HealthManagement.org
The Journal
LEADERSHIP • CROSS-COLLABORATION • WINNING PRACTICES
VOLUME 18 • ISSUE 3 • 2018 • € 22
ISSN = 1377-7629

Emerging Markets

Financing micro health insurance

Theory, methods and evidence

A look at innovations in harnessing voluntary and contributory micro health insurance to finance universal health coverage in the informal sector.

David M. Dror
Chairman
Micro Insurance Academy
New Delhi, India

daviddror@socialre.org

microinsuranceacademy.org

Everybody spends money on healthcare; some people pay negligible amounts, and others pay exorbitant and impoverishing sums. In a perfect world, everyone should have protection against the excessive costs, and this is what health insurance (HI) can do. However, accomplishing this goal is a tall order, financially and administratively. The more extensive the HI coverage, the higher the challenge to succeed, particularly when the HI should ideally cover the entire population.

Providing meaningful HI coverage to the entire population is possible only when the benefits package can compensate all needs. As the insured population increases, its requirements become more variable and complex. A broad "birth-to-death" standard benefits package may perhaps cover all needs (at high cost), or it may even go further and include benefits that most insured persons would never enjoy. So, we assume that the majority of the world population would consider such a package simultaneously unaffordable and unattractive, notably because its premium would tally with data of frequency and severity of risks that do not apply in most locations. This issue can plague any scheme—government-run or private. Most plans in low- and middle-income countries (LMIC) face this paradigm, obliging them to consider partial benefits packages.

People in low-income and informal settings

However, designing partial packages raises the essential questions of what to include and what to keep out, which data to use for pricing, and who

should take those decisions. For most people in low-income and informal settings (small-scale, self-employed activities, typically unrecorded, unregistered and conducted without proper recognition from the authorities), the answer is clear: have a say on what you pay. In fact, they want extensive discussions among family, friends and peers, ie the people most involved in household spending decisions. They want to be reasonably sure that the money spent will generate some welfare gains. However, welfare gains can be assessed only retrospectively at the end of the period of insurance, whereas the premium must be paid at the beginning of the period, prospectively. So, decisions cannot emerge from actual results, but from a discussion of transactional aspects, such as: can they trust the insurance agency? Can they trust the process to be transparent and fair? Such confidence building conversations must take place before attempting to sell insurance in the informal sector. They include explanations of the business process of insurance, agreement within the target group on an estimate of willingness-to-pay (WTP), and preparing for an assessment of risks to be protected by conducting the baseline study. Unfortunately, these essential discussions are often sidestepped, presumably to save time and money. These shortcuts have led to low insurance uptake in the informal sector.

The usual order of things to achieve high enrolments is first to develop context-relevant innovative health benefits packages, preceded by the preparatory steps mentioned. Since the poor seek welfare gains through affiliation with family, friends, and others in their reference group, confidence-building steps should occur in that context. The name given to the local context is "community-based health insurance" (CBHI) or "micro health insurance."

Micro health insurance

This brief introduction explains why micro HI is not merely a characteristic of the product (cheap insurance with low-risk cover) or the target clientele (poor people) but a different business model of protection in which the locus of decisions is at the "micro" stratum of society, namely local communities. Placing decisions at the micro level will bring the message of HI to where the majority of the population in most LMICs lives and works. The actors in the microinsurance space need to agree to this sequence of actions, since large sections of the community in rural and informal settings are not familiar with HI, and are unlikely to buy an unknown product from an unknown agent. Following the course of action described here would be a useful strategy to reach the majority, without reliance on LMIC governments requiring individuals to enrol ("mandating") or subsidising premiums, or providing universal HI.

> "SUCCESS IN CATALYSING DEMAND FOR HI IN THE INFORMAL SECTOR DEPENDS ON ENCOURAGING GROUP DIALOGUE"

Three core issues to address

Against this backdrop, my book, *Financing micro health insurance: theory, methods, and evidence*, addresses three core issues about financing voluntary and contributory HI for resource-poor and rural groups in LMICs. First, the underlying rationale for engaging in insurance literacy is to catalyse demand for voluntary and contributory HI among illiterate and innumerate persons. Secondly, it is important to render the business process of insurance simple so that local communities can learn it and own it (ie launch, administer and govern the scheme after receiving appropriate training). The actions to achieve this involve developing simplified methods for risk assessment to price and underwrite hazards, set up the administrative tasks and ensure proper governance of the micro HI schemes. The third issue involves formulating a compelling business case of affordable-, financially sustainable- and operationally-scalable micro HI. This book coherently compiles research outcomes of studies conducted by the author in collaboration with others (health economists, development economists, actuaries, medical professionals, mathematical modellers, and social scientists) to provide a comprehensive perspective on the development and implementation of health microinsurance.

