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The landscape of community health insurance in India: An overview based on 10 case studies

Narayanan Devadasan ^{a,d,*}, Kent Ranson ^b, Wim Van Damme ^a, Akash Acharya ^c, Bart Criel ^a

^a Department of Public Health, Institute of Tropical Medicine, Antwerp, Belgium
^b London School of Hygiene and Tropical Medicine, London, UK
^c Centre for Social Studies, Surat, Gujarat, India
^d AMCHSS, Sree Chitra Tirunal Institute of Medical Sciences and Technology, Trivandrum, India

Abstract

The Indian health system is mainly funded by out-of-pocket payments. More than 80% of health care expenditure is borne by individual households. Only about 3% of the population, mostly those in the formal sector, benefit from some form of health insurance. Several Indian Non-Governmental Organisations (NGOs) have initiated Community Health Insurance (CHI) schemes within their existing development programmes. This article describes the principal features of the design and functioning of a selection of 10 CHI schemes and presents a brief overview of the current landscape of CHI in India. The schemes explicitly target the poorest and most vulnerable households in Indian society—scheduled tribes, scheduled castes and poor women. Three CHI management models can be distinguished. The first model consists of local NGOs acting as both insurer and provider. In the second model, the NGO is the insurer but does not itself provide care, which is then purchased from a private provider. In the third model, the NGO neither does provide health care nor acts as an insurer: the NGO, on behalf of a community, links with an insurer and purchases health care from a provider. The benefit packages generally include both primary and secondary care and most of the providers are in the private sector. Most of the schemes require external resources for financial sustainability. There is currently little information on the impact of CHI schemes on the performance of local health systems and more research is warranted in that respect.

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1. Introduction

While the Constitution of India states that it is the "duty of the State to raise the level of nutrition and standard of living and to improve public health" [1], a lot remains to be done to reach these goals. Forty-seven percent of children are underweight; infant mortality

E-mail address: deva@devadasan.com (N. Devadasan).

^{*} Corresponding author. Tel.: +32 3 2476286/+91 94484 91355; fax: +32 3 2476258/+91 80265 96445.

rate has been stagnating at about 70 per 1000 live births; TB, malaria, childhood illnesses and pregnancy-related diseases still kill millions. This is due to many reasons, one of them being the low allocation of government finances to the health sector [2]. Currently the Government spends about 0.9% of GDP on health care. The rest of the health expenditure (4.3% of GDP) comes from out of pocket payments by individual patients, through user charges. Health insurance covers only about 3% of the population, either civil servants or employees in the formal sector [3]. The main providers of health care in India are the 'free' government health services or the extensive network of private dispensaries and hospitals.

The public sector provides inadequate and low-quality health care [4]. Common complaints include poor utilisation of the primary health care facilities, overcrowding in hospitals, lack of adequate manpower, drugs and equipment [5]. The private sector on the other hand provides health care at a cost. This has serious repercussions in terms of access to health care and impoverishment. The poorest quintile of the population accesses inpatient care six times less than the highest quintile [4]. Accessing care, especially inpatient care, often leads to catastrophic health expenditure [6]: 24% of all hospitalised patients in India become impoverished because of hospital expenses [4].

Some Non-Governmental Organisations (NGOs) have initiated Community Health Insurance schemes (CHIs) to ease the burden on the poor. While there is much literature about African and Asian CHIs [7–12], there is little documented evidence from India [13,14]. This article attempts to rectify this imbalance by describing and analysing a selection of case studies of Indian CHIs. On the basis of a largely inductive analysis, more knowledge is generated on the contexts in which the CHIs developed, on the different mechanisms they use to provide insurance cover and on the specific features of the nascent Indian CHI movement. It concludes by identifying lessons that can be applied to CHIs in India as well as other countries.

