

## NATURE OF FRAUD AND ITS EFFECTS IN THE MEDICAL INSURANCE SECTOR IN KENYA

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**ABSTRACT** *Insurance fraud is a major challenge facing the insurance industry both in the developing and developed world. This vice has no doubt existed wherever insurance policies are underwritten and takes different forms depending on the economic time and coverages available. However, the validity of this claim has hardly been established empirically in Kenya. It is important that the insurance players in Kenya understand the nature and effects of insurance fraud and also come up with strategies to counter the same. The study objective was to investigate the nature of fraud and its effects in the medical insurance sector in Kenya and also establish possible solutions in countering the vice. The study adopted a descriptive research design where each of the twenty eight registered medical insurance providers and twenty Insurance companies underwriting medical insurance in Kenya formed the sample frame of forty eight firms. A questionnaire was the main research instrument. The study findings revealed that majority of the firms sampled had experienced different levels of fraud in the recent past with the fraud form ranging from overstated medical bills, concealment of medical history of the patient, fraudulent identity / impersonation, document theft fraud as well as perpetration of the insurance premium fraud. The extent of fraud was found to depend on the existence and extent of automation that the firms had adopted with high fraud levels being associated with low IT Usage and/or automation. The effects of fraud include: increase in the cost of medical insurance and tarnishing the image of the insurance industry. Solutions suggested in managing the level of fraud include: subjecting medical bills to extensive audit to determine their validity as well as high levels of automation of the processes, making it mandatory for clients to produce their smart-cards in any medical facility before receiving services, and maintaining a database of all insured within the organizations' network. Other strategies include restriction of unauthorized employees in accessing client information, educating the staff to uphold ethical practices and offering a better remuneration and friendlier work environment. This study contributes to a partial understanding of the reasons for medical covers being expensive and the negative image of the insurance industry.*

**Key words:** Insurance Fraud; Medical Insurance Sector; Insurance Image

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## INTRODUCTION

A medical insurance cover/policy provides for the payment of the costs of medical care that result from sickness and injury and also caters for preventive care through wellness programs by meeting the expenses of physicians, surgeons, specialists and physiotherapist fees, cost of prescribed drugs, X-rays, electrocardiograms, hospital, nursing, and related services, as well as medications and supplies (Green and Rowell, 2011). However, most covers exclude pre-existing & chronic conditions and intentional self-injury among others. Under this arrangement, the insured pays premium to get health insurance cover through the policies offered by the insurance companies.. (Ericson et al., 2000). However, once this insurance contract has been defined and agreed upon, its violation through illegitimate claiming will lead to inefficiencies and inequities in insurance markets. Inequities occur because costs are inevitably shifted to others when claims are inflated above those accounted for in the premium charge, or when all consumers' premiums are higher because some consumers inflate their claims (Weits, 2009). Inefficiencies arise when the possibility of profiting through fraud distorts insurance purchase decisions, loss prevention, or claiming incentives.

Insurance fraud is defined as criminal acts, provable beyond reasonable doubt, that violate statutes by making the willful act of obtaining money or value from an insurer under false pretenses or material misrepresentations (Derrig & Krauss, 1994). Fraud in the health care system includes the pocketing of user fees by a service provider or the overcharging of a health insurance benefit by a physician. In a hospital, it could involve the diversion of patient fees or collusion between a hospital administrator and a

purchasing agent. Planned fraud may be undertaken by an individual on a onetime basis, or may be carried out by professionals in a systematic effort to profit from the insurance system. Opportunistic fraud is undertaken by individuals who experience a loss and attempt to shift the costs to the insurance system. This is most often characterized by claims exaggeration, and may be undertaken by the insured alone or with the help of a service provider or legal professional (Viaene et al., 2009).

Fraud in health insurance and healthcare is an immense problem and is responsible for losses of substantial amounts of money. According to the European Healthcare Fraud and Corruption Network (2009), an average of 5.59 percent of annual global health spending is lost to fraud. Insurance companies globally have identified the problem and are seeking ways to fight it. Schiller (2006) notes that global health care expenditure is about US\$4.7 trillion, translating into about US\$260 billion lost globally to fraud and error. It has been suggested that effective information support in the form of a fraud management system is practically the most appropriate approach to tackle that problem, especially because insurance companies deal with enormous amounts of data which can only be effectively processed through automation.

