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Made Under Mediclaim Policy of the  
General Insurance Corporation of India

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# Analysis of Claims and Reimbursements Made Under Mediclaim Policy of the General Insurance Corporation of India<sup>1</sup>

A case study of one of the branches of the GIC's  
subsidiary company in Ahmedabad

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**Abstract**

This paper analyses 621 claims and reimbursements data pertaining to policy initiation years 1997-98 and 1998-99 of Ahmedabad branch of one of the subsidiary companies of the General Insurance Corporation of India. The analysis suggests that the number of policies and premiums collected have grown at significant rates, more than 30 per cent during 1998-99 and 50 per cent during the year 1999-00. The growth had implications for the management of scheme in terms of problems of adverse selection or provider induced demand and falling premiums per insured person. It was found that the number of claims increased by about 93 per cent during the year 1998-99 when policies sold grew at 32 per cent. The study estimates that about 1/3<sup>rd</sup> of claim amount increase is because of the problems of adverse selection or provider induced demand. The analysis of break-up of reimbursements suggests that about 40 per cent of reimbursements are made towards doctor's fees. This is followed by diagnostic charges, which accounts for about 30 per cent. This makes the insurance claims highly vulnerable to provider-induced use of resources. The findings also suggest that the insurance company took on an average 121 days to settle the claim. It is pointed out given the demand side and supply side imperfections in the healthcare markets and absence of appropriate regulatory mechanisms in place, the Insurance and Development Regulatory Authority's proposal to ensure payment settlement within 7 days is highly ambitious. The study also analyses reasons for the delay and cases where reimbursements have been less than claims submitted.

# **Analysis of Claims and Reimbursements Made Under Mediclaim Policy of the General Insurance Corporation of India**

## **1. Introduction and objectives**

Health insurance can be broadly defined as financial mechanisms that exist to provide protection to individuals and households from the costs of health care incurred as a result of unexpected illness or injury. Under this mechanism insurer agrees to compensate or agrees to guarantee the insured person against loss by specified contingent event and provide financial coverage. Against this protection the insured party pays a premium and the insurer provides required services or pays the agreed sum spent on hospitalisation in case of illness of insured person. The case for health insurance rests on three grounds: first, illness cannot be predicted, second, hospitalisation costs lumpy and cannot be planned, and three, the proportions falling ill requiring hospitalisation in any large population is small and therefore permits of risk-pooling (Krishnan 1996). Pooling of risks, resources and benefits are the hallmarks of any insurance system. In India (and elsewhere) there exist a variety of forms of health insurance, both formal and informal. Based on the ownership various forms of health insurance schemes can be broadly categorised in three groups. These are state-run schemes (e.g., Employee State Insurance Scheme, CGHS), market-based and voluntary insurance schemes, schemes offered by member based organisations (e.g., NGOs and cooperatives).

The government-run General Insurance Corporation of India (GIC) and its four subsidiaries<sup>4</sup> offer market based voluntary Mediclaim insurance product in India. These products are sold on voluntary basis to individuals, groups and corporate sector. The Mediclaim Policy was introduced in the Indian market in 1986. The objective of this policy is to provide the insurance cover for financial burden arising out of illnesses that require hospitalisation. From time to time the GIC has revised the features of medical insurance product to make it more effective. Till sometime back only GIC run companies were allowed to offer and sell insurance products in India. The Government of India has now permitted the private sector companies to enter the insurance sector. Given the diverse and changing needs of health care, the entry of private players is likely to have significant impact on the health insurance initiatives in the country. The Government of India has passed the Insurance Regulatory and Development Authority (IRDA) bill, which has paved the way for developing appropriate regulations to steer the process and development of this sector. The objectives of the IRDA are to regulate the entry of

insurance providers, protection of interests of policyholders, promoting efficiency, control and regulation of rates, regulating investment of funds, supervision of insurer, insurance intermediary and other organisations connected with insurance business.

The IRDA is in the process of developing regulatory framework for new entrants and existing players in the insurance sector. *Inter alia*, the pricing of products and management of claims is likely to assume considerable importance in these regulations. The past experiences in pricing and managing the claims is useful guide to provide some understanding of the issues and help developing appropriate policies in this area. However, there is very little documentation of experiences of insurance companies in managing claims and reimbursements in India. The objective of this paper is to present empirical findings about the claims and reimbursements made under the Mediclaim Insurance policy offered by one of the GIC run company in Ahmedabad city. More specifically, the study aims at to:

- find the number of policies sold during last three years and analyse quarter-wise sales data to find if there is any pattern in sales of Mediclaim policies,
- understand the magnitude of reimbursements against premiums collected,
- describe the profile of diseased persons,
- analyse the break-up of expenditures for which claims and reimbursements have been made,
- find the delay in number of days in settling the claims and reasons thereof, and
- analyse the reimbursement system and its relationship with costs and claims made.

We hope the findings of this study would be useful to the IRDA in developing and framing appropriate regulations in claims settlement and reimbursements and pricing of products. In broader sense the findings of this paper should also help us to understand the working of Mediclaim insurance reimbursement system, the implications of private voluntary medical reimbursement based insurance schemes for claims management and the areas of regulation and management that would need further strengthening to ensure healthy development of private health insurance sector. The paper is divided into five sections. The following section describes the history of Mediclaim insurance scheme and issues pertaining to this scheme. Section 3 provides a description of the process of data collection. Section 4 provides the findings of the study. Section 5 discusses the implications of the results and summarises the paper.

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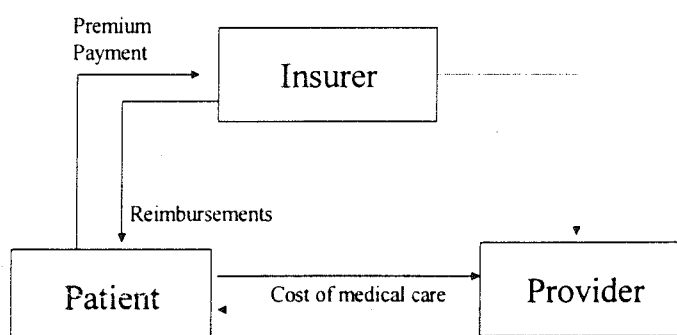
<sup>4</sup> These subsidiaries are: New India Assurance Company Limited, Mumbai; Oriental Insurance Company Limited, New Delhi; United India Insurance Company Limited, Chennai; and National Insurance Company Limited, Calcutta.

## 2. Health Insurance in India and Mediclaim Policy

India spends about 6 per cent of its GDP on meeting health care needs. Of these expenditures 75 per cent is private out-of-pocket costs spent by households. The health insurance constitutes a small of total financing. It is estimated that less than 10 per cent of the total financing in health sector is through various types of insurance. ESIS and other employer based schemes form significant part of this. Member based organisation also offer number of schemes to its members. The private voluntary health insurance is very limited. The General Insurance Corporation (GIC) and its four subsidiaries and the Life Insurance Corporation (LIC) have designed a number of medical reimbursement schemes which are sold to individuals and groups. These schemes can be broadly classified into three categories:

Focus	Schemes
Individual reimbursement schemes	Mediclaim Jan Arogya Policy Bhavishya Arogya Policy LIC's Asha Deep
Group reimbursement schemes	Group Mediclaim Policy Group Mediclaim Policy for Card Holders
Specific medical reimbursement policies	Cancer Insurance Policy Birthright Insurance Scheme Overseas Mediclaim Policy

These policies cover only a very small percentage of the population. Most of these schemes, at present, are structured as "fixed indemnity" policies, under which the maximum amount that will be reimbursed for covered services are specified. The insured person after making payment to providers for services submits bills to the insurance company for the purpose of reimbursement. This medical reimbursement triad is depicted in the following diagram.



