

**FACTORS AFFECTING PROFITABILITY OF PRIVATE HEALTH
INSURANCE IN KENYA: A CASE OF HERITAGE INSURANCE
COMPANY**

BY

TERESA WANJIKU NDUNGU

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DECLARATION

This research project report is my original work and has not been presented for the award of a degree in any other university.

Signed: _____ **Date:** _____

TERESA WANJIKU NDUNGU

L50/72001/2011

This research project report has been presented for examination with my approval as the appointed university supervisor.

Signed: _____ **Date:** _____

MR.LEVI MATSESHE

Lecturer - Department of Extra Murial Studies

University of Nairobi

DEDICATION

I dedicate my project to my father Daniel Ndungu and my sister Lillian Muthoni Ndungu. Thank you for your understanding, moral support, patience and prayers that saw me through the entire MA program.

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ABSTRACT

For many years, health insurance business has reflected poor performance and sometimes heavy losses. Some of the factors that have continued to contribute to the poor performance include poor pricing patterns, poor underwriting practices, high cost of healthcare services, fraud, weak regulatory framework, inadequate information management systems among others. According to industry stakeholders, the losses being incurred by companies offering health insurance is on a steady rise and far outstretches globally accepted levels. This purpose of the study was to analyze factors affecting profitability of private health insurance. The objectives of the study included: to investigate the extent to which pricing patterns affect profitability of Heritage health division, establish the extent to which the health underwriting practices affect profitability of Heritage health division, investigate the extent to which health insurance fraud affects profitability of Heritage health division and to establish the extent to which the health regulatory framework affects profitability of Heritage health division. The study applied a case study research design and took a holistic approach on Heritage health division. The respondents were the managers of Heritage Insurance Company. The data collection instruments that were used were semi-structured questionnaires and they were complemented with interviews. Analysis of the data was done using descriptive statistics and linear regression. The findings revealed that all the independent variables had a positive correlation with the dependent variable health regulatory framework having the highest correlation of 0.780 followed by pricing patterns with a correlation of 0.737 and then health underwriting practices with a correlation of 0.656. Fraud had the least correlation of 0.616. The research established with a 99% confidence that all the independent variables significantly affect profitability of Heritage health division. The study established that the regulatory framework and pricing patterns had the greatest effect on profitability of Heritage health division. It also established that the underwriting practices had a significant influence while fraud had the least effect on profitability on Heritage health division as Heritage had effective ways of mitigating fraud. The study recommends that when pricing the health insurance covers, the management should be considerate to the regulatory, economic and social environment. Through this they can achieve a competitive edge through balancing in order to make the prices attractive to new clients as well as the existing clientele.

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ACRONYMS AND ABBREVIATIONS

AKI	-	Association of Kenya Insurers
ECLAC	-	Economic Commission for Latin America and the Caribbean
GAO	-	General Accounting Office
GDP	-	Gross Domestic Product
IBNER	-	Incurred But Not Enough Reported
IBNR	-	Incurred But Not Reported
IRA	-	Insurance Regulatory Authority
NHCAA	-	National Health Care Anti-fraud Association
ROA	-	Return on Assets
ROE	-	Return on Equity
ROIC	-	Return On Invested Capital

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The term health insurance is a type of insurance that covers medical expenses that are incurred by the insured. Health insurance provides coverage for medicine, visits to the doctor or emergency room, hospital stays, nursing homes and other medical expenses (Porter, 1979). The insured pays premium to get health insurance policy. These policies offered by the insurance companies differ in what they cover, limits of coverage and the options for treatment available to the insured. Private health insurance is a contract between the insured and the insurance company where the insurance company will pay for the medical expenses if the insured gets sick or hurt.

Private health insurance plays a large and increasing role around the world and is significant in countries with widely different income levels and health system structures. There is a wide variety of health systems around the world. In some countries, there is a concerted effort among governments, trade unions, charities, religious, or other co-ordinated bodies to deliver planned health care services targeted to the populations. Many developing countries have private health insurance markets which are serving their middle class; and may also afford some degree of financial protection for the poor (particularly those that are more commonly characterized as community health insurance schemes). Many developed countries use supplementary private insurance to fill gaps in their publicly funded systems offered by governments and pay for increasing health services demand, Edebalk, Gunnar and Olofsson (1999).

In the nineteenth century, the only significant forms of private health insurance in Western Europe were provided by mutual associations, employers, guilds or unions on a voluntary basis. For example, 10% of Sweden's workforce was covered by voluntary private insurance schemes called "Friendly Societies" Edebalk et al (1999). In Germany, Bismarck established the first national social insurance system by knitting together voluntary pre-existing occupationally and industrially based sickness funds, Glaser (1991). The United States is the only rich country that relies on voluntary private insurance to provide coverage to most of its people. Over 70% of the population obtains health coverage through private insurers, with almost 64% of this through employment-based insurance plans, Docteur, Suppanz, and Woo (2003).

Latin America has the most countries with private insurance coverage. Over the past two decades, Latin American countries have undertaken many reforms of their health care systems, and private insurance has sometimes been an explicit strategy to attract private funds into the health sector. Several countries have encouraged investment from foreign insurers and managed care companies, by opening their health insurance markets, however, most countries have failed to enact adequate regulatory controls to preserve equity and ensure consumer protection, Laver (2000). Recently there have been efforts to remedy this by placing requirements on insurers for solvency, equitable rating methods, and standard benefit packages. Despite this, enforcement of regulations remains weak and presents a challenge in many parts of Latin America, Laver (2000).

Private health insurance also exists in Africa with South Africa, Namibia and Zimbabwe funding a significant percentage of their health care costs through private insurance. Botswana, Cote d'Ivoire, Kenya, Madagascar and Mali, have large markets as well. Community health insurance schemes are also fairly extensive in some African countries, such as the *mutuelles* in Senegal, ILO-Universitas Programme, Geneva (2002). Other forms of voluntary coverage have emerged as the result of market forces and incentives from government towards the private sector. In Northern Africa and the Middle East, Bahrain, Lebanon, Morocco, Saudi Arabia, and Tunisia have significant private health insurance markets. Other countries are exploring opening their markets to domestic and foreign insurers to address the needs of their large immigrant workforces, and to deal with increasing demands for health services fuelled by rising income levels, Schieber (1997).

In 2000, seven countries stood out as funding over 20% of total health expenditures through private coverage. Interestingly, these ranged from Zimbabwe, a low-income country that spent \$171 annually per capita on health care, to the United States, which spent the highest amount on health care in the world (\$4499 per capita) World Health Organization, Geneva 2000. Each of these countries use private insurance to provide principal coverage for some segment of its population. In 2004, thirty-nine countries in the world had private health insurance exceeding 5% of total health expenditures. As noted above, almost half (46%) of these countries are in the low and lower-middle income categories Savedoff, W. and Sekhri, N. (2004).

1.1.1 The Insurance Industry in Kenya

Part one, section 2(1) of the insurance act, CAP 487 of the laws of Kenya defines insurance business as a business of undertaking liability by way of insurance (including reinsurance), in respect to any loss of life and personal injury and any loss or damage, including liability to pay damage or compensation, contingent upon the happening of a specific event.... in return for payment of one or more premiums. Basher (2002) observes that insurance is the most important form of risk management and defines it as the transfer of risk from one person (or party) to another for a specified premium. Insurance, he notes plays an important role in the political, social, and economic development of a society by offering diverse benefits to individuals, groups, countries and the world in general.

There has been an increasing cost of medical care in Kenya which has forced health insurance companies operating in the country to alter their business models to maintain revenues and improve performance. In addition to pushing up insurance premiums, health insurance providers are increasingly focusing on the micro-insurance sector to create a new income stream. Additionally, there are increasing partnerships between companies in order to provide low cost services. Firms have also introduced co-payment systems, which require patients to pay for a portion of their treatment costs.

Much has been written about the performance and sustainability of health insurance business by the insurance industry in Kenya after consistent heavy losses posted across the industry for several years (IRA industry results analysis, 2010). In September 2010, it was revealed that over a period of three years, medical costs in Kenya had risen at an average rate of 20% per annum, with the increase attributed to a steep rise in doctors' fees after the pricing guidelines developed by the Medical Practitioners and Dentists Board collapsed. Consultation fees for general practitioners stood at KES1,200 up from KES900 in 2009. Fees for specialists such as gynecologists, dentists and oncologists were between KES2,000 and KES3,000 up from KES1,500 in 2009. In 2011, hit by rising inflation and the increase in the price of medicines and medical devices, the majority of which are imported, and the subsequent increase in the cost of operations, Kenya's top hospitals raised bed and consultation charges. This translates into a 10-40% increase in charges in the last four months of that year (IRA industry results analysis, 2010).

According to the Association of Kenya Insurers (AKI), only five out of the 16 medical insurance providers in Kenya made an underwriting profit in 2009, with the loss reaching KES235.8million. Highlighting continuing operational challenges, the association's report for 2010 said the medical insurance sector had the highest loss ratio in the industry of 81.5%. Net earned premiums reached KES5.9billion and net incurred claims reached KES4.8billion. It was followed by private motor insurance at 74.9% and commercial motor insurance at 58.8%. The loss ratio is the ratio of what an insurance company pays in benefits and associated expenses against what is collected in premiums, expressed as a percentage, AKI annual report (2009).

Referring to the inflationary climate in 2011, Peter Nduati, chief executive of insurance provider Resolution Health East Africa, said: 'We are being hit by costs of diagnostic procedures and medicines that have increased by 40% and 30%. Medical insurance premiums are bound to go up on renewal and we, in the mean time, expect very high loss ratios for insurers.' Insurance companies that have been forced to bear the immediate costs in healthcare have said the cost of health premiums could rise by up to 22%, in line with the pace at which the cost of medical services is rising.

1.1.2 The Heritage Insurance Company Limited

The genesis of the Heritage Insurance Company can be traced to 1908. Heritage provides innovative general insurance protection solutions for both corporate and individuals to help meet clients' needs. The Heritage Insurance Company offers short term insurance policies with a maximum period of one year. The insurance policies offered include insurance against commercial fire, personal and corporate accident cover, motor insurance, marine insurance and health insurance. Personal and corporate insurance is the class that makes the highest profits for Heritage followed by Marine and Commercial fire insurance. Motor and health insurance are considered to be the most risky classes of business which normally have huge losses, though not always as they are not predictable.

Table 1.1 Profits earned at Heritage, health division for the last five years.

