# **Publicly-Financed Health Insurance for the Poor** Understanding RSBY in Maharashtra

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Evaluating the effectiveness of the "targeting" approach in the Rashtriya Swasthya Bima Yojana, the present study examines the determinants of enrolment, hospitalisation and financial protection for below the poverty line households using data from a large-scale survey conducted in Maharashtra in 2012-13. Almost 50% of BPL households were found to be non-poor and only 30% of them were aware about RSBY. More importantly, the effect of RSBY on catastrophic health expenditure was not found to be statistically significant. Since commercial insurance companies and their third party administrators have limited interest in awareness generation and enrolment, their role may be reviewed and instead an independent public agency should be given responsibility for enrolment of unorganised sector workers. This would be a key step towards achieving universal population coverage. However, in the long run, the government should strengthen the resource-starved public health system.

In India, access to healthcare has been largely affected by financial exclusion (Babajanian and Hagen-Zanker 2012). Government health spending has been very low and hovering around 1% of the gross domestic product (GDP). Till 2009, the penetration of health insurance was minimal and thus there was no other option but to rely on out-of-pocket (OOP) payments for using health services. This fact has important consequences for household living standards. OOP payments increased the poverty ratio by 4.4 and 4.9 percentage points in 2004-05 in India and Maharashtra, respectively (Ghosh 2011). More importantly, the reliance on OOP payments for financing healthcare has affected people below the poverty line (BPL) the most. The poor cited financial constraints as the predominant reason for not seeking healthcare and thereby exposing themselves to health risks (Ghosh 2014).

In an effort to provide protection against catastrophic expenditure for hospital care and to address disparities in access to quality medical care, particularly across the richpoor divide, an innovative range of publicly-financed health insurance (PFHI) schemes have surfaced to provide health security to the poor. In a span of five years from 2007 to 2012, six PFHI schemes have been initiated by various state governments and one by the Government of India. These schemes actually signify a fundamental policy shift in traditional public health financing and healthcare delivery arrangements in India. They are essentially the demand-side financing mechanisms which are transferring a part of the government subsidy for health directly to households so that they can purchase healthcare directly from the providers (Forgia and Nagpal 2012).

The Government of India's sponsored scheme, launched in 2008, is known as the Rashtriya Swasthya Bima Yojana (RSBY). It can easily be called as the world's largest PFHI as it sougth to cover more than 55 million BPL households by 2012-13 working in the unorganised sector in India (Devadasan and Swarup 2008). The scheme has many unique design and operational features. While it is publicly financed, both private and public insurance companies compete to participate in the insurance programme. Under the RSBY, a maximum of five members in a BPL family can be enrolled. The enrolled families are entitled to receive secondary-level inpatient care up to an annual sum of Rs 30,000 on floater basis. The scheme has established a network of hospitals and the enrolled people can seek cashless inpatient care from these identified network hospitals.

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#### Implementation in Maharashtra

In Maharashtra, the RSBY was introduced in 2008 and the Department of Labour (DOL) was entrusted with the task of implementing the programme in the state. DOL selected five commercial insurers, mainly private ones through a bidding process to provide health insurance cover to the BPL population. The insurance companies were paid directly by the DOL for enrolment of every household in the scheme. However, these companies in turn delegated the administrative functions such as beneficiary enrolment, hospital empanelment and claim processing and payment to third party administrators (TPAs). In Maharashtra, insurance companies have listed only private hospitals to provide services covered under the RSBY.

# **Current Status of the Scheme**

Based on the programme data provided by the state nodal agency in Maharashtra, the scheme was active in different parts of the state from 2008 to 2013 and was rolled out in 32 out of 35 districts. In 2012, the Government of Maharashtra started a state-specific scheme, namely, the Rajiv Gandhi Jeevandayee Aarogya Yojana (RGJAY) in eight districts, and as a result of this, the RSBY was withdrawn from six districts. The remaining districts were Mumbai and Mumbai Suburban region, where RSBY was never implemented. In 2013, the scheme was at various stages of implementation across districts. However, there are indications that the programme may have been temporarily withdrawn after September 2013 as tenders have not been invited from the insurers till date (Gothoskar 2014).