Medical Reimbursement Triad

The solid lines in above diagram indicate the flow of funds for premiums and cost, and reimbursements in Mediclaim scheme.

The most popular health insurance cover is Mediclaim Policy of GIC offered by GIC companies. Under this scheme a person between 3 months to 80 years of age can be purchase Mediclaim Policy. The total insurance sum can be up to Rs. 5 lakhs against accidental and sickness hospitalisations during the policy period. In 1995-96, the number of mediclaim policies issued was less than half a million and persons covered were less than 2 million. The sale of these policies is also confined to the urban areas which account for about 95 per cent of policies and male members which constitute about 83 per cent of policy holders (GIC India, 1995). A large section of the population, particularly those belonging to lower income groups, has remained uncovered by these policies.

There are two major issues in any insurance scheme: problem of moral hazard and problem of adverse selection. In order to minimise the negative consequences arising out of these problems, the GIC has framed several rules and regulations. For example, the policy makes it mandatory for the policyholders to declare any pre-existing disease and they are not eligible for reimbursements for the treatment taken for such pre-existing illness. Other type of illness prevalent such as diabetes, hypertension and high blood pressure had to be declared while applying for Mediclaim policy. The forms for applying the policy have been made comprehensive over the years to ensure getting information on pre-existing diseases and other socio-economic profile of the policyholder.

The premium of the policy depends on the amount of sum insured and the age of the person. At the time of introduction of this scheme the minimum and maximum age limits were 5 and 70 years respectively. This has, however, been changed over the years. Now these age limits are 3 months and 80 years respectively. For age groups below 5 years and above 70 years the policyholder is required to buy insurance for entire family. It has been observed that generally insurance companies are reluctant to issue the policies to people in higher age groups. At the time of introduction of the scheme, the sum assured were categorised in six broad groups and limits were specified. These limits for each category were revised. The amount of premium depended on the group and age. The sum insured by categories increased during 1996. The following table shows the change in benefit package.

Category	Existing Benefit	Sum Insured New Scheme
1	83000	100000
2	54000	65000
3	37500	45000
4	27000	35000
5	14600	20000
6	10500	15000

The first significant revision in the Mediclaim policy was made in April 1996. In order to promote Mediclaim policy the government of India in 1996 allowed tax benefit up to Rs. 10,000 of premium paid as tax-deductible expense. Also the revisions in policy removed all categories allowing an individual to get himself insured for any sum-insured from Rs 15000 to Rs 500000. Premium is now calculated on the basis of sum-insured and the age. The earlier rules also imposed item-wise limits on expenditures which have been done away with now.

In case a person who has submitted the claim is found having a pre-existing disease he is not eligible for reimbursement. It has been observed that in number of cases the policyholders do not declare having pre-existing disease. The recommendation of panel doctors is considered while processing the claim and in many cases the claimant is not entitled for reimbursements because of having pre-existing disease. This has also resulted into number of disputes as in most cases the decisions are contested in courts.

Mediclaim policyholders are entitled for benefit of cumulative bonus of 5 per cent up to maximum of 50 per cent of sum insured in case there is no claim and there is continuity in policy. The policyholder is eligible for bonus for every claim free year of insurance subject to a maximum accumulation of 10 years. As regards break in renewal only 7 days period is considered adequate to renew the policy. The insured is also entitled to reimbursement for the cost of a medical check-up once in every four years provided there are no claims in that period.

The introduction of Mediclaim policy did not receive very encouraging response and however the scheme recorded profit during the first three years. After that the financial performance of the scheme in terms of claims ratio could not remain healthy. It started incurring losses. The recent data on this suggests that the claim ratio of Mediclaim scheme is in the region of 130 per cent (Business Standard 3 August 2001). Though the insurance premium has increased many fold but this scheme remains loss-making proposition. One of the problems with the scheme has been less number of takers for this policy. The number of persons insured under this policy remains in the region of 2 million.



The Medclaim policy will be admissible only if hospital or nursing home is a registered body with local authorities or should have at least 15 in-patient beds. The Medclaim policy started with the cover to protect the hospitalisation costs, but over the period the definition of hospitalisation has been changed keeping in view the technological advancements and procedural protocols for treatment of various illnesses. For example, in case of dialysis, eye surgery, dental surgery, kidney stone removal where insured is discharged on same day, the stay in hospital is not considered necessary. Also, cases are considered where due to technological advances, hospitalisation required is less than 24 hours. Medclaim also covers pre-hospitalization and post-hospitalization expenses up to 30 days.

The policy has also 30-day exclusion clause. This means that any disease contracted by the insured person during first 30 days from the commencement date of policy will not be considered for reimbursement. However, under certain condition where it was not possible to know the existence of the disease at the time of initiation of policy the policy still holds. In some specific cases the policy has also one-year exclusion clause. These conditions have been incorporated to minimise the problem of adverse selection.

### **3. Data Collection**

The data collection for this study started in the beginning of year 2000. The study team approached to one of the Ahmedabad based GIC companies and the management agreed to provide us the access to data. The data pertaining to reimbursements were not computerised at that time and therefore the required data used in the present study was collected manually. The researchers got most of the data from the claim files. The claim files contain documents like the claim form, expenditure schedule, claim form filled by the claimant, all possible bills for the expenditure incurred by the claimant including various diagnostics and other related items. The claim file also had the family policy schedule which gave information like the policyholder's name, names of family members insured the amount of individual insurance the premium, total family insurance and the total family premium and the family discount and the cumulative bonus details.

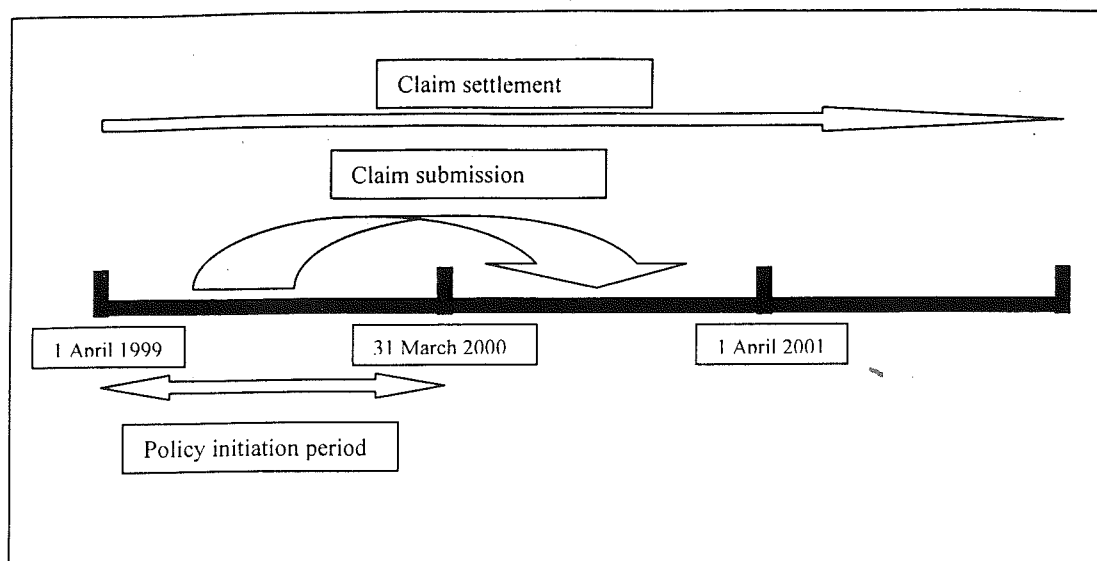
Most of the information contained in the claim form was collected (see Annexure 1). Apart from the details in the claim files additional information such as address, age, gender, occupation, relationship, hospital admitted, family information and sum insured etc. were also collected from the proposal form (see Annexure 2). The study tried to ascertain the number of claimants who had taken the Medclaim policy for the first time to compare it with the number of claims who have already Medclaim policyholder for more than one year. For this purpose