YEAR	PROFITS EARNED(Millions)
2012	73.53
2011	-122.35
2010	-23.54
2009	0.59
2008	11.52

Like all other Health insurance companies, there have been tremendous losses in this line of business in Heritage Insurance Company. For many years, the Heritage health division has reflected poor performance and sometimes heavy losses, yet the company has continued to underwrite the risk.

1.2 Statement of the Problem

For many years, health insurance business has reflected poor performance and sometimes heavy losses. Some of the factors that have continued to contribute to the poor performance include poor pricing, poor underwriting practices, high cost of healthcare services, fraud, weak regulatory framework, inadequate information management systems among others. According to industry stakeholders, the losses being incurred by companies offering health insurance is on a steady rise and far outstretches globally accepted levels. In 2010, for example, a company offering medical insurance was 85 per cent likely to incur a loss on the policy against the globally accepted standard of 50 per cent risk ratio.

Figures from AKI annual report 2010 show that the health insurance industry recorded losses of over Sh530 million, a situation aggravated by the high amounts that go to settling medical claims. Data from the Kenya Association of Manufacturers indicate that health insurance has the highest loss ratio of 81.5 per cent compared to other business lines. In spite of a review that saw medical premiums reach Sh7.4 billion in 2010, the industry ended up with a loss of Sh530 million. The segment had returned a loss of Sh236 million in 2009 out of the Sh5.9 billion premium it collected over the period. Firms that underwrite health insurance have been forced to

turn down mega deals because medical claims consistently exceed the premiums and in turn affect the company's performance.

Studies have been done on performance of the insurance industry in Kenya. Kariuki G.N, 2007 carried a study on the key success factors for firms in the insurance industry in Kenya. His study revealed that the insurance companies in general need to apply marketing strategies that are relevant to the study in order to succeed. The Henry J. Kaiser Family Foundation, 2012 carried out a study on health insurance market reforms and how rate restrictions limit how much insurance companies can vary premiums charged to individuals and businesses based on factors such as health status, age, tobacco use and gender. From the international journal of business and social science, a group of students from Masinde Muliro University, September 2012 carried out a study on the effects of operational factors on the organizational performance in Kenyan Insurance industry. They identified the operational factors as claims, agents and brokers and company infrastructure. Their research showed that there was relationship between operating factors and organizational performance that is, among others do not affect the performance of an insurance firm significantly.

From the above studies, it can be seen that the studies have addressed the issue of performance in general of the health insurance companies and the insurance industry in general. To the best knowledge of the researcher, no study has been carried out on the factors affecting Heritage health insurance division.

1.3 Purpose of the study

The purpose of the study was to analyze the factors affecting profitability of private health insurance in Kenya.

1.4 Objectives of the Study

The study was guided by four objectives:

1. Investigate the extent to which pricing patterns affect profitability of Heritage health division
2. Establish the extent to which health insurance underwriting practices of health insurance affect profitability of Heritage health division

3. Investigate the extent to which health insurance fraud affects profitability of Heritage health division
4. Establish the extent to which the health regulatory framework affects profitability of Heritage health division.

1.5 Research Questions

1. How does pricing patterns of the health risks affect profitability of Heritage health division?
2. Which health insurance underwriting practices affect profitability of Heritage health division?
3. How does the perennial problem of health fraud affect the profitability of Heritage health division?
4. Will the available regulatory framework on the industry hinder growth of the Heritage health division?

1.6 Significance of the Study

The findings of this research will be beneficial to scholars as it would add to the existing body of knowledge in the field of Health Insurance and also act as a spring board for further research in the same area and other related areas. This study will provide empirical evidence about factors affecting the health insurance industry which can be used in academic institution as reference since a gap exists

This research will be significant to both Heritage Insurance Company and other health insurance companies in designing strategies on how to boost performance of the health line of business. The improved performance will in turn increase the business volume and Heritage's client's portfolio. It will also attempt to suggest alternative ways of engagement between the health insurance underwriters and the healthcare service providers.

The Government can use the findings to help put in place the relevant authorities to strengthen legislation in the insurance sector and information of policies on healthcare financing.

1.7 Scope of the Study

The study was centered on health insurance business at Heritage Insurance Company as a case study. This study was carried out on the insurer who is Heritage insurance Company but focused more on the health division. Information will be gathered from the managers of the company.

1.8 Limitations to the Study

The researcher had a hard time getting the top managers for the interviews because of their busy schedule. However, the researcher managed to get interview them either before or after working hours. Time was also a limitation to the study as it was inadequate especially in balancing work and school.

1.9 Organization of the study

The study was divided into five chapters where Chapter One covered background of the study, statement of the problem and objectives of the study. Chapter Two entails literature review on the factors affecting profitability of private health insurance. Chapter Three was on research methodology which includes the research design used and how the data was analyzed. In Chapter Four, the researcher collected and analyzed the data and finally Chapter Five was summary of findings, conclusion and recommendations of the study.

1.10 Assumption of the study

It was assumed that the respondents would fill the questionnaires honestly and give accurate information.

1.11 Definition of significant terms

Insurance is the equitable transfer of the risk of a loss, from one entity to another in exchange for payment. It is a form of risk management primarily used to hedge against the risk of a contingent or uncertain loss.

Health insurance is insurance against loss by illness or bodily injury which provides coverage for medicine, visits to the doctor or emergency room, hospital stays and other medical expenses.

Private health insurance is coverage by a health plan provided through an employer or union or purchased by an individual from a private health insurance company.

Profitability is the state or condition of yielding a financial gain.

Pricing patterns are the strategies that a health insurance company employs when rating their health insurance covers.

Underwriting practices refers to the process where an underwriter evaluates a proposal that comes for insurance to understand the health risks to which the underwritten member is exposed to.

Health insurance fraud occurs when any act is committed with the intent to obtain some health benefit or advantage to which they are not otherwise entitled.

Health insurance regulatory framework refers to the rules and regulations guiding the health insurance companies.

1.12 Summary of Chapter One

This chapter gives a global background of the study and statement of the problem. The chapter also gives the purpose, objectives, significance, assumptions and limitations of the study. The significant terms have also been defined in this chapter as used in the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter gives a background on the nature of demand for health insurance and the different theories that inform demand for health insurance. The chapter then gives the empirical studies on the factors affecting profitability of private health insurance and how they relate to profitability.

2.2.1 The Nature of Demand for Health Insurance

In a famous article published more than four decades ago, Arrow (1963) argued that where private markets for insurance, particularly health insurance, were absent, a strong case could be made for governmental provision of insurance. In an almost equally well known comment five years later, Pauly (1968) observed that health insurance often induces moral hazard, resulting in an inefficient reallocation of resources, and that institutionalizing such inefficiency through government regulation could potentially be welfare-reducing. Thus, moral hazard weakened the case for national health insurance. Nyman (2003) reconsiders moral hazard and offers a new perspective on the reason why consumers buy medical insurance in the first place. He acknowledges at the outset that his position is controversial in several respects.

Pauly's (1968) essay assumed a fixed individual demand curve for health care and a constant marginal cost of production. Together, these determined an efficient optimum for an uninsured patient: the marginal willingness to pay for care (as represented by the demand curve) was equal to the marginal cost of care. If the same individual were insured, however, she would perceive a lower out-of-pocket price for care (zero, if there was no coinsurance), and move down the demand curve; unless demand had no price-elasticity, the insured would then consume more units of medical treatment. The marginal cost of health care would exceed the consumer's willingness to pay for the extra units, and inefficiency would thereby be introduced. His model therefore overstates the inefficiency induced by moral hazard. In response, Pauly (1983) acknowledged that income effects might indeed matter for critically ill patients, but asserted that moral hazard among healthier consumers was still largely inefficient.

Fifteen years later, Meza (1983) argued that an ill consumer's demand curve is not the same when insured as when uninsured. Rather, the reimbursement of medical expenses provided by insurance shifts the demand curve outward just as a cash transfer would. Thus, the consumer's willingness to pay increases with insurance coverage, and Pauly's (1968) model therefore overstates the inefficiency induced by moral hazard. In response, Pauly (1983) acknowledged that income effects might indeed matter for critically ill patients, but asserted that moral hazard among healthier consumers was still largely inefficient.

2.2.2 Moral hazard theory

In subsequent articles, Nyman (1999) and Nyman and Griffin (2001) elaborated on Meza's basic insight, using indifference curves and budget constraints to illustrate the difference between efficient and inefficient moral hazard. Nyman (2003) pursues this idea even further. He sought to expand this analysis of moral hazard into an entirely new theory of the demand for health insurance. His new theory postulates that the central rationale for buying insurance is the individual's desire to obtain an income transfer from the risk pool if she becomes ill. This is a valid observation, but it begs the question of why the consumer would pay a loaded premium upfront for a smaller expected transfer in the future. One possibility is that the consumer seeks to smooth out consumption (or wealth) across time by sacrificing a little when healthy to be compensated in the event of injury or illness; that is, to avoid the risk of a potentially large and perhaps unaffordable medical bill in the future. In that case, however, the consumer exhibits the classic symptoms of risk aversion, which Nyman rejects. Instead, Nyman argues that the demand for health insurance is derived from the access it provides to medical care, which generates more utility than does the income spent on premiums. Thus Nyman contends that insurance buyers do not need to be especially risk averse, though he is not prepared to dismiss the principle of diminishing marginal utility, and indeed, his model requires it; hence his insistence that one can have diminishing marginal utility without risk aversion.

2.2.3 Expected utility theory

Although Nyman emphasizes the mathematical equivalence between his model and expected utility theory, he objects to risk aversion as the basis for buying insurance. He therefore delves briefly into prospect theory, where the consumer's value function is assumed to be concave over

gains and convex over losses. Framing the consumer's decision in terms of losses, that is, comparing the sure payment of an insurance premium to the uncertain expense of medical bills, Nyman (2003) concludes, 'insurance should not be purchased according to this specification.' In an appendix, he re-specifies the consumer's decision as a choice between two gains, and reconciles the purchase of insurance with the concave portion of the value function; but this seems to show that it is the concavity of the objective function (that is risk aversion) rather than prospect theory per se that drives the purchase of insurance. The concept of risk aversion need not be limited to wealth fluctuations, however, and the access motive that Nyman endorses may even be viewed as a reflection of the consumer's aversion to health risks. If the consumer knew with certainty that she would never need medical treatment, she would presumably not be willing to pay for health insurance. It is the *risk* of becoming ill (at an uncertain time and with unpredictable severity and duration) that prompts a desire for access to medical care.