RSBY had completed four years of implementation at the time of survey and there is a growing body of literature that has explored different aspects of the programme. Narayana (2010), using programme data for districts that completed the first year of enrolment found that the proportion of poor families enrolled in the scheme in two districts of Maharashtra was only 39%. Another study by Rathi, Mukherjee and Sen (2012) found a similar enrolment rate for the Amravati district, with tribaldominated blocks recording the lowest enrolment. Nandi, Ashok and Lakshminarayan (2013) tried to assess the factors associated with the variations in participation and enrolment in RSBY. They found that political and institutional factors are the major determinants of participation and enrolment in RSBY.

Apart from issues related to enrolment, studies also investigated the role of RSBY in providing financial protection. Using survey data from a district in Gujarat, Devadasan et al (2013) found that enrolled persons had to incur substantial oop payments while availing hospital care from the RSBY empanelled hospitals.

Interestingly, on the basis of the preliminary evidence from a handful of studies, indicating that this public-private partnership model has achieved success in terms of enrolling the poor population, the government decided to allocate more financial resources for RSBY in the previous year's budget (2013-14) to cover an additional target population. The scheme has now been extended to even non-BPL categories such as rickshaw, autorickshaw and taxi drivers, sanitation and mining workers, and workers in construction. But as the programme expands, several important questions arise: (1) Is the strategy adopted by DOL in identifying poor families effective? (2) What has been the level and patterns of enrolment? (3) Has it improved the utilisation of hospital care for the poor? (4) To what extent has the RSBY provided financial protection against catastrophic health expenditure?

The empirical evidence on these questions remains scant. One of the reasons for this is the lack of availability of state or nationally representative household survey data. This study makes an attempt to address these questions. Here, the author tries to assess whether the current strategy of using the BPL lists is effective in reaching the target population. The characteristics of the BPL households enrolled under RSBY in Maharashtra are also studied in order to examine the determinants of hospitalisation and, finally, to assess the extent to which the BPL people in the state are protected from catastrophic expenditure for hospital care and explore whether RSBY could influence the last two outcomes.

#### Methods

We conducted a large-scale multistage sample survey in Maharashtra from December 2012 to February 2013. A total of 6,000 BPL households were included, giving a final sample of 29,858 individuals. In the household survey, information was collected from the BPL households on their monthly consumption expenditure. This data is used to classify the households as poor and non-poor using the official poverty line for 2011-12. Logistic regression was used to determine the factors influencing the household's enrolment in RSBY and the same was employed to identify the determinants of hospitalisation among the poor. In assessing the financial-protection effect of RSBY, an analysis of catastrophic expenditure was carried out using the World Health Organization's (WHO) approach for measuring catastrophic payments for hospital care.

Catastrophic expenditure is defined as an OOP payment for healthcare that exceeds 40% of a household's capacity to pay (Xu 2005). Usually, household non-subsistence spending is used as a proxy for capacity to pay. I used the household's observed food expenditure to define its basic subsistence needs and its capacity to pay its total expenditure minus food expenditure. In case of inpatient care, the reference period was 12 months. The expenditure on inpatient care included medicines, x-rays, electrocardiograms (ECGs), pathological tests and other inpatient-care-related medical expenses. The OOP for inpatient care was converted to monthly figures and then catastrophic health expenditure for inpatient care was calculated. Further, the multivariate binary logistic regression model was used to assess the determinants of catastrophic expenditure.

## **Results and Discussion**

**Effectiveness of Targeting Approach:** The DOL has used the BPL lists prepared in 2002 by the Ministry of Rural Development, Government of India, to identify rural poor households. In case of urban poor, the same was obtained from the Directorate of Municipal Administration for the purpose of enrolling

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them under the RSBY. It is worth mentioning here that the success of any target-based social welfare scheme depends to a great extent on the strategy adopted to reach the eligible population.