we needed information on whether the policyholder was existing member or has taken fresh policy in the current year. It was possible to get this information from the family schedule and cumulative bonus information provided in each case. However, in most cases this information was not provided as a result it was not possible to do this part of analysis.

The data collection team explored the possibility of getting the computer scan of each claim but the idea was abandoned because of procedural difficulties and insurance company not agreeing to allow photocopy of claim files. A data collection sheet was prepared for the purpose of data collection. The insurance company also provided macro information such as quarter-wise details of policies sold.

In order to collect the data for two years, the data collection team had problem in accessing the previous year claim files. Current financial year files were generally readily accessible and are properly classified. However, previous year files are generally kept in storeroom along with other (non-health) insurance claims. Segregating the claim files pertaining to Mediclaim from all files turned out to be time-consuming task. The claim files generally had all documents in order. However, it was found that there was no standardised way of reporting the information about claims as a result of this considerable time was spent in getting clarification in number of cases. Another difficulty faced in data collection was non-availability of all the required data from the claim file. The insurance company maintains two separate files for issuing the policy and processing of claims. Generally the staff completing the claim file do not enter all items of information because that information is generally available in policy file. Most of the time the data which was not available from claim file was collected from policy file. Some files which just contained one or two papers written by hand and did not have complete information were excluded from the study.

Another issue in data collection was the selection of period for which the study planned to collect the claims and reimbursement information. The study proposed to have all the claims and reimbursement information of all claimants for at least two years of policy initiation period. This necessitated the data collection for at least four year period. The accounting year starts from 1<sup>st</sup> April and ends on 31<sup>st</sup> March. A policyholder's claim settlements are classified as per the accounting year i.e., the year in which policyholder's claim is settled. The following diagram explains this.



Since the policy period is valid for one-year period, all policyholders, who took policy during 1<sup>st</sup> April 1999 to 31<sup>st</sup> March 2000, their respective claims can take place in two accounting periods viz., 1<sup>st</sup> April 1999 to 31<sup>st</sup> March 2000 and 31<sup>st</sup> March 2000 to 1<sup>st</sup> April 2001. And the settlement of these claims can take any time after the claim submission date. Since all claim settlements are classified as per the accounting year in which they fall, all these were traced to policy initiation year. The insurance companies in practice compare the claims settled in a particular accounting year with the policy amounts received during that accounting period. The claims settled do not necessary represent the same policies initiated in that accounting year. Since the number of policyholders and collections are growing, the claim ratio is always underestimated in this way. The study has tried to estimate the correct claim ratio by tracing the claims settled with their policy initiation period. In order to have correct computation of claims belonging to one specific period during which the policyholders took policy, it necessitated the collection of multiple years of claims and reimbursement data. Therefore, for two-year policy initiation period the study collected four-year claims and reimbursement data. The distribution of the cases as per the policy initiation period and claim period are provided in the following table.

Policy initiation period	Claim Period				Number of cases
	1997-98	1998-99	1999-00	2000-01	
1 April 1997 – 31 March 1998	10 (4.72%)	174 (82.08%)	28 (13.21%)	0 (0.00%)	212 (100.00%)
1 April 1998 – 31 March 1999	0 (0.00%)	285 (69.68%)	323 (78.97%)	3 (0.73%)	409 (100.00%)
<b>Total cases</b>	<b>10</b>	<b>285</b>	<b>323</b>	<b>3</b>	<b>621</b>

The analysis of claims and reimbursements data was divided into following three sets viz., all data points (621 observations), all claims and reimbursements belonging to policy initiation year of 1997-98, and all claims and reimbursements belonging to policy initiation year of 1998-99. This paper reports the results of first data set. The statistical analysis of data was carried out using SYSTAT, Microsoft Access and Microsoft Excel packages.

#### 4. Findings

Overall the GIC and its subsidiary companies have experienced significant growth in insurance business. For example, the total premium collected by the GIC and its subsidiaries increased from Rs. 40700 crores in 1989 to Rs. 70800 crores in 1996. The real compounded annual growth rate (1989-1996) is 76 per cent (Zervoudis and Karamchandani 2000). The Mediclaim scheme has also experienced impressive growth in number of persons applying for the scheme. This has happened particularly after the revised policy was introduced in 1996. The last three years data of number of policies issued in our case study also suggest 32 per cent and 50 per cent growth in number of policies issued during 1998-99 and 1999-00 respectively. Number of persons insured under these policies also increased by about 29 per cent and 70 per cent during these two periods respectively. Table 1 provides the quarter-wise data of policies sold and number of persons insured under these policies. The growth in total premium collected has also been on the same lines registering growth of 23 per cent and 50 per cent during these two years respectively. The quarter-wise analysis of sale of policies suggest that 40 per cent of the policies are sold in January-March quarter and more than 60 per cent in last two quarters of financial year signifying the effect of fiscal benefit which accrues to the policyholder in terms of tax advantage. The data suggest that these tax benefits have significant influence on the behaviour of policyholders. Any change in the government policy towards this may have significant implication for the sale of these policies.

Table 1 also provides the per insured person premium collected for the period of last three years. It can be observed that the year-end figures of premiums collected per insured person is showing a declining trend. The average per insured person premium has declined from Rs. 834 to Rs. 793 in 1998-99 registering a decline of about 5 per cent. The average premium of per insured person has further gone down to Rs. 690 registering decline of about 13 per cent during 1999-00. Quarter-wise data also show decline over the period of three years. These signify that as the insurance company attempted to expand their base by issuing more policies and increasing the number of insured persons, the average premium collections has not respond in the same manner. As the number of policies are increasing, the declining average premium also indicate the new policyholders are either opting for lesser sum insured (people preferring for

basic minimum package and sum-insured because of constraints on ability to pay) or are of lower age group than the exiting age group of policy holders. This also suggests that there are limitations in increasing the base of policyholders, as not many persons beyond a threshold income levels would buy insurance. This may be happening either because of income levels or because of high tariff structure. Increasing the base of policyholders is most desirable thing for any insurance company. This diversifies the risks and making insurance more viable proposition. The experience, however, suggests that there may be constraints in increasing the base of persons insured raising questions on overall viability of the scheme. This problem also arises because currently the insurance companies are selling only one type of product and prospective buyers of insurance do not have adequate choices to address their needs and capacity to pay. India does not have a comprehensive health insurance programme with the result that only small groups of people belonging to the organized sector enjoy some measure of financial protection against illness (Krishnan 1996). The tariff structures have generally remained constant (in some cases increased to reflect inflation factor), but rarely declined to reflect the economies of scale because of growing number of policyholders. A number of studies also suggest that the marketing function of GIC companies has remained less developed. The quality of services is also generally considered to be less satisfactory, all these affecting the preferences of persons to buy insurance policies and affecting declining per capital premiums. Weakness of Mediclaim is that, it covers only hospitalisation and domiciliary hospitalisation expenses, leaving out routine outpatient care. In many cases either the medical spending claim was disallowed or only partial reimbursement was received. Premiums are high in relation to the claim payments (Gupta 2000).