Defining conditions that catalyse demand

A review of the demand for micro HI suggests that conventional economic theory does not adequately explain financial behaviour in the informal sector and

the context of poverty and informality. Thus a new approach is needed to define the conditions that catalyse demand for HI in the informal sector (Dror and Firth 2014). The alternative theory of demand proposed is based on relevant and workable assumptions of the role of groups in financial decisions in the informal sector. It also considers the influence of local governance arrangements on enhancing trust in the system, which is a necessary—but not sufficient—condition for the establishment of an HI market. An empirical follow-up study does not uphold the null hypothesis that demand is an individual decision. It examines factors which catalyse demand for community-based micro HI schemes and confirms the assumption that success in catalysing demand for HI in the informal sector depends on encouraging group dialogue (Dror et al. 2018).

> “DESIGNING PARTIAL PACKAGES RAISES THE QUESTIONS OF WHAT TO INCLUDE, WHICH DATA TO USE FOR PRICING, AND WHO SHOULD TAKE THOSE DECISIONS”

A systematic review and meta-analysis of the literature on factors affecting uptake of CBHI in LMICs included 18 qualitative studies (Dror et al. 2016a). The systematic review identified nine significant factors as enablers for uptake: knowledge and understanding of insurance principles and CBHI, quality of healthcare, trust, benefits package, CBHI scheme rules, cultural beliefs, affordability, distance to health facility, and legal and policy framework.

The socioeconomic status of households, education, age, and female household heads also affect enrolment positively. There is empirical evidence that awareness campaigns conducted for CBHI members enhance understanding of HI among the target population.

The evidence also suggests that CBHI encourages both early healthcare seeking (Dror et al. 2005) and a higher practice of preventive healthcare measures (Panda et al. 2015a). The authors verified that the increased utilisation by the insured was not due to adverse selection.

Willingness to pay

After establishing the micro HI framework, community members discuss the benefits package with premiums and choose the package that best captures their priorities and willingness to pay (WTP) level. By definition WTP is the maximum amount people are willing to spend to acquire a service. A review of 20 papers describing 14 experimental field studies on eliciting WTP for health insurance among low-income persons in developing countries concluded that there was no “gold standard” method to quantify the expected WTP in different settings (Dror and Koren 2012). The most common practice was conducting household surveys to elicit information. However, these surveys are expensive and time-consuming, so naturally, there is an interest to find faster and cheaper alternative ways to estimate WTP. Binnendijk et al. (2013) suggested that it is possible to determine the WTP level based on each community’s food expenditures (based on Engel’s law), with a reasonable approximation of WTP in the studied locations at around 4.5 percent of food expenditures. Nosratnejad et al. (2016) proposed determining WTP as a percentage of GDP per capita (GDPPC). GDPPC is readily available in most countries. WTP for HI among rural households in LMICs was just below 2 percent of the GDPPC per household per year.

The business case for micro health insurance

Another methodological issue has been to estimate the frequency of risks by studying healthcare utilisation (as a proxy for morbidity). Binnendijk et al. (2012) proposed a quick and cheap intervention to estimate morbidity and healthcare utilisation locally, known as “illness mapping.”

Since affordability is a crucial factor in catalysing demand for microinsurance, medical and health insurance (MHI) units persistently face the challenge of keeping premiums low enough to be perceived as affordable by the target population, yet high enough to ensure sufficient income to keep the micro insurance unit (MIU) solvent. Dror et al. (2018a) devised a prototype scheme, based on empirical data collected from two CBHI plans, to evaluate the Business Case for micro HI. The business model examined required the MHI plan to be able to maintain all its payments (administration, claims and loan repayments) at 99.9 percent confidence. The additional condition examined was that the medical health insurer (MHI) would pay interest rates on commercial loans taken to fill its

capital requirements. The study demonstrated that MHIs could repay loans with commercially competitive interest. Considering that the MHIs could meet investors' legitimate expectations (loan repayment with interest) and members' interests (full payment of their claims every year and growth of their organisation's capital assets), the authors conclude that there is a compelling business case for operating voluntary and contributory micro HI. Governments could encourage the outreach of micro HI by creating an enabling regulatory framework allowing MHIs to borrow funds.