However, the analysis of BPL household consumption expenditure revealed that more than half of them were actually nonpoor households (Figure 1). The same was also found in other studies (Ram, Mohanty and Ram 2009; Dreze and Khera 2010). These findings contribute to the ongoing debate on the methodologies used for BPL census and raises critical questions regarding the use of BPL lists and the extent to which RSBY would be able to target the actual poor to ensure access to quality healthcare.



Figure 1: Economic Status of Households Having BPL Cards in Maharashtra (2012-13)

Awareness and Enrolment Patterns in Maharashtra: Of the 6,000 households interviewed in Maharashtra, only 30% reported that they were aware about the RSBY. As shown in Figure 2, there are differences between rural and urban areas in terms of knowledge about the scheme. The knowledge level regarding RSBY was considerably higher amongst the households in rural Maharashtra than amongst the households in urban parts of the state. However, upon enquiring about the insurance status of the BPL households, it was found that only 22% were ever enrolled under the RSBY. Ever enrolled are those who became the member of RSBY at some point since the beginning of the scheme but may not necessarily be still enrolled with the scheme. The ever enrolment rate of BPL households was considerably higher in rural areas (27%) than in urban areas (13%).





The analysis revealed that only 12% of the BPL households are currently enrolled in the scheme in 2012-13 in Maharashtra and the enrolment rate varied substantially across regions (from 31% to 7%) (Figure 3). As observed in case of ever Figure 3: Current Enrolment Rate across Regions in Maharashtra (2012-13, in %)



enrolment, the current RSBY enrolment rate of the BPL households was higher in rural areas (14%) compared to urban areas (8%). The following reasons could possibly explain the causes of low enrolment in Maharashtra. First and foremost, the BPL list considerably affected the enrolment process.

Second, the information, education and communication campaigns to spread awareness about the RSBY programme were consciously low key, as the nodal agency feared that an extensive campaign would lead to more people demanding insurance cover even in talukas where no hospital was empanelled. Third, as there was stiff competition among the TPAs for the contracts from the insurance companies, many had quoted very low rates for carrying out the enrolment activities. However, once they found out that the actual cost of enrolling BPL households was higher than what they had expected, they left many areas without completely enrolling the target population.

Finally, the DOL did not have adequate administrative support at the taluka, village or ward level to monitor and oversee the implementation of the scheme. For example, the Field Key Officers, important functionaries for enrolment, were not from the state nodal agency and therefore, the DOL had little control over them. Lack of administrative capacity on the ground seems to have adversely affected the enrolment activity.

To gain insights into the individual and household characteristics that influence the decision of the BPL households to enrol, logistic regression was employed (Table 1, p 96). Households which knew about the scheme were 38 percentage points more likely to enrol in RSBY. This corroborates the results of a study by Das and Leino (2011) on RSBY which also pointed out that awareness is an important determinant of enrolment. Interestingly, female-headed households were more likely to take up RSBY, in line with the findings of Nandi, Ashok and Laxminarayan (2013). The reason for greater likelihood of enrolment among female-headed households could be attributed to the process of registration for RSBY. As per the earlier RSBY guidelines, the household head has to be physically present at the enrolment site and this may have improved the chances of femaleheaded households' enrolment into the programme vis-à-vis male-headed households as the males were more likely to be at work during the day when the enrolment camp was held.

The monthly consumption expenditure (MCE) was selected as proxy for measuring the economic status of the BPL household. It is encouraging to note that the poorest of the poor households were significantly more likely to enrol in RSBY