What has been the implication of growth in the number of policies and number of persons insured to the claims? During the year 1997-98 to 1998-99 the number of claims increased by 93 per cent. The total amount claimed increase from Rs. 3.8 million to Rs. 6.21 million showing a growth of 61 per cent. The total amount of reimbursement increased from Rs. 3.31 million to Rs. 5.55 million, increase of 68 per cent. At the same time the number of insured person per claim has gone down. There were about 29 insured persons against one claim in 1997-98, which declined to 20 persons. One of the objectives of this study has been to find how much amount of premiums collected is paid as reimbursements. It is generally claimed that the Mediclaim scheme is making losses as about 130 per cent of premiums are paid out as reimbursements. The four-year data for reimbursements from 1997 to 2000 were segregated and identified with the policy initiation years of 1997-98 and 1998-99. Based on this Table 2 provides the claims ratio for these two years. The reimbursements as per cent of premiums collected increased from 64 per cent to 88 per cent. Overall for two years combined data, this

ratio is 77 per cent. However, based on this study it is not possible to extrapolate this ratio for all-India.

Similarly, we can also find that the number of claims as per cent of number of persons insured was 3.42 per cent during the year 1997-98. This increased to 5.12 per cent during the year 1998-99. At the same time one finds that the average amount of claim per claim has reduced from Rs. 18197 to Rs. 15177. One finds that on the one hand the insurance company has suffered because of adverse claims ratio but at the same time it has been able to reduce the amount per claim. The significant growth in number of claims may be because of adverse selection problem. Where as the reduction in average amount claimed may be because of lower amounts of sum-insured by persons applying for claims. Table 2 shows that per claim sum-insured declined from Rs. 75,000 to Rs. 72,000 during 1997-98 and 1998-99 respectively.

Insurance provides the means whereby risks, or uncertain events, are shared between many people. The value of insurance focuses on protection against the cost of illness and mobilises funds for health services. The studies on insurance, however, are replete with the findings that the private health insurance suffers from negative consequences of moral hazard and adverse selection problems. Insurance lowers the price of care at the point of treatment and increases demand (consumer moral hazard). The economic effects of health insurance are on the demand for health care and supply of health care (Mills 2000). Using the claims data of four years, we have made an attempt to understand the magnitude of problem because of adverse selection and other negative consequences. We assume that the experience of 1997-98 in terms of average claim and number of claims against number of insured as standard. The average claim per claim was Rs. 18,197 and number of claims was 3.42 per cent of total number of persons insured. Using these two parameters as standards we estimate what would have been the position if we had similar experience during 1998-99. We compare this with the actual of 1998-99 as follows:

	As per last year's efficiency	Actual this year
Average amount per claim	18197	15177
Claims as % of number of persons insured	3.42%	5.12%
Number of insured persons (actual for 1998-99)	7995	7995
Total amount (Rs.)	4973836	6207480

At last year's efficiency levels, the total amount of claims should have been Rs. 4.98 million. As compared to this the actual amount of claim is Rs. 6.21 million. There is an adverse variance of Rs. 1.23 million. This adverse variance is sum of two main components. One which is arising because of adverse selection problem (as reflected by claims as % of number of

persons insured) and second because of less consumption of medical services (as reflected in reduction in average amount of claim per claim from Rs. 18197 to Rs. 15177). The first one is negative and later one is positive effect. This implies that the actual variance because of adverse selection is much higher than the variance as calculated above. The average claims, which declined from Rs. 18197 to Rs. 15177, saved Rs. 3020 per claim. At the rate of 3.42 per cent of 7995 insured persons this works out to be Rs. 0.83 million. This is what insurance company saved because of less consumption of health care services. This saving partly offsets the losses. Taking this into account this saving the total variance because of adverse selection or provider-induced demand would be much higher and it works out to be Rs. 2.06 million (0.83 million plus 1.23 million). This is also equal to excess claims which is 1.70 per cent (5.42 per cent minus 3.42 per cent) of 7995 insured persons, and this multiplied by Rs. 15177 per claim. This analysis suggests that about one-third of claims during 1998-99 arose because of adverse selection problem or provider induced demand problem<sup>5</sup>.

Table 3 gives profile of claimants on three counts: gender, occupation and relations with the principal policyholder. Of the total claimants about 43 per cent are females and 57 per cent are males. The majority of females are housewives. Another one-fourth of the claimants are having their own business. About 18 per cent of the claimants are in service or are professionals. The rest of the claimants are either students or are retired persons. About 46 per cent of the claimants are the principal policyholders themselves and usually head of the family. One-fourth of claimants are spouse (majority of them wives) of principal policyholder. Sons and daughters constitute about 14 per cent and 8 per cent respectively. In 4.5 per cent of cases the diseased is father, mother or brother (blood relation) of principal policyholder.

The profile of diseased and broad disease groups have been further analysed using claims and reimbursement information. Table 5 presents the difference in means tests (both parametric t-statistics and non-parametric Mean-Whitney U test statistics) for hospital days, sum insured, premium paid, amount claimed, amount reimbursed and age based on gender, occupation, relation and disease group classification. The means of these six variables are not statistically different between males and females. When the claims were segregated based on earning and non-earning member (occupation), we find that averages of sum-insured, premium paid and age are statistically significantly different between these two groups. If diseased happens to be earning member (here having business or in service), he is likely to have higher sum-insured and pays higher premium and in higher age group than if diseased in non-earning member

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<sup>5</sup> The numbers and percentages shown here have been rounded up to two decimal points. The actual computations have been done without rounding off.

(student, housewife or retired). However, there is no significant difference in the amounts these two groups claim or are reimbursed. There is also no difference in the hospitalisation days of these groups.

We define the relation variable in terms of diseased is either policyholder (defined as self) and if diseased in not policyholder himself he is relation of policyholder. All claims were segregated in to two groups: self and relation. Except hospitalisation days the means of all other claim and reimbursement parameters are significantly different. If diseased happens to be the policyholder (self), he is likely to have higher sum-insured, higher claim and is in the higher age group.