2.2.4 Neo-classical welfare economic theory

In neo-classical welfare economic theory, individuals make choices to maximize their preferences over time, and the goal of society is to maximize social welfare, or aggregate preferences. It assumes that individuals make rational choices based on cost-benefit calculations under varying conditions. Neo-classical theory predicts that consumers will insure against catastrophic medical events and cover lower-cost services themselves; in reality consumers typically choose policies with low deductibles and co-payments. This approach asserts that the free market is the best way to allocate resources, as it values efficiency over equity. Risk-averse individuals are predicted to choose insurance against large risks, leaving smaller risks uncovered, thereby improving their overall welfare. As stated above, however, in empirical studies, individuals find it difficult to make such choices. Health insurance markets are also not entirely free. Insurance companies have an information advantage, which they can use to 'cherry pick' both the kinds of consumers they insure and the kinds of coverage they offer them, in order to increase their profits. In consequence, more comprehensive coverage tends to be confined to wealthier individuals, reducing the pooling of risk across the population. Conversely, poorer individuals often fail to choose coverage that meets their health needs (Ruger 2007).

2.2 Pricing patterns of health insurance

Pricing of insurance is through premium. Premium is the monthly fee that is paid to an insurance company to provide coverage. Health insurance premiums represent a contractually agreed upon amount to be paid for a defined set of health benefits such as doctor visits, hospitalizations, and medications and is defined period of time usually a year. Premiums charged by health insurance companies represent actuarial estimates of the amount that would be required to cover three main components which include the expected cost of the health benefits covered under the plan, the business administrative costs of operating the plan, and lastly the profit margin consistent with the strategic business goals of the company. Target profit margin is a component of premium rates. This may be raised or lowered as insurers' desire to be more profitable or to be more competitive to gain market share. The fourth and final component to the premium calculation involves adjustments upward or downward to reflect several miscellaneous factors, such as responding to prior gains or losses, strategically responding to competitors (that is pricing lower to gain market share), hedging against uncertainty risks created by a changing regulatory environment, and other factors often collectively described as the underwriting cycle. These are all estimated in advance, and the accuracy of the estimates ultimately determines the underwriting results Newsom and Fernandez (2011).

Premiums may vary for different individuals with the same health benefits package from the same insurance company. Each variation is referred to as a premium rate. Rating methodologies generally vary between health insurance market segments and may have additional state-specific variation due to differences in state rate regulations. Generally, the more generous the benefits package the higher the premiums will be. In addition to paying for medical claims, premiums are expected to cover the operational costs of the insurance company. Health insurance companies generally are complex organizations requiring specialized human resources and information technology to perform the functions of developing, marketing, and operating a health plan or insurance policy Newsom and Fernandez (2011).

The uncertainty about frequency and severity of claims makes the pricing task of insurance product very difficult. The health insurance company has to make use of stochastic models which are based on theory of probability. Based on the past data (experience), these model help

them in making prediction about the likely number of claims that are expected to be reported as also about the average claims size. The expected claims cost is worked out by multiplying the two. The claims cost must also take into account the provision for Incurred But Not Reported (IBNR) and Incurred But Not Enough Reported (IBNER) claims, Qaiser (2012).

Inflation must also be factored in pricing. The pricing will also depend on the terms, conditions, special warranties, and scope of coverage. Higher deductibles and reduced coverage will obviously attract lesser premium. Pricing should also be sensitive to the business, regulatory, economic and social environment. Balancing has to be done to make the price competitive on the one hand and actuarially adequate (alignment of risk with price) that is economic price on the other hand. Yet another pricing aspect is, the pricing philosophy should be based on system of loading and discount depending upon how the policy performs. It must encourage loss control. The price must also factor “margin for adverse deviation.” The pricing philosophy must address the regulatory concern of rating adequacy, nondiscriminatory and non-excessive pricing. The price should be stable over a period of time. While talking about pricing, it should be appreciated that rates are ultimately quoted by companies based on the competitive environment, the reality of risk / loss exposures are same for all. After having fixed the price, the next issue is to examine the acceptance in relation to the underwriting capacity and also if so warranted how to increase this capacity and the cost of the same. Underwriting capacity refers to the maximum premium that an insurance company can go for against the specified level of capital because of regulatory requirements and also dictated by prudence, Qaiser (2012).

Just as premiums must be adequate to pay for expected health care use, they also must be sufficient to compensate insurance carriers for taking on the financial risk associated with providing coverage. The final premium rate calculation often is adjusted to reflect several other factors, such as making up for a previous financial loss and providing excess capital to manage various risks generally regulated under state solvency standards. State regulators have adopted solvency standards to protect consumers by requiring insurance companies to keep certain reserves of capital to protect against asset risks, underwriting or insurance risk, and business risks. Without this required safety net of reserved cash, a health insurance company could go

bankrupt if it experiences unforeseen losses, thus resulting in its consumers being placed at full financial risk for their medical claims Newsom and Fernandez (2011).

From above, it is clear that premiums are the basis for insurance income and it is from these premiums that an insurance company can make profits. It is unfortunate that competition in the insurance industry has pushed many insurers to adopt the unconventional strategy of undercutting premiums just to win business, according to the Business & Financial Times (2012). Currently, there are about 42 licensed insurance firms in the country who are all competing in a market that has low insurance penetration rate. The low penetration of insurance in the country has been hampered by the inability of some insurers to honor genuine claims when they fall due. And the current trend of undercutting could further dent the image of an industry that is struggling to shrug-off bad perception among the public in regard to declining claims.

When pricing insurance, the insurers have to consider the risk being covered. The premiums charged should be compared to the risks. The insurance company should be able to pay for any claim that occurs in regard to the risk. So if an insurance company carries too many benefits to the client without taking the necessary premium and there is a claim, the company will be at a risk of losing money thus making losses in the long run. Other considerations include the age of the plan members, size of the group to be covered and the past claims experience if available. On the basis of age, more premiums are charged on the older members to take care of the chronic diseases and their low immunity. The smaller the group being covered the higher the premium compared to the bigger groups while in the case of claims experience, the insurer will be able to pre-determine how the claims utilization of the members will look like and this will assist them when pricing. All these is done to ensure that the health insurance companies will be able to do the correct pricing and in turn be able to pay for any claims that occur and at the same time be able to make profits (McGuire et al 2012).

2.3 Underwriting Practices of health insurance

For a general insurance company, underwriting business is the basic core activity. All other activities, in fact, emanate from this core activity only. Underwriting basically refers to the process of evaluating a proposal that comes for insurance to understand the risks to which the

underwritten object is exposed to. The risk can either be physical risk or moral risk. The physical risk is related to the physical characteristics of the insured object that may increase the possibility of a claim. For instance in health insurance, an individual with a history of cancer possess a physical risk that increases the individual's probability of dying sooner than an individual of the same age and sex who does not present the same medical history. On the other hand, the moral risk is related to the applicant's reputation, financial position or criminal record, Macedo (2009).

When underwriters evaluate applications for insurance they follow a very thorough thought process to identify the moral and the physical risk. Another important aspect that underwriters have to deal with while assessing an application is the asymmetric knowledge of the risk. Individuals will always know more than anyone else about the perils to which their own goods, businesses or health are exposed to. This insider knowledge could be misused in the form of misrepresentation or non disclosure of important facts about the object to be insured thus not allowing the underwriter to properly assess the full extent of the risk. To be able to properly assess the risk insurance companies have developed underwriting guidelines to which all underwriters must abide. Every insurance company develops its own guidelines. It is standard for insurance companies to have guidelines or selection tables that identify various classes according to the likelihood of a claim. Further, if a risk does not meet any of the classes mentioned then the risk is declined. An example of the guidelines is the substandard class where there are medical conditions that do not lend themselves to the use of exclusions, for example hypertension, or diabetes. For such conditions an extra premium will be added to the standard premium to cover the higher risk. Another example is the limited condition guideline. This is a type of exclusion rider which provides some type of coverage for a specific condition without altering the other benefits that were applied for. The underwriter may consider extending the coverage to a condition on a limited basis rather than completely excluding it. Based on the evaluation done by the underwriter a decision is to be taken on the acceptance of proposal or otherwise. If it is to be accepted, at what price and on what terms, conditions and coverage, this process ends with the issue of policy documents, Macedo (2009).

When an underwriter does not follow one or two of the underwriting guideline, he or she may cause the company an underwriting loss which has an effect on the profitability of the insurance industry. For health insurance, medical checkup and diagnostic test may be insisted upon. Moral hazard aspects are difficult to assess. But for big corporate clients, it is worthwhile to examine their corporate governance, risk management philosophy, safety and investigation mechanism and above all the quality, skill and experience of manpower in handling and minimizing loss. Underwriters analyze information on insurance applications to determine whether a risk is acceptable and will probably not result in an early claim to the insurance company (Kipp, Cookson, and Mattie (2003).

Insurance companies are always exposed to ‘adverse selection’ where a member takes up health insurance cover because they know they have a certain pre-existing condition or chronic condition. In most cases it happens when the client does not disclose this information during inception and the underwriter will not be able to consider it. This can result into huge claims which can surpass the premiums paid for the members and hence it affects the profitability of the health insurance company. Whether it is proposal form, questionnaire or risk inspective, the idea is to get all relevant information for an informed underwriting. Insurance companies have to be on their guard for adverse selection and moral hazard aspect, Qaiser (2012).

The underwriting objective must be in line with overall corporate objective. It should be appreciated that long term basic objective of any underwriting policy is ‘penetration’ and ‘profit’. Volume and profit are necessary for survival of the company as also to protect the interest of shareholders and policyholders. Poor underwriting practices results into poor performance of the health insurance company leading to low profitability.

2.4 Health Insurance Fraud

Health care fraud, based on the definition of the NHCAA (National Health Care Anti-fraud Association), is an intentional deception or misrepresentation made by a person or an entity, with the knowledge that the deception could result in some kinds of unauthorized benefits to that person or entity (Alleyne, 2006). On its company website, The Standard Life Assurance Company of Canada (2008) defines fraud and insurance fraud as the intentional use of deception

to obtain an unjust or illegal advantage for one party, or parties, to the detriment of another. Insurance fraud involves insurance claims being filed with the intent to defraud an insurance provider and by extension, its clients.