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Table 1: Determinants of Current Enrolment in RSBY,	Maharashtra (2012-13)
Determinants	Marginal Effect on
	Enrolment Rate (Std Err
Knows about RSBY scheme	0.38* (0.014)
Household head being female	0.01* (0.004)
Household with five or more members	-0.002 (0.002)
Number of elderly in the household	-0.001 (0.0016)
Highest education level in the household	0.0008* (0.0003)
Caste	
SC	0.0062*** (0.0041)
ST	0.0062 (0.004)
OBC	0.0058***(0.0032)
Others ®	
Religion	
Hindu ®	
Muslim	0.01***(0.006)
Buddhists and others	-0.008**(0.003)
Monthly household consumption expenditure	
Quintile 1	0.012**(0.005)
Quintile 2	-0.002 (0.003)
Quintile 3	-0.004 (0.003)
Quintile 4	-0.013* (0.005)
Quintile 5®	
Head of the household has a chronic health problem	0.0004 (0.005)
Region	
Konkan ®	
Khandesh	-0.006 (0.006)
Desh	-0.008 (0.007)
Marathwada	-0.01*** (0.006)
Vidarbha	-0.030* (0.006)
Vidarbh	-0.027* (0.006)

<sup>®</sup> Reference category of the variable in logistic regression analysis.

\*p<0.01; \*\*p<0.05; \*\*\*p<0.10.

compared to their relatively "better-off" counterparts in the fifth household expenditure quintile. This is in contrast to the findings of the study by Nandi, Ashok and Laxminarayan (2013) which suggested that the enrolment rate is higher among the economically better-off groups.

Given the thrust on social inclusiveness of RSBY, the present study analysed the differences in enrolment status by caste. Scheduled caste (sc) and OBC (Other Backward Classes) households were significantly more likely to enrol in RSBY than households from the "others" category. Similarly, Muslim households were 1 percentage point more likely to participate in RSBY compared to Hindu households. The analysis reveals an interesting enrolment pattern across social groups in Maharashtra. It appears that despite their vulnerable social position, the participation of marginalised groups such as scs and OBCs has not been affected. However, persons belonging to "Buddhist and other" religions were 1 percentage point less likely to enrol than their Hindu counterparts.

The regional variations indicated significant impact on the rate of enrolment. I have divided the state into the following regions: Konkan (Thane, Ratnagiri, Sindhudurg), Khandesh (Ahmednagar, Jalgaon and Nandurbar), Desh (Pune, Satara, Kolhapur), Marathwada (Aurangabad, Jalna, Bid, Latur, Osmanabad, Hingoli), Vidarbha (Akola, Yeotmal, Buldana, Washim) and Vidarbh (Bhandara, Wardha, Chandrapur). Households from Marathwada, Vidarbh and Vidarbha were less likely to enrol in the scheme than persons from the Konkan region. In case of voluntary health insurance, it is expected that households with elderly members and household heads suffering from chronic health problems would be keen to get enrolled as they are likely to use healthcare services extensively. This phenomenon is known as the "adverse selection" problem in health insurance literature. But the result does not support this hypothesis, strengthening the findings of Sun (2011). It appears that the presence of chronically ill and elderly persons in the family did not influence the household's decision to enrol in RSBY.

The analyses do not show any significant effect of size of household on enrolment. However, the information on size of household alone is not adequate to understand the patterns of enrolment within the household. The insurance companies hardly have any incentive to enrol all the members of the households as they are paid a flat amount per family enrolled. This can be substantiated with the following fact that around 40% of the enrolled households reported that not all five members were included in RSBY. Further, the survey data showed that 34% of the households had more than five members, implying that because of the five-member limit in the scheme, many have been excluded from participation in the programme. In the following section, we deal with the question of whether RSBY enrolment has improved the utilisation of hospital care.

#### **Hospital Utilisation**

Utilisation is measured by an indicator for being hospitalised in the past 12 months. The hospitalisation rate was found to be higher among the RSBY-enrolled people than their non-RSBY counterparts, especially in the urban areas (Figure 4). While the reported hospitalisation rate was 5.7% and 5.3% among RSBY- and non-RSBY-enrolled persons, respectively, in the rural areas, in the urban areas, RSBY-enrolled persons recorded a considerably higher hospitalisation rate (8.3%) compared to the non-RSBY-enrolled persons (5%).