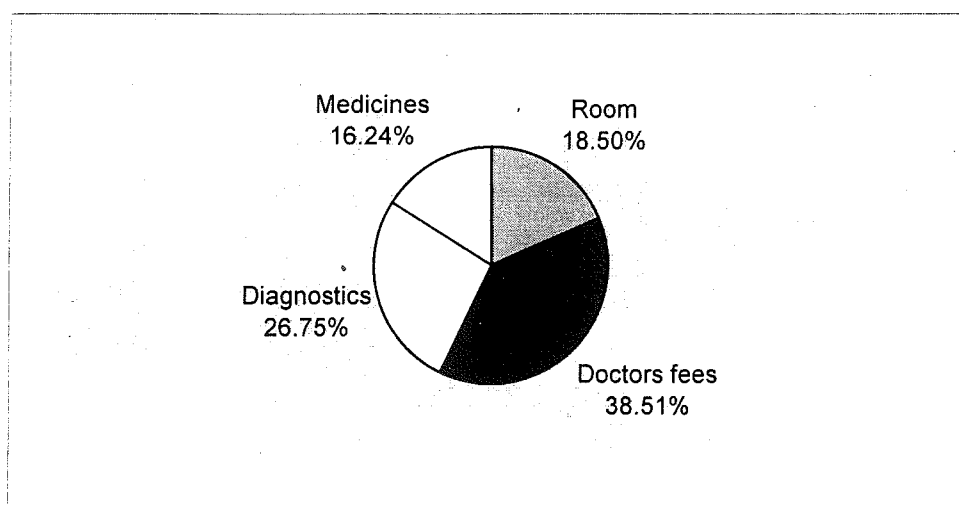
All cases of claims were also analysed in terms of disease of claimant. The broad classification diseases suggest that about 22 per cent of cases, the claimant suffered from some form of communicable diseases. This suggests that the insurance companies face significant operating risks. The communicable diseases still account for about 50 per cent of deaths in India. These diseases are preventable. The claims arising out of these cases can be reduced provided insurance company develops some appropriate interventions such as emphasis on preventive and primary care. In 64 per cent of cases the diseased suffered from non-communicable disease. Accidents and injuries have become one important cause of health problem in recent times. In our case study these account for about 14 per cent of cases. This data is provided in Table 4. The means of hospitalisation days, sum-insured, amount claimed, amount reimbursed and age are statistically significantly different across three groups of diseases. The hospitalisation days in case of communicable diseases are highest at 4.63 days as compared to 4.12 and 3.89 in other to cases respectively. The amount claimed and reimbursed is highest in case of non-communicable diseases. Age of claimants in non-communicable diseases is also higher than other two groups. The claimants under non-communicable diseases have higher sum-insured. One suspects adverse selection problem as the claimants under this group have predicted their risk group and gone for higher sum-insured.

The data on claims and reimbursements were further analyses in terms of hospitalisation days, number of days taken to settle the claim, age profile of diseased, break-up of claims and reimbursements and medical reference fee incurred by insurance company. The descriptive statistics of these are provided in Table 6. The break-up of claims and reimbursements has been done in four broad categories: room charges, fees charged by doctor, diagnostic charges and charges for medicines. The analysis of number of hospitalisation days show that average length of stay of diseased in this sample is about 4 days. From the day of illness the diseased on an average has taken about 12 days to hospitalise. The data also suggest that the claimant has



fallen sick after 177 days of the start of the policy during the current financial year. The average age of the diseased is 39 years. The other insurance statistics suggest that average sum-insured per claimant is about Rs. 78,000. The average premium paid by the diseased is Rs. 1049. On the average each claimant has family insurance of three members for which average sum-insured has been Rs. 200,000 for which the policyholder has paid average premium of Rs. 2500.

The break-up of claims and reimbursements is provided in Table 6. The average claim and reimbursement has been Rs. 16,208 and Rs. 14,278 respectively. The break-up of data suggests that about 38.5 per cent of reimbursements were paid towards doctor's fees. Diagnostic charges account for about 27 per cent of reimbursements. Room charges account for 18.5 per cent of total reimbursements and medicine the remaining. The break-up is provided in the following diagram.



The correlation matrix of various items of expenditure is provided below.

Claims	Amount claimed	Room	Doctor	Diagnostics	Medicines
Amount claimed	1.000				
Room	0.582	1.000			
Doctor	0.799	0.334	1.000		
Diagnostics	0.807	0.292	0.506	1.000	
Medicines	0.621	0.403	0.450	0.382	1.000

Reimbursements	Amount reimbursed	Room	Doctor	Diagnostics	Medicines
Amount reimbursed	1.000				
Room	0.519	1.000			
Doctor	0.621	0.360	1.000		
Diagnostics	0.654	0.292	0.379	1.000	
Medicines	0.437	0.517	0.282	0.214	1.000

The correlation between doctor's fees claim and diagnostics charges claim is highest in the claims correlation matrix. Second highest correlation is doctor's fees and medicines. When we examine the break-up of reimbursements the association between doctor's fees and diagnostic charges is not as strong as it is in claims correlation matrix.

In practice, payment systems are not always 100 per cent reimbursement based. The actual reimbursement data suggest that it has some features, which, at least partially, are fixed in nature. The reimbursements system is such that it reimburses only part of the cost, particularly when the claims are higher. This suggest that there is in-built system of co-payments in practice of reimbursing the claims. The payment system of insurance company includes features which, in effect, reimburse part of costs when the claims are higher. To capture the elements of this system that characterize actual payments, we estimate a general payment system in the following way:

$$\text{Reimbursement} = \alpha + \beta \text{ Claims} + \varepsilon$$

where  $\alpha$  is the portion of payment that is unrelated to incurred costs and can be paid in connection to any of the above mentioned units of payment;  $\beta$  is what has been referred to as the supply side cost sharing parameter (Ellis and McGuire, 1986; Newhouse, 1996) indicating the portion of incurred costs, i.e., claims, that are reimbursed in the payment system. Claim based reimbursement can be characterised by setting  $\alpha = 0$  and  $\beta = 1$ . A mixed system which has in-built co-payment and cost sharing elements, where  $\alpha > 0$  and  $0 < \beta < 1$ . Using this equation one can estimate these elements. The estimated equation in our sample is as follows:

$$\text{Reimbursement} = 2672.64 + 0.716 \text{ Claims} \quad R^2 = 0.875 \\ (\text{se} = 0.011)$$

$$\text{Reimbursement} = 0 + 0.755 \text{ Claims} \quad R^2 = 0.904 \\ (\text{se} = 0.010)$$

We estimated the above equation keeping the constant equal to zero since there can not be any reimbursement in the absence of claim. The estimated  $\beta$  is significantly different from one in both the cases. It is clear that there is inbuilt co-payment or co-insurance system in the payment system followed by the insurance company. It remains to be examined whether the co-insurance parameters remain constant at all levels of claims. It is possible at higher levels of claims the co-insurance is also higher. It is clear from the above equation that in practice the payment systems is mixed system, not 100 per cent of claims reimbursements.

An attempt was made to find the determinants of amount claimed and amount reimbursed using regression analysis. The following independent variables were used:

1. Hospitalisation days
2. Disease dummy for three groups of broad classification of disease
3. Gender
4. Age
5. Self dummy for two groups if diseased is principal policyholder and other relation
6. Employed dummy for two groups if diseased is earning member and non-earning
7. Sum-insured as proxy for income-group of diseased

The cross-section correlation and regression results are provided in Table 7. Two regression equations one for amount claimed and another for amount reimbursed were estimated. Both these equations were significant at 5 per cent level of significance. Hospitalisation days, Disease dummy, age and sum-insured were found significant at 5 per cent level of significance in both equations.

The next issue in our analysis was to find the number of days the insurance company has taken to reimburse the claim. Also, we analysed the cases where the claims were rejected and cases where reimbursements have been less than the claims submitted. We also discuss the reasons for rejecting the claims or less reimbursements. The analysis of the data suggests that the insurance company on an average has taken about 121 days to settle the claim. In about 1/4<sup>th</sup> cases either case was rejected or reimbursements were less than the claims because of some errors. In about 75 per cent of claims 100 per cent of reimbursements were given. The insurance company on an average spent about Rs. 133 for referring the claims to qualified doctors to verify the claim. The medical reference was sought in about 46 per cent cases.