The NHCAA estimated conservatively that at least 3%, or more than \$60 billion, of the US's annual health care expenditure was lost due to outright fraud. Fraud and abuse have led to significant additional expense in the health care system of the United States. Health care has become a major expenditure in the US since 1980. According to a report by the GAO (General Accounting Office) to Congress in 2004, annual health care expenditures were approaching two trillion dollars, which accounted for 15.3% of the GDP (Gross Domestic Product). While no firm figures are available, the Canadian Health Care Anti-fraud Association estimates that between 2% and 10% of all healthcare dollars are spent fraudulently. Considering only the private healthcare expenditures estimated at close to \$50 billion, between \$1 billion and \$5 billion is lost by insurers every year (Maxwell, 2008). The size of the health care sector and the enormous volume of money involved make it an attractive fraud target. Not only is the financial loss a great concern, fraud also severely hinders the US health care system from providing quality and safe care to legitimate patients. Therefore, effective fraud detection is important for improving the quality and reducing the cost of health care services.

Fraud and abuse of private healthcare benefits has three perpetrators. Fraud can take place when an individual patient perpetuates a fraud scheme against his or her own health plan, also called beneficiary fraud when the treatment providers and medical equipment vendors act on their own by using to their advantage a benefits plan, also known as provider fraud, and when there is collusion between the providers and patients, which essentially is a combination of provider and beneficiary fraud, but which opens the door to whole new sets of possible schemes to defraud the insurer. One of the greatest challenges for the insurer is to properly identify and prove whether or not the plan member is involved in the fraudulent or abusive scheme. All members usually plead that they were innocent victims (Busch, 2008).

Beneficiary Fraud is the most common type of fraud engineered by plan members. This type of fraud invariably falls into four categories which include malingering where the plan members

exaggerate illness or injury to collect additional health benefits (more widely present in disability benefit fraud). There is also doctor shopping or pharmacy shopping which involves sharing drug cards with non-members, purchasing drugs on behalf of non-members; abusing narcotics by 'shopping' different doctors/pharmacies to obtain prescriptions and purchase drugs, which also usually involves addiction or resale on the streets; and shopping for doctors until one will provide a prescription for the medical equipment or treatment that is not medically necessary (Maxwell, 2008).

The next category of beneficiary fraud is misrepresenting dependents such as creating 'non-existing' dependents, or adding as dependents non-related members while lying about their relationship with the member; maintaining eligibility for individuals not qualified for benefits such as formerly dependent children who cease to qualify under the terms of the plan (that is by being dishonest about the student status of a dependent in order to maintain coverage); and failing to coordinate benefits with the insurance carrier of a spouse by, for example, submitting the same 'original' invoice to the member's insurer and the spouse's insurer without disclosing coordination of benefits ('double-dipping') which can result in a claim being reimbursed at more than 100%. The last category is plan members getting involved in false claims for example using the credentials of legitimate practitioners or creating fake ones for services never rendered. The receipts often look very legitimate showing the name and credentials of a legitimate practitioner. Some fraudster will provide false contact information on the receipts in order to fake a real clinic and/or impersonate a practitioner legitimate practitioner when contacted. The member can also falsify the diagnostics on a prescription to reflect a condition covered under the plan; and sometimes tampering with receipts to claim a higher amount (Maxwell, 2008).

Provider fraud is committed by medical service providers which usually takes different forms. Some of them include billing for services not rendered for example pharmacist who bill for drugs that were not dispensed; the insured member who reached the benefit maximum but requests and obtains a receipt under the spouse or children benefits in order to maximize coverage illegally (a certain degree of collusion with the patient is usually necessary for this scheme to operate – the insured member is not out-of-pocket and the provider can invoice for additional services and keep his customer satisfied); dentists that bill insurers for treatments they never performed and

they send the insurer forged bills for fake treatment, medicine and supplies they never used. These schemes are possible since the insurers often allow dentists to invoice them directly rather than requesting that the members pay for the services up front and submit their claims thereafter for reimbursement by the insurer. This process is called “Assignment of Benefits”, which is a value-added service for the plan members and a service usually required as part of the benefit package since the approach is common among all insurers, but it also opens the door to provider fraud. Another form of provider fraud is providing treatments that are not medically necessary for example dentists who perform work that is not required, dishonest dentist performing useless surgery on a perfectly healthy patient to hike his/her own insurance billing where the dentist removes healthy teeth, does root canals that aren’t needed, and drills for cavities that do not exist or physiotherapist or chiropractor maximizing visits even if not necessary among others (Alleyne, 2006).

The other category of fraud is collusion. Many of the schemes above can be slightly ‘modified’ to allow collusion and benefit both the plan member (patient) and practitioner (service provider) for example licensed practitioners preparing false receipts for a fee. If questioned, the practitioners promise to confirm having treated the customer. Also providers and members mutually agree to modify the nature of the treatment to appear on the invoice in order to maximize reimbursement to the member then they can share the money. Fraud schemes involving collusion are on the rise and have the added ‘benefit’ for the fraudsters involved and are very difficult for the insurer to detect. It is very difficult (even sometimes impossible), time consuming and costly for an insurer to attempt proving that treatments were not provided when both the practitioner and plan member say otherwise (Ching and Alger (2003).

The consequences of fraud and abuse of health benefit plans are insidious. As the claims experience deteriorates over the years, and if the same coverage is maintained, the cost of the plan will increase significantly and premiums will increase in order to make up for the cost of illegitimate or abusive claims, making coverage less affordable for both the plan sponsor (employer) and the plan members (employees) who often share the cost of the plan with their employer. Fraud also affects the profitability of Health insurance as most of the premium will be used to pay the ‘fraudulent’ claims which can surpass the premiums paid.

2.5 Health Insurance Regulation

Regulation means to control by means of rules or principles. The rules set out the desired behavior while the regulatory administration oversees conformity to the regulation. Regulation allows a government to formalize and institutionalize its commitments to protect consumers and investors. Governments undertake regulation of insurance companies to protect consumers, promote allocative and productive efficiency, minimize informational rent (due to information asymmetry between regulator and firm), and to avoid regulatory capture and develop credible commitment. The key roles that regulation can play within the health sector include the control of market entry and exit, control of competitive practices, control of market organization, control of standards or quality, and ensuring safety. In most cases, regulation is a response to problems of market failure and is therefore aimed at correcting the failures through either very specific actions, which can include measures of functional integration and separation, control of pricing and possibly investment and quality, or a legal prohibition of the exercise of potential monopoly power (ECLAC, 1996). Regulatory intervention may also involve legal restrictions or controls, which the players in the industry must conform to. In addition to informal rules, the healthcare sector has formal rules and codes of conduct and guidelines that can lead to punishment when violated. The overall government agency for regulating healthcare provision is the Ministry of Health.

As noted in ECLAC (1996), when a government allows the private sector to provide goods and services, it may also want to influence private sector behavior. With increased liberalization of markets over the last few years, health services have mainly been left in the hands of private sector. This has raised widespread interest in the role of regulation in achieving positive benefits from the private sector. There has been an assumption, for example, that liberalization leads to competition such that prices would tend to drop. However, price competition does not necessarily mean quality competition. As Kumaranayake (1998) notes, quality is a crucial factor in healthcare although quality is in some cases associated with higher investment in technology and equipment. Market failure results from such asymmetry of information, moral hazard, and uncertainty, which sometimes leads to inefficiency and escalation of costs. These problems have been associated with overcharging, use of unnecessary high technology equipment, and over-

reliance on laboratory tests. Regulations are required to ensure that quality standards are met, that financial fraud and other abuses do not take place, and that those entitled to healthcare are not denied the services. Whereas this might be possible with regulation, it remains the physician's duty to reduce information asymmetry for the health market to operate efficiently for the benefit of consumers. Asymmetric information in the health sector occurs because providers of healthcare usually have much better information about health and healthcare interventions than consumers. The resultant risk of the providers capturing the market and disadvantaging consumers generates a need for government regulation Scott and Scott (2002).

In the past health insurance companies used to practice 'cream skimming' which occurs where health insurers in an unregulated free market have an incentive to reduce their costs by selecting low risk clients and declining to cover those likely to fall ill (as in HIV/AIDS cases) and require healthcare. Historically, people living with HIV/AIDS have had a difficult time obtaining private health insurance and have been particularly vulnerable to insurance industry abuses. People with HIV/AIDS also face barriers to obtaining care from qualified providers. Consistent with the goals of President Obama National HIV/AIDS Strategy, the Affordable Care Act makes considerable strides in addressing these concerns and advancing equality for people living with HIV/AIDS. In 2010, President Obama signed the Affordable Care Act into law. The health care law ends the worst practices of the insurance industry, such as dropping people's coverage when they get sick. The law also offers Americans strong consumer protections, more coverage options, and lower costs (Affordable Care Act, 2010).

In 2012 the IRA enacted a law on how much commissions should be paid for health insurance. They put a standard commission of ten percent which is lower than the rate that was being charged of between 15 – 20 percent. This has a positive effect on the health insurance companies as it reduces the expenses paid out and adds on the company's reserve from which they can pay claims. This also reflects positively on the company's profitability in general (IRA, 2012).

2.6 Conceptual Framework

The relationship between dependent variables and independent variables has been conceptualized as depicted in Figure 1.