2. Methods

We used a case study methodology to document the design, activities and performance of 10 CHI schemes in India. For the purpose of this study, we included only

those community-financing schemes that use an insurance mechanism. Insurance is defined as "a financial instrument which, in return for payment of a contribution (or premium), provides members with a guarantee of financial compensation or service on the occurrence of specified events. The members renounce ownership of their contributions. These are primarily used to meet the costs of the benefits" [15]. We defined Community Health Insurance as "any not-for-profit insurance scheme aimed primarily at the informal sector and formed on the basis of a collective pooling of health risks, and in which the members participate in its management." This is a slightly modified version of Atim's original definition of Mutual Health Organisations [7].

We initially conducted a literature review on all the (documented) community financing schemes in health care in India [14,16]. Using our working definition of CHI, 25 schemes were short-listed. We excluded those providing only outpatient services (eight in number). As time and finances were limited, 10 out of the remaining 17 CHI schemes were studied. We believe that they are reasonably representative of the Indian CHI land-scape.

Using the tool designed by WHO [17] and the assessment protocol of *Infosure* [18], a comprehensive researcher-administered questionnaire was developed. The major elements looked at were (1) the context in which the CHIs developed, (2) the principal design features of the CHI schemes, (3) the details on the premium, (4) the nature of the benefit package, and finally (5) the identity of the various stakeholders and their respective roles.

One of the three authors (ND, KR or AA) visited each of the schemes for 4 days and administered the questionnaire to its managers. Note taking was used to record these interviews and preliminary written findings were shared with the scheme managers for their feedback, which was incorporated into the final versions. Quantitative data on subscription, utilisation and finances were extracted from registers and reports of the different CHI schemes. The data of the different cases were analysed using a case description strategy and a cross case synthesis technique [19].

The purpose of the present study is to increase our understanding of the expression CHI takes in the Indian context. The analysis of the schemes was not guided by a set of well-defined and pre-established research hypotheses, but relied upon a more inductive approach aiming to increase our general understanding of the complex phenomenon that CHI is. It is expected that the analysis will lead to more clarity in the different types of CHI that exist in the country and to gain more insight in their design and operating features. Eventually, a rough level of comparison with the features of the CHI movement in sub-Saharan Africa could be established.

Table 1 NGOs initiating Community Health Insurance

3. Results

3.1. The context

All the CHIs studied were initiated by Non-Governmental Organisations (NGOs) or Community based organisations (CBO). The 10 NGOs are all local organisations involved in providing various development services to their target populations and nine of

Name, acronym and location of the NGO (year of initiation of the CHI)	Target population for the insurance programme (size of the population)	Main activities of the NGO
Action for community organisation, rehabilitation and development (ACCORD), Tamil Nadu (1992)	Scheduled tribes of Gudalur Block ^a who are members of the Adivasi Munnetra Sangam (AMS)—a tribal union (N=11,875 individuals)	Activist organisation that organises tribals to fight for their rights. Also provides health services (through a 20-bed hospital and 7 health centres), education services, agricultural and housing support
Bharat Agro Industries Foundation (BAIF), Maharashtra (2001)	Poor women members of the community banking scheme and living in the villages around Uruli Kanchan town (<i>N</i> = 1500 women)	Development NGO that supports poor farmers in their agricultural operations. Works in many states. In Pune, it also operates a small health programme
DHAN Foundation (KKVS), Tamil Nadu (2000)	Poor women, members of the community banking scheme and living in the villages of Mayiladumparai Block. Total of 4514 members and their families (<i>N</i> = 19,049 individuals)	Organising women for micro-credit and savings activities. Also provides support for income generation and has a small primary health care programme
Jowar Rural Health Insurance Scheme (JRHIS), Maharashtra (1981)	Small farmers and landless labourers living in 40 villages around Kasturba Hospital (<i>N</i> = 30,000 individuals)	Integrated development work including primary health care. Is supported by a Medical college hospital that provides referral services
Karuna Trust, Karnataka (2002)	Total population of T. Narsipur Block, with a focus on scheduled tribes and scheduled caste populations (<i>N</i> = 278,156 individuals)	Development NGO that provides development services like health, education, and income generation support
Navsarjan Trust, Gujarat (1999)	Select Scheduled Caste individuals in two Blocks of Patan District, North Gujarat (N is unknown)	Activist organisation that supports the scheduled castes in 2000 villages in Gujarat and fights for their basic rights
Raigarh Ambikapur Health Association (RAHA), Chattisgarh (1980)	Poor people living in the catchment area of 92 rural health centres and hostel students (<i>N</i> = 92,000 individuals)	Provides technical and financial support to a network of 92 faith-based health care institu- tions in four districts
Self-Employed Women's Association (SEWA), Gujarat (1992)	534,674 SEWA Union women members (urban and rural), plus their husbands living in 11 Districts of Gujarat (<i>N</i> =1,067,348 individuals)	Organising self-employed women (labour- ers, vendors, home based entrepreneurs and small producers). Also has a credit and sav- ings programme and an integrated social security programme
Student's Health Home (SHH), West Bengal (1952)	Full-time students in West Bengal State, from class 5 to university level ($N = 5.6$ million students)	Provides comprehensive health care to students through a 70-bed multi-speciality hospital and 32 regional centres
Voluntary Health Services (VHS), Tamil Nadu (1972)	Total population of the catchment area of 14 mini-health centres ($N = 104,247$ individuals)	Provides comprehensive health care through a 405-bed hospital and 14 mini health centres