The Medclaim policy specifies charges, which are excluded from the scope of the policy, hence if the claimant happens to include that in the claim then the insurance company deducts that amount and reimburses the remaining amount. In about 30 per cent cases the claims submitted included items, which were not claimable such as charges for toothpaste etc. The bills from the date of admission to the date of dispatch from the hospital can be included in the claim. If the bill bears a date before the date of admission or after the date of dispatch then it is not included in the reimbursement given to the claimant. In about 1/4<sup>th</sup> cases where reimbursements were less, the bills submitted did not belong to the period of hospitalisation and were outside the dates of hospitalisation. Pre-existing diseases, claim outside the scope of the policy, hospitalisation not necessary were some of the reason for rejecting the claim. About 3 per cent

of claims fall in this category. Summary of various other reasons why the amount claimed and reimbursement did not match are provided in Table 8.

Further analysis of medical reference cases suggests that the hospitalisation days, amount claimed and claim settlement days were statistically significantly different and higher for the cases that were referred to medical doctor for further scrutiny. On an average it took 24 more days in referred cases than the cases that were not referred to settle the claim. The claim settlement was still at 110 days for the cases that were not referred for further medical scrutiny (see Table 9)

One of the important conditions for the claimant to get the reimbursement is that the hospital where the claimant has received the treatment has to be registered. If the hospital is not registered then no claim is given to the claimant. It was found that 89 per cent of the hospitals are registered. Only in one case the hospital was not registered. In about 11 per cent cases the information whether the facility was registered was not specifically stated in the claim file. In many of these cases the claims have been reimbursed and it is assumed that since the claim was settled the facility is registered.

## **5. Implications and conclusions**

This study discusses preliminary results from the analysis of 621 cases of claims and reimbursements made under the government run Mediclaim insurance scheme. The analysis of a Ahmedabad based branch of one general insurance subsidiary of GIC India suggests that the number of policies and premiums collected have grown at significant rates, more than 30 per cent during 1998-99 and 50 per cent during the year 1999-00. This growth had implication for the management of scheme and problems of adverse selection or provider induced demand and falling premiums per insured person. It was found that the number of claims increased by about 93 per cent during the year 1998-99 when policies sold grew at 32 per cent. The study estimates that about 1/3<sup>rd</sup> of claim amount increase is because of the problems of adverse selection or provider induced demand. This case study provides insights into that Mediclaim scheme in India is vulnerable to adverse selection and provider induced moral hazard problem. In the present scheme of things, the insurance companies do not have any mechanism in place which would ensure less of such unintended consequences of insurance. The analysis of break-up of reimbursements suggests that about 39 per cent of reimbursements are made towards doctor's fees. This is followed by diagnostic charges, which accounts for about 28 per cent. The correlation between these two claims is highest than other items of expenditure. This makes the insurance claims highly vulnerable to provider-induced use of resources.

The implementation of the Medclaim is critically dependent on the efficiency and effectiveness of delivery system of private medical services. The dependence of government-run insurance companies and all new private entrant in health insurance would remain significant on private for-profit sector. The public curative sector has grown over the years but the dependence of insurance companies on them is negligible. In our case study no diseased has used medical services of government hospital. One of the problems with the private sector is that it has grown without any regulation. The significant dependence on totally unregulated for-profit private medical sector is sure case of high cost reimbursement based insurance scheme. It is well know fact that hospitals have been over-charging patients specially those who at the time of admission state that they have Medclaim cover. At present, the four state-owned insurance companies are experiencing a high claim ratio in the region of 130 per cent in Medclaim (Business Standard 2001).

The findings of this study suggest that the insurance company took on an average 121 days to settle the claim. Given the demand side and supply side imperfections in private for-profit healthcare markets and absence of appropriate regulatory mechanisms in place, the Insurance and Development Regulatory Authority's proposal to ensure payment settlement within seven days time looks ambitious. The current claim management systems of government-run insurance companies do not match with the tasks that would be required in monitoring the diverse unregulated for-profit medical service providers. In the absence of standardisation, treatment protocols and price regulation, billings vary and this is not necessarily in keeping with any minimum hospital facility requirements. Settling the claims under these circumstances is time-consuming task. The development of third party administrators (TPAs) is one way to dvest this responsibility from insurance companies. However, the cost implications of this intervention from consumer point of view need to be examined. The regulations in this area are still in nascent stage. The IRDA in collaboration with the central Ministry of Health and Family Welfare has also proposed to develop accreditation system for hospitals. This may be the first step towards developing foundation for health insurance market to work effectively. However, larger problem would be developing appropriate incentive based mechanisms and contracts which would be binding on providers to provide appropriate care. It remains to be seen how the scope of activities of the IRDA will get widened, as we understand the complexities of the health care market in India and which are also perhaps the stumbling blocs in the way of getting efficient and effective health insurance market in place.

**Table 1: Quarter-wise analysis of policies sold**

Year	Policies Issued		Persons Insured		Premium Collected		Premium per Insured
	N	%	N	%	Rs.	%	
<b>April 1997-March 1998</b>							
April - June	369	16%	1034	17%	810958	16%	784
July - September	480	21%	1250	20%	1072744	21%	858
October - December	572	25%	1528	25%	1263337	24%	827
January - March	886	38%	2389	39%	2025274	39%	848
Full Year	2307	100%	6201	100%	5172313	100%	834
<b>April 1998-March 1999</b>							
April - June	560	18%	1377	17%	1082369	17%	786
July - September	675	22%	1690	21%	1082521	17%	641
October - December	638	21%	1891	24%	1564877	25%	828
January - March	1171	38%	3037	38%	2611482	41%	860
Full Year	3044	100%	7995	100%	6341249	100%	793
<b>April 1999-March 2000</b>							
April - June	743	16%	1930	14%	1483000	16%	768
July - September	1084	24%	3114	23%	1982923	21%	637
October - December	1138	25%	3585	26%	2364293	25%	659
January - March	1610	35%	5188	38%	3698610	39%	713
Full Year	4575	100%	13817	100%	9528826	100%	690

**Table 2: Premiums collected and reimbursements (1997 to 1999)**

	All cases	1997-1998	1998-1999
<b>Policy information</b>			
Number of Policies	5351	2307	3044
Number of persons insured	14196	6201	7995
Average persons per policy (Rs.)	2.65	2.69	2.63
Amount of Premium Collected (Rs.)	11513562	5172313	6341249
Average premium per person insured (Rs.)	811	834	793
<b>Claims and reimbursement information</b>			
Number of Claims	621	212	409
Total Sum insured for all claims (Rs.)	45205000	15840000	29365000
Sum insured per claim (Rs.)	72794	74717	71797
Number of persons insured per claim	23	29	20
Total Amount Claimed (Rs.)	10065236	3857756	6207480
Average claim amount per claim (Rs.)	16208	18197	15177
Total Amount Reimbursed (Rs.)	8866376	3310840	5555536
Average reimbursement per claim (Rs.)	14278	15617	13583
<b>Selected indicators</b>			
Reimbursements as % of Claims	88.09%	85.82%	89.50%
Number of Claims as % Number of Insured	4.37%	3.42%	5.12%
Reimbursements as % of Premiums	77.01%	64.01%	87.61%