Figure 4: Hospitalisation Rate by RSBY Enrolment Status and Place of Residence, Maharashtra (2012-13)



However, hospitalisation is known to be determined by a number of covariates which also tend to vary across population groups. An assessment of the difference between hospitalisation rates of RSBY enrolees and non-enrolees, therefore, warrants adjustment for factors that affect hospitalisation. Table 2 (p 97) presents the odds ratios of the multivariate binary logistic regression model estimated for the BPL population.

**Multivariate Analysis of Hospitalisation:** The results of the multivariate logistic regression model shows that age and gender of persons had no significant effect on the risk of reporting

hospitalisation. However, the currently married and widowed were 1.28 and 1.38 times more likely to report hospitalisation than their "never married" counterparts. Not surprisingly, the scheduled tribes (sTs) were significantly less likely to report hospitalisation (OR=0.80) than persons from "others" background.

Religion showed significant impact on hospitalisation. The odds of reporting an incidence of hospitalisation was 36% lower among the Muslims compared to the Hindus. The lower probability of utilisation among the STS and Muslims demonstrate that they continue to face access-related issues even after the introduction of RSBY. RSBY coverage did not show any strong effect on hospitalisation as persons enrolled under RSBY did not differ significantly in their likelihood of hospitalisation (OR=1.20) from those without RSBY.

As expected, odds ratios indicate a negative relationship between the reported health status of persons and the risk of reporting hospitalisation. The odds of reporting the incidence

Table 2: Determ	inants of Hos	pitalisati	on among	the Adul	t Popul	ation
<b>Relonging to Ho</b>	useholds wit	h RPI Car	d Mahara	chtra (20	12-13)	

Background characteristics	OR
Individual characteristics	
Age	
60+ vs 15-59	1.08
Gender	
Male vs female	1.07
Marital status <sup>1</sup>	
Currently married vs never married	1.28*
Widowed/divorced/separated vs never married	1.38**
Education	
Up to primary vs no formal education	0.98
Primary to secondary vs no formal education	0.95
Secondary and above vs no formal education	0.77*
Enrolled in RSBY vs non-enrolled	1.20***
Self-reported health status	
Good vs excellent	1.13
Fair vs excellent	2.88*
Poor vs excellent	3.41*
Presence of chronic health condition	
Yes vs no	2.33*
Household characteristics	
Caste	
Scheduled tribe vs others	0.80**
Scheduled caste vs others	0.91
Other Backward Classes vs others	0.98
Religion	
Muslim vs Hindu	0.64*
Buddhist and others vs Hindu	0.84
HHMCE	
Quintile 2 vs 1	1.48*
Quintile 3 vs 1	2.07*
Quintile 4 vs 1	2.08*
Quintile 5 vs 1	2.32*
Place of residence	
Urban vs rural	1.14 (0.79-1.02)
Region	
Konkan vs Khandesh	0.96
Desh vs Khandesh	1.27**
Marathwada vs Khandesh	1.22***
Vidarbha vs Khandesh	1.71*
Vidarbh vs Khandesh	1.10
Pseudo-R <sup>2</sup>	0.0962
-Loglikelihood	4,474.32

\*p<0.001, \*\*p<0.05, \*\*\*p<0.10

of hospitalisation was significantly higher among those who reported as having "fair", "poor" health status or chronic conditions than the persons with perceived "excellent" health status and non-chronic health conditions. The analysis suggests a positive relationship between household monthly consumption expenditure and reported hospitalisation. The prevalence of hospitalisation was almost two and a half times higher among persons belonging to most "better-off" quintile than persons belonging to the poorest quintile.

Significant regional differences were found in the reported prevalence of hospitalisation. Those living in Desh, Marathwada and Vidarbha were more likely to report hospitalisation than their counterparts in Khandesh. In the following section, the paper analyses the levels of OOP health payments on inpatient care and rates of catastrophic payments from hospitalisationrelated expenditure among BPL households across locales in Maharashtra. Further, an attempt is made to identify factors that underlie the risk of experiencing this outcome.