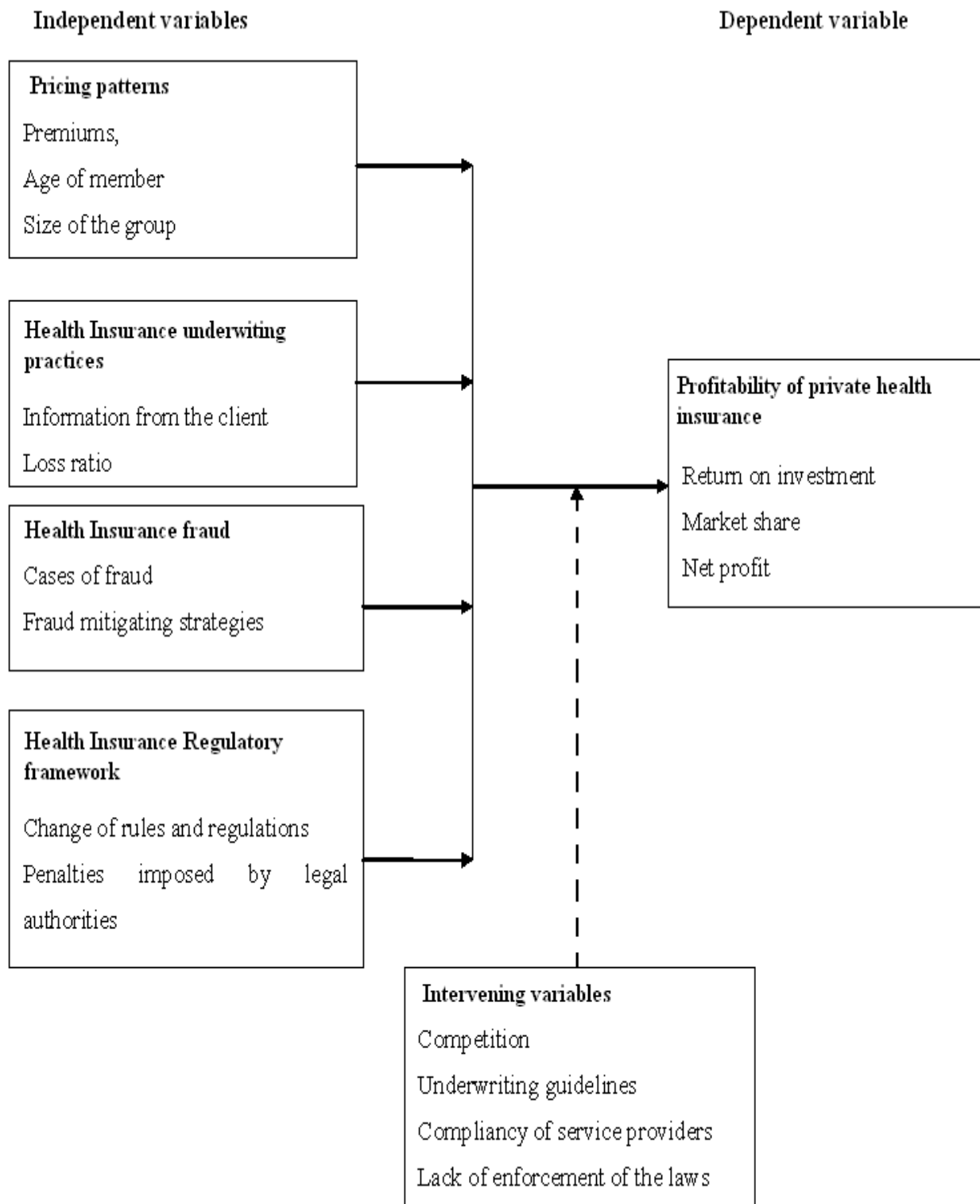


Figure 1. Conceptual framework

2.7 Summary of Chapter Two

The chapter reviewed literature and studies carried out by different authors on the different factors affecting profitability of private health insurance. The chapter first highlighted the concept of demand for health insurance and discussed the theories that inform the demand for health insurance which include moral hazard theory, expected utility theory and neo-classical welfare economic theory. The chapter also discussed the relationship between the independent variables and the dependent variable under study. On pricing and health insurance, literature reveals that pricing strategy (premium) is a significant factor affecting uptake of health insurance hence more premiums means higher profitability. On underwriting practices, it was established that underwriting is the core activity in health insurance as all other activities emanate from underwriting. Through good underwriting practices, a company makes an underwriting profit. On fraud and health insurance, it was established that there were three types of fraud which include member fraud, provider fraud and collusion between member and provider. It was evident that the huge fraudulent claims affect profitability in a negative way especially if the claims payouts on these fraudulent claims surpass the premiums received. On health insurance regulations, it was evident that there were adequate regulatory bodies that regulate health insurance. The efficiency of the regulation ensures fair business practices which in turn affects profitability.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology used based on the research design, target population of the study, data collection method and instruments and data analysis of the study. The objective of this section is to provide insight into the study.

3.2 Research design

The research design used in this study was a case study design of the Heritage Insurance Company as whole. The researcher took into consideration a holistic approach and emphasizes detailed contextual analysis. A case study design is most appropriate where a detailed analysis of a single unit of study is desired as it provides focused and detailed insight to phenomenon that may otherwise be unclear. The importance of the case study is emphasized by Young (1960) and Kothari (1990) who both acknowledge that a case study is a powerful form of qualitative analysis that involves a careful and complete observation of a social unit, irrespective of what type of unit is under study. It is a method that drills down rather than cast wide. Sekaran (2003) also argues that case studies involve in-depth, contextual analyses of matters relating to similar situation in other organizations.

3.3 Target population

The target population of the study was the Heritage Insurance Company managers. These were 55 in total and categorized as 5 directors, 7 senior managers, 15 managers and 28 deputy managers. These are the people who are engaged in the day-to-day supervision, interpretation of policies and decision making. These managers are considered appropriate to provide accurate and quality information so as to achieve the objectives of the study. Since the population was small, the researcher endeavored to include the entire population of the study.

3.4 Data collection method

The study collected both primary and secondary data. The primary data was collected using a combination of “drop and pick later” and “self administered” semi-structured questionnaires which were complemented by interviews. Parasuraman (1985) contents that personal interviews

have the potential of yielding the highest quality of data compared to other methods because supplementary data may be collected during the interview. Both open ended and closed questions were asked in the questionnaires so as to capture both qualitative and quantitative data. Follow ups was made to ensure collection of the questionnaires in time as well as assisting respondents in any difficulties encountered in completion of questionnaires. The secondary data was obtained from the secondary sources which include internal management reports, company's annual report and AKI annual reports.

3.5 Research procedure

3.5.1 Validity of the research instrument

Sanders et al (2007) defines validity as the extent to which data collection method or methods accurately measure what they are intended to measure and the extent to which research finding are really about what they profess to be about. According to Carmine and Zeller (1979) validity can be assessed using expert opinion and informed judgement. To ensure validity of the mentioned instrument, the researcher reviewed the instrument with one of the senior managers working in the health division. This assisted in examination of the content and degree to which the instrument would gather the information intended.

3.5.2 Reliability of the research instrument

It is important that the measurement instrument is reliable for it to measure consistently. According to Robson (2002) there may be four threats to reliability which include subject or participant error, subject or participant bias, observer error and observer bias. A pilot testing was carried out before the actual data collection took place. In the research the questionnaire was pre-tested by initially involving a few managers from the health division. This improved the data collection instrument. This approach is widely used by cognitive psychologists (Robson, 2002). Depending on the results of the pretest, a decision is made to proceed or to amend the instrument first.

3.5.3 Administration of the questionnaire

The questionnaires were personally administered to the respondents using the “drop and pick later” method. An introductory letter and questionnaires were given to the respondents. For the

top managers, the researcher interviewed them. The researcher made follow ups to ensure collection of the questionnaires and give assistance to the respondents in case they needed clarification.

3.6 Data analysis

Data analysis was carried out on both qualitative and quantitative data. After data was collection, examination for completeness, reliability and consistency was done on the data. The data was then summarized on the basis of the managers' responses and analyzed further using descriptive statistics such as mean, frequencies, and percentages from which the results were presented using tables. The researcher also used regression analysis so as to identify the relationship between the independent variables with the dependent variable.

The regression model

$$Y = \alpha + \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \text{ Where;}$$

Y= Profitability of health insurance

α = Constant

X_1 = Pricing patterns

X_2 = Health insurance underwriting practices

X_3 = Health insurance fraud

X_4 = Health insurance regulations

B_{1+n} = Regression coefficients

ε = the error

Was used to compute the linear relationship between the dependent variable and the independent variables

The regression analysis assumed that:

1. Each independent variable was linearly related to the dependent variable
2. The observations were independent to each other thus the sample was drawn at random

3.7 Ethical consideration of the study

The researcher ensured that the data collected from the respondents was kept confidential. This was evident in that the respondent did not have to reveal their identity in the questionnaires.

3.8 Operationalization of variables

The independent variables in this study include pricing patterns, health underwriting practices, health insurance fraud and health regulatory framework. The dependent variable in this study is profitability of private health insurance. This is depicted in Figure 2.

Objective / Research Question	Variable	Indicator	Measurement	Level of Measurement	Research Design	Data collection Method	Data analysis
How does pricing patterns affect profitability of Heritage health division?	Independent: Pricing patterns	* Premiums charged *Age of insured *Size of the group	*Premiums received *Years of the member *No. of people in a group	* Ordinal * Interval	Case Study	* Interviews * Questionnaires	*Regression analysis
	Dependent: Profitability of private health insurance	* Return on investment * Market share *Net profit	*Savings made after claims payouts *No. of renewals by existing clients	*Ratio *Interval	Case Study	* Documents Review * Questionnaires	* Regression analysis
Which health underwriting practices affect profitability of Heritage health division?	Independent: Health insurance underwriting practices	*Information from the client *Loss ratio	*Accuracy of the information received *Competitiveness of the loss ratio in the market	*Ordinal *Interval	Case Study	*Interviews * Questionnaires	* Descriptive statistics
	Dependent: Profitability of private health insurance	* Return on investment * Market share * Net profit	*Savings made after claims payouts *No. of renewals by existing clients	*Ratio *Interval	Case Study	* Documents review * Open-ended questionnaires	* Regression analysis
How does health insurance fraud affect the profitability of Heritage health division?	Independent: Health insurance fraud	*Cases of fraud *Fraud mitigating strategies	* Number of fraudulent claims *Effectiveness of these strategies	*Interval *Ordinal	Case Study	* Interview * Questionnaires	* Descriptive statistics
	Dependent: Profitability						
Will the available health regulatory framework hinder growth of the Heritage health division?	Independent: Health regulatory framework	*Change of rules and laws * Penalties imposed by legal authorities	*Difference in incidents before & after *Number of complaints from the clients	*Ordinal *Interval	Case Study	* Documents review * Questionnaire	*Descriptive statistics
	Dependent: Profitability						

Figure 2

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the findings of the study. Analysis was done using descriptive statistics and linear regression analysis and presented in tables. Each independent variable was analyzed separately in order to bring out the extent to which each of them affects the independent variables (profitability). These factors included pricing, underwriting practices, fraud and health insurance regulation.

4.2 Response rate

A total of 55 questionnaires were administered to respondents. 54 questionnaires were completely and adequately filled for inclusion in this study. This represents a 98% response rate.

