Lemons Problem and Health Insurance Fraud

Role of information asymmetry in inducing health insurance fraud.

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Abstract

In insurance contracts inaccurate or false information results in distortion of truth. Imperfect information on the other hand results in adverse selection (lemons) and moral hazard. Imperfect information when performed intentionally, with unwarranted profit in mind, where one of the parties will be a victim to the cheating of the other, is a fraud. Insurance business is not immune to frauds though the "Principle of Utmost Good Faith" is one of the pillars, which assures the success of insurance operations. When this principle is breached, it disturbs an insurer's capability in meeting its social and business obligations. This is what happens, when either the person buying an insurance plan or the one who provides insurance commits fraud, by giving or withholding information which misleads the decision making process. The information imbalance is called lemons problem, a form of "Asymmetry of information". This paper focuses on health insurance frauds resulting from asymmetry of information – the lemons problem.

Important terms

Health Insurance Fraud, Asymmetric Information, Principle of Utmost Good Faith, Representations, Warranties, Concealments, Mistakes, Non-disclosure, Demand Side Frauds, Existing Information, Non-Existing Information, Adverse Selection, Moral Hazard, Lemons Problem, Principal-Agent Problem.

Introduction

A person asked God, "What surprises you most about mankind?"

God answered, "They lose their health to make money and then money to restore their health."

Although life is less fleeting today than what it was a few decades ago and with life spans and life expectancies across the globe increasing, the future of the *triumvirate* of health, health care and health care costs continues to be an area of concern for Governments all over the world. The role of health insurance is paramount in achieving "Health for all".

Indian health and wellness market is said to be worth Rs.3500 crore, and is growing at a CAGR of 40%.[1] The growth is attributed to the change in the mindset that has come in our attitude towards health. The old adage, Health is wealth, was earlier thought to be for the elderly and well-settled sections of society but today it seems to influence the remaining sections of population. For instance, Jagdeep Kapoor, CMD of Samsika, says, "People in developed markets realise they can enjoy material goods only if they live long and well. In the case of our country, the lack of sensitivity to health was not because we were distracted by luxuries, but because we were distracted by necessities. But both markets are now aware of the need." The increasing awareness among citizens about the importance of keeping good health as also the Government's stand in raising the health standards of its citizens in general has transformed the health care market into a lucrative one in India. According to Article 47 of the Directive Principles of Indian Constitution, "the

[1] Technopak Report, The Healing Touch, Brand Equity, The economic times, 10th October 2007.

duty of the state is to raise the level of nutrition, the standard of living and to improve public health," of its citizens.

Despite the limited spread of health insurance in the country, the claims ratio of Mediclaim policies rose from 94 per cent in the year 2002 to a whopping 140 per cent in 2004. This sharp increase in claims within a short span of two years was a shock to the overseers of health insurance system – the Insurance Regulatory and Development Authority of India (IRDA). This phenomenon provoked the IRDA to review the existing healthcare policies which were not only matching the present needs of the people, but also gave room for unwarranted gain to a few groups of notorious clients who were adept in exploiting unnoticed loopholes[2] of the policies at the cost of faithful clients. For instance, an individual who takes enough initiative to protect himself from controllable health hazards has to pay the same premium as the one who enrols with ulterior motives, who misleads the judgement of insurer by manipulating the information he gives to the health insurer.

Though the insurer balances the operation by adjusting the premiums to accommodate such inefficiencies caused by fraud, there are instances where the business itself becomes unprofitable and loss making in the long run. It happened with "Panworld, the largest general insurance company in Uganda, which went out of business because of large-scale fraud that took place in its health insurance scheme for the poor.[3] Rise in the occurrence of frauds result in wasteful business processes, delay in claims processing and dissatisfaction among genuine customers.

Health Insurance

Health insurance can be defined as, "Any form of insurance whose payment is contingent on the insured incurring additional expenses or losing income because of incapacity or loss of good health." Many markets, particularly in Europe, classify health insurance as non-life insurance, whereas in US, it is considered as a branch of life insurance.

The first health insurance program basically covered only disability risks and was called disability insurance. The sole purpose of disability insurance was to cover the cost of emergency care arising out of different injuries occurring as a result of unexpected catastrophes. Hugh, an Elder Chamberlain from the Peter Chamberlain family, first proposed the concept of health insurance in the year 1694. However, it was not until the 19th century that it developed enough to be called health insurance. Since it has its roots in the disability insurance and evolved from it, most of the rules and regulations pertaining to health insurance actually refer to disability insurance.