^a An Indian district has about 1–2 million people. A block is a sub-district with a population of approximately 100,000.

them are also involved in health care delivery (Table 1). The population targeted varies from about 10,000 individuals to more than 100,000. A common feature of all these NGOs is their explicit commitment towards the poor. Four NGOs work exclusively with scheduled tribes and castes—the poorest population groups in Indian society. Most of these populations live in rural regions. The average daily wage for men in these regions is approximately US\$ 1.

The CHIs were initiated as a response to local community needs. The main objectives in initiating the CHI were to increase access to health care, to protect the financial assets of the household at the time of illness, and also to promote community participation in the management of health care delivery.

3.2. The design

The 10 CHI schemes can be classified broadly into three types (Fig. 1). In the first type the insurer and the provider are the same institution; the 'provider model'.

The NGOs operate their own facilities for primary and secondary care, collect the premiums from the community themselves and meet the medical expenses from this insurance fund. The health institution thus bears the financial risk of the insurance arrangement. In one of the four situations (ACCORD), the NGO established a link with a formal insurance company in order to share the financial risks.

In the second type, the 'insurer model', the NGO is the insurer of the scheme. It collects the premiums from the community and purchases health care from private providers (for-profit or not-for-profit). Patients seek care from these empanelled hospitals and are either reimbursed their bills or enjoy the benefit of a third party payment mechanism.

In the third type, the 'linked model', the NGOs act as intermediaries between the community and formal insurance companies. The NGOs collect premiums and pass them on to a formal insurance company, be it a government or private insurer. The patients can then use the services of any health care provider.

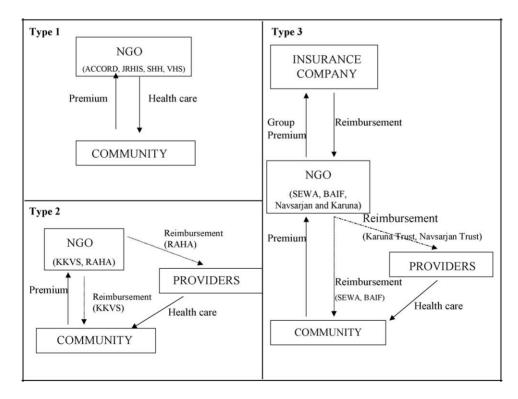


Fig. 1. Three types of CHI.

Only Karuna Trust restricts the use to public health care providers. The insurance company reimburses the NGO, which in turn refunds the patients or the provider (Karuna Trust). In three of the four CHI schemes with linkages to insurance companies, the NGOs negotiated an appropriate insurance product for their respective target populations.