Table 4.1: Response Rate

	Questionnaires Distributed	Questionnaires Received (valid)	Response Rate
Managers	55	54	98

4.3 Demographic Characteristics of Respondents

A profile of the characteristics of the respondents is presented as Table 4.2. The demographic information captured in the study related to level of management, department that the respondent worked and years of experience. The sample varied adequately in terms of the most important background characteristics. Examinations of the results revealed that majority of the respondents were deputy managers with a 54.5% of the total respondents, while 38.6% were managers and the remaining 6.8% were senior managers. 61.5% of the respondents indicated that they worked in the underwriting department whereas 27.3% worked in the finance and accounting department. The marketing department was represented by 10.2% of the respondents. This revealed that all the dominant departments were adequately represented.

The study also sought to establish the years of experience of the respondents with an aim to ascertain the credibility of the information that they had provided. Most of the respondent

indicated that they had worked in the organization for 6 to 10 years with 46% whereas 43.8% indicated that they had worked for 1 to 5 years. Most of the senior managers indicated that they had been in the organization for more than 11 years representing 6.8% and finally 3.4% indicated that they had worked in the organization for more than 20 years. This shows that majority the responses obtained was credible.

Table 4.2 Demographic characteristic of the respondents

Variables	Category	Percentage
Level of management	Senior Manager	6.8
	Manager	38.6
	Deputy Manager	54.5
	Total	100.0
Department	Accounting and Finance	27.3
	Underwriting	61.5
	Marketing	10.2
	Total	100.0
Years of Experience	0 – 5 years	43.8
	6 - 10 years	46.0
	11 – 20 years	6.8
	More than 20 years	3.4
	Total	100.0

4.4 Descriptive analysis

Descriptive analysis was performed on all variables including profitability, pricing patterns, health insurance underwriting practices, health insurance fraud and health insurance regulations. The descriptive analysis included mean and standard deviation.

4.4.1 Profitability of health insurance

Three parameters were presented as the basic measurement of profitability. These include return on investment, gross profit and profit per product. This question had some mixed reactions as some respondents indicated more than one parameter. A mean of 1.2 indicated that most respondents felt that more profits was generated from investments and thus return on investment was the most preferred measure of profitability. This does not mean that other parameters were not used to measure profitability as seen in the open ended questions where the respondents were asked about other measures of profitability and they indicated return on equity, net profit and return on assets.

When the respondents were asked to compare the profits generated from the health division with other divisions, the respondents rated it as high which represented a score of 4.1 in a five point likert scale. The managers were also asked to rate their opinion of the profitability of the Heritage Insurance Company health. The management indicated that it was moderately profitable as the parameter scored 3.8 in a five point likert scale. On broader scale, the respondents were asked to rate the overall profitability of the health division which scored a mean of 4.0 in a five point scale.

Table 4.3: Mean and standard deviations for profitability of health insurance

Item	Mean	S.d
Profitability measurement	1.2931	1.0016
Comparison of profit generated from the health division with other divisions	4.0690	.94982
Management's opinion respect to profitability of the Heritage health	3.8966	.84955
Profitability rating of Heritage health insurance division	4.0690	1.05426

*Five -point scale:

4.4.2 Pricing patterns of health insurance

The respondents were asked to indicate the extent to which pricing affects profitability. Responses obtained revealed that it actually affected profitability scoring a mean score of 4.1 in a five point likert scale. From the responses, most customers prefer getting the cheaper and most convenient cover which in this case is silver. However, from the mean scores obtained as far as the most preferred cover is concerned, there was mixed reaction since the clientele base had different taste and preference. This was evident as both silver and gold has mean scores of 2.27

and 2.17 indicating more clientele compared to diamond and platinum which had mean scores of 1.5 and 1.9 respectively indicating less clientele.

Several parameters were used to establish the factors that affect pricing of the Heritage health covers at the company. The respondents indicated that the scope of coverage was the biggest determinant of insurance pricing with a mean score of 3.8 in a four point likert scale. The other significant parameter was inflation even though it was inevitable. The respondents indicated that it was a major determinant since the premiums were adjusted in accordance to the rates of inflation.

The respondent had mixed reaction as far as the age of the insured was concerned as they indicated that the price difference between age groups was negligible a factor that scored the parameter a mean of 3.2 in a five point scale. The respondents also were concerned with the size of the group as they indicated that the charged premiums were based on per person basis and thus the group size did not have much consideration where the parameter had a mean of 3.1 in a four point scale.

Being an open market, the respondents were concerned about competition as it was a major determinant of pricing as the parameter scored a mean score of 3.4 in a four point likert scale. The other parameter that did not have much impact on pricing was claims experienced. The respondents indicated that since they had catered for that in the principle of subrogation, it did not matter the number of claims experienced. This parameter had the smallest mean score of 2.1 in a four point likert scale.

Most of the respondents indicated that price undercutting practice greatly affected the pricing of the division as this parameter scored a mean score of 4.1 in a five point likert scale. The respondents were asked to indicate the extent to which the company practices price leadership strategy to maintain their relevance in the industry. The respondents indicated that there existed some price benchmarks that were supposed to be adhered to by all the insurance companies and thus they had to follow them. On comparing the premium prices of Heritage health insurance with the industry set prices, the study discovered that the organization exercised positive price

leadership thus scoring the parameter a mean of 3.89 in the five point scale. On the same note they were asked to indicate the extent to which this strategy affected the profitability of the company. The respondents indicated that it greatly affected the profitability a parameter that scored a mean of 4.0 in a five point likert scale.

Table 4.4: Mean and standard deviations for pricing patterns of health insurance

Item	Mean	Sd.
Extent to which pricing affect profitability	4.1379	.78017
Silver	2.2759	.98465
Gold	2.1724	.95488
Diamond	2.5000	.91499
Platinum	1.9865	.72651
Age of insured	3.9655	.85519
Size of the group	3.2414	.93964
Scope of coverage	3.8966	.92804
Claims experience	2.1379	1.23111
Competition	3.4563	.94219
Inflation	3.7931	1.00160
Extent to which price undercutting affect the health division	4.0690	.84955
Extent to which extent the Company practices price leadership strategy	3.8966	.94982
Extent to which price leadership strategy positively affects profitability	4.0690	.89026

4.4.3 Health insurance underwriting practices

The respondents were concerned about the credibility of the information that they receive from the target customers as this variable had a low score of 2.03 in a five point likert. This was an indication of doubt on the accuracy of the information received. Most of the respondents also indicated that failure to obtain full disclosure from the customers, led to claims that were not legitimate as the underwriters only work with information that they receive from the customers when underwriting the health risk. This in turn had a great effect on the profitability of the health division as they were forced to pay for some claims that came about from the undisclosed a parameter that scored a mean score of 4.1 in a five point likert scale.

The respondents indicated that the underwriters had a hard time in obtaining accurate information from the customers a parameter that scored a mean of 1.9 in the five point likert scale. The respondents were also concerned about the sufficiency of Heritage health loss ratio as they rated in 3.2 in a five point likert scale as well as its competitiveness in the market. They indicated that the loss ratio is competitive in the market as it was within the required loss ratio of 65% declared by Association of Kenya Insurers. The respondents indicated that the ratio had an effect on profitability a parameter that scored a mean score of 4.0 in a five point scale. To sum it all the respondents agreed that underwriting practices have an effect on the profitability of the Heritage health division with a mean score of 4.7.

Table 4.5: Mean and standard deviations for underwriting practices in health insurance

Item	Mean	S.d
Extent to which underwriter obtain comprehensive and accurate information about the client	2.0345	.81338
Extent to which failure to obtain full disclosure from the client affect the health risk of the company	4.1379	.82367
Ease of obtaining accurate information is by the underwriters	1.9310	.87329
Sufficiency of loss ratio at the company	3.2759	1.11741
Competitiveness of loss ratio to the market	2.1034	.92804
Effect of ratio to profitability	4.0000	.83527
Extent to which the underwriting practices at the firm affect its profitability	4.7241	.64139

4.4.4 Health insurance fraud

The respondents did not have a major issue with the fraud cases in Heritage Insurance Company as this parameter had a low mean score of 2.1 in a five point likert scale. Since the respondents negated the existence of fraud in Heritage health division, most of them failed to answer the subsequent question as they did not have any comment but for those who claimed the existence of the same indicated that the most common form of fraud was member/insured fraud as the parameter had a mean score 1.13 in the five point likert scale.

The respondents were asked to indicate the frequency with which they received fraudulent claims at the health division a parameter that had a score of 1.7 in the five point likert scale which is quite low insinuating that there were few claims of that nature. The respondents were put to task with an aim of establishing if they were aware of existence of strategies to curb the vice. Most of the respondents indicated that they were not aware of the same as this parameter scored a mean of 1.4 in the five point scale. The respondents who were aware of the same were asked to comment on the efficiency of the systems in place which they rated as very efficient scoring a mean of 4.7 in a five point scale.

The respondents indicated that fraud has a great effect on the general profitability but they had mixed reaction with regards to heritage insurance as this parameter scored a mean of 3.7 in the five point likert scale.

Table 4.6: Mean and standard deviations for Health insurance fraud

Item	Mean	S.d
Extent to which fraud is experienced in the Heritage health division	2.1379	1.04739
Most common fraud at Heritage health division	1.1310	.87329
Frequency of fraudulent claims	1.7241	.83094
Awareness of controls taken by Heritage insurance company to mitigate fraud	1.4379	.94219
Efficiency of control systems in place to mitigate fraud	4.7241	.74224
Effects of fraud to the general profitability of the company	3.7931	.80893

4.4.5 Regulation of health insurance

As far as the regulation of the industry is concerned, the respondents indicated that it was adequately regulated considering the fact that there were very many government authorities that worked closely to regulate the insurance industry a parameter that scored a high mean score of 4.7 in the five point likert scale. The respondents indicated that the regulation had a positive effect on the overall profitability of Heritage health division scoring a mean of 3.68 in a five point scale since if the industry is left unchecked, players could abuse it due to its susceptibility to abuse.

The respondents also indicated that regulation was a hindrance to profitability due to the fact that the regulation authorities had set benchmarks that were supposed to be adhered to this led to a score of 4.0 in a five point likert scale. The respondents also indicated that even though regulation was a hindrance, it was more a facilitator and thus as it facilitated fair business practices which some respondents referred to as ethical business practices as the parameter scored a mean of 4.6 in the five point scale.

The respondents were concerned about the selective insurance on members with chronic illnesses which was considered a high risk to cover. Regulation on this regulation by the authorities had a great effect on the profitability of the health division scoring a mean score of 4.0 on a five point scale.