The initial health model, which was a fee-for-service model, made it necessary for the patients to pay their health care expenses. However, this model was not fully functional in the face of rapid industrial development and economic progress, which resulted in the evolution of insurance services catering to the medical needs of the patients and came to be called as Health Insurance. This transformation was brought about due to the efforts of not only the governments of the time but also the employers, who recognized the importance of health care. The latter encouraged employees and citizens to undergo systematic health care check ups, so that a disease could be treated at the earliest identifiable stage. Over time health insurance programs have developed so extensively that health insurers provide services which cover most of the medical expenses including those for the routine health care check up, prescription drugs, preventive and emergency health care etc.

[2] Falaknaaz Syed, *expresshealthcaremgmt.com, accessed from the link http://www.expresshealthcaremgmt.com/20040815/coverstory01.shtml*

[3] The Risks and Opportunities of Micro Health Insurance Schemes Operating in India: A Marketing Perspective, Unpublished Project Report, TNOU, Chennai

Need for Health Insurance

Health care costs are rising rapidly. Today, the best health care involves high cost technologies that latest advancements in medical field facilitate. Added to this is the expertise of professionals, and utilities. A citizen has to pay huge fees to avail such health care. Low and middle-income people who are not prepared to pay for their emergency health care expenses, during an unforeseen accident or major illness, find health insurance a viable alternative.

Health insurance helps in ensuring that no one is deprived of the minimum health care. Its primary aim is to protect a patient and his family from financial disaster and simplifying the mode of payments. For example, instead of making separate payments, say for the doctors, surgeon, pathologist, nurse etc., the insured will pay premium to the insurer who in turn will take care of all these expenses. It also helps in eliminating sickness as a cause of poverty and helps reduce anxieties of different nature – economic, medical and moral. Health insurance companies thus provide financial assistance to the insured in case of disability or loss of health, so that he/she can take curative measures and also maintain their dependents during the period of sickness/disability with the benefits the insurer provides.

Health insurance is classified into three categories:

1. Medical Expense Insurance: The expenses of the insured, such as hospital, physician and other health care expenses are covered by this arrangement.
2. Disability Income Insurance: Disability income policies replace lost income when the insured is disabled as a result of sickness or injury. Payment is made because physical or mental incapacity prevents the insured from working.
3. Long-term Care Insurance: Long-term insurance policies promise to pay expenses if the incapacity prohibits the insured's activities of daily life.

Principle of Health Insurance

The generic features and principles that govern insurance concepts are equally applicable to health insurance. Insurance basically rests on the principle of pooling risks associated with the same cause, i.e., health, to share losses on some equitable basis. The risks may be combined under an arrangement whereby the participants insure each other, a plan that is appropriately named as "mutual insurance" or they may be transferred to an organization constituted separately and willing to assume the risks and pay the resulting losses for a consideration, called premium. Pooling of risks and losses is the essence of any insurance plan, be it health or other. Though a sound insurance plan consists of several elements some of the principles like principle of utmost good faith, misrepresentations etc., relevant to this paper are discussed below.

Principle of Utmost Good Faith

According to the principle of utmost good faith, it is the reciprocal duty of the insurer and the proposer (insured) to voluntarily disclose, accurately and fully, all facts material to the risk being proposed, whether requested or not. A proposer needs to disclose all the relevant facts about the risk being proposed for insurance. For example, in case of health insurance, there are certain aspects of the risk which are not apparent at the time of survey or medical examination i.e., the previous loss or medical history and so on. However, efforts to weed out such tendencies during application stage is ignored by insurers; as G. V. Rao says, "The desire to build premium incomes,

among insurers, is so strong and powerful that all aspects of detection of a likely fraud are relegated to and enforced only at the claim settlement stage."[4]

Representations

A representation is a statement an applicant makes for insurance before the policy is issued. Although the representation need not be in writing, it is usually embodied in a written application. An example of a representation in health insurance would be answering 'yes' or 'no' to a question as to whether or not the applicant had been treated for any physical condition or illness by a doctor during the previous four years. If the insurer relies on a representation while entering into the contract, and if it proves to have been false at the time it was made or becomes false before the contract is signed, there exists a legal ground for the insurer to avoid the contract.

Warranties

Warranty is a clause in an insurance contract, which states that a certain fact, condition, or circumstance affecting the risk must exist before an insurer is liable. For example, an insurance policy covering a ship may state "warranted free of capture or seizure." This statement means that if the ship is involved in a war skirmish, the insurance is void. Similarly, a bank may be insured on condition that a certain burglary alarm system be installed and maintained. Therefore, this clause is a condition that has to be met for giving cover, and acts as a warranty. A warranty creates a condition of the contract; any breach of warranty, even if immaterial, will make the contract void. In health insurance, such conditions are covered under the heading – Exclusions.

