



Micro Health Insurance in India

POINTERS FOR PROGRESS

DR. DAVID DROR SAYS ‘ONE CANNOT EXCLUDE THE POSSIBILITY THAT INSURERS AND OTHERS, INSUFFICIENTLY AWARE OF CLIENTS’ PRIORITIES, SEEM TO MISINTERPRET LOW DEMAND AS REFLECTING LOW WILLINGNESS TO PAY, IGNORING THE UNATTRACTIVE VALUE-PROPOSITION OF THE MAIN PRODUCT AND THE DEVASTATING IMPACT ON THE DEMAND SIDE OF “CHERRY PICKING” ... ONE CAN WONDER IF THOSE WHO ARE INTERESTED IN MAKING INSURANCE WORK FOR THE POOR IN INDIA MIGHT BE STUCK IN A VICIOUS CYCLE, WHICH LOOKS LIKE THIS: POOR PRODUCTS →LOW DEMAND →LOW WILLINGNESS TO PAY →LOWERING OF PREMIUMS →FURTHER WORSENING OF INSURANCE PRODUCT OR SERVICE ...

Introduction

The IRDA concept paper¹ that preceded the publication of the IRDA (Micro-insurance) Regulations 2005 explained the objectives underlying those regulations. In the background section of the Concept Paper one can read that: “*Micro-insurance refers to protection of assets and lives against insurable risks of target populations...*” The purpose of this article is to examine the extent to which Micro health insurance products, i.e. health products that comply with the specifications of the IRDA (Micro-Insurance) Regulations 2005, achieve this goal.

We recall the salient features defined in the Regulations:

- Health insurance sold under the “general micro-insurance product” or the “life micro-insurance product” definition must cover (“cap”) no less than Rs. 5,000 (per individual) or Rs. 10,000 (per

household). Although not specifically stated in the Regulations, it is assumed that this cap applies for the entire period of the contract (rather than to a single episode of illness).

- The minimal period of coverage is one year. The Regulations do not specify the terms for renewal, and this implies that insurers could decide to renew or not to renew any policy at the end of the affiliation period. Incidentally, insurers could also change the terms of the policy and the premium it commands, which *de facto* means that insurers could cherry pick. And insurers can decide whether to accept an offer of insurance in the first place or refuse it.
- Minimum and maximum age of the insured is left to insurers’ discretion. The Regulations do not require the insurer to justify such exclusions, or to maintain the same age limitations for all insured.

1. http://www.microhealthinsuranceindia.org/content/e22/e156/e288/e289conceptpaper_microinsurance_aug182004.pdf

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- The Regulations do not define the scope of coverage; therefore, insurers can (and do) exclude certain conditions or pathologies from coverage (both pre-existing and newly diagnosed ones).

Method

We examined the effectiveness of the product in protecting the clients against high expenses related to illness. The analysis of the degree of protection of assets was done by reference to the compensation that would be due under the terms of the most widely sold health insurance product known as ‘*Mediclaim*’ policy’, and we looked at its low-cost version known as *Jan Arogya Bima*² which is adapted to the caps defined in the Microinsurance Regulations.³

For the examination of cases of illness, we used a dataset that includes 4,317 illness episodes that were reported by 3,531 households on illnesses that occurred during the three months preceding a HH survey. The household survey was conducted among low-income persons in five locations in India in 2005 by the project “Strengthening micro insurance units for the poor in India”⁴.

Examination of effective protection

It is often claimed that insurance should

cover low probability and high cost events. The way to examine the effectiveness of insurance that follows this logic would be to examine events that are low frequency and high costs. In the case of this examination, we look separately at the 10% most expensive illness episodes (top decile) and at hospitalizations in general. How well were they covered under the terms of *Jan Arogya Bima*?

It is often thought that high cost of illness is intimately associated with hospitalizations. However, in our dataset, only 524 illness episodes (12%) seemed

eligible; from the total number of 4,317 episodes, only 960 episodes (22%) entailed hospitalization, but 436 episodes with hospitalization originated from excluded pathologies and 3357 episodes did not entail hospitalizations. This means that 3,793 reported illness episodes seemed ineligible for reimbursement. In passing one should add that the cost of the ineligible cases can be very high. This suggests that the limitation of insurance coverage to selective cases of hospitalization fails to provide protection to many other illness episodes, and the qualifying condition for financial

Table 1: Locations included in the 2005 household survey with valid illness episode data

Location	State	District	Rural HH	Urban HH	Illness episodes	Sampled HH Per location
I	Maharashtra	Pune	708		502	708
II	Maharashtra	Pune		700	472	700
III	Bihar	Patna	160		279	
		Vaishali	160	354		
		Khagaria	180	383		
		Muzaffarpur	100	54		
		Nawada	40	28		
IV	Tamil Nadu	Theni	722		1445	722
		Chennai		701	669	701
Entire sample			2,030	1,501	4,317	3,531