Impact of microinsurance on welfare gains

Various studies have delved into the positive impact of microinsurance on welfare gains of the insured households. Dror et al. (2016) demonstrated that the studied MHI schemes improved insured households' access to healthcare (by reducing self-medication); enhanced financial protection (reduced hardship financing and increased economic mobility); and improved equality of access between richer and poorer households. These indicators of impact after only two years of operation would presumably be better after a more extended period of being insured.

The possibility of microinsurance being financially sustainable and operationally scalable without subsidies infuses new investment opportunities, which have yet to be explored. In 1963 Kenneth Arrow (1963) recognised that

> *the loss due to illness is only partially the cost of medical care. It also consists of discomfort and loss of productive time during the illness, and, in more serious cases, death or prolonged deprivation of normal function. From the point of view of the welfare economics of uncertainty, both losses are risks against which individuals would like to insure. The nonexistence of suitable insurance policies for either risk implies a loss of welfare.*

Decades later, governments of LMICs are formally committed to promoting universal health coverage. However, actual health coverage is very far from satisfactory. The declared intention of governments is to reach their objective by using a blend of tools for healthcare financing, notably microinsurance schemes. The conditions whereby insurance providers would both compensate for welfare loss and add welfare gains to the insured that do not claim anything from their HI is a distant dream. This book provides policy guidelines to harness micro HI in the effort to finance universal health coverage. ■

KEY POINTS

- ✓ Insurance literacy is the key impetus to catalysing demand among poor communities
- ✓ Active involvement of community members in the business processes fosters acceptance of insurance, trust in the scheme and higher willingness to pay
- ✓ Microinsurance has the potential to be financially sustainable and operationally scalable without subsidies or government mandating

REFERENCES

Arrow KJ (1963) Uncertainty and the welfare economics of medical care. American Economic Review 53 (5): 941-73.

Binnendijk E et al. (2012) Illness mapping: a time- and cost-effective method to estimate healthcare data needed to establish community-based health insurance. BMC Medical Research Methodology 12(1): 153.

Binnendijk E et al. (2013) Estimating willingness-to-pay for health insurance among rural poor in India by reference to Engel's law. Social Science and Medicine 76: 67–73.

Dror DM et al. (2005) Field-based evidence of enhanced healthcare utilization among persons insured by micro health insurance units in Philippines. Health Policy 73(3): 263–71.

Dror DM, Koren R (2012) The elusive quest for estimates of willingness to pay for health micro insurance among the poor in low-income countries. In: Churchill C, Matul M, eds, Micro insurance compendium II. Geneva. ILO, pp.156–73.

Dror DM, Firth LA (2014) The demand for (micro) health insurance in the informal sector. The Geneva Papers on Risk and Insurance Issues and Practice 39(4): 693–711.

Dror DM et al. (2016) Impact of community-based health insurance in rural India on self-medication and financial protection of the insured. Indian Journal of Medical Research 143(6): 809–20.

Dror DM et al. (2016a) What factors affect voluntary uptake of community-based health insurance schemes in low- and middle-income countries? AS systematic review and metaanalysis. PLoS ONE 11(8): e0160479.

Dror DM et al. (2018) The effect of consensus on demand for voluntary micro health insurance in rural India. Manuscript in preparation.

Dror, DM, Majumdar A, Jangle N. (2018a): Estimating Capital Requirements to Scale Health Microinsurance Serving Rural Poor Populations (Submitted for publication).

Nosratnejad S et al. (2016) Systematic review of willingness to pay for health insurance in low and middle-income countries. PLoS ONE 11(6): e0157470.

Panda P et al. (2015) Building awareness to health insurance among the target population of community-based health insurance schemes in rural India. Tropical Medicine and International Health 20(8): 1093–1107.

Panda P et al. (2015a) Mobilizing community-based health insurance to enhance awareness and prevention of airborne, vector-borne and waterborne diseases in rural India. Indian Journal of Medical Research 142(2): 151–64.