Concealments

Concealment is defined as silence when obligated to speak. Concealment has approximately the same legal effect as a misrepresentation of a material fact. The important, often crucial, question about concealment lies in whether or not the applicant knew the fact withheld to be material. Every circumstance is material which would influence the judgment of a prudent insurer in fixing the premium or in determining whether he will take the risk. The categories of facts to be disclosed are:

i. Facts about those risks, which represent a greater exposure than would be expected from its nature or class; for example, Fire cracker factory adjoining or situated near the household of the proposed-to-be-insured.
ii. External factors which make the risk greater than would normally be accepted;
iii. Facts related to previous losses and claims, if any, under other policies;
iv. Any special terms imposed on previous proposals by other insurers;
v. The existence of other non-indemnity policies such as life and accident;
vi. Full facts related to the description of the subject matter of insurance.

In case of Health insurance, factors such as age, previous medical history, occupation, smoking/drinking habits, height and weight are facts that need to be disclosed. There are however some circumstances, which are material but not necessary to be disclosed.

Non-disclosure of material facts which are either within the knowledge of the first party but not known to the second party and/or facts if known would not encourage the second party to enter

[4] G. V. Rao, Frauds in Health Insurance - What Could Insurers Do? , Insurance Chronicle, September 2007.

the contract, can lead to avoidance of the contract by the second party. Thus, an insurer can void the contract on the basis of the nature of concealment of material facts. But the insurer cannot void a contract on the grounds of concealment of those facts that are embarrassing or self-disgracing to the applicant. For example, asking a woman whether she drinks or smokes. In India a woman would feel embarrassed and might conceal this fact.

Mistakes

When an honest mistake is made in a written contract of insurance, steps can be taken to correct it after the policy is issued. Generally, a policy can be modified if there is proof of a mutual mistake or a mistake on one side that is known to be a mistake by the other party, where no mention was made of it at the time of entering into the agreement. A mistake, in the sense used here, does not mean an error in judgment by one party but refers to a situation where it can be shown that the actual agreement made was not the one stated in the contract. For example, an insurance company issued a Rs.50, 000 life insurance policy and, by an error of one of its clerks, included an option at the end of 10 years to receive income payments of Rs.1, 055 per year, against Rs.105.50 per year. The mistake was discovered 8 years later. When the insurer tried to correct the error, the insured refused to accept payment of the smaller amount. In such a situation, the insured cannot benefit from this mistake as the error of the insurer was in misplacing a decimal point, whereas the error of the insured was either in not noticing the error or, if noticed, in failing to say anything (i.e., not acting in good faith). Thus, the smaller payment was substituted for the larger one incorrectly stated in the policy.

In contrast to the above example, suppose A believes that he is the owner of a certain property and insures it. He cannot later demand the entire premium back solely because he discovers that, in fact, he was not the owner of the property. This was a mistake in judgment or an erroneous supposition, and the courts will not accept such type of mistake.

Effects of Non-disclosure

The effect of non-disclosure of the facts amounts to the contract becoming void at the option of either of the parties to the contract. The breach of utmost good faith arises due to misrepresentation of the facts or non-disclosure of the material facts that are otherwise to be declared under the terms of the contract or under the provisions of common law of the state. If the insurer or the insured wants to rescind the contract they should show non-disclosure of the facts that have a material effect on the continuance of the insurance contract.

Risk Assessment, Underwriting and Premium Setting

Risk Assessment, Underwriting and Premium Setting require a lot of information about the object of insurance. Underwriting, is a technique, which an insurance company uses to determine whether or not a person is qualified for insurance, and if so, the premium or rate the person should pay for that insurance. Underwriters play a crucial role in insurance business; they are considered to be the “gatekeepers” of insurers because they are responsible for evaluating the loss potential (risk exposure) of each proposed insured based on the information pertaining to that kind of exposure. Moreover, underwriters are also responsible for classifying the accepted risks and designing a premium structure in that line of classification.

The process of underwriting deals with probabilities (chance of occurrence approximately of a loss) rather than with certainties. Underwriters depend on statistical tools and techniques that associate certain characteristics with the probability of loss of health (morbidity risk). This is the reason why

underwriters enquire about each proposed insured's weight relative to such person's height. For example, if a proposed insured's weight is relatively more than his height, underwriters put him in the overweight list and charge more premium. Similar is the case with under-weight persons. All things being equal, an under-weight or over-weight individual will pay higher premiums than an average-weight person because he comes under a category of insured whose chances of falling sick are more.