3.3. Enrolment to the CHI

All schemes have clearly defined eligibility criteria for enrolment (Table 2). Membership is confined to communities living within certain geographic limits or enrolled with a Community-Based Organisation (CBO). Yet another criterion is age, usually used in the linked model. All the 10 CHI schemes are organised on a voluntary basis. At RAHA, while the families were free to join the CHI, it is mandatory for the students staying at the church run hostels to purchase insurance. At SHH, the enrolment unit is the educational institution: once an institution agreed to join the scheme, then all the students have to pay the premium. While seven of the schemes have an individual unit of enrolment, three of them encourage the family to enrol.

Seven of the 10 CHIs use a community-rated premium system, i.e. system where the premium is identical for all the members, irrespective of their income or health status. JRHIS, Karuna Trust and VHS, however, have income-rated premiums that varied with the family income.

Seven of the 10 CHIs have a specific collection period, which usually coincides with high-income levels in the community and five of the schemes (four of them with linkages to an insurance company) have introduced a waiting period. Only at VHS was there neither a collection nor a waiting period and patients were allowed to join the scheme at the time of illness. The NGO staff collects the premium in half of the cases, while in the remaining five this is organised by the community.

Table 2 also presents data on the size of the premium and on the coverage rates of the 10 CHI schemes. The premiums range from as low as Rs. 4 per person per year (US\$ 0.10) to Rs. 159 per person per year (US\$ 3.53). On average, the premium for a family of five is equivalent to an adult weekly wage. In most cases, the size of the premiums was decided based on afford-

ability. It is only in the linked schemes that premiums were calculated on an actuarial basis. The enrolment rate ranges from 10% to 90% of the target population, with a median between 30% and 40%.

Seven of the CHI schemes have designed specific mechanisms to include the poor. These mechanisms range from direct subsidies of the premium to income rated premium to providing loans or organising a deposit scheme to facilitate premium payment. At two of the CHIs, the community is allowed to pay the premium in kind.

3.4. Benefit package

In Table 3 the main characteristics of the benefit package are presented. Given our selection process, all CHI schemes studied provide hospitalisation benefits. In nine of the schemes, the NGO also provides primary care. This ranges from very basic health care by village health workers to first line care offered by doctors. It is funded from the insurance funds (in five cases) or from other sources (in four cases). Three of the schemes also provide life and asset insurance. Karuna Trust was the only scheme that also compensated for the loss of wages.

Four of the schemes excluded pre-existing illnesses and three excluded maternity services. In seven of the schemes there is a maximum limit to the benefit package. It is as low as Rs. 1250 (US\$ 28) at RAHA and as high as US\$ 330 at Navsarjan. The average cap is in the range of US\$ 50. Any expense above this has to be paid by the patient. The average hospital bill for a normal delivery ranges from US\$ 25 to 125 in these regions. Admissions for uncomplicated surgeries (e.g. hernia or acute appendicitis) would cost between US\$ 125 and 250.

Six of the CHI schemes have a third party payment mechanism implying that the patient does not have to pay the bill at the time of discharge. Various forms of co-payments, deductibles or systems of fixed indemnity exist in eight of the 10 schemes.

In nine of the CHIs, the providers are private, either not-for-profit or for-profit. Only Karuna Trust relied solely on public health care providers. All the providers charge a fee-for-service method to charge the patients. In most of the cases (8 out of 10), the patient can use the hospital directly. While some of the NGOs negotiated with the providers on financial matters, none had

Table 2 Enrolment criteria, size of premium and populations covered in the 10 CHI schemes