In the Kenyan situation, the issue of fraud control and proper governance has lately received a lot of attention from both the regulators and Medical Insurance Providers due to rising insurance costs. This is in addition to intensified pressure and competition from banks and other institutions that have moved into medical insurance business, providing financial alternatives to traditional insurance. At the same time, large corporations are getting more direct access to

health care services and all these coupled with the increased fraud on the insurance segment has affected medical insurance profitability (IRA,2015). Medical insurance in Kenya has had a high loss ratio and this may be the reason that it is not underwritten exclusively. For instance AAR Health Services and Resolution Health East Africa came on board the Kenyan market as health maintenance organizations but have recently diversified and acquired licenses to underwrite general insurance classes of business in order to stay afloat.

The general cost of healthcare has been increasing steadily and figures from AKI annual report of 2010 show that the health insurance industry recorded losses of over Sh930 million, a situation aggravated by the high amounts that go to settling medical claims. This points to the need for every medical insurance provider to engage in serious policy strategy to counter the effects of fraud. In spite of these observations, the facts on fraud have not been well documented hence the need to establish the nature and effects of fraud in the medical subsector in Kenya.

A number of studies have been done on the medical insurance field both internationally and locally. In Mexico, Knaul and Frenk (2005) did a study on voluntary tax-financed medical schemes where households, except for those in the poorest bracket, contribute. Escobar and Panpolou (2003) did a study in Colombia on subsidized social health insurance schemes, while Wagstaff et al. (2007) analyzed the impact of China's new insurance scheme which was implemented in 2004 as a trial on a small population. These studies however did not cover insurance fraud. In Kenya, Wanderi (2012) studied the factors influencing medical insurance

practices among persons in Nairobi central business district; Kubania (2011) did a study on the external environmental challenges affecting the performance of medical insurance sub sector in Kenya while Kosgei (2009) studied factors influencing the choice of health care financing by informal sector employees. However, none of the studies delved into the nature of fraud and its effects in the medical insurance sector. It is against this background that this study sought to determine the nature, effects and possible solutions to insurance fraud in the medical sub sector in Kenya. The objectives of the study were: -

- i. To determine the nature of fraud patterns and its effect in the medical insurance industry in Kenya
- ii. To establish possible solutions in countering fraud in the medical insurance sub sector in Kenya

## **THEORETICAL FRAMEWORK**

The Self Control Theory by Holtfreter et al. (2010) suggests that individuals with low levels of self- control are more likely to commit a wide variety of crime and crime-related behaviors. These individuals tend to be impulsive, insensitive, physical (as opposed to mental), risk-taking, shortsighted and nonverbal (McMullen, 1999). The theory posits that low self-control is learned from childhood through parental nurture, and argues that inconsistent parenting practices result in children who are unable to delay gratification, avoid risky behavior, control their impulses and consider the feelings of others. Once self-control is developed at childhood, it remains stable over the life course (Holtfreter et al., 2010). The theory recognizes that low self-control is not the sole cause of crime, but that the combination of opportunity to commit crime and self-control

are important in the analysis of criminality (McMullen, 1999).

The Fraud Triangle theory as advanced by Albrecht et al. (2009) posits that fraud is composed of three elements, namely a perceived pressure, a perceived opportunity and rationalization of the act of fraud. However, fraud is a complex matter and is a function of a combination of factors (Rae & Subramaniam, 2008). They contend that although there may be no incidents of fraud where internal controls are poor, there are still other cases with good internal controls but employees still manage to circumvent the internal controls to commit fraud. An understanding of how opportunities, pressures and rationalizations contribute to fraud in organizations can assist management to easily recognize the areas of susceptibility to fraud and strengthen these areas (Albrecht et al., 2010).