The above are some of the explicit health details of an individual. The problem comes only when the ailments prevailing in a person has to be measured by subjective information provided by a prospective customer. Insurers gather information about the proposed insured from various sources viz. Application Form, Physical Examination, Laboratory Testing, The Agent's Report, Attending Physicians Statement (APS) and Inspection Companies.

In the US, health/life insurance companies often obtain consumer reports on all persons who apply for policies of considerably large denomination. In the case of insurance cover of small denominations and for covers taken at younger ages, many companies do not usually collect such reports. These reports provide information that has a bearing on the insurability of the proposed insured. Insurers obtain these reports from inspection companies that collect and sell information about an individual's character, employment history, financial condition, creditworthiness, personal characteristics, mode of living, and other relevant personally identifiable information. Within the US, inspection companies are called Consumer Reporting Agencies (CRA) and their reports are called consumer reports.

Classification of Risks

Underwriting is the technique insurance companies use to find out as to who would qualify for coverage and what premium would be charged for such coverage. Applicants are classified according to their "insurability" i.e., the risk they pose to the insurance company. Usually, insurance companies all over the world classify risks as Preferred plus, Preferred, Standard, Substandard and Uninsurable Risk.

Preferred plus, Preferred and standard risks are generally acceptable to an insurance company. They usually pay standard or substandard premiums for their coverage. Substandard risks may be accepted but at a higher premium or with a specially written policy, whereas, uninsurable risks cannot obtain insurance coverage at all.

The first and foremost duty of the underwriter is to collect the underwriting information about the proposed insured. Once such information is gathered from diverse reliable sources, it must be evaluated and a decision should be taken as to whether the proposed insured can be qualified at one of the preferred or standard rate classes, or be treated as substandard but acceptable risks, or rejected completely.

Sometimes, underwriters postpone the risk for a period of time till the effect of a condition or impairment is resolved. To cite an example, if a proposed insured is expecting to undergo a major surgery, the underwriter must defer the decision till the surgery is undertaken. Preferably, the selection and classification system an underwriter uses should:

1. Measure accurately the effect of each factor affecting the risk.
2. Assess the combined impact of interrelated factors including the conflicting ones.
3. Generate equitable and impartial results.
4. Be comparatively simple and less expensive to operate.

Two basic systems have evolved to accommodate these concerns:

1. The judgment method.
2. The numerical rating systems.

Whatever be the tool, information from the prospective insurance customer is very important and plays a vital role in the selection and classification of risks.

Importance of Information in Health Insurance Markets

An insurance company's profitability depends on classifying and pricing risks properly so that losses and expenses do not cross premium income. It is the underwriter who shoulders these responsibilities, and thus plays a key role in the success of an insurance company.

In addition to risk evaluation, underwriters work with the pricing of insurance coverage to determine appropriate premium rates. They also work closely with the marketing, claims, and field services (loss prevention) departments that have a considerable impact on the decision-making process.

Insurance is a unique product, which gives coverage to future events, which may or may not happen. The product serves the purpose of restlessness associated with the uncertainty regarding the health status of an individual and the need for additional money to support the health care needs if his health is affected suddenly. Thus, health insurance is basically meant for protecting a person against illness, which the person is not currently suffering from.

Coverage of pre-existing ill health is out of context from the point of view of an insurance product. However, there is a tendency for people who are more susceptible to ill health or who suspect illness in near future to go for health insurance cover at the earliest.

This natural tendency of people compels health insurance providers to strive to obtain maximum information from prospective customers. Insurance companies are up-to-date about details pertaining to the identification of people with pre-existing condition to refuse to reimburse during a claim.

Optimal risk loading can happen only if there is an even distribution of information between the risk transferee and risk taker. This is because when a transaction takes place between two risk-averse agents, information plays an important role in judging the mutual obligations and responsibilities related with the transaction.

		INSURER	
		Informed	***Non-informed***
INSURED	***Informed***	Successful Underwriting	Moral Hazard
	Non-informed	Conflict	Adverse selection

When both the insurer and the insured are informed, then the whole underwriting process is a success; and the insurer is safe. If the insured keeps the insurer uninformed or under informed, the probability of moral hazard occurs. Similarly, if both of them are under informed, there is a greater possibility of adverse selection. The potentially harmful area is where the insured is uninformed and the insurer is informed resulting in a conflict.

However, collecting the entire information about an individual's health at a particular point of time to use it as a standard of reference over a period of time will neither be accurate nor feasible. Even if a health insurer ventures to collect it, the cost would be higher than what a health insurance customer would be interested in paying.