**Catastrophic Inpatient Expenditure:** In absolute terms, the average OOP payment on inpatient care for BPL households was Rs 267. In relative terms, the mean share of OOP inpatient expenditure was 3.7% with a higher proportion being recorded in rural areas (Table 3). The mean catastrophic inpatient expenditure (CIE) was 4.6% with the rural BPL households being at greater risk of experiencing catastrophic expenditure than the urban households. The CIE was found to be higher among rural and urban households having chronically ill and elderly member(s). Interestingly, the RSBY-enrolled households faced a higher rate of CIE in the urban population. On the other hand, the CIE for rural households enrolled under RSBY was lower than the overall average.

Table 3: Distribution of Household Inpatient Care Expenditure among

nousenoids with BPL Cards across Locales, Manarashtra (2012-13)			
Measures	Rural	Urban	All
Average monthly inpatient care expenditure	280	243	267
OoP share of monthly household consumption expenditure (%)	4.1	3.1	3.7
Households with catastrophic inpatient care expenditure	5.1	3.7	4.6
Distribution of catastrophic inpatient expenditure among different households			
Member aged 60 years and above	5.2	4.2	4.9
Member with chronic disease	6.0	4.4	5.4
RSBY-enrolled households	4.0	6.9	4.7

## **Determinants of CIE**

For determining the determinants of CIE, the probability of experiencing CIE is modelled using a multivariate logistic regression model. The results (Table 4, p 98) indicate that economic status was positively related to the probability of experiencing CIE, suggesting that relatively better-off households within BPL category were more likely to have suffered from catastrophic expenditure.

Along with economic status, social factors such as religion played an important role in determining whether a household will experience catastrophic expenditure. Muslim households were less likely to experience catastrophic expenditure than their Hindu counterparts. Rural households were more likely to incur catastrophic expenditure than urban households.

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Table 4: Determinants of Catastrophic Inpatient Expenditure among th	le
Households with BDI Cards Maharashtra (2012-13)	

Households with BPL Cards, Manarashtra (2012	-13)	
Household Characteristics	Р	OR (95% C.I.)
Gender of household head (female vs male)	0.136	1.29 (0.92-1.80)
Educational level of household head		
No formal education vs secondary and above	0.427	0.95 (0.67-1.35)
Up to primary vs secondary and above	0.729	1.06 (0.76-1.48)
Primary to secondary vs secondary and above	0.771	0.85 (0.56-1.27)
Currently enrolled in RSBY vs non-enrolled		
Yes vs no	0.716	0.93 (0.63-1.27)
Households having		
Five or more members (5+ vs <5)	0.004	0.67 (0.51-0.88)
Elderly members (60+ years)	0.328	1.14(0.88-1.48)
Caste		
Scheduled tribe vs others	0.698	1.09 (0.71-1.66)
Scheduled caste vs others	0.093	0.70 (0.47-1.06)
Other Backward Classes vs others	0.413	1.16 (0.81-1.67)
Religion		
Muslim vs Hindu	0.001	0.32 (0.17-0.50)
Buddhist and others vs Hindu	0.860	0.96 (0.59-1.56)
Expenditure quintile		
Quintile 2 vs 1	0.014	1.75(0.94-3.25)
Quintile 3 vs 1	< 0.0001	2.95(1.65-5.26)
Quintile 4 vs 1	< 0.0001	6.32(3.66-10.92)
Quintile 5 vs 1	< 0.0001	11.64 (6.82-19.87)
Place of residence		
Rural vs urban	0.007	1.52 (1.12-2.06)
Region		
Konkan vs Khandesh	0.900	0.97 (0.60-1.57)
Desh vs Khandesh	0.366	1.23 (0.79-1.91)
Marathwada vs Khandesh	0.870	1.04 (0.77-1.80)
Vidarbha vs Khandesh	0.813	0.93 (0.54-1.62)
Vidarbh vs Khandesh	0.485	0.82 (0.49-1.51)

Households having five or more members had lower likelihood of incurring catastrophic expenditure than households with less than five members. Notably, having RSBY coverage had no significant effect on CIE.