Pressure relates to duress that is caused by an employee's perceived immediate need for assets, financial difficulties or vice-related activities (Hillison et al., 1999). It is further argued that pressure pushes the fraudster further to take significant risks in order to obtain the desired resources. Examples of perceived financial pressures that can motivate fraud involve greed, living beyond one's means, high bills or personal debt, poor credit, personal financial losses, the need to meet short-term credit crises, inability to meet financial forecasts and unexpected financial needs (Albrecht et al., 2010).

Fraud perpetrators must have a perceived opportunity or they will not commit fraud. Opportunities include factors such as a weak board of directors, inadequate internal controls or the ability to hide the fraud behind complex transactions or related-party structures. Opportunity is thus a weakness in

the system where the fraudster has the power or ability to exploit making fraud possible (Rae & Subramaniam, 2008). Other factors that create an opportunity to commit fraud include lack of controls, circumvention of controls that prevent or detect fraudulent behavior, the inability to judge the quality of performance, failure to discipline fraud perpetrators, lack of access to information, ignorance or apathy, incapacity and the lack of an audit trail. Fraud perpetrators must have some way to rationalize their actions as acceptable (Albrecht et al., 2009). Justification of fraudulent behavior is usually as a result of a fraudster's lack of personal integrity or other moral reasoning (Rae & Subramaniam, 2008). Rationalization by fraudsters emanates from their feeling that the victims owe them and that they deserve more than they are getting (Mutua, 2011). A strong moral code can prevent individuals from using rationalizations to justify dishonest behavior. Internal auditors however should assume that anyone is capable of justifying the commission of fraud (Hillison et al., 1999).

The Economic-Contractual theory as advanced by Hart and Moore (1988) suggests that insurance fraud occurs within the context of a contractual relationship between the insurer and the insured, hence seen as a purely economic response to this contract. This view of fraud builds on economic theories of moral hazard, which recognize that insurance reduces the insured's incentives to prevent losses, and exaggerated or fictitious claims are characterized as an ex-post moral hazard. In addition, the traditional economic theories of crime suggest that an individual, in deciding whether to file a fraudulent claim will evaluate the magnitude of the potential gain from a successful filing against the magnitude of penalties from the act. If the

expected gain from successful fraud outweighs the expected penalties, then the fraudulent claim will be filed (Mazar et al., 2007).

**METHODOLOGY AND RESULTS**

This study adopted a descriptive cross sectional research design. The population of 48 was a census and consisted of all the 28 medical insurance providers (MIPs) and 20 Medical Insurance companies in Kenya. A semi structured questionnaire was used to collect data. Data was analyzed using

descriptive statistics such as means, percentages and standard deviations. Presentation of the results was done in tables. 42 questionnaires were returned duly complete giving a response rate 87.5%, which was deemed adequate for the realization of the research objectives.

On the nature of fraud patterns in the medical Insurance sector in Kenya, using a 5 point likert type scale (very low extent' (1) to 'very great extent' (5), the findings are as shown in table 1

**Table 1: Types of fraud**

Types of fraud	Mean	Std. Deviation
Overstated Medical Bills	3.2619	1.46256
Concealment of medical history and other material facts	2.6429	0.95818
Identity and document theft fraud	2.0952	1.05483
Insurance premium fraud	2.0238	.92362

Source: Researchers

These findings suggest that the common forms of fraud experienced by the medical insurance firms are: overstated medical bills (M=3.262, SD=1.363) and concealment of patient medical history (M=2.643). The possible explanation of this trend is that the insured patients collude with independent service providers to charge higher fees and conceal medical history which would otherwise result in either exclusion or subjected to a lower policy sub-limit. The high standard deviation /variation of answers in the case of overstated medical bills implies lack of consensus among the respondents and may be explained by the volumes and variety

of the claims that various medical insurance firms handle in a given period, as well as the nature of the internal controls that the insurance firm has put in place, all of which are different. On the other hand the least prevalent form of fraud in the firms is insurance premium fraud (M=2.024). This is because medical cover is only activated upon receiving premium in full or part thereof hence this has better controls currently.