For instance, a person has lived his whole life in a place closer to a nuclear reactor site and moves to a new place where he wishes to take a cancer care policy. The proposer will be cautious while referring to his previous residence. This has two implications – for one, his past residence will not necessarily make the person prone to cancer; and therefore rejecting the proposal can be costly if the proposer does not suffer any complication. For another, the information can also turn out to be negative to the insurer because residing closer to a nuclear reactor might result in the proposer developing a tumor.

Thus, the decision to rip all the information in itself is a decision between cost and benefits. And most of the time, the information gathered subjectively or objectively through investigation and analysis is very peripheral and questions the very sustainability of the insurance process. The cost incurred cannot be passed on to the customers who would not be interested in buying a costly plan. Thus the whole idea of the product gets disturbed. Therefore, it is a trade-off between high quality information and high cost.

Information Asymmetries in Health Insurance Markets

People, who purchase a health insurance plan, are often in a better position to identify and understand the risks they face than their insurance companies. Lemon's problem happens in a market when one party to the transaction has far superior information than the other. This phenomenon is also called as asymmetric information or information asymmetry.

Normally, this information refers to a collection of facts about the health care status of an individual, which helps an insurer make better judgment about the acceptability of a proposal. When the information an insurer collects exactly describes the condition of the insured, the conclusions made from it are accurate. But, if the information the insurer has is incomplete or inaccurate the result is a distorted decision. Such, distortion of information can be attributed to lack of transparency or opaqueness of details about one party to another, who basically operates based on the reliability of information furnished by the former. Thus, one gets profited at the expense of the other.

The following information asymmetries can indicate that there is a potential fraud threat to one of the parties involved in the insurance relationship:

- Frequent address changes.
- Drug receipts with different colors from the same druggist.
- Doctors' specialty does not match with the diagnosis.
- Similar claims for the same patient in different periods.
- Dates on the bills different from the dates in hospital records.

- Pressure from the policyholder to pay claim quickly.
- Signature provided at the time of claim not matching with the signature in the records.
- Changes or alternations in the documents provided for claiming insurance amount.

The above distortion of information could be by providing the same name or address for the insured and the service provider. Alteration or mutilation of medical records can also be resorted to.

Health Insurance Fraud

According to the National Health Care Anti-Fraud Association (NHCAA), fraud is defined as, "An intentional deception or misrepresentation that the individual or entity makes, knowing that the misrepresentation could result in some unauthorized benefit to the individual, or the entity, or to another party"[5].

A prospective health care service beneficiary intentionally hides completely or partially certain facts which could make the insurer decline the coverage. For instance, a middle class youth tore his ligament while playing football at school. The pain being mild he ignored it and did not seek any medical help; the problem persisted. After he completed his studies and began working in an organization, the pain became severe. Therefore, the ligament tear was already there when the individual went for coverage (individual or group); this fact is not verifiable without voluntary disclosure by the individual himself.

Moreover, as the incentive to get treated for less expense is high when the prior presence of condition is not mentioned, the individual tends to conceal any information pertaining to injury and prior treatment. The above is just an illustration of how an insured indulges in exploiting asymmetry of information to his/her advantage.

In this paper, we consider only the intentional withholding of information by the insured that has adverse impact on the other party, the insurer. This sort of unequal access to information or asymmetry of information between two parties is termed "Lemons problem." This paper cites instances where information manipulation can occur during the insurer-insured transactions and push one of the interacting parties into a disadvantaged position. Such instances, which are captured under the term asymmetry of information, are termed adverse selection or moral hazard in insurance parlance. The outcome from them results in one of the parties making unwarranted profit while the other ends up as an innocent loser resulting in fraud.

Demand Side Frauds

The most common form of fraud is the one which results from asymmetry of information from the demand side. Buyers of insurance perform this kind of fraud to derive an unwarranted profit out of an insurer-insured relationship. It is more often pre-planned and therefore involves intentional leverage of asymmetric information. Such demand side frauds can happen because the buyers have more information than the sellers. For the seller this information is crucial to accept or reject the health insurance purchase proposal.

Klamer, McCloskey, and Ziliak state, "Which farmer is most eager to buy crop insurance? The one who already has inside information (after all, it is his farm) that his crop will be bad. Which person is most eager to buy health insurance? The man who knows he has a history of heart disease that he has not revealed to the company. This problem is called moral hazard, the hazard being that

[5] What is Health Care Insurance Fraud?, state of new Hampshire Insurance Department, accessed from their website

the morality of the insured person might not be good enough for him to level with the insurance company"[6].

