

Financial Protection in Health Insurance Schemes: A Comparative Analysis of Mediclaim Policy and CHAT Scheme in India

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Abstract

This article analyzes the level of financial protection to low-income people during illness in 'private health insurance' and 'people's preferred health insurance'. In a hypothetical situation of being insured with both the pro-poor version of the 'Mediclaim policy' (private health insurance) and CHAT—'Choosing Health Plans All-Together'—scheme (people's preferred health insurance), this study analyzed the out-of-pocket-spending for health care incurred by persons per reported illness episodes in four select resource-poor locations in India. Three data sources were used: (a) household survey, (b) CHAT: a field-based experiment conducted in India to reveal people's preference for health insurance benefits and (c) the specification of conditions of Mediclaim policy. The study found, first, that the Mediclaim policy covers a small proportion (eight per cent) of the total reported illness episodes but CHAT scheme covers a large proportion (90 per cent) of illness episodes and, second, that the Mediclaim policy reimburses five per cent of the total health expenditure but CHAT scheme reimburses 37 per cent. The study concludes that private health insurance provides lower level of financial protection compared to 'people's preferred health insurance' and hence recommends that health insurance packages must be comprehensive and reflect community preference to make it attractive so that health insurance penetration can be increased.

Keywords

Health Insurance, Financial Protection, Health Expenditure, Mediclaim Policy, CHAT scheme

Introduction

Household out-of-pocket spending for health care occupies 90 per cent of private health expenditure in the year of 2007 in India (WHO 2010). This alone may push 2.2 per cent of the population below poverty line each year; 24 per cent of the people fall below the poverty line because they are hospitalised (Peter et al. 2002); 28 per cent in rural and 24 per cent in urban areas of those who had illnesses, have cited financial constraint as the reason for not having used health care (GoI 2005a). Further, there is a growing

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preference for private health care where more than 80 per cent of the people prefer to utilise private sector health care facilities (GoI 2005a). Despite massive and enormous efforts to scale up health insurance as a mechanism to reduce financial burden due to health care, the health insurance penetration is still very low in India. In the financial year 2008–09, voluntary private health insurance schemes had covered only 32.7 million individuals (GoI 2009), which accounts for around three per cent of the Indian population.¹

There can be several reasons for such a low level of health insurance uptake in India, among which the following three arguments are usually advanced: (a) low insurance awareness among the people; that is, people do not necessarily know what insurance, especially the formal insurance system, exactly is and why it is important for them to buy health insurance, (b) the poor are too poor to pay the premium because a majority of Indians are in the low and middle income groups and (c) insurance companies are not following aggressive business strategies to spread individual health insurance in the informal sector, mainly because the absence of proper data on morbidity and health expenditure-related issues may lead to market failures such as adverse selection and moral hazard. These aspects are widely discussed in various academic and policy circles in India. If we assume for a while that the above mentioned constraints are resolved, can we expect that people would buy health insurance in the present context? To answer this question, let us also look at another fundamental question which is the main focus of this article: Do prevailing health insurance schemes offer necessary financial protection during illness? To the knowledge of this author, there has been no study till date that has examined whether prevailing health insurance schemes in India meet the preferences of clients and hence offer necessary financial protection during illness.

In this article, we examined the above question by analyzing the level of financial protection to low-income people during illness in ‘private health insurance’ and ‘people’s preferred health insurance’, by exploring the effective financial protection (reimbursement) of the pro-poor version of the Medici claim policy in comparison to the ‘CHAT scheme’. The rest of the article is organized as follows. Section 2 explains the features of the CHAT scheme and Medici claim policy. Section 3 describes the data and methods. Section 4 presents the results and the last section discusses the findings and points out the implications and limitations of the study.

CHAT Scheme and Medici claim Policy

Many authors agree that if the poor are to accept and purchase insurance, it must respond to their needs (Ahuja and Jutting 2004; Gumber 2000; Leftley 2005; Radwan 2005). An appropriate health insurance scheme must respond to clients’ priorities, and cover affordable benefit package (Danis et al. 2007) to make it attractive. The responsiveness of health insurance to prospective clients’ perceived priorities would be positively associated with willingness to join such a system and pay for it (De Allegri et al. 2006; Schone and Cooper 2001). Further, we have evidence that people have strong preference for various health insurance benefits (Dror et al. 2007a) and do expect value for money from their enrolled scheme.