Name of the scheme (type of CHI)	Enrolment criteria	Unit of enrolment	Premium per year (INR ^a)	Coverage (% of target population)
ACCORD (provider)	All members of the AMS tribal union and their families	Individual although family enrolment is encouraged	Rs. 20 per person	4291 (36%)
BAIF (linked type)	All female members of the micro-finance groups organised by BAIF. Only women between 18 and 58 years are eligible	Individual	Rs. 225 per person	909 (58%)
KKVS (insurer type)	All female members of the micro-finance groups and their families residing at Kadamalai Block. Only those in the age groups 1–55 years are eligible	Individual, although family enrolment is encouraged	Rs. 100 per person or Rs. 150 per family	7576 (40%)
JRHIS (provider type)	All the families residing in the 40 villages where the MGIMS is involved. Provided that 75% of families in the village are willing to subscribe and they have constructed a latrine or taken part in similar development activities	Family	Minimum Rs. 48 per family in kind	Approx. 27,000 (90%)
Karuna Trust (linked type)	All residents of T. Narsipur Block	Individual	Rs. 30 per person. Subsidised for the poor	85,092 (unknown)
Navsarjan Trust (linked type)	All scheduled castes living in Pathan district	Individual	Rs. 159 per person	574 (unknown)
RAHA (insurer type)	All poor families living in the four districts where RAHA is operating	Individual, although family enrolment is encouraged	Rs. 20 per person	53,598 (58%)
SEWA (linked type)	All female members of the SEWA Union and their spouse within the age groups of 18–58 years	Individual	Rs. 22.50 per person or Rs. 45 for family	102,897 (10%)
SHH (provider type)	Schools and colleges in West Bengal can enrol students from class 5 to university level. Exceptionally, individual students do enrol if their schools do not	School or college	Rs. 4 per student per year	1,286,126 (23%)
VHS (provider type)	All the families residing in the catchment area of the programme's 14 health centres	Family	Rs. 250 per family of five	12,785 (12%)

^a US\$ 1 = Rs. 45.56 (24 October 2004).

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Acronym of CHI Primary care	Primary care	Secondary care	Maximum limits (US\$)	Exclusions	Exclusions Co-payments at the time of admission	Reimbursement mechanism
ACCORD	Additional programme from external resources	Insurance cover	33	Yes	No	Third party payment
BAIF	Additional programme from external resources	Insurance cover	110	Yes	Yes—indemnity if upper limit is exceeded	Insurance company reimburses patient through NGO
KKVS	Additional programme from external resources	Insurance cover	220	Yes	Yes—deductible + indemnity if upper limit is exceeded	KKVS reimburses patients
JRHIS	Insurance cover		No limit	No	Yes—co-insurance	Third party payment
Karuna Trust	Additional programme from external resources	Insurance cover	55	No	No	Third party payment
Navsarjan Trust	No	Insurance cover	330	Yes	Yes—indemnity if upper limit is exceeded	Insurance company reimburses patient through NGO
RAHA	Insurance cover		28	Yes	Yes—coinsurance + indemnity if upper limit is exceeded	Third party payment
SEWA	Additional programme from external resources	Insurance cover	44	Yes	Yes—indemnity if upper limit is exceeded	Insurance company reimburses patient through NGO
SHIH	Insurance cover		No limit	Yes	Yes—co-insurance	Third party payment
VHS	Additional programme from external resources	Insurance cover	No limit	N _o	Yes—co-insurance	Third party payment

negotiated the issue of quality of care or cost containment. Only in two cases (ACCORD and JRHIS) some measure of cost containment like the mandatory use of essential drugs and generics was introduced. RAHA charges for tonics and injections, thereby discouraging irrational care.

3.5. Management

As highlighted above, a specific feature of all the 10 schemes is that they are all initiated by an NGO. When looking at the various managerial functions that need to be carried out in operating a Community Health Insurance scheme, it appears that most of these are fulfilled by the NGO (Table 4). In the "linked model" financial risks and some of the management functions, like fixing the premium and managing claims and reimbursements, were shared between the NGO and the insurance company. Only in KKVS and SEWA, do women, as community leaders, play a major role in managing the funds. Elsewhere the NGO is the key player and manages most of the operations. In most CHI schemes, the NGOs have staff with technical skills in accounting. Competence in organisation and management of health systems, or actuarial skills were lacking in most of the cases. While many of the CHIs keep registers, few of them have a well-functioning management information system.