The information the insurer needs from the insured is usually proprietary, personal and subjective, and cross checking the reliability of the facts is impossible. This phenomenon in insurance parlance is called as adverse selection. Adverse selection is the first step towards a planned fraud, which an immoral customer would indulge in (moral hazard). This behaviour explains the research work of George Akerlof, an assistant economics professor, who tried to explain a similar situation in his working paper titled, "The Market for "Lemons," in the year 1966. His argument goes like this, "If somebody who has plenty of experience driving a particular car is keen to sell it to you, why should you be so keen to buy it.[7] The example applies equally to most insurance products especially including health insurance.

	(Insured) **WELL INFORMED**	(Insured) **ILL INFORMED**
	Known to insurer	*Unknown to insurer*
(Insured) **WELL DISCLOSED**	Advantageous Selection	Moral Hazard
	Knowable to insurer	*Unknowable to insurer*
(Insured) **UNDER DISCLOSED**	No selection 	Adverse Selection

When the insured is well informed and is also well disclosed to the insurer, the insurer is safe. But, the situation changes when the insured is ill informed or the insured is ignorant about his physical health. Now, the insurer has the responsibility to rule out the insurability of an individual.

The bottom row shows two cases where the insured is well informed about his health, but has disclosed moderately, which can be either out of ignorance or with intention of committing a fraud. This cell of the matrix means that the insurer is not aware of the health care risks to which his customer is exposed. This act will become a fraud, if the insured is intentionally withholding the information, in spite of the insurer having knowledge about his health in totality.

Finally, there is the zone where both of them have no access to necessary information about details of the health of the individual who is insured or to be insured. In the above matrix, the cell representing unknown and knowable, points out to unilateral asymmetry, whereas, the cell representing unknown and unknowable falls into bilateral asymmetry.

[6] The Economic Conversation by Arjo Klamer, Deirdre McCloskey, and Stephen Ziliak

[7] Tim Harford, *If Life Gives You Lemons, Why you can never buy a decent used car*., April 29, 2006. Accessed from the link: http://www.slate.com/id/2140743/. on 27th September 2007.

Why People commit frauds?

According to Rao, (2007), the factors which motivate a prospective insurance customer to commit frauds are, "Opportunities provided to the insured by the inadequate underwriting controls exercised by the insurers and in their claim transactions as well; the personal motives of claimants that encourage them to commit frauds in the claim settlement chain, mostly with the connivance of others."

Rao also says, "Frauds in health insurance are intensely personal. Insurance cover is quite often bought for the first time, when one is detected having some disease or the other and requiring costly treatment. Since it is purchased without initial medical checkups, even an adverse health condition that one is aware of is suppressed from disclosure."

Information problems in health insurance markets

One of the important assumptions of a perfect competitive market is that both the buyers and sellers are well informed. In reality, it is not so. Information problems do exist and undoubtedly they are the most important imperfections of the market.

1. EXISTING INFORMATION

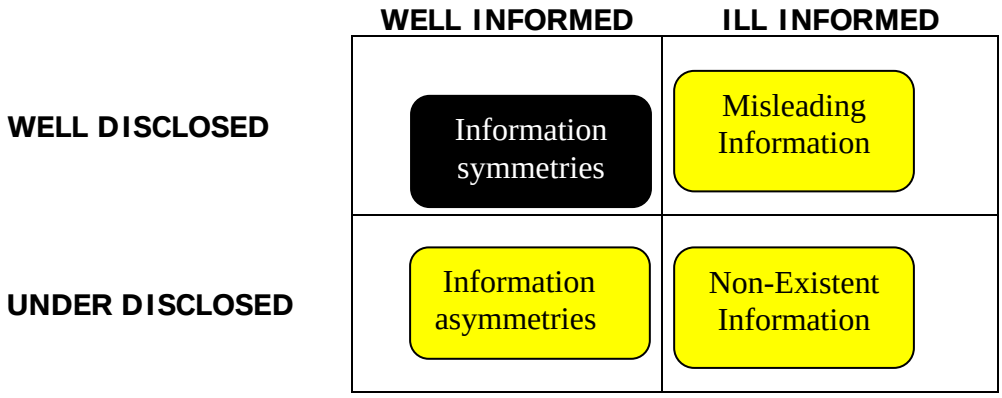
a. Asymmetric Information

The cells in yellow shade refer to different ways by which asymmetries can happen. The asymmetries can happen in any of the following ways.

i. Misrepresentation – Disclosure with hidden agenda to commit intentional fraud
ii. Concealment – Non-disclosure
iii. Mistake – Wrong disclosure

b. *Symmetric information*

The first cell shows a well-informed and well-disclosed region.