The common belief that people who are illiterate and innumerate may not be able to articulate their preferences for health insurance packages had been falsified by results of a simulation experiment called ‘Choosing Health Plans All-Together’ (CHAT) that was conducted among the poor in India to elicit their

preferences for health insurance benefits. CHAT is a simulation exercise designed to allow persons to define their own health insurance benefit package within the constraints of limited resources. It deals with the fundamental economic problem of reconciliation of limited resources and unlimited desires (for more details of CHAT tool, see Danis et al. 2007). The CHAT tool used in India was a revised version of the original CHAT tool developed and tested in the USA (Danis et al. 2002, 2004; Goold et al. 2005; Keefe and Goold 2004) which was then adapted to the Indian situation. It revealed that the poor will make a careful selection of benefits if they get an opportunity to reveal their preferences (Danis et al. 2007; Dror et al. 2007a).

In the CHAT exercise, the participants rationally select preferred health insurance benefits from 10 pre-defined health insurance benefits at basic (B), medium (M) and high (H) level for a hypothetical health insurance package, given a limited budget. The 10 benefits are: drugs (D), out-patient care (OP), in-patient charges (IP), tests (T), dental care (DEN), medical equipment (ME), preventive care (P), maternity care (M), indirect costs (IC) and mental healthcare (MH). Further, corresponding to the level of selected benefits, the health insurance scheme would reimburse 50 per cent, 75 per cent and 100 per cent of the expenditures at basic, medium and high levels, respectively. During the CHAT exercise that was conducted in rural India for the first time in November–December 2005, the participants revealed their preferences for health insurance benefits resulting in the composition of various health insurance packages.

The CHAT exercise revealed that people have strong preferences for specific benefit packages and are able to design various viable health insurance schemes within their budget constraints. Among the several preferred hypothetical health insurance packages designed by low income communities during the CHAT exercise in India, the present study considered the highly preferred CHAT health insurance scheme comprising of only five major health care benefits, viz., hospitalization (In-Patient) charges (IP), consultation (during out-patient visits) charges (OP), tests and image (T), drugs prescribed (D) and indirect costs incurred as wage loss and travel costs of patient and caring person/attendant (IC). In short, the CHAT scheme consists of IP (B), OP (B), D (B), T (B) and IC (B), where:

1. **IP (B)** = Hospitalization charges at basic level (50 per cent)
2. **OP (B)** = Consultation charges at basic level (50 per cent)
3. **D (B)** = Tests (Lab and Image) at basic level (50 per cent)
4. **T (B)** = Drugs (prescribed) at basic level (50 per cent)
5. **IC (B)** = Indirect costs at the rate of INR 50 per day of hospitalisation (wage loss and travel costs of patient and caring person/attendant)

As already mentioned, the selected health insurance benefit at basic level (B) and high level (H) under the CHAT scheme would reimburse 50 per cent and 100 per cent of the incurred health expenditure, respectively. However, under the benefit of indirect cost, the reimbursement at basic level is INR 50. In short, there is no ceiling on reimbursement (except in the case of indirect costs) in the CHAT scheme, but, there is a co-insurance rate and it is 50 per cent at the basic level (B) and zero per cent at higher levels (H).

The Mediclaime policy and the *Jan Arogya* policy, of the four public sector insurance companies (viz, National Insurance Company, New India Assurance Company, United Insurance Company, and Oriental Insurance Company), are the two major health insurance schemes available in India. Since the individual

Mediclaim policy is the dominant among the prevailing health insurance schemes in terms of supply and demand in India, and is being supplied by the four public sector general insurance companies since 1987, we have taken the Mediclaim policy as the representative commercial scheme in the present study. Moreover, health insurance in India is generally equated with the Mediclaim policy as it is the oldest and relatively most popular one and is considered to be more comprehensive than others.

In India, none of the existing schemes covers the out-patient care expenses; apparently, the Mediclaim policy is basically a hospitalization (in-patient) scheme. With the privatization of the insurance market in the country in 2000, many private sector players entered it, breaking the monopoly of the public sector general companies. Their health insurance products are similar to the Mediclaim policy. Currently, apart from the four public sector companies, more than 12 private sector general insurance companies provide health insurance schemes.