**Table 3: Profile of claimant**

Gender	Cases	%	Age	Claim	Reimbursement
Female	269	43%	37	14150	12437
Male	352	57%	35	17781	15684
Total	621	100.00%	39	16208	14278

Occupation	Cases	%	Relation	Cases	%
Housewife	162	26.09%	Self	288	46.38%
Business	148	23.83%	Spouse (Wife: 150)	158	25.44%
Service	106	17.07%	Son	89	14.33%
Student	96	15.46%	Daughter	50	8.05%
Retired	19	3.06%	Blood relation	28	4.51%
Professional	11	1.76%	Not specified	8	1.29%
Not specified	79	12.72%			
Total	621	100.00%	Total	621	100.00%

**Table 4: Broad Classification of Diseases**

Broad classification	Cases	%
Communicable	139	22%
Non-communicable	400	64%
Injury and accidents	82	14%
Total	621	100%

**Table 5: Means Difference Tests: Profile of Diseased and Various Medicaid Policy Claim Related Information**

<b>Gender</b>							
	Female	Male	t-statistic	Mann-Whitney U test statistic	Probability	$\chi^2$ Value	
Hospitalisation Days	4.11	4.28	0.291	48151	0.712	0.136	
Sum Insured	70904	79421	1.690	45777	0.342	0.904	
Premium Paid	930	1065	1.718	43547	0.356	0.854	
Amount Claimed	14150	17781	1.637	48236	0.687	0.162	
Amount Reimbursed	12437	15684	1.926	48864	0.493	0.471	
Age of Claimant	39.7	37.7	1.295	40004	0.368	0.811	

<b>Occupation</b>							
	Earning Member	Non-earning member	t-statistic	Mann-Whitney U test statistic	Probability	$\chi^2$ Value	
Hospitalisation Days	3.894	4.495	1.109	46218	0.377	0.781	
Sum Insured	82782	68898	2.73*	51014	0.002*	9.652	
Premium Paid	1104	911	2.419*	49181	0.001*	11.471	
Amount Claimed	18159	14361	1.611	50896	0.222	1.489	
Amount Reimbursed	15929	12714	1.783	50526	0.292	1.112	
Age of Claimant	41.61	35.77	3.754*	49658	0.000*	12.579	

<b>Relation</b>							
	Self	Other Relation	t-statistic	Mann-Whitney U test statistic	Probability	$\chi^2$ Value	
Hospitalisation Days	4.13	4.26	0.243	45867	0.325	0.967	
Sum Insured	89397	63460	5.098*	54763	0.000*	24.698	
Premium Paid	12557	781	6.006*	54326	0.000*	35.992	
Amount Claimed	20844	12093	3.653*	57494	0.000*	17.970	
Amount Reimbursed	18006	10969	3.840*	55989	0.000*	12.710	
Age of Claimant	46.90	31.35	10.941*	61340	0.000*	88.128	

<b>Broad Disease Groups</b>					
	Communicable	Non-communicable	Accidents and Injury	Kruskal-Wallis test statistic ( $\chi^2$ )	
Hospitalisation Days	4.63	4.12	3.89	18.938*	
Sum Insured	59888	81295	75260	26.402*	
Premium Paid	710	1113	972	31.595*	
Amount Claimed	9893	19177	12429	38.048*	
Amount Reimbursed	9524	16488	11553	22.711*	
Age of Claimant	29.45	43.08	33.21	57.875*	

\* Significant differences at 5 per cent level of significance.



**Table 6: Descriptive Statistics for two years claims data  
(1 April 1997 to 31 March 1999)**

	Cases	Avg	Max	Min	Stan Dev
<b>Days Statistics</b>					
Days from Policy to Illness	618	177	374	0	103
Days from Illness to Admission	621	12	1095	0	58
Hospitalisation Days	621	4	109	0	7
Days from Claim to Settlement	581	121	475	3	71
<b>Insurance Statistics</b>					
Sum Insured of claimant	579	78074	300000	5000	61831
Premium paid by claimant	558	1049	5770	175	962
Total family insurance amount	564	203576	1000000	1885	156273
Total family premium	555	2456	11515	184	1933
Total persons insured in the family	570	3	7	1	1
Age of the claimant	582	39	76	1	19
<b>Amount Claimed</b>					
Room charges claimed	621	2904	125494	40	7225
Doctor charges claimed	621	5782	178880	30	11882
Diagnostic charges claimed	621	4433	143063	29	13633
Medical charges claimed	621	2503	56005	26	4947
Total amount claimed	621	16208	415083	540	29069
<b>Amount Reimbursed</b>					
Room charges	621	2408	60575	60	4534
Doctor charges	621	5012	102743	30	8639
Diagnostic charges	621	3482	129830	29	10383
Medicine charges	621	2114	41843	26	3642
Total amount reimbursed	621	14278	248200	906	22249
<b>Medical reference fees (paid for 284 cases)</b>	621	133	1000	200	180

**Table 7: Cross-section Regression Results of Claims and Reimbursements****Pearson Correlation Matrix of Variables**

	HD	D	G	Age	Self	Emp	SI	AC	AR
HD	1.000								
D	-0.024	1.000							
G	-0.004	0.092	1.000						
Age	0.073	0.312	0.059	1.000					
Self	0.009	-0.115	0.499	-0.413	1.000				
Emp	0.025	-0.011	0.482	-0.147	0.585	1.000			
SI	0.064	0.153	-0.062	0.375	-0.238	-0.124	1.000		
AC	0.418	0.143	-0.064	0.253	-0.155	-0.070	0.259	1.000	
AR	0.426	0.140	-0.075	0.280	-0.164	-0.076	0.316	0.935	1.000

**Regression Results**

Dependent variable: Amount Claimed

Multiple R: 0.512, Squared multiple R: 0.262

Adjusted squared multiple R: 0.253

F-ratio: 28.235 (Pr 0.000)

Independent variables	Coefficient	Std Error	t-value	Pr (2 Tail)
Constant	-5527.961	3638.044	-1.519	0.129
Hospitalisation days	1738.576	159.155	10.924	0.000
Disease (dummy)	5631.132	2423.867	2.323	0.021
Gender (dummy)	-3283.059	2812.205	-1.167	0.244
Age	196.886	72.720	2.707	0.007
Self (dummy)	-2175.603	3263.210	-0.667	0.505
Employed (dummy)	418.192	2821.989	0.148	0.882
Sum-insured	0.079	0.019	4.090	0.000

Dependent variable: Amount Reimbursed

Multiple R: 0.547, Squared multiple R: 0.299

Adjusted squared multiple R: 0.290

F-ratio: 33.827 (Pr 0.000)

Effect	Coefficient	Std Error	t-value	Pr (2 Tail)
Constant	-4508.713	2706.185	-1.666	0.096
Hospitalisation days	1333.870	118.389	11.267	0.000
Disease (dummy)	3663.412	1803.010	2.032	0.043
Gender	-3256.828	2091.879	-1.557	0.120
Age	173.015	54.093	3.198	0.001
Self (dummy)	-810.629	2427.362	-0.334	0.739
Employed (dummy)	341.569	2099.156	0.163	0.871
Sum-insured	0.081	0.014	5.630	0.000

- Disease (dummy) variable is 1 for non-communicable diseases and 0 for others
- Self dummy is 1 for principal policyholder and 0 for others members of family
- Employed dummy is 1 for if diseased is earning member and 0 for others
- Sum-insured is proxy for income variable.