On the extent of fraud incidences in the medical insurance firms in Kenya. The results are presented in Table 2

**Table 2: Extent of Fraud Incidences in the Institutions**

Statement	Mean	Std. Deviation
Experienced medical bill frauds in your organization in the last one year	3.0476	1.14663
Concealment of medical history and other material facts in your organization in the last one year	2.4524	1.10878
Insurance premium fraud in your organization in the last one year	1.9524	1.10326
Theft of identity and document theft in your organization in the last one year	1.6905	.78050

Source: Researchers

Medical bill fraud (M=3.048) was found to be the commonly practiced form of fraud that occurs in the institutions while to a moderate extent, concealment of medical history of the patient (M=2.452) is another common form of fraud that occurred in the firms This implies that the medical insurance firms should take precautions to curb the fraudulent activities in the industry by trying to appoint reputable service providers who do not engage in malpractices of concealing medical history. On the other hand, the extent of incidence of theft of identity and document theft (M=1.6905) was the least form of fraud experienced by the medical insurance firms, possibly explained by the adoption of better technologies such as use of smart cards and other biometric identification systems to limit impersonation of clients. Most of these forms of fraud were found to have a large standard deviation among the respondents probably explained by the type of medical facilities /providers that the medical insurance firms deal with which are all different from each other, as well as the type of controls that have been instituted by the firms.

**Effect of Fraud**

The respondents were asked to indicate the effects of fraud in the medical insurance subsector and all of them (100%) noted that fraud leads to the following negative effects: Fraud leads to a general increase in the cost of healthcare due to rising insurance costs, resulting in inability to afford medical covers. Fraud also affects the rate of penetration of medical insurance because the cost is not affordable. Insurance penetration in Kenya is currently about 2.9%, a situation which could greatly improve if fraudulent activities were countered. Another effect is that fraud has contributed to poor performance of the insurance firms in the market leading to limitations in the provision of medical cover and it also contributes to the negative image of the industry and reduces the number of potential clients who may be interested in the medical covers.

**Possible Solutions to Countering Fraud**

Likert scale type questions ranging from ‘strongly disagree (1)’ to ‘strongly agree’ (5) were used to bring out possible solutions and the results are as reflected here below:-

**Table 3: Suggested Solutions to Countering Medical Bill Fraud**

Statement	Mean	Std. Deviation
Medical bills are subjected to audit to determine validity	3.9286	.92110
Computer software installed to generate, verify and process expense claims	3.8333	1.14587

Internal and external Audit select medical bill claims randomly and subject to audit process	3.8333	.82393
The organizations recruitment procedure involve employee background check to ensure employees with good track record are hired	3.7381	.93859
The organization to have fraud management policy in place	3.6905	1.11504
The organization's employment contract to spell out fraud intolerants of the organization	3.5714	1.19231
The organization to put punitive measures on irregular bills/actions	3.4524	1.01699

Source: Researchers

The above findings strongly suggest that the solutions in countering medical bill fraud is through subjecting the claims to audit to determine their validity (M=3.929) and the use of ICT solutions to generate, verify and process expense claims (M=3.833, SD=1.14587). The high standard deviation in the latter strategy may be explained by possible existence of current IT solutions that are still prone to human manipulation and therefore not considered as a foolproof viable solution to the problem. To a lesser extent, the study found that establishment of an

organization's employment contract that spells out fraud intolerance (M=3.571, SD=1.192) as well as introduction of punitive measures on irregular bills (M=3.452, SD=1.017) were considered a deterrent to the medical billing fraud.

### **Suggested Solutions for Identity and Document Theft**

The section covered the fraud management strategies to minimize identity and document theft in medical insurance sector. The results are presented in Table 4.