The sum insured under the Mediclaim policy ranges from INR 30,000 to INR 500,000 and the premium varies according to the amount of insurance coverage bought by clients at the time of buying. Given the low per capita income of INR 23,222 (\$550) annually at current prices during the year 2004–05 (GoI 2005b), it can be inferred that the ability of the majority of Indians to pay is poor; they might prefer to buy a small amount of health insurance coverage. Moreover, many ‘willingness to pay’ studies in India (Mathiyashakan 1998; Dror et al. 2007) revealed that the average ‘willingness to pay’ for health insurance by rural Indians is around INR 100 per annum. In fact, after adjusting with the age factor, the annual premium of the Mediclaim policy for the minimum amount of insurance coverage of INR 30,000 is in the range INR 500–600. Therefore, we can expect that if the poor buy a Mediclaim policy, they would opt for the minimum coverage of INR 30,000. Moreover, by taking INR 30,000 as the insured amount under the Mediclaim policy, we can expect that the findings of this study can be transferred to the context of the recently introduced *Rashtriya Swasthya Bima Yojana* (RSBY)—a health insurance scheme by the government of India for the BPL population- offers coverage for INR 30,000 per year (GoI 2010). Hence, this coverage level is taken as the ‘pro-poor version’ of the Mediclaim policy and this version is what is referred to when the term Mediclaim policy is used in the rest of this article.

Data and Methods

This study has utilized three major data sources.

- First, the household survey that was conducted in 2005 in India by an EU-funded research project on ‘Strengthening Micro Health Insurance for the Poor in India’. The utilization data originate from 2,830 households and 3,648 illness episodes. The analysis is based on self-reported illness episodes during the three months prior to the survey in four selected ‘resource-poor’ locations in India. For the sake of the present study, the data was rearranged and the unit of analysis was converted from households to individuals. Accordingly, per capita ‘out-of-pocket spending’ for health care incurred per illness episodes per year was used.
- Second, the results from ‘Choosing Health Plans All Together’ (CHAT) exercise were utilized. The exercise was carried out in November–December 2005, in some selected locations in the states of Karnataka and Maharashtra. Around 302 individuals organised in 24 groups participated in the exercise.

- Third, the specification of the conditions of the Mediclaim policy issued by the four public sector general insurance companies namely, National Insurance Company (NIC), New India Assurance Company (NIAC), United Insurance Company (UIC), and Oriental Insurance Company (OIC) was extracted from their official web sites (as on August, 2005)² and also from the respective policy prospectus that was distributed to the people while buying such schemes. However, the latest version of the specifications of the Mediclaim policy is also referred to, to ensure that the study findings are valid to date as well. Nevertheless, the policy prospectuses of other health insurance schemes prevailing in the Indian market have also been used to understand to what extent these schemes are similar to the Mediclaim policy.

The study is placed in the contexts of a hypothetical situation of being insured with Mediclaim Policy and the CHAT scheme. The study compared the out-of-pocket expenses for health care incurred by persons per reported illness episode in the past 3 months as well as the illness episodes covered and the level of reimbursement from both schemes in four selected resource-poor locations in India. The four selected locations have micro-health insurance programme and almost 50 per cent of our sample have enrolment in micro-health insurance programmes in their respective locations; however, we neither report the reimbursement from these micro-health insurance programmes nor compare the health care expenditure between insured and uninsured individuals. For the ease of discussion, we call these locations micro-health insurance units and, therefore, the four locations are the following: BAIF and UPLIFT in Maharashtra, Nidan in Bihar and Dhan in Tamil Nadu. To keep the analysis manageable, the interpretation of the result and further analysis are performed largely in terms of a comparison of the Mediclaim policy on the one hand and the CHAT scheme on the other hand, without discussing the variation in the study results across these four locations.

The study used the following three simple steps. First, the extent to which all illness episodes will be covered by both insurance schemes across various selected locations was investigated. Second, we estimated the level of reimbursement for the illness episodes from each insurance scheme. Third, we performed a decile-wise analysis of the identification-eligible illness episodes and the estimation of the reimbursement level to understand whether the high-cost illness episodes are covered by both types of insurance schemes or not.

Identification of Eligible Illness Episodes and Calculation of Reimbursement under the Mediclaim Policy and CHAT Scheme

In this regard, the eligible illness episodes for reimbursement from the reported illness episodes in the household survey were identified and listed separately under Mediclaim policy and CHAT scheme for reimbursement. It needs to be mentioned here that neither the Mediclaim policy nor the CHAT scheme directly list the names or types of illness episodes that are covered/eligible under the respective scheme, but they do list the type of health insurance benefits covered therewith, say, for example, in-patient care, out-patient consultation expenses, drugs, etc. Therefore, we have examined the health insurance packages covered by each insurance scheme and compared these with morbidity conditions of the individuals who participated in the household survey.