2. NON-EXISTENT INFORMATION

Asymmetric Information / "Lemons" Problems

Asymmetric information problems mean that one party to a transaction has the required information while the other party does not. These problems lead to health insurance frauds and are the bane, driving most of the regulation in insurance.

These problems can be categorized into three:

i. Adverse Selection problem.
ii. Moral Hazard problem.
iii. Principal-Agent problem.

Among the three classes mentioned above, adverse selection and moral hazard are terms, which are predominantly used in finance, especially asymmetry problem influencing publicly traded firm. These two classes are discussed in Strategic Financial Management under the common class "Lemons Problem."

However, financial management textbooks discuss about the problem from purchasers' point of view and so seller (of the product) will not be affected, unlike in health insurance business, where the seller of the service will be affected as a result of information asymmetry. Here we consider the uncertainty the demand side creates to the supplier as a lemons problem; both adverse selection and moral hazard constitute lemons problem and cause health insurance fraud. It is a situation where one of the parities either a buyer or seller knows more about a product than the other. In case of health insurance, it is reiterated the prospective product purchaser than a product seller creates uncertainty and ambiguity.

Adverse Selection

Adverse selection happens before an insurance transaction begins and the prospective insurance customer is most likely to produce adverse outcomes and likely to seek for coverage and be selected. It is also termed as *Ex-ante* or before actions taken from the demand (buyer) side. According to Schartz (2006), "the health of an applicant for insurance is worse than of an average individual". It means sick persons tend to shop for (& buy) medical insurance.

As the buyer knows better about his condition than the seller, insurers seek broad information about the customer. They want to know the loss potential of those to whom they issue insurance. This is because it will enable the insurers to charge prices, which are equitable and reflect the expected value of the proposed insured losses. The price charged will be equitable to the proposed insured and to others in the insurance pool only if their expected premiums reflect their loss potentials. If some insureds pay premium that is lower than the expected value of their losses, then it imposes costs on the other insured and distorts pricing. Adverse selection has the potential of causing a failure in the insurance mechanism altogether. However, an insurance company cannot be sure that the buyer is disclosing all the required information. The proposed insured may not disclose all that they know about their insurability, as it will affect their interest of getting the most favourable prices, terms and conditions.

According to Rao (2007)[8], "Adverse selection is the biggest risk factor prior to acceptance of a health cover. The situation is made worse because health claims are paid in full, without the insured having to contribute any amount to the final claim amount. The position is rendered worse due to the cashless treatments permitted, wherein the insurer has little control on the manner and costs of treatments". "Quite a few insured buy health insurance just when they need to have treatment and forget that insurance is against unforeseen illnesses and not for known and existing illnesses. Once the cover is bought, the risk of moral hazard post-ante a claim occurrence is the highest. In terms of adverse selection and moral hazard, insurers' internal control mechanisms are woefully incomplete and inadequate."

Moral Hazard

Moral Hazard happens after an insurance contract is entered between the insurer and the insured. The hazard to the insurer is that the insured has incentives as well as motives to engage in (immoral) activities, which are against the well being of the insurers, where he is more likely to use the health plan, which he would have otherwise ignored.

It is the natural tendency of the people to show complacent behaviour because of insurance. Generally, insurers are not much concerned about it as they presume that insured will not engage in such behaviour, which will shorten their lives or cause disability just because they are insured. For most of the people the desire to continue living and be healthy is not affected by whether or not they are insured. On the other hand, insurers are greatly concerned about the probability that the beneficiary of insurance might be careless in terms of showing diligence in measures to prevent health hazards. For example, in the ligament tear case, as it is a non-life threatening ailment, high medical expenses would have stopped a normal individual from going for ligament reconstruction surgery, which would cost a minimum Rs.10, 000.

Principal-Agent Problem

Fraud, as a result of agency flaw, can happen when the self-interests of the insured and agent differ. Free riding can happen from both sides (buyer and agent). An agent is a person who represents another. The term 'agent' here refers to not just insurance agents who represent insurance companies but anyone acting for another. The person whom the agent represents is the principal.

The principal-agent problem arises when the agent knows more than the principal. The agent can take advantage of the principal's ignorance. The agent's aim is always to maximize his own personal gain, which is not always in proportion to the principal's gain. The principal has to ensure that the agents do not withhold from the customer any required information about the company or its products or misrepresent; and also that the agent does not misrepresent or withhold key information about the customer from the company. An ideal principal cannot always rely on the agents about the applicant's insurability since sales people are interested in making the sale to get commission. Their interests may not completely align with the interest of the insurer.