**Table 4: Suggested solutions to minimizing identity and Document Theft**

Statement	Mean	Std. Deviation
The customers to produce the card in any hospital before being treated	4.2143	1.00087
The organization to educate the customers to keep their medical card safe	3.5952	1.10563
The organization to have a 24 hour customer care service to respond to customers claims in case of document theft	3.5724	1.32781
The organization to have CCTV / full time guards at the premise to identify suspicious activities	3.5000	1.30931

Source: Researchers

From the above findings, the most effective suggested strategy is for customers to produce their medical cards in any hospital they attend (M=4.214) and also for the medical insurance firms to educate their customers on the safe keeping of their medical cards (M=3.595). To a lesser extent, the stationing of full time guards at the premises to identify suspicious activities in the organization, as well as

installation of the CCTV cameras in the organizations premises to deter offenders(M=3.500) were found to be viable strategies. However, all the suggested strategies were found to have a standard deviation greater than 1, implying that the respondents have divergent views on the effectiveness of the strategies proposed.

**Suggested Solutions for Concealment of Medical History and other Material Facts**

The section covered the fraud management strategies to minimize concealment of

medical history and other material facts in medical insurance sector. The results are presented in Table 5

**Table 5: Suggested solutions to Minimize Concealment of Medical history and other Material Facts by clients**

Suggested solution	Mean	Std. Deviation
The organization to employ modern technologies in the management of database within the organization network	4.1190	1.17291
The organization to employs multiple identification features (face, finger prints, etc.) to counter counterfeit card use.	4.0476	1.14663
The organization to update their security features in their medical cards regularly	3.7619	.98301
The organization to have a 24 customer emergency calls center response in case of fraudulent transactions	3.6667	1.28151

Source: Researchers

The findings indicate that the adoption of modern technologies in the management of database within the organization network (M=4.1190) is a popular strategy to minimize fraud as well as having multiple identification features (face, finger prints, etc.) to counter counterfeit card use (M=4.0476) and update of security features in their medical cards regularly (M=3.7619). However, the high standard deviation (SD > 1.0) for most of the

strategies suggested implies that the effectiveness of the strategies was not unanimously agreed upon by the respondents.

**Suggested Solutions for theft of confidential information**

The fraud management strategies suggested to minimize theft of confidential information in the medical insurance sector are presented in Table 6.

**Table 6: Suggested Solution to minimize Theft of Confidential Information**

Suggested Solution	Mean	Std. Deviation
Restriction of employees and customers to certain area.	3.8333	1.24776
Conduct induction on fraud to new employees	3.5952	1.26991
Discourage employees from receiving favors from customers and suppliers	3.3810	.98655
Use of job rotation to minimize fraud by employees	3.3095	1.29705

Source: Researchers



The most popular strategies suggested by the firms to minimize theft of confidential information is restriction of employees and customers to certain areas (M=3.8333) and the medical insurance firms conducting training programs for new employees on fraud (M=3.5952). It was also suggested that the medical insurance firms can use job rotation to minimize fraud by employees (M=3.3095). However, the respondents'

opinion on the effectiveness of the various strategies was varied as evidenced by the high standard deviation (SD > 1.0).

### Long Term Recommendations in Countering Fraud

The study sought to establish whether some strategies not being employed currently could be employed in future. The results are presented in Table 7

**Table 7: Long term recommendations in countering fraud**

Recommended Strategy	Mean	Std. Deviation
Creation of Anti-fraud Strategy and Framework	4.3750	.96965
Government Legislation against Insurance fraud	4.1667	1.16718
Sharing of Fraud Information within the Industry	4.1250	1.11560
Training on Fraud in both Underwriting and Claims	4.1250	1.19100

Source: Researchers

The considered effective long term solution, is the creation of an anti-fraud strategy and framework in the insurance firms (M= 4.3750) while encouraging establishment of government legislation against insurance fraud (M=4.1667). The sharing of fraud information within the industry and training on fraud in both underwriting and claims was also recommended as a long term solution among the firms (M=4.125). All the suggested long-term strategies were to a great extent identified as expected to have an impact on reducing fraud in the medical insurance sub sector in Kenya.

### DISCUSSION

The study sought to explore the nature and effect of fraud in medical insurance sector in

Kenya. The medical insurance industry has in the recent past lost quite a substantial amount of money due to fraud perpetrated by the firms' staff, customers and medical institutions as well as third parties that take advantage of the existing weaknesses in the systems.