Subsequently, the study has identified and listed the illness episodes that would be eligible for reimbursement from each insurance scheme according to the benefits offered by each and the required benefits for reimbursement by each reported illness episode. For example, the Mediclaim policy offers only in-patient care, so those illness episodes requiring in-patient care was identified and listed as the ones eligible for reimbursement from the Mediclaim policy. In the rest of the article, we use the term 'eligible illness episodes' to denote those illness episodes that are eligible for reimbursement from the respective insurance scheme. Apart from this, other eligibility conditions in terms of co-insurance and ceilings are also examined to determine the amount of reimbursement.

Since the Mediclaim policy does not cover all types of expenses due to illness, and there is no direct listing of which illnesses are being covered in the policy prospectus, this study has identified the illness episodes that are covered based on the 'inclusion' and 'exclusion' of benefits in the Mediclaim policy. As per the specifications, it covers all direct expenses due to 'hospitalization' (in-patient), 30 days pre-hospitalization and 60 days post-hospitalization related to 'out-patient' expenses. It excludes all expenses related to 'out-patient' care other than the above and maternity care. Therefore, we have identified the eligible illness episodes for reimbursement from the Mediclaim policy as those illness episodes that require hospitalization but do not include maternity care. This is what has been termed 'Mediclaim eligible illness episodes' throughout this study.

Calculation of Total Health Expenditure for Estimating Reimbursement

In this regard, the total health expenditure and reimbursement for reported illness episodes was calculated. We estimated the level of reimbursement under each insurance scheme, in both absolute and relative terms, for eligible illness episodes. To analyze in absolute terms, we compared the mean total health expenditure with the mean reimbursement amount for eligible illness episodes under each of the insurance schemes. The proportion of reimbursement to total health expenditure has also been calculated to analyze reimbursement in relative terms.

The following formulae are used for the calculation of total health expenditure (total cost) and the mean value of cost incurred during each illness episode.

1. **Total Health Expenditure** = Hospitalization charges (IP) + Consultation charges (OP) + Drugs (D) expenses (prescribed) + Test (T) expenses + Indirect Costs (IC);
2. **Mean Health Expenditure of eligible illness episodes³ under each insurance scheme** = Total health expenditure for eligible illness episodes under each insurance scheme/Total number of eligible illness episodes.

The following algorithm is used for the calculation of reimbursement amount from the Mediclaim policy:

Amount of reimbursement for Mediclaim policy = (hospitalization charges (IP) + consultation charges (OP) + drugs (D) expenses (prescribed) + test (T) expenses) for the Mediclaim eligible illness episodes with a ceiling of INR 30,000.

Like the Mediclaim policy, the CHAT scheme also does not directly mention the illnesses covered but only mentions the health care benefits covered. Illness episodes that are eligible for reimbursement under the CHAT scheme have been identified on the same basis as was done for the Mediclaim policy. We use the following formula to calculate reimbursement under the CHAT scheme.⁴

Amount of reimbursement for CHAT scheme = 50 per cent of $([IP] + [OP] + [D] + [T]) + (\text{number of days hospitalized} \times \text{INR } 50 \text{ for 'CHAT Scheme 1 eligible illness episodes'})$.

Decile-Wise Classification of Illness on the Basis of Total Health Expenditure

In general, insured people prefer to have health insurance cover against both catastrophic exposures and less catastrophic exposures. Therefore, apart from knowing how many illness episodes are covered by both insurance schemes, it is equally important for us to know the nature of illness episodes eligible for reimbursement in terms of treatment cost. To know whether the pattern and eligibility of reimbursement is correlated with the cost of illness/treatment, the illness episodes are classified into 10 classes. It is done with an interval of 10 per cent of the illness episodes (that is, 10 per cent of 3648 = 365 in each class) in an ascending order based on the value of total health expenditure (cost of illness). Table 1 presents the distribution and mean value of health expenditure by deciles.

Table 1. Classification of Reported Illness Episodes into Health Expenditure Deciles

Deciles	Number of Reported Illnesses	Mean Value of Health Expenditure (in INR)	Cumulative Percentage Distribution of Health Expenditure (%)
1	365	2 (2)	0.02
2	365	42 (16)	0.41
3	365	97 (16)	0.95
4	365	165 (22)	1.61
5	365	245 (28)	2.38
6	364	354 (41)	3.44
7	366	527 (59)	5.13
8	365	823 (118)	8.00
9	365	1533 (367)	14.91
10	363	6493 (5945)	63.15
Total	3648	1025 (2650)	100

Source: Household survey. Figures in brackets show standard deviation from mean.