2 The programme is sold by all insurance companies in India, with only minor variations. The brief description given here was adapted from one variation, posted on the website of Oriental Insurance Co.): The policy is available to persons between the age of 5 years and 70 years. Children between the age of 3 months and 5 years of age can be covered provided one or both the parents are covered concurrently. Covered Risks: The policy covers hospitalization and domiciliary hospitalization, which extends to 30 days before the hospitalization and 60 days after discharge from hospital; benefits consist of reimbursement of medical expenses incurred in respect of covered disease /surgery while the insured was admitted in the hospital as an in patient. The benefits are up to Rs 5000/- per person per annum. Major Exclusions: Any pre-existing disease, any expense incurred during first 30 days of cover except injury due to accident, all expenses incurred in respect of any treatment relating to pregnancy and child birth. Treatment for Cataracts, Benign prostatic hypertrophy, Hysterectomy, Menorrhagia or Fibromyoma, Hernia, Fistula of anus, Piles, Sinusitis, Asthma, Bronchitis, All Psychiatric or Psychosomatic disorders are excluded from the scope of the cover. Other insurers also exclude circumcisions, dental care, vitamins, arthritis etc.

Source: http://orientalinsurance.nic.in/Policy_Details.asp?dept=48&poltyp=101

3 The simulations were performed with the following assumptions:

- In all cases that an illness episode was eligible for reimbursement, for the purpose of this simulation it was assumed that the full capped amount can be considered (namely, there was no previous partial reimbursement).
- Considering that the policy covers all costs related to an eligible hospitalization (including those incurred 30 days before admission and 60 days after discharge), our calculation of the episodes also included related costs e.g. medicines, tests and consultations.
- We assumed that all persons aged below 5 years and above 55 years were insured, i.e. were not excluded due to age (although such an exclusion is possible under the terms of the Regulations and the typical policy)
- We assumed that the clause of exclusion due to “pre-existing conditions” did not apply to the illness episodes in this dataset (it is usually very difficult to determine pre-existing conditions in a survey of self-reported illnesses).

4 www.microhealthinsurance-india.org; the data was collected in 2005, and the project was concluded in Dec. 2006. It was jointly implemented by Erasmus University Rotterdam, the University of Cologne and the Federation of Indian Chambers of Commerce and Industry (FICCI), and funded by the EU. Opinions expressed are those of the authors, and do not necessarily engage the institutions that participated in the consortium or funded it.

protection is not the cost (as could be assumed, if the purpose is to *protect the assets of the target population*), but other parameters that do not serve the clients.

One might argue that insurance should only cover the more expensive events; so we now proceed to examine the situation when only the expensive cases (the 10% of cases that cost most, hereafter “top decile”) are considered. Of the total 4,317 cases, the top decile included 432 episodes, of which only 266 (62%) involved hospitalizations, but only 209 episodes (48% of the top decile and less than 5% of total number of episodes) were eligible for reimbursement after removing the excluded pathologies. This clearly means that 38% of the top decile would not be eligible for compensation under the terms of the *Jan Arogya Bima* micro health insurance as the high costs were due to expensive outpatient care that did not require hospitalization. The message from this calculation is that about half of the most expensive illness episodes would not be reimbursed even when the households were insured and incurred catastrophic expenses due to hospitalization and other medical needs.

The cost of an illness episode that included hospitalization in this dataset ranged from a low of Rs. 40 (charged for a single night by a charitable hospital) to Rs. 56,400. Once again, if the purpose of insurance is only to cover high-cost events, it is important to look at the impact of the insurance cap on the reimbursement payable by the insurance. In our dataset, the cost of 14% of the 209 cases that involved hospitalizations and were eligible for reimbursement exceeded the cap of Rs. 5,000. Hence, the persons (or households) concerned in these 14% of high-cost events would be required to pay considerable amounts out-of-pocket even if they were insured; and in 6% of the episodes, the insured households would be required to pay out-of-pocket an amount equal to or higher than the benefit they

could expect to receive from the insurance.

This simulation illustrates that, all good intentions notwithstanding and admitting that self-reported data regarding illness episodes could be subject to recall bias, the existing health insurance products that suit the conditions of the Micro-insurance Regulations would provide “*protection of assets [and lives] against insurable risks of target populations*” only to about half the cases involving hospitalization, and insufficient protection of assets to the more expensive cases. In passing we add that only about 10% of cases of illness in general would be reimbursable. Such insurance products leave the bulk of illness-related financial risks outside the realm of insurance even for the insured population. One can only wonder whether this is what the Regulator had originally intended.