The findings demonstrate that most of the medical insurance firms have experienced one form of fraud or another in the recent past. The fact that majority of the firms noted that internal and external fraud is prevalent in their institutions is consistent with the findings by Goldmann (2009) that internal fraud committed by employees and management accounts for 50-80% of frauds committed in organizations. This is due to the fact that employees have access to information,

processes, systems and assets of the insurance firm, making it easier for them to come up with ways of committing fraud without being detected.

The study established that for effective management of fraud, the medical insurance firms should adopt a multi-prong approach that involves different strategies employed at the same time. In line with Radu (2012), organizations have to formulate strategies that undermine all the motivations for committing fraud, specifically those that will reduce opportunity, pressure and rationalization of the activities that are being undertaken by an individual. This confirms the findings by the economic crime survey conducted by PricewaterhouseCoopers (2009) that suggested that 68% of the sources of fraud risk are attributed to pressure, 18% are attributed to opportunity and 14% are attributed to rationalization. Therefore, if a firm's management identifies areas where these possible causes of fraud are prevalent and comes up with appropriate mechanism to control them, then this will enhance the performance of the insurance firm in the market.

The study results show that instituting adequate internal controls by the organizations will minimize cases of fraud. These include computerization of the claims processes, establishment of audit procedures, vetting of staff, and installation of surveillance cameras as well as restricting access to sensitive areas in the organization to authorized persons (Hampton 2009). In practice controlling these forms of fraud is still challenging because implementing effective preventive controls continues to prove very difficult, due to the virtually limitless number of ways that these frauds can be perpetrated (Goldmann, 2009). The study also suggests, as a long term strategy to

countering fraud, for the government to come up with platform where fraud information will be shared among the medical insurance firms and coming up with a common training program for all insurance practitioners on fraud in both underwriting and claims.

The study confirms the finding by (IRA 2015) on the effect of fraud and shows that this vice has affected the rate of penetration of medical insurance because the cost is not affordable. The insurance sector needs to be keen on this because it contributes to the negative image of the industry and reduces the number of potential clients who would be interested in the medical covers. The establishment of an anti-fraud strategy that aims at encouraging, preventing, promoting detection, ensuring effective investigation where suspected fraud has occurred and prosecuting offenders where appropriate is therefore recommended in each organization.

## **CONCLUSION**

Different medical insurance firms have developed payment systems with a perfectly valid set of customer service values in mind and in doing so, they assume that the providers they are dealing with are delivering legitimate and necessary medical services, and can be trusted to tell the truth, while at the same time expecting that its employees uphold integrity at all times. However, the systems the industry has constructed, regrettably, turn out to be perfect targets for fraud, and criminal assault against them has become a common occurrence. Medical insurance managers therefore need to recognize the seriousness of the vice and recognize the true nature of the fraud threat, and substantially increase their efforts in exposing and controlling it. Unless the fraud

challenge is managed, there is real danger that it may end up destroying the long term position of the insurance firms.

Medical insurance firms need to do more to pre-empt, measure and put in place creative preventive mechanisms that would deter fraud. Better inter-company data exchange can facilitate this. Once such claims become visible, auto-rejection of the obviously bad claims is a desirable response. A proper fraud response unit should do whatever is necessary to rip open and expose the business practices that produce such vices.

### **IMPLICATIONS FOR POLICY AND PRACTICE**

The findings of this study are a basis for the insurance regulator in policy formulation that will help mitigate the effects of medical insurance fraud in the Kenyan market. The Insurance companies may use the findings to formulate better fraud detection mechanisms that will result in an improvement in the detection and control of the level of fraud in the medical insurance business in Kenya.

The identification of the challenges will enable insurance companies enhance the scope of the existing medical insurance covers after understanding the factors that contribute to fraud and in the end formulate better, affordable and attractive packages for potential customers and the insuring public. This can be made possible through adoption of an electronic data management system to administer customer records and establish a common referencing bureau. This would make it easier for the insurers to correlate customer information and identify patterns of fraud, which would also help reduce customers moving from one insurance firm to another after committing fraud.

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