Table 4.7: Mean and standard deviations for Regulation of Health Insurance

Item	Mean	S.d
Extent to which health insurance is adequately regulated	4.7931	.61262
Effects of regulation on profitability at Heritage health division	3.6892	1.00160
Extent to which regulation is hindrance to profitability	4.0690	.94982
Extent to which regulation is a facilitator to profitability	3.8966	.84955
Extent to which regulation facilitate fair business practices	4.6690	1.05426
Extent to which regulation of selective insurance affect profitability	4.0690	.94982

4.5 Descriptive statistics of the constructs

Since a single construct in the questionnaire was measured by multiple items, the average score of the multi-items for a construct was computed and used in further analysis such as descriptive statistics, correlation analysis and multiple regression analysis.

To construct the final data set, the researcher merged the aggregated survey data set based on the means of responses as presented in table 4.8. In general, the mean score for the items in the constructs (profitability, pricing patterns, health insurance underwriting practices, health insurance fraud and health insurance regulation) were average ranging from 3.1 to 4.1 on a five likert scale.

Table 4.8: Descriptive Statistics for the constructs

Construct	Mean	S.d
Profitability	3.8571	.63478
Pricing	3.9080	.59485
Underwriting practices	3.1322	.63700
Fraud	3.0287	.63805
Health insurance regulation	4.1816	.59732

4.6 Correlation analysis

Pearson correlation analysis was conducted to examine the relationship between the variables. As cited in Wong and Hiew (2005) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8, to avoid multicollinearity. Since the highest correlation coefficient is 0.78 which is less than 0.8, there is no multicollinearity problem in this research (Table 4.9).

All the independent variables had a positive correlation with the dependent variable with health insurance regulation having the highest correlation of ($r=0.780$, $p< 0.01$) followed by pricing patterns with a correlation of ($r=0.737$ $p< 0.01$) and then health insurance underwriting practices with a correlation of ($r=0.656$ $p< 0.01$). Health insurance fraud had the least correlation of ($r=$

0.616 $p < 0.01$). This indicates that all the variables are statistically significant at the 99% confidence interval level 2-tailed. This shows that all the variables under consideration have a positive effect on the dependent variable.

Table 4.9: Pearson correlation coefficient

Variable	Correlation (r)	Significance
Pricing patterns	0.703	0.001
Health underwriting practices	0.656	0.012
Health insurance fraud	0.616	0.026
Health insurance regulation	0.708	0.000

4.7 Regression analysis

Since the measures that are used to assess the primary constructs in the model are quantitative scales, regression analysis can be used to achieve this end. Regression analysis is a set of techniques that can enable us to assess the ability of an independent variable(s) to predict the dependent variable(s).

The F-statistics produced ($F = 114.491$.) was significant at 1 per cent level (Sig. $F < 0.01$), thus confirming the fitness of the model. Therefore, there is statistically significant relationship between pricing patterns, health underwriting practices, health insurance fraud and health insurance regulation and profitability. The coefficient of determination R^2 value was .841 percent. This shows that 84.1 per cent of the variance in dependent variable (profitability) was explained and predicted by independent variables (pricing patterns, health underwriting practices, health insurance fraud and health insurance regulation).

The effect of health underwriting practices on profitability was significant ($\beta = 0.238$, $t = 1.871$, $p < 0.035$). In addition, the effect of health insurance regulation was the most important determinant of profitability in terms of size of the regression coefficient ($\beta = 0.603$, $t = 12.027$, $p < 0.000$). The effect of pricing patterns on profitability was also significant ($\beta = 0.514$, $t = 5.268$, $p < 0.0012$). Finally, health insurance fraud affected profitability of Heritage Insurance ($\beta = -0.247$, $t = -2.577$, $p < 0.000$).

It can be observed that every time health underwriting practices are increased by 1 unit, profitability is increased by 0.238 when all other variables are held constant. When pricing pattern is increased by 1 unit the profitability is increased by 0.514 when all other variables are held constant and when health insurance fraud is increased by 1 unit decreased by 0.247 when all other variables are held constant. When health insurance regulation is increased by 1 unit, profitability is increased by 0.603.

Table 4.10: Regression analysis

	Co-efficient	t-values	Significance	R Square	Adjusted R. Square	Model value	F-
Constant	.264	1.651	0.103	.848	.841	114.491	
Pricing	0.514	1.871	0.035				
Underwriting Practices	0.238	5.268	0.000				
Fraud	-0.247	2.577	0.012				
Health insurance regulation	0.603	12.017	0.000				

4.8 Summary of Chapter Four

The chapter focused on data analysis which was done using descriptive statistics and regression analysis. The independent variables were analyzed separately and their means and standard deviations presented on tables. Correlation and regression analysis was later conducted to examine the relationship between the dependent variables and the independent variables.

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSION AND
RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions and recommendations for the factors affecting profitability of private health insurance. Areas which can be further researched have also been provided.

5.2 Summary of Findings

The study revealed that more than half (56.2%) of the respondents have worked in the organization for more than 5 years indicating that they have experience in the insurance. The study revealed that 61.5% of the respondents worked in the underwriting department, while 27.3% worked in the finance and accounting department and 10.2% worked in the marketing department an indication that they were versed with the core activities related with the study. The findings revealed that the respondents' opinion on profitability of Heritage health division was relatively high scoring a mean score of 3.8 in a five likert scale.

The findings revealed that age of the insured was a major factor to be considered when determining pricing of health insurance covers at Heritage health division scoring a mean score of 3.9 in a five likert scale. On comparing the premium rates of Heritage with other stakeholders in the industry, the findings revealed that Heritage practices positive price leadership scoring the parameter a mean of 3.89 in a five likert scale.

The findings revealed that it was difficult for the underwriters to obtain accurate and comprehensive information from the client. The respondents felt that failure to obtain full disclosure from the client may cause and underwriting loss a parameter that score a mean of 4.1 in a five point likert scale. The findings revealed that health insurance fraud was not a major concern at Heritage health division as it scored a low mean of 2.1 in a five point likert scale. The findings also revealed that the control systems used by Heritage to mitigate this fraud were very efficient as this parameter score a high mean of 4.7 in a five point likert scale.

As far as health regulatory framework was concerned, the findings revealed that health insurance was adequately regulated scoring a mean score of 4.7 in a five point likert scale. The respondent also felt that the regulation facilitates fair business practices scoring the parameter a mean of 4.66 in a five point likert scale.

5.2.1 Extent to which pricing patterns affect profitability of Heritage health division

The findings revealed that pricing has a great effect on profitability with a mean score of 4.1 in a five point scale as it is from these premiums that Heritage health division gets its revenue through investing after paying all the claims and other expenses. This is in line with the findings of Business & Financial Times (2012) findings that revealed that it is clear that premiums are the basis for insurance income and it is from these premiums that an insurance company can make profits. Results from the study also revealed that age of the insured was a major determinant to be considered when pricing as it scored the highest mean of 3.9 in a five point scale on the factors affecting pricing. This is because the premiums of the Heritage health insurance cover are affected by age of the insured where older people pay more premiums. This is in line with a study conducted by McGuire et al (2012) who indicated that considerations to be put in place by insurers before pricing include the age of the plan members, size of the group to be covered and the past claims experience if available. He supported his arguments by indicating that on the basis of age, more premiums are charged on the older members to take care of the chronic diseases and their low immunity. From this the insurer will be able to pre-determine how the claims utilization of the members will look like and this will assist them when pricing and in turn be able to pay for any claims that occur and at the same time be able to make profits.

Competition was also considered to be a major factor to be considered when pricing at Heritage health division which supports Qaiser (2012) study which he advised that pricing of health insurance should be quoted based on the competitive environment. From the responses, it was evident that price undercutting greatly affected the pricing at Heritage health division. This was brought about by the competition in the insurance industry which has pushed many insurers to adopt this unconventional strategy of undercutting premiums just to win business, according to Business & Financial Times (2012).

5.2.2 Extent to which health underwriting practices affect profitability at Heritage health division

Results from the study revealed that underwriting practices at Heritage affect its profitability to great extent since the parameter had a mean score of 4.0 in a five point scale. This is because their profitability is somewhat influenced by underwriting practices. This study gets back up from a study conducted by Kipp et al (2003) who indicated that when an underwriter does not follow one or two of the underwriting guidelines, he or she may cause the company an underwriting loss which has an effect on the profitability of the insurance company. It was also evident that Heritage health division has kept in check efficient underwriting as they follow the underwriting guidelines from the insurance regulators and also their own underwriting guidelines. The study revealed that it was difficult for underwriters to get accurate and comprehensive data from the clients especially on the moral risk of the client which is related to applicant's reputation, financial position or criminal record which is in line with Macedo (2009) study.

The respondents indicated that the underwriters had a hard time in obtaining accurate information from the clients. Macedo (2009) in his study revealed that it is only the individuals who know more than anyone else about the perils to which their own health is exposed to. That insider knowledge could be misused in the form of misinterpretation or non disclosure of important facts about the member to be insured thus not allowing the underwriter to properly assess the full extent of the risk. The respondents indicated that the loss ratio of 60% at Heritage health division was sufficient and competitive to the market which has a loss ratio of 65% according to AKI report (2012).

5.2.3 Extent to which health insurance fraud affects profitability at Heritage health division

It was evident from the respondents that fraud was not a major issue at Heritage health division as it scored a low mean of 2.1 in a five point scale. However, from the findings some respondents felt that there was some form of fraud experienced at Heritage health division and the common one was the member fraud where an insured person claims for compensation falsely. This is because the member is the only person who knows about ht benefit of the cover and the membership card is in his or her name thus he or she can misuse it by sharing with other

people who are not insured. This is line with Maxwell (2008) study which confirms that this is the most common type of fraud where the plan members exaggerate illness to collect additional health benefits or where the member share the medical cards with non-members.

From the above, the respondents felt that though the frequency of fraudulent claims scored a low mean, the few fraudulent claims can have an major effect on the profitability of Heritage health division as this will lead to huge claims from which a bigger percentage of the premiums will be used to pay for these claims and sometimes the claims can surpass the premiums received as seen in Ching and Alger (2003) study.