Are we all “bad risks” in the long term?

There is another major concern: The Micro-insurance Regulations allow insurers to limit the period of cover to one year. Consequently, insured persons cannot be sure about the continuity of their coverage beyond one year, and in particular when they could become “bad risks”. From the clients’ point of view, this uncertainty dramatically reduces the incentive to insure when people perceive themselves as “good risks” (who are less likely to claim), because the value proposition of

insurance to such clients is the long-term protection of their assets. Insurance companies can reduce this value proposition by “cherry picking” (selecting only good risks) and “lemon dropping” (deselecting bad risks), in addition to being allowed to also charge whatever premium they wish for health insurance (in India, health insurance products have not been subject to regulated tariffs even before the “detriffing” was introduced for other classes of risks (e.g. fire or engineering) in January 2007). Such practices further impede the extension of micro-insurance coverage. The argument that the insurance industry needs this protection against the impact of adverse selection by clients seems weak in view of the fact that countries with developed insurance markets restrict preferred risk-selection or disallow it altogether.

Related considerations: premium levels, benefit-package composition, metrics

Unattractive micro-insurance products (demonstrated here only with regard to health insurance) are bound to be associated with low demand, when affiliation is voluntary (as is the case in India). The argument is often leveled that the product must be very limited in order to keep the premium very low. So the question is how much would the target population in India be willing to pay? We explored this question through a unidirectional (descending) bidding game among 3,024 low-income households in

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seven rural and slum locations in India in 2005⁵. About two-thirds of the sample agreed to pay at least 1% of annual household income; about half the sample was willing to pay at least 1.35%; and 30% of the sample was willing to pay about 2.0% as premium for health insurance. The nominal median value of the willingness to pay was Rs. 560.

This declared level of willingness to pay seems surprisingly high in view of the low demand for micro health insurance products in India⁶. Is it possible that the clients are aware of the limitations of the existing products and would like to avail of other products that would suit their level of willingness to pay? This was examined by eliciting clients' priorities in a field experiment that used a game-like decision tool, called CHAT (Choosing Healthplans All Together)^{7, 8, 9}.

We field-tested CHAT in Karnataka and Maharashtra in 2005-06 (and in Rajasthan in 2006 with somewhat different metrics) to examine the choices that respondents would make at a premium of Rs. 500 per household per year. With this modest premium, participants could select 34% of the benefit options offered in the exercise. Group decisions were reached by consensus. The most consistent finding has been that respondents selected broad benefit packages at basic coverage levels

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that reflect high aggregate costs (unavailable on the market today) over narrow packages with higher coverage. Furthermore, close to 100% of respondents included at least basic coverage of medicines and maternity in the desirable benefit-package. Medicines were chosen because they represent a large and frequent expense - comparable to hospitalizations on an aggregated basis¹⁰; and maternity was chosen because of the high rate of delivery at home and the need for better professional support to mother and newborn.

The other important lesson from our field-work (looking at socio-economic status, cost and incidence of illnesses, willingness to pay, and clients' preferred benefit-package design) is that differences across locations are pronounced and significant¹¹. Hence, one can wonder whether a uniform benefit package, such as 'Mediclim', Jan

Arogya Bima or similar micro-insurance versions, could be uniformly and sufficiently attractive all over India, as a standardized approach suggests.

Conclusions

Taking into account estimates of UNDP¹² and projections of McKinsey¹³, as well as a surging interest in micro-insurance by MFIs, NGOs, SHGs and some insurers in India, we assume that there is a large potential market for micro health insurance. Bearing in mind the findings on willingness to pay mentioned earlier in this article, and resources that the Government of India is said to make available, e.g. for micro health insurance of rural dwellers (under the National Rural Health Mission)¹⁴, and through other programmes targeting the poor¹⁵, it seems plausible that the large demand could be solvent. Yet, in reality there is low uptake of health insurance.

5 Dror DM, Radermacher R, Koren R: Willingness to pay for health insurance among rural and poor persons: Field evidence from seven micro health insurance units in India. *Health Policy*, (2007) 82(1):12-27.

6 It should be noted also that respondents in the same survey said that their medical costs were about four times higher; this suggests that (i) while respondents were willing to pay for health insurance, they limited this WTP to about one quarter their health spending; and (ii) that the cost of travel to dispensaries and hospitals, which can be high in rural areas, needs to be considered as well in health insurance.

7 Dror DM, Koren R; Ost A, Binnendijk E; Vellakkal S, Danis M: *Health insurance benefit packages prioritized by low-income clients in India: Three criteria to estimate effectiveness of choice*, *Social Science & Medicine*, February 2007 64(4): 884-896.