We can observe from Table 1 that 63 per cent of the health expenditure falls under the upper deciles, which means, that the total health expenditure falls more heavily on the upper deciles for all reported illness episodes.

Results and Analysis

Eligible Illness Episodes for Reimbursement

Based on the types of benefit packages offered by each insurance scheme, we have estimated the illness episodes that will be covered. Table 2 gives the total number of reported illness episodes as well as the number and proportion of illness episodes covered under various insurance schemes.

Table 2. Illness Episodes Covered by Both Insurance Schemes

Location	Total Number of Reported Illnesses	Mediclaim Policy		CHAT Scheme	
		Number of Illness Episodes Covered	Proportions of Eligible Illness Episodes to Total Illness Episodes	Number of Illness Episodes Covered	Proportions of Eligible Illness Episodes to Total Illness Episodes
Baif	502	48	10%	487	97%
Uplift	472	38	8%	443	94%
Nidan	1229	70	6%	1138	93%
Dhan	1445	95	7%	1067	74%
All Locations (average)	912	63	8%	784	90%

Source: Household survey.

Table 2 demonstrates that, of the total reported illness episodes, the Mediclaim policy covers only a limited number of illness episodes across various locations. On an average of all locations, Mediclaim policy covers only around eight per cent of the total reported illness episodes. In contrast to this, the CHAT scheme covers a large proportion of the reported illness episodes (on an average of 90 per cent) across various locations. In short, we can find that various CHAT schemes are more comprehensive than the Mediclaim policy with respect to covering a large proportion of reported illness episodes.

To see whether the coverage is skewed in favour of low-cost or high-cost illness episodes or both are evenly covered under these insurance scheme, let us now examine the decile-wise distribution of illness episodes across both insurance schemes (see Table 3), keeping in mind that the Mediclaim policy covers only around eight per cent whereas the CHAT scheme covers 90 per cent of the reported illness.

Table 3. Distribution of Reported Illness Episodes Eligible for Reimbursement under each Insurance Scheme (All Locations Together), Decile-Wise

Decile	Mediclaim Policy		CHAT Scheme	
	Number of Reported Illnesses Episodes Eligible for Reimbursement	Percentage Distribution of Eligible Illness for Reimbursement	Number of Reported Illnesses Episodes Eligible for Reimbursement	Percentage Distribution of Eligible Illness for Reimbursement
1	5	1%	310	85%
2	6	1%	320	88%
3	6	2%	324	89%
4	8	2%	334	92%
5	8	2%	347	95%
6	8	2%	355	97%
7	12	3%	353	97%
8	20	5%	357	98%
9	45	12%	362	99%
10	151	41%	355	97%
Total	269	7%	3417	94%

Source: Household Survey.

It is clear that the CHAT scheme reimburses for eligible illness fairly across all the deciles. But the Mediclaim eligible illness episodes are more skewed in the upper deciles. It can be seen that though only around eight per cent of the total reported illness episodes are covered by the Mediclaim policy; out of this, a larger proportion of eligible illness episodes (41 per cent) falls in the upper health expenditure deciles. But, in the CHAT scheme, the proportion of illness episodes is fairly distributed across each health expenditure decile. In short, though the Mediclaim policy covers a few illness episodes, it covers mainly the high-cost illness episodes. On the other hand, the various CHAT scheme cover low-cost as well as the high-cost illness episodes. In summary, we can infer that the CHAT scheme covers those illness episodes that will be having both high and low health expenditure but Mediclaim covers only those illness episodes that will be having high expenditure.

Reimbursement Levels

Table 4 presents the mean health care expenditure on eligible illness episodes under each insurance scheme as well as of all reported illness episodes.

Table 4. Reimbursement for Both 'Eligible' and 'All' Illness Episodes from Mediclaim Policy and CHAT Scheme

Location	Mean of Total Health Expenditure of All Illness Episodes (n = 3648)	Mediclaim Policy		CHAT Scheme	
		Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes (%) (n = 3648)	Proportion of Reimbursement to Total Health Expenditure for Eligible Illness Episodes (%) (n = 251)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes (%) (n = 3648)	Proportion of Reimbursement to Total Health Expenditure for Eligible Illness Episodes (%) (n = 3117)
Baif	1807(4636)	8(25)	82(19)	45(19)	46(17)
Uplift	1005(2723)	7(24)	86(21)	44(17)	47(13)
Nidan	919(1668)	5(20)	85(20)	43(17)	46(13)
Dhan	851(2289)	4(18)	64(34)	28(26)	38(23)
All Locations	1025(2650)	5(21)	77(28)	37(23)	44(18)

Source: Household Survey. Figures in Brackets Show Standard Deviation from Mean.