**Table 8: Claims rejected or less reimbursements and reasons thereof**

	Cases	%
No error found (reimbursements = claims)	468	75.36%
Errors found (reimbursements < claims)	134	21.58%
Claim rejected (no reimbursement)	19	3.06%
<b>Total</b>	<b>621</b>	<b>100.00%</b>

**Reason for errors or claim rejection**

Charges not claimable (various items)	31	29.25%
Bill date outside hospitalisation dates	25	23.58%
Incorrect Bill and Errors in Calculation	17	16.04%
Claim exceeds sum insured	10	9.43%
Pre-existing disease	6	5.66%
Excluded from scope of policy	6	5.66%
Hospitalisation not necessary	4	3.77%
Duplicate bills	1	0.94%
Claim pending	1	0.94%
Others (not specified)	5	4.72%
<b>Total</b>	<b>106</b>	<b>100.00%</b>

**Table 9: Characteristics of cases referred for Medical Reference**

	Hospitalisation Days	Amount Claimed	Claim Settlement
Case not referred (337 cases)	3.23 days	Rs. 10598	110 days
Case referred (284 cases)	5.35 days	Rs. 22866	134 days
t-statistics	3.680	5.023	3.876
Mann-Whitney U test statistic (probability)	40725.5 (0.001)	32127.5 (0.000)	34353.5 (0.000)
$\chi^2$ approximation (d.f. = 1)	10.496	49.855	14.057

**Table 10: Registration of facility**

Registered	Cases	%
Yes	555	89.37%
Not specified	65	10.47%
No	1	0.16%
<b>Total</b>	<b>621</b>	<b>100.00%</b>

## Annexure 1

## Items of information on claim form

Terms	Explanation
Insured	Name of the person who has bought the policy
Claim No.	Claim Number
Policy No.	Policy Number
Period	Period of Insurance always (Twelve months)
Date of Loss	Date when the patient suffered the illness or injury or disease
Cause	Hospitalisation/Domestic Hospitalisation (whether the person was hospitalised or was advised rest at home)
Covered	Whether the person for whom claim is made is Covered by the insurance policy
Permitted by treating Doctor	That whether the Doctor permitted hospitalisation
Person involved in the cover	Number of persons covered by the policy
Any breach of warranties	There are certain Rules and Regulations, which have to be governed before the policy is issued, whether there is any breach of the said rules and regulations
Sum insured Persons	Amount the claimant is insured for Persons covered by the policy (sometimes you find this section empty it is only because of the speed of work that sometimes the insurance company does not find it necessary to write it down since there is form (pink form) in the same file which gives all these details)
Calculation	Whether the calculations in the form made by the claimant are correct
All Steps taken to minimise loss	Investigation by Doctors that if the person is aware that he is subject to an particular ailment did he take necessary steps to prevent the illness or not. Usually investigation done by the Doctors belonging to the Panel of the Insurance Companies. Also the investigation covers that whether the bills put for claim are pertaining to the disease or not
Insurable Interest	Power of Attorney. e.g. a family is insured and the son falls ill then the father or mother who are insured in the policy have insurable interest in it and can claim the amount. There has to be some relation, you cannot claim on behalf of a person whom you don't know
Amount claimed Amount payable Our share	Amount the claimant has claimed Amount payable by the insurance company after all investigations and scrutiny If the insured person or claimant is also insured by his company then what remaining percentage what he has not got from his company will have to be paid by the insurance company
Amount payable workout	Same as our share
Medical Reference Fees	All Insurance Companies have panel of Doctors whom they refer to if they find the claim case to be not normal. The fees charged by those Panel Doctors are to be paid by the Insurance Companies and not to be charged to the claimant
Compliance with the Insurance Act. 1938	Complied with section 64 VB and rules 58/59 of the Insurance Act 1938. This means that unless the claimant has paid the 'Final' of Full Premium of the insurance he has taken he is not eligible for claim from the insurance company. If he has paid part amount of the Premium then he is not eligible to get the claimed amount
Registered	Whether the given Doctor or Hospital is Registered or not
D.O.A.	Date of Admission to the Hospital if Hospitalisation
D.O.D.	Date of Dispatch from the Hospital if Hospitalisation
Disease/Injury Fully Cured Certificate Date	Name or Disease or Injury or Illness If there is a certificate saying that the patient is fully cured then what is the date of that certificate (usually one does not find this date)
Error	Whether there is any error in the sum calculated and whether any other things have been claimed not pertaining to the disease
Reason	Reason for the error in the claim made by the claimant and why the particular bill has been excluded from the total amount of claim

## Annexure 2

<b>Item of information</b>	<b>Particulars</b>
Address	Address of the person to identify geographic location
Age	Age of the diseased person
Gender	Gender of the diseased person
Relationship	Relationship of the diseased person to the policyholder
Occupation	Occupation of the diseased person
Hospital	Name of the hospital where the diseased patient was admitted
Registered	Whether the hospital is registered or not
Number of persons	Number of persons in the family who are insured
Sum insured	Amount of insurance for the diseased person
Premium	Insurance premium for the diseased person
Total Sum Insured	Total amount of premium paid by policyholder for insurance after totaling individual persons insured amount
Total Premium	Total amount of insurance premium for the whole family
Cumulative Bonus	Whether the persons is eligible for cumulative bonus and if yes then what percentage or amount is he eligible for

## References

1. Ansari, H. (2000), "Regulatory Aspects in Health Insurance," Paper presented at the conference on Health Insurance organised by the Indian Institute of Management, Ahmedabad during March 18-19, 2000.
2. Business Standard, IRDA to look into accreditation of hospitals, 2 August, 2001
3. Ellis R.P., Alam M. and Gupta I. (2000), Health Insurance in India: Prognosis and Prospectus. Economic and Political Weekly, 22 January 2000, pp: 207-217.
4. Ellis, R.P. and McGuire, T.G. (1996), "Hospital Response to Prospective Payment: Moral Hazard, Selection, and Practice-Style Effects," *Journal of Health Economics*, 15: 257-277.
5. Garg, Charu (2000), "Implications of Current Experience of Health Insurance in India," Paper presented at the conference on Health Insurance organized by the Indian Institute of Management, Ahmedabad during March 18-19, 2000.
6. GIC India (1995), "Health Insurance," International Workshop on Health Insurance in India, IIM, Bangalore, September 20-22, 1995.
7. Krishnan, T.N. (1996), "Hospitalisation Insurance: A Proposal," *Economic and Political Weekly*, April 13, 1996, pp: 944.
8. Kutzin, J. (1995), "Experience with organizational and financing reform of the Health Sector," SHS Paper 8, Geneva: World Health Organization
9. Mills, Anne (2000), "Health Insurance, Implications for the Demand and Supply of Health Services," Paper presented at the conference on Health Insurance organized by the Indian Institute of Management, Ahmedabad during March 18-19, 2000.
10. Newhouse, J.P. (1996), "Reimbursing Health Plans and Health Providers: Selection versus Efficiency in Production," *Journal of Economic Literature*, 34(3): 1236-1263.
11. Supakankunti, Siripen (2000), "Community Health Insurance in Thailand," Paper presented at the Conference on Health Sector Reforms, Equity, Efficiency, and Sustainability, Dhaka-Bangladesh 4-6 July 2000.
12. Zervoudis M. and Karamchandani A. (2000), "The Monitor Group Study on Insurance-I," *Business Today*, March 22, 2000.