5.2.4 Extent to which health regulatory framework affects profitability at Heritage health division

The respondents indicated that the health insurance was adequately regulated thou these regulations had mixed effects on the profitability of Heritage health division. Some respondents felt that the regulations were a hindrance to profitability with a mean score of 4.0 whereas others felt that regulations supported the fair business practices with a mean score of 4.2. This was because some of the regulations worked against the health insurance companies like regulation on selective insurance while others worked for them like reducing and standardizing the commission rate to be paid to the brokers. This is in line with IRA (2012) report that enacted a law on how much commissions should be paid for health insurance. They put a standard commission of ten percent which is lower than the rate that was being charged of between 15 – 20 percent.

From the study, it was evident that the respondents were concerned about selective insurance and its regulation. The findings also revealed that selective insurance affects profitability of Heritage health division scoring a mean score of 4.0 in a five point scale. This is because the insurance companies were forced to cover all members regardless of their illnesses whether chronic including HIV/AIDS. This was a great risk and the claims are normally huge. As seen in Scott and Scott (2002) where they state that regulations should ensure that quality standards are met and that those entitled to healthcare are not denied the services, it is clear that the regulation on selective insurance was a good thing for the members with chronic illnesses including

HIV/AIDS. The study also supports the Affordable Care Act (2010) for the Americans which was signed by President Obama to end the worst practices of the insurance industry such as dropping people's coverage when they get sick. The law also offered Americans stronger consumer protections, more coverage options, and lower costs.

5.3 Conclusion

Profitability of private health insurance can be achieved by correctly underwriting of the health risks to be covered. This can be ensured by following the standard underwriting guidelines and complementing them with internal underwriting guidelines of the company. Health regulatory framework has a significant effect on profitability of Heritage health division as it was evident that Heritage adhered to the regulations set by the insurance authorities and it this facilitates its business thus a great effect on its profitability. The study can also established that due to the regulatory framework, the pricing patterns at Heritage follow the pricing philosophy which addresses the rating adequacy, nondiscriminatory and non-excessive pricing. Health insurance fraud is a major issue affecting private health insurance although its effect at Heritage health division is minimal as the mitigating strategies are effective and efficient.

5.4 Recommendations

Health insurance companies

The researcher recommends that when pricing, the health insurance companies should be considerate to the regulatory, economic and social environment. Through this they can achieve a competitive edge through balancing in order to make the price attractive to new clients as well as the existing clientele while ensuring that it is actuarially adequate.

The researcher recommends that the health insurance pricing strategies should be based on system of loading and discount depending upon how the policy performs, that is they should be flexible and not rigid.

Health insurance companies should have initiate risk inspection as this will go a step further in ensuring that the clients provide all the relevant information to make an informed underwriting decision.

Health insurance regulating authorities

The regulatory bodies should come up with a database for all insured which can be used for reference solely for insurance defaulters and fraud stars.

5.5 Recommendations for Further Research

1. Further research should be conducted on the viability of premium reference bureaus in the insurance company with an aim of curtailing fraudulent claims and insurance premium defaulters.
2. Further research should also be conducted on the effects of transferability of insurance covers on the overall efficiency of the insurance industry. Special focus should be placed on the health sector as the same insurance give services in the same hospitals.
3. Further research can be conducted on the effects of technical skills, Confidence, strong individual involvement and the willingness to take risks by insurance companies on the effectiveness of the industry.

5.6 Summary of Chapter Five

The chapter gives a summary of the major findings of the study and gives discussions of the same. It also entails conclusions and recommendations to the different beneficiaries of the study.

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APPENDIX I: INTRODUCTION LETTER

Teresa Wanjiku Ndungu
P.O Box 16520 – 00100
Nairobi

Dear Sir/Madam

RE: REQUEST FOR RESEARCH DATA

I am a post graduate student at the University of Nairobi. In partial fulfillment of the requirements for the award of a Master degree in Project Planning and Management, I am conducting a research titled “Factors affecting profitability of private health insurance: a case of Heritage Insurance Company”. You have been selected to assist in providing the required information as your views are considered important to this study. I therefore kindly request you to fill this questionnaire. Please note that the information on in this questionnaire will be treated confidentially and will not be used for any other purpose other than academic.

Thank you very much for your anticipated cooperation.

Teresa Wanjiku Ndungu
MA Student,
University of Nairobi

APPENDIX II: MANAGER'S QUESTIONNAIRE

A. General Information

1. Level of Management/Rank
 - Director
 - Senior Manager
 - Manager
 - Deputy Manager
2. Department _____
3. Years of experience in the insurance business
 - 0 – 5 years
 - 6 - 10 years
 - 11 – 20 years
 - More than 20 years

B. Profitability of Heritage health insurance

1. How is profitability measured at Heritage Insurance Company:-
 - Return on Investment
 - Gross profit
 - Profit per product
 - Other, please specify _____
2. How does profit generated from the health division compare with other divisions on a scale of 1 to 3?
 - 1 - Low
 - 2 - Average
 - 3 - High
3. What is the opinion of management with respect to profitability of the Heritage health division on a scale of 1 to 5 where 1 is least profitable and 5 highly profitable?
 - 1
 - 2
 - 3
 - 4
 - 5
4. On a scale of 1 to 5, how would you rate profitability of Heritage health insurance division where 1 is non-profitable and 5 highly profitable?
 - 1
 - 2
 - 3
 - 4

5

C. Pricing patterns of Health insurance

1. To what extent does pricing affect profitability of Heritage health division on a scale of 1 to 5 where 1 is least affects and 5 highly affects profitability?

- 1
- 2
- 3
- 4
- 5

2. Heritage Insurance Company offers a health product called BLUE which has four options. Which is the most preferred option by your clients in order of priority? (Tick one -Most preferred, preferred or Not preferred)

Option	Most preferred	Preferred	Not preferred
Silver			
Gold			
Diamond			
Platinum			

Give a brief reason(s) for the trends above.....

.....

3. Given the following factors, please tick in the order of priority how you rate them in regard to how they influence pricing of health insurance at Heritage Insurance Company

Factor	Most important	Important	Less important	Not important
Age of insured				
Size of the group				
Scope of coverage				
Claims experience				
Competition				
Inflation				

4. Price undercutting is a practice where some insurance companies reduce their pricing so as to have a competitive advantage over the others. This practice affects many insurance companies. To what extent does price undercutting affect the health division at Heritage Insurance Company on a scale of 1 to 3 where 1 is least affects and 3 highly affects?

- 1
- 2
- 3

5. To what extent does Heritage Insurance Company practice price leadership strategy on a scale of 1 to 5 where 1 is least practices and 5 highly practices?

- 1
- 2
- 3
- 4
- 5

6. To what extent does the price leadership strategy positively affect profitability of Heritage health division on a scale of 1 to 5 where 1 is least affects and 5 highly affects?

- 1
- 2
- 3
- 4
- 5

7. In your opinion, what would you recommend in pricing that would positively affect profitability of Heritage health division?

D. Underwriting practices in Health insurance

1. When underwriting health risks, the underwriter needs to get all the information from the client so as to be able to correctly assess the risk. To what extent does the underwriter obtain comprehensive and accurate information about the client?

- Fully obtain
- Partially obtain
- None

2. To what extent does failure to obtain full disclosure from the client affect the health risk at Heritage Insurance division on a scale of 1 to 5 where 1 is least affects and 5 highly affects the health risk?

- 1

- 2
- 3
- 4
- 5

3. In your opinion, how easy is it for underwriters to obtain accurate information from a client to access the health risk on a scale of 1 to 5 where 1 is difficult and 5 very easy?

- 1
- 2
- 3
- 4
- 5

Briefly explain _____

4. At Heritage health division, one of the underwriting guideline is that the loss ratio should be less than 60%. In your opinion is this percentage sufficient?

- YES
- NO

5. In your opinion, is the above ratio competitive in the market in a scale of 1 to 5 where 1 is least competitive and 5 very competitive?

- 1
- 2
- 3
- 4
- 5

6. To what extent does this ratio impact on the profitability of the Heritage health division in a scale of 1 to 5 where 1 is least affects and 5 is highly affects profitability?

- 1
- 2
- 3
- 4
- 5

7. To what extent, do you think the underwriting practices at Heritage health insurance affect its profitability on a scale of 1 to 5 where 1 is least affects and 5 is highly affects profitability?

- 1
- 2
- 3
- 4

5

E. Fraud in Health Insurance

1. In your opinion, to what extent is fraud experienced in the Heritage health division on a scale of 1 to 5 where 1 is least often and 5 very often?

- 1
- 2
- 3
- 4
- 5

2. There are different forms of healthcare fraud. Of the following, which form of fraud do you feel is most common at Heritage health division?

- Member/Insured fraud
- Service provider(s) fraud
- Both through collusion

3. What is the frequency of these fraudulent claims at Heritage health division where 1 is least frequent and 5 highly frequent?

- 1
- 2
- 3
- 4
- 5

4. Are you aware of any controls taken by Heritage insurance company to mitigate fraud?

- YES
- NO

5. To what extent is the control system at Heritage efficient in mitigating fraud on a scale of 1 to 5 where 1 is least efficient and 5 highly efficient?

- 1
- 2
- 3
- 4
- 5

6. In your opinion, how can this fraud be minimized?

7. To what extent does fraud affect the general profitability of the health division at Heritage insurance company on a scale of 1 to 5 where 1 is least affects and 5 is highly affects profitability?

- 1
- 2
- 3
- 4
- 5

F. Regulation of Health Insurance Industry

1. To what extent is health insurance adequately regulated on a scale of 1 to 5 where 1 is least adequate and 5 highly adequate?

- 1
- 2
- 3
- 4
- 5

2. To what extent does the regulation affect profitability of health insurance at Heritage Insurance Company on a scale of 1 to 5 where 1 is least affects and 5 is highly affects profitability?

- 1
- 2
- 3
- 4
- 5

3. To what extent is health insurance regulation a:-

i. Hindrance to profitability (1 - 3)

- low
- average
- high

ii. Facilitator to profitability (1 - 3)

- low
- average
- high

4. To what extent does regulation facilitate fair business practices in the health insurance industry on a scale of 1 to 5 where 1 is least facilitates and 5 highly facilitates?

- 1
- 2
- 3

- 4
- 5

Explain briefly _____

5. Selective insurance (cream skimming) has been a widespread practice in the health sector where some insurance companies select the less insurance risks to cover and especially the less risky ones. To what extent does regulation of selective insurance affect profitability of Heritage health division on a scale of 1 – 3 where 1 is least affects profitability and 3 highly affects profitability?

- 1
- 2
- 3

Thank you for your co-operation