Out of the total reported illnesses in all locations, the CHAT scheme reimbursed 37 per cent of the total health expenditure whereas the Mediclaim policy reimbursed only five per cent of the total health expenditure. Since the true purpose of having health insurance coverage is its ability to reduce the out-of-pocket financial burden of those insured, the CHAT scheme is relatively more capable than the Mediclaim policy to provide financial protection during illness.

However, taking into account only the eligible illness episodes for reimbursement, the CHAT scheme reimburses only 44 per cent of the total health expenditure incurred under the eligible illness episodes, even though 90 per cent of all illness episodes are 'eligible illness episodes for reimbursement' under this scheme. Though the medical policy covers only eight per cent of all illness episodes, it reimburses 77 per cent of the total health expenditure of these eligible illness episodes, which means that reimbursement rate is higher in the Mediclaim policy than in the CHAT scheme. The obvious reason for this is that the

Mediclaim policy covers illness episodes that require hospitalization rather than outpatient consultation. These episodes are more likely to be chronic illness and hence, high-cost.

Let us now discuss the decile-wise reimbursement for eligible as well as for all illness episodes under both insurance schemes (see Table 5).

Table 5. Decile-Wise Reimbursement for both 'Eligible' and 'All' Illness Episodes from Mediclaim Policy and CHAT Scheme

Deciles	Mean Value of Health Expenditure (in INR)	Mediclaim Policy		CHAT Scheme	
		Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes (%) (n = 3648)	Proportion of Reimbursement to Total Health Expenditure for Eligible Illness Episodes (%) (n = 251)	Proportion of Reimbursement to Total Health Expenditure for All Illness Episodes (%) (n = 3648)	Proportion of Reimbursement to Total Health Expenditure for Eligible Illness Episodes (%) (n = 3117)
1	2(2)	0(0)	0(0)	35(27)	50(0)
2	42(16)	0(0)	0(0)	34(22)	50(16)
3	97(16)	1(7)	100(0)	41(24)	46(20)
4	165(22)	1(9)	61(45)	40(23)	44(20)
5	245(28)	1(9)	72(26)	42(18)	44(15)
6	354(41)	1(11)	80(28)	41(20)	42(20)
7	527(59)	3(16)	78(40)	41(18)	43(16)
8	823(118)	4(19)	75(34)	42(22)	43(21)
9	1533(367)	10(28)	82(23)	40(17)	40(17)
10	6493(5945)	32(41)	78(24)	42(17)	43(16)
Total	1025(2650)	5(21)	77(28)	37(23)	44(18)

Source: Household survey. Figures in brackets show standard deviation from mean.

It is obvious from Table 5 that the CHAT scheme reimburses fairly for the eligible as well as for all illness episodes across the deciles. The proportion of reimbursement to total health expenditure ranges from 34 per cent to 42 per cent for all illness episodes and from 40 per cent to 50 per cent for 'eligible illness episodes'.

But, the Mediclaim policy reimburses only a small proportion of the total health expenditure for all illness episodes, except the 10th decile. However, the mean value of reimbursement from Mediclaim policy for eligible illnesses is skewed towards the upper deciles as compared to the CHAT Scheme. For example, the Mediclaim policy reimburses 82 per cent and 78 per cent of the total health expenditure of the eligible illnesses in the upper 9th and 10th deciles. It means that though the Mediclaim policy covers only a few illness episodes, it provides a higher level of financial protection to the illness episodes that are covered.

Discussion and Conclusion

One of the major findings of this study is that people insured with both CHAT scheme and Mediclaim policies have to pay for health care despite paying the insurance premium, which means that neither

scheme is comprehensive enough to minimize the burden of the out-of-pocket health expenditure. From an insured person's perspective, the objective of having health insurance protection is to minimize the burden of out-of-pocket health expenditure by getting complete reimbursement for each illness incident. However, such a comprehensive health insurance package can be provided only at a premium higher than is charged now and could prove beyond the reach of a large part of the Indian population. We have observed above, in both the Mediclaim policy and the CHAT scheme that the insured persons are in a situation of having to pay their health insurance premium on the one hand, and out-of-pocket spending for some part of the health care on the other.