Non-Existent Information

Often in insurance processes, neither the buyer nor the seller has complete information because the required information does not exist. Both the insurer and the insured individual face uncertainty. Insurance contracts promise future delivery and the insurer sets the prices before the cost is fully

[8] G. V. Rao, Frauds in Health Insurance - What Could Insurers Do? , Insurance Chronicle, September 2007.

known. Similarly, individuals cannot have complete knowledge about the consequences of their choices. Environmental factors, such as the economy, inflation, new laws and regulations, and changing consumer needs, attitudes and preferences, present great uncertainty to both buyers and sellers. Due to market failures, private insurers do not offer every type of insurance that consumers need. Market failures occur when insurers see excessive adverse selection or when they cannot adequately diversify their loss exposures. Thus, the private insurers offer little insurance for persons with extreme health problems. If such persons are to be insured, the government itself or some government-subsidized private arrangement provides the insurance.

Trade-offs and Solutions

Acquiring additional information can reduce asymmetric information problems. All affected parties should obtain more information to reduce information asymmetry. An insurer can secure additional information about the insured before the issuance of a policy. Similarly, a buyer can do research about his insurance needs. An insurance company's board of directors can set-up a more efficient system of monitoring which can be strict with sales people. Securing information however increases costs to the buyer as well as to the seller. Increased search costs lead to an increase in the customer's costs and securing information from other sources raises the insurer's costs. Thus, trade-offs are inevitable between the additional expenses incurred to become well-informed and additional costs inherent in making decisions with less information.

The lemons problem is considered to be the most critical failure of the insurance market. Individuals are not well equipped to evaluate and monitor the financial position of insurance companies. It is quite common that managers withhold the bad news from their sales people and shareholders, which adds to the asymmetric information problem. Since public interest is affected by asymmetric information, governments check the imbalance to provide substantial attention to the financial position of insurers through tight regulations.

The market has, of course, its own solutions to asymmetric information problems. Rating agencies monitor financial conditions of insurance companies and give their opinion. The very purpose of a company's underwriting and claims settlement process is to minimize moral hazard and adverse selection. Similarly, certain problems are addressed through law that limit reimbursement when the insured purposefully causes the loss or obtains it through misrepresentation.

Conclusion

Although insurance emerged in our country more than a century ago, there is still little awareness about insurance, its advantages, product details etc. The situation is worse in respect of health insurance. In recent years, after the industry was opened up, there seems to be better awareness about health insurance and products. The awareness campaigns led by IRDA and entry of Third-Party Administrators and brokers have also helped in creating awareness about health insurance products and their benefits.

For instance, with regard to coverage for dental care, the coverage gives a favourable reimbursement for individuals who have gone for routine dental care checkups and treatment. The routine checkups though are taken to be a palliative measure to prevent serious future complications, the overindulgence of the insured results in augmented financial participation causing overuse of basic service or the most expensive procedures.

The worst things of all, some of the procedures undergone may ignore the purpose of coverage, and may also include procedures, which are purely for cosmetic enhancement. Therefore, it is necessary that while providing health insurance coverage, it is mandatory to control the activities of

health care service providers and their beneficiaries- the purchasers of insurance. The interactions between them are purely subjective and therefore open up avenues for indulging in unwarranted gains (fraud). Health care professionals and institutions being on a higher plane or status than the patient allow the health provider to be in a better position to influence the insured. Such indulgence prevents insurance business from surviving to meet the needs of an insured with a real need of health insurance to pay for an emergency health care service.

The Law of Contract defines Fraud (under section 17 of the Act) as "The active concealment of a fact by one having knowledge or belief of the fact". It also states that the mere silence of the facts likely to affect the willingness of a person to enter into contract is not fraud, unless the circumstances of the case are such that, regard being had to them, it is the duty of the person keeping silence to speak, or unless his silence is, in itself, equivalent to a speech. Therefore, for avoiding fraud insurers ought to work closer with other insurers, brokers, police, etc, in getting access to information about their potential customers. In UK, the ABI does an excellent job of liaising with the police and other organizations on behalf of the insurance industry. It is very effective at transferring information to insurance companies, and acting as a focal point for information.

Health insurers should understand that quality underwriting is the *sine qua non* for the development of a healthy insurance business. Indian insurers need to regain control of their health business, which is one of the fastest-growing segments in the market .They need to commit resources not merely to develop the health insurance portfolio but also the detection of frauds.