8 Danis M, Binnendijk E, Ost A, Vellakkal S, Koren R, Dror DM.: *Eliciting the Health Insurance Benefit Choices of Low-income Populations in India with the CHAT Exercise*, *Economic and Political Weekly* (Mumbai) 42(32):3331-3339 August 11-17, 2007.

9 A 6-minute video of CHAT in the field can be found at: <http://www.microinsuranceacademy.org>

10 Dror, DM: *Health insurance for the Poor: Myths and Realities*, *Economic and Political Weekly* (Mumbai), 41 (43-44):4541-4544, 6 November 2006 (Myth No. 2 - see figure).

11 Dror, DM: Why "one-size-fits-all" health insurance products are unsuitable for low-income persons in the informal economy in India, *Asian Economic Review*, 49(1):47-56, (Hyderabad) April 2007.

12 UNDP: *Building Security for the Poor: Potential and Prospects for Microinsurance in India*, UNDP Human Development Report Unit, Asia and the Pacific, April 2007, ISBN 978-955-1031-16-9.

13 McKinsey Global Institute: *The Bird of Gold: The Rise of India's Consumer Market*; McKinsey & Company, May 2007.

14 <http://mohfw.nic.in/NRHM.htm>, with links to Mission Statement, Framework for Developing Health Insurance Programmes and progress report

15 Financial Times reported on 3 October 2007 that the Union Government of India plans to subsidize health insurance premiums, through state governments, to the tune of Rs. 550 per household per year.

This analysis of a standard micro health insurance product offers some pointers to the possibility that the crux of the problem lies with the low value-proposition of the supply side. Admittedly, more conclusive analysis would be needed, and it could be done best when real data (that insurance companies possess) would be made available on renewal rates and on the claims ratios paid by insurance companies to their insured under the micro health insurance products. For the time being, one cannot exclude the possibility that insurers and others, insufficiently aware of clients' priorities, seem to misinterpret low demand as reflecting low willingness to pay; ignoring the unattractive value-proposition of the main product and the devastating impact on the demand side of "cherry picking" combined with insufficient choice of micro health insurance products. This error in judgment could lead to another one: that the premium needs to be lowered further. However, further lowering of the premium without re-engineering of the business process is bound to involve concurrent reductions in the quality of the product or its servicing even further, when what is needed is broadening the products to include more benefits types (e.g. outpatient care and medicines) as well as clients' transaction costs (e.g. due to transportation, medical equipment etc.). With these considerations, one can wonder if those who are interested in making insurance work for the poor in India might be stuck in a vicious cycle, which looks

like this: *poor products* ® *low demand* ® *low willingness to pay* ® *lowering of premiums* ® *further worsening of insurance product or service* ...

In parallel, there is an ongoing debate on the question whether subsidies could solve the problem of low uptake. The core issue is, however, not whether subsidies could play a role, but what use of public funds would deliver acceptable, effective, efficient and equitable results for the poor. Subsidizing only the demand for products that do not find takers or that offer insufficient protection is certainly not the only option. A more interesting option could be subsidizing the risk rather than the premium (e.g. by subsidizing the reinsurance of outlier claims costs, or by cross-subsidizing certain types or health risks within the industry-wide pool through some form of risk-adjustment). Such solution would remove the disincentive of insurers to insure everyone (and thus remove cherry picking from the market). Such an option could encourage product innovation based on better market research aimed at improving uptake of (micro) health insurance, when the allocation rule would give more subsidies to products and insurers that demonstrate higher protection actually given to poor clients (based not merely on affiliation but on the ratio of settled claims and/or a broader set of conditions). Without any fundamental change in product design or in business process, why would a simple allocation of funds to pay part of the premium of designated clients (be it

directly to insurers or otherwise) change the value-proposition of the products? Hence, we doubt that such a measure could break the vicious cycle of micro health insurance.

Breaking the vicious cycle begins at the cycle's original weak point: unattractive products and insufficient choice to clients must be reversed. Improving the value-proposition and variety of micro-insurance products; and after-sale service is not only fair and desirable, but indispensable for the extension of an insurance market that could reach as vast a size as the number of the underserved poor persons. This is also the key to generating more revenue for insurance.

Change will probably not come by itself. However, the IRDA, the Indian Actuarial Society, the insurance companies and indeed bodies representing the low-income clients could all play a leading role in promoting the conditions that will result in more and better products hitting the market: better product design; better servicing; benchmarking levels of claims-ratios in micro health insurance relative to admin costs and profit-taking; and mitigation of certain supply-side insurance market failures such as "cherry-picking" and "lemon-dropping". The ultimate purpose of such measures would be, as stated in the IRDA Concept Document, to achieve better *protection of assets and lives against insurable risks of target populations*.

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