Another major question we raise in this study is, which of the two—the Mediclaim policy or the CHAT scheme—provide a higher level of effective financial protection to the insured. The overall financial protection is higher under the CHAT scheme than under the Mediclaim policy. The Mediclaim policy covers a small proportion (around eight per cent) of the total reported illness episodes while the CHAT scheme covers a large proportion (more than 90 per cent). Similarly, the Mediclaim policy reimburses only five per cent of the total health expenditure but the CHAT scheme reimburses on an average of 37 per cent of the total health expenditure.

The Mediclaim policy gives the wrong impression that health insurance is the least attractive health care financing strategy. This could be one reason why the Mediclaim policy covers only a small proportion of the population even though it has been in the market since 1987. However, though the Mediclaim policy covers only a few illness episodes and thus reimburses only a meagre portion of the total health care expenditure, one argument in its favour is that it gives catastrophic protection for those covered illnesses as compared to the CHAT scheme. The Mediclaim policy still has relevance in a situation where high treatment costs of catastrophic illnesses lead to pushing people below the poverty line.

The issue of the non-comprehensiveness of health insurance schemes should be viewed in a context where a large part the Indian population does not have significant experience with any kind of risk-pooling forms of insurance, other than the life insurance scheme, which are mainly saving schemes (where they will get back a significant part of the premium income even if the insured events do not occur). In such a situation, a person enrolled with health insurance perhaps expects that he/she would get back a major part of the premium even if the person does not fall sick, although the person is aware of the fact from the health insurance documents that reimbursement will be given only when the insured event occurs. Issues arise when an insured person does not even get reimbursement once he/she falls sick. In this context, we can observe that the various CHAT schemes have a significant comparative advantage over the Mediclaim policy, partly in terms of the large number of illness episodes eligible for reimbursement from CHAT scheme.

Apart from the above issues, we have found that the illness episodes, health expenditure and reimbursement levels vary considerably not only between the Mediclaim policy and the CHAT scheme but also across various locations. Therefore, it is important to consider the region-specific features, such as health care infrastructure, health problems, etc., while designing health insurance schemes. To increase the health insurance penetration in the country, health insurance packages must be comprehensive and must reflect community preferences, income levels, and location-specific health and health care conditions. Moreover, community participation in decision-making is recommended for ensuring universal access to necessary health care. As the market is not able to respond to people's preferences and is unable to provide complete financial protection during illness through health insurance, the central, state and local governments should make policy decisions to implement universal and comprehensive health

insurance programmes with community participation. This can be done through initiatives such as the National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM) by making community health insurance an integral part of it.

It needs to be borne in mind that the CHAT scheme is a hypothetical health insurance scheme composed by the surveyed communities. The fact that the communities chose to fashion an insurance package that was vastly dissimilar to the Medclaim policy should be a pointer to people's preferences. From the perspective of a national health care policy, the CHAT scheme has the advantage of rationing the limited health care resources. The co-insurance of 50 per cent would work as an effective tool to control demand-induced moral hazard.

Before concluding, let us also point out some of the limitations of this study. For effectively comparing the nominal value of money of the Medclaim policy and the CHAT scheme, we should have the market premium of both health insurance schemes. But the CHAT scheme does not have a market premium, making the two non-comparable. Since the study is conducted in a hypothetical scenario of being insured, the data on household expenditure that we have utilized do not necessarily reflect that of people who have comprehensive health insurance coverage. The fact is that once comprehensive health insurance programmes are put in place, it may lead to major market failure such as 'adverse selection' (propensity of the high risk/unhealthy to join the scheme than the low risk/healthy people) and 'moral hazard' (change in the behaviour of the insured in the form of over-utilization of health care goods and also of taking less preventive care due to insurance coverage). Moreover, in a low-income country like India, utilization of health care facilities is poor because of financial constraints; once comprehensive insurance that will remove, or at least reduce this constraint, is introduced, it can be expected that utilization will drastically increase. This will imply much higher health expenditure than revealed in the data. The present article has not looked into these issues. These could offer scope for future research.

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Notes

1. This figure is after excluding the fully funded government-sponsored health insurance programs such as RSBY, CGHS, ECHS, ESIS, state level programs in Andhra Pradesh, Tamil Nadu and Karnataka.
2. Since the household survey was conducted during August 2005, the household-level health expenditure profiles are compared with the specification on the Medclaim policy as on 2005 to make the comparison more logically consistent.
3. For example, if the total health expenditure for Medclaim-eligible episodes (at BAIF) is ₹291,865, and the total number of Medclaim-eligible illness episodes (at BAIF) is 48, then, the health expenditure is 29,1865 /48, which is ₹6,081.
4. As we are comparing the Medclaim policy with the CHAT scheme, the following facts have to be highlighted:
(a) there is no co-insurance or deductible with the Medclaim policy but there is co-insurance (50 per cent and