The NGOs have been reluctant to enter in a negotiation process with the providers. RAHA negotiated the costs with three faith-based hospitals. KKVS and Navsarjan empanelled private hospitals but did not negotiate quality of care or cost containment measures.

Feedback to the community exists in all the CHI schemes and is an important component for ensuring renewals. Institutional mechanisms, both formal and informal, have been developed to facilitate this process. In terms of financial balance, it is important to note that eight of the CHIs require external subsidies to meet the deficit between income and expenditure. These resources either come from the government (the case of JRHIS and SHH), or from external donors (ACCORD, VHS, RAHA, SEWA, Navsarjan Trust and Karuna Trust). Unfortunately, details on deficits are lacking in most of the schemes. Approximate calculations indicate that cost recovery ranges from 10% (in the case of JRHIS) to 80% in the ACCORD scheme. This needs to be explored further.

Table 4 Distribution of management functions in the Indian CHIs

Functions	Provider model	Insurer model	Linked model
Creating awareness in the community	NGO staff	NGO staff and	d community
Fixing the premium	NGO staff	NGO and community	NGO and insurance company
Collection of premium	NGO staff	NGO and community	NGO and community
Managing the insurance fund	NGO staff	NGO/community	NGO
Negotiations with providers	Inherent	Nil	
Negotiations with insurance company	Not applicable NGO		NGO
Providing care	NGO	Purchasing care from other providers	
Managing claims	NGO	NGO/community	NGO and insurance company
Managing reimbursement	NGO	NGO/community	NGO and insurance company
Managing the risk	NGO	NGO	Insurance company
Monitoring	Financial monitoring by NGO	Financial monitoring by NGO	Minimal monitoring by NGO
Feedback to the community	NGO	NGO	NGO

NB: The seven CHIs that were not studied were similar to the above 10 in terms of geographical distribution. Four were from Tamil Nadu and one each from Gujarat, Kerala and West Bengal. Three were the insurer model, two each were the direct and linked models. Of the seven, there was a preponderance of urban CHIs (4) as compared to rural. All of them also targeted farmers, self-help groups, workers' unions and slum inhabitants.

4. Discussion

A limitation of our study is the fact that we only included CHI schemes on which documentation was available. This is likely to be a source of bias since it is expected that only the more successful schemes are in that situation. We nevertheless believe that our investigation gives an indicative view of the expression Community Health Insurance takes in India. In this section, we propose to address the most specific features of the Indian CHI movement and the lessons that can be learnt from them. When appropriate, we will discuss some of the most prominent differences with the outlook of CHI schemes in sub-Saharan Africa.

One of the important features of the Indian CHIs is their use of existing community organisations to piggyback community health insurance schemes. This is the case in almost all the schemes. This strategy helps the CHI leverage the organisational strengths of the community. Thus, creating awareness about health insurance, collecting premium, processing claims and

reimbursements and providing a forum for redressal of complaints are much easier with this approach. This has particular significance for extension of health insurance to larger population groups. India has a myriad of organised communities in the informal sector, ranging from trade unions, cooperative societies, associations, etc. These could be the foundations on which health insurance could be introduced into the informal sector.

Indian CHIs differ from African schemes in that in India all schemes have been initiated by local NGOs. Most of the CHIs are nested within broader development programmes, thus providing some level of credibility to the insurance scheme. This trust is a crucial element in the development of the CHI and cannot be neglected. If the government wants to extend health insurance to new areas, they need to seek support from credible local partners, be they NGOs or local governments. Schemes introduced by outsiders without previous track record may not be acceptable to the community.

All the Indian CHIs target the poor. Two of them even exclude more affluent population groups. While this enhances horizontal equity, it also reduces risk sharing by pooling the risk only between the healthy and the sick. Some of the NGOs have tried to overcome this disadvantage by reinsuring with formal insurance companies. This is an effective mechanism for enlarging the risk pool and needs to be used more effectively.

