet current aspiration	5	4	3	2	1
6. NHIA claims policies treat providers fairly	5	4	3	2	1

Part II: COMPLIANCE WITH NHIA CLAIMS PAYMENT POLICIES

The statements below will help find out how well claims policies are complied with by TMHIS.

Please select by ticking (√) the appropriate number to indicate your level of agreement of each statement.

5=Strong Agree [SA] 1 = Weak Agree (WA)

	S A				WA
1. Providers comply with NHIA claims payment policies	5	4	3	2	1
2. TMHIS abides by NHIA claims payment policies.	5	4	3	2	1
3. TMHIS regularly checks compliance with its claims payment policies	5	4	3	2	1
4. TMHIS conducts regular provider satisfaction survey regarding claims payment	5	4	3	2	1
5. Complaint desks exist for providers to register their grievances on claims related issues	5	4	3	2	1

6. Quick remedial action has been established to address policy implementation challenges at scheme level	5	4	3	2	1
7. TMHIS strictly abides by the existing claims payment policies	5	4	3	2	1
8. Incidence of claims officers compromising with providers to defraud the system do occur	5	4	3	2	1
9. Correct tariff is always sent to providers to ensure proper charging of healthcare claims	5	4	3	2	1
10. Incidence of abuses to defraud the system are found on the part of providers	5	4	3	2	1

Part III:INTERNAL CONTROL SYSTEM

The statements below are used to find out measures put in place to ensure effective and efficient vetting and payment of healthcare claims

Please select by ticking (√) the appropriate number to indicate your level of agreement of each statement.

5=*Strongly Agree [SA]*

1 = *Weak Agree (WA)*

	S A				WA
1. Scheme claims staff have adequate knowledge and skill on their job schedule	5	4	3	2	1
2. Claims staff at provider site have adequate knowledge and skill on their job schedule	5	4	3	2	1
3. Internal Auditors regularly scrutinize the financial records of scheme claims officers	5	4	3	2	1
4. Regular training on claims management is given to staff claims officers	5	4	3	2	1
5.Claims managers vet, approve and pay for healthcare claims	5	4	3	2	1
6.Claims processing manual exits to guides accounting for claims	5	4	3	2	1

7. Clinical Auditors regularly audit claims submission documentations at the provider site.	5	4	3	2	1
8. Regional monitoring and evaluation officers regularly conduct claims verification exercise at scheme office	5	4	3	2	1
9. Regional monitoring and evaluation officers regularly conduct claims verification exercise at provider site	5	4	3	2	1
10. Misappropriation of claims fund by scheme officers as well as overstatement of claims by providers are severely punished by NHIA	5	4	3	2	1

Part IV:MANAGEMENT OVERSIGHT RESPONSIBILITY

The statements below are used to find out the extent to which management of TMHIS supervise vetting, processing and payment of claims.

Please select by ticking (√) the appropriate number to indicate your level of agreement of each statement.

5=*Strongly Agree [SA]*

1 = *Weak Agree (WA)*

	S A				WA
1. Management of TMHIS conducts regular claims verification at provider sites	5	4	3	2	1
2. Management of TMHIS conducts regular claims verification at the scheme office	5	4	3	2	1
3. Management of TMHIS conducts claims file peer review exercise with sister offices in the region.	5	4	3	2	1
4. Management of TMHIS has the requisite skills and competence to handle claims related issues	5	4	3	2	1
5. Effective online claims submission	5	4	3	2	1

system exist to facilitate immediate review					
---	--	--	--	--	--

Part V: HUMAN RESOURCE CHALLENGES

The statements below are used to find out challenges that claims officers face in the discharge of their duties.

Please select by ticking (√) the appropriate number to indicate your level of agreement of each statement.

5=Strongly Agree [SA]

1 = Weak Agree (WA)

	S A				WA
1. Claims officers lack pharmacological skills to handle claims vetting very effectively	5	4	3	2	1
2. Numerical strength of claims officers is too low to effectively conduct meaningful vetting on voluminous claims received.	5	4	3	2	1
3. In terms of financial remuneration, claims officers are not well rewarded	5	4	3	2	1

to enable them perform with high degree of enthusiasm and honesty.					
4. Claims department lacks conducive office space for operation	5	4	3	2	1
5. Lack of standardised software for claims vetting renders quick and excellent vetting of claims problematic	5	4	3	2	1
6. Enough ICT equipments are not available for use by claims officers	5	4	3	2	1

SECTION B: BACKGROUND CHARACTERISTICS

The statements below are used to obtain information on demographic details of respondents.

Please tick or provide the responses to the questions in the spaces provided

1. Gender

i. Male []

ii. Female []

2. Age

.....

3. Academic background

i. HND []

ii. Degree []

iii. Masters []

4. Name of your institution / facility

.....

5. How long have you been working in the institution/facility?

.....

6. What is your current position held in the institution/facility

.....

7. How long have you occupied the current position?

.....