0 per cent co-insurance for benefits at the basic (B) and high (H) levels, respectively) with the CHAT scheme, and (b) the ceiling on the reimbursement amount is INR 30,000 and no additional expenditure above this ceiling is reimbursed under the Mediclaime policy. In the case of the CHAT Scheme, no ceilings have been imposed and all incurred expenses that fall under the eligible health insurance benefits will be reimbursed at the selected level (i.e., 50 per cent) except for reimbursement under the benefit indirect cost (IC) which are subject to a ceiling (INR 50 at basic level and INR 100 at high level).

References

- Ahuja, R. & J. Jutting (2004). *Are the poor too poor to demand health insurance?* New Delhi: Indian Council for Research on International Economic Relations.
- Danis, M., A.K. Biddle & S.D. Goold (2002). Insurance benefit preferences of the low-income uninsured. *Journal of General Internal Medicine*, 17(2), 125–33.
- (2004). Enrollees choose priorities for medicare. *Gerontologist*, 44(1), 58–67.
- Danis, M., E. Binnendijk, S. Vellakkal, A. Ost, R. Koren, & D. Dror (2007). Eliciting health insurance benefit choices of low income groups. *Economic and Political Weekly*, 62 (32), 3331–3339.
- Danis, M., M. Ginsburg & S.D. Goold (2006). The coverage priorities of disabled adult medical beneficiaries. *Journal of Healthcare for the Poor and Underserved*, 17(3), 592–609.
- De Allegri, M., M. Sanon, J. Bridges et al. (2006). Understanding consumers preferences and decision to enrol in community-based health insurance in rural west Africa. *Health Policy*, 76(1), 58–71.
- Dror, D., R. Koren, A. Ost, S. Vellakkal, & M. Danis (2007a). Health insurance benefit packages prioritised by low-income clients in India: Three criteria to estimate effectiveness of choice. *Social Science and Medicines*, 64(4), 884–96.
- Dror, D., R. Radermacher & R. Koren (2007b). Willingness to pay for health insurance among rural and poor persons: Field evidence from seven micro health insurance units in India. *Health Policy*, 82(1), 12–27.
- Goold, S., D., A.K. Biddle, G. Klipp et al. (2005). Choosing health plans all together: A deliberative exercise for allocating limited healthcare resources. *Journal of Health Policy and Law*, 30(4), 563–601.
- GoI. (2005a). *Morbidity, healthcare and the condition of the aged*, NSSO 60th round, report No 507, National Sample Survey Organization. New Delhi: Ministry of Statistics and Programme Implementation.
- (2005b). India statistics-national income, *Central Statistical Organisation*. New Delhi: Ministry of Statistics and Programme Implementation.
- (2009). *Macro indicators on health insurance data—2008–09*. New Delhi: Insurance Regulatory and Development Authority (IRDA)
- (2010). *Rashtriya Swasthya Bima Yojana*, Ministry of Labour and Employment. www.rsby.gov.in/. Accessed on 12th October 2010.
- Gumber, A. & V. Kulkarni (2000). Health insurance for informal sector-case study of Gujarat, *Economic and Political Weekly*, 35(40), 3607–3613 .
- Keefe, C.W. & S.D. Goold (2004). Designing health plan benefits: A simulation exercise. *Medical Education*, 38(11), 1196.
- Leftley, R. (2005). Technical assistance for the promotion of micro insurance—The experience of opportunity international. Good and bad practices in micro insurance. CGAP Working Group on Micro insurance. Good and Bad Practices Case Study No. 11 (Report), International Labour Organisation, Geneva. Retrieved from <http://www.ilo.org/employment/Whatwedo/Publications> (accessed on 12th January 2012)
- Mathiyashagan, K. (1998). Willingness to pay for rural health insurance through community participation in India. *International Journal of Health Planning and Management*, 13(1), 47–67.
- Peters, D.H., A.S. Yasbeck, R.P. Sharma et al. (2002). *Better health systems for India's poor: Findings, analysis and scheme*. Washington, DC: World Bank.

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- Radwan, I. (2005). India: Private health services for the poor, a policy note. Washington, DC: World Bank.
- Schone, B.S. & P.F. Cooper (2001). Assessing the impact of health plan choice. *Health Affairs (Millwood)*, 20(1), 267–75.
- World Health Organisation (2010). *World health statistics 2010*. Geneva, Switzerland: WHO.