The social proximity of the manager of Indian CHI schemes to the local community has an influence on

the definition of the insurance product. The premium and the benefit package tend to be a mutually acceptable compromise between social demands and technical priorities. It is indeed noteworthy that while most of the insurance packages were specifically designed to cover hospitalisation expenses, the NGOs invariably included primary care as well. This definitely enhances the social acceptability of the insurance arrangement, even if the final product is not financially sustainable. A final point concerning the benefit package is the fact that it is customary in Indian CHI schemes to exclude chronic diseases. Such a measure may have a strong actuarial rationale, but is fundamentally at odds with sound public health. The fact that Indian society is fully entering the era of epidemiological transition, with an increasing prevalence of life-style related diseases, further compounds the situation. The government and the insurance companies need to take into account the public health perspective also while designing relevant health insurance products.

Indian CHIs can broadly be divided into three types or models. The linked model is rather typical of the Indian situation and is rarely found in sub-Saharan Africa. We believe that the existence of health insurers that offer insurance products to poor population groups, via the mediation of non-governmental organisations, constitutes a specific feature of Community Health Insurance in India. There are at least two advantages to the linked model. First, there is the possibility that the more technical management functions can be taken up by professionals instead of having them performed by volunteers as is the case in many African schemes [20]. Second, there is the possibility of enhancing the pooling of resources and thus creating possibilities to share more expensive risks. The other side of the coin is that the involvement of insurance companies in the management of Community Health Insurance may limit the scope for the community to participate in the overall decision-making process.

Most of the providers with whom the CHI schemes establish working relationships are from the private sector, which seems to be a specific feature of the Indian CHI landscape altogether. They are largely unregulated [21] and virtually all charge on a fee-for-service basis. In combination with a health insurance programme, this is a clear recipe for cost escalation [22]. That the purchasing capacity of NGOs is limited further

aggravates the situation. This often resulted in cases where the health services provide services of questionable quality [23]. The NGOs definitely require technical support in negotiating, both with the providers and with the insurance companies in developing better packages for their communities and containing the costs.

On the whole, there is scanty evidence of the overall impact of Indian CHIs on health systems' performance. Most of the schemes have inadequate monitoring and documentation systems. There is some evidence from the ACCORD scheme indicating that the CHI had increased access to hospital care for the insured [24]. Similarly the SEWA scheme appears to have reduced catastrophic health expenditure among the insured [25]. It is clear that much more effort needs to be put in assessing the various dimension of impact of Indian CHIs.

Simple design measures like a larger unit of enrolment, insisting on a referral system, introducing capitation system of payment and generic medicines can improve the performance of the CHIs considerably. With medical costs increasing, coverage of hospitalisation expenses seems to be the most appropriate policy. Government health services apparently do not appear able to cope with the demand making it necessary to work with the private for-profit and notfor-profit sector for the provision of care. There is a major role for the government in rationalising and expanding the public provision of health care. Eventually, the government could also consider the introduction of a provider accreditation system in order to help CHI schemes in their efforts to purchase quality health care.

5. Conclusion

We have attempted in this paper to explore some of the most characteristic features of Community Health Insurance (CHI) in India. Currently CHIs cover small pockets of the population. On the other hand, there is the huge social capital within Indian micro-finance groups (an estimated 8 million members), co-operative movements, farmer's unions and trade unions. This definitely constitutes an asset. These groups can help people in enrolling members, informing them about health insurance and possibly help in collecting premiums and

managing claims and reimbursements. This is a feasible way to extend CHI to larger population groups [26]. But for this to be successful, the schemes design needs to be rational, premiums need to be affordable as well as adequate to cover the benefit package and where necessary, the government should provide subsidies to bridge the gap.

In a context where more than 80% of health care expenditure is out of pocket and only 3% of the population is covered by any form of insurance, CHI in India definitely does respond to a need, especially for poor households in the informal sector. CHI has the potential to improve people's access to quality health care, to protect households against excessive health expenditure and to shift expenditure from inequitable out-of-pocket spending to more equitable risk pooling arrangements.

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