#### Conclusions

The analysis of the survey data points to some major concerns with regard to the success of RSBY in Maharashtra not only in targeting and enrolling BPL households, but also in improving access to healthcare and providing financial protection from the cost of hospital care. First, it was found that there are serious issues with the current BPL lists as it significantly excluded poor households, thereby depriving them of the benefits of welfare schemes such as RSBY. The implications are far more serious for the disadvantaged groups such as scs, sTs, agricultural labourers, and landless households as they face higher rates of exclusion from BPL list (Swaminathan 2008). The government has partly acknowledged this issue by adopting a two-pronged strategy. One, it is planning to use the new BPL lists based on 2013 Socio-Economic and Caste Census for implementing RSBY and other social assistance programmes. This is a better approach per se but it will not be able to fully mitigate the risk of exclusion (Dreze and Khera 2010). Two, it decided to extend RSBY coverage to other unorganised sector workers such as domestic workers and Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) cardholders. But recent evidence indicates that even using the current BPL and MGNREGS beneficiaries' lists, RSBY has not been able to expand the population coverage

significantly. For example, over 60% of targeted households in Karnataka were not enrolled into RSBY in 2013 with higher levels of exclusions occurring among socially-excluded groups (Seshadri et al 2013). Hence, the current strategy of using the "targeting" approach for RSBY is proving to be ineffective.

Thus, if the programme is continued in Maharashtra and elsewhere, it should adopt the universal approach, as it would be more effective at including all the needy households.

Second, awareness about the scheme seems to be strongly associated with enrolment in RSBY. This means that there should be more emphasis on educating the BPL families about the programme, though this would happen only when the insurance companies or the intermediaries like TPAs and third party vendors (TPVs) would take active interest in carrying out effective information, education and communication campaigns and enrolment activities. However, the design of RSBY is such that the nodal agency has hardly any control over the TPAs or TPVs. The MOLE should make appropriate changes in the guidelines so that the TPAs or TPVs can also be made accountable to the system. Alternatively, since the commercial insurance companies and their TPAs have limited interest in awareness generation and enrolment, their role may be reviewed and instead an independent public agency should be given responsibility for enrolment of workers.

Another concern is the intra-household exclusion occurring due to the very design of RSBY. It was seen that by not setting any incentives for enrolling maximum members from each family and keeping the "five-member" ceiling has worked to the advantage of insurance companies as that led to exclusion of many eligible persons from RSBY. Therefore, the restriction of five members should be withdrawn to prevent intra-household exclusions.

Urban households were found to be disadvantaged compared to rural households in terms of RSBY coverage. Hence, the nodal agency needs to monitor the enrolment activities more closely to improve the awareness level and enrolment in urban areas. The fact that almost half of the previously enrolled households were not continuing with the programme suggests that "compulsory annual renewal" policy should be scrapped and instead, the nodal agency should consider providing long-term coverage/extending the policy duration to the enrolled households. The latter would not only reduce the burden on the health system but also reduce the chances of exclusion due to non-renewal of insurance policy.

Low enrolment affected utilisation adversely. In particular, the "poorest" of the poor and vulnerable groups like sTs and Muslims had lower likelihood of hospitalisation compared to those with advanced socio-economic background, implying that RSBY has hardly improved the utilisation of inpatient care among them. As per the economic theories on health insurance, it is expected that utilisation of healthcare among the uninsured would increase significantly once they are provided insurance cover. But introduction of RSBY has not led to such a situation. This reinforces the findings of other studies which revealed that the RSBY suffers from abysmally low levels of utilisation (Ghosh and Thakur 2013; Rajasekhar et al 2011; Seshadri et al 2013). The absence of empanelled hospitals in many talukas could be an important factor that may have contributed to non-utilisation of services. Also, the lack of knowledge regarding the scheme's benefits as well as empanelled hospitals may have deterred the enrolees from using RSBY benefits.

Finally, financial protection against cost of illness for BPL households remains a challenge as the effect of RSBY in reducing the risk of experiencing catastrophic expenditure for hospital care is not seen. A similar observation was also made by Selvaraj and Karan. Analysing the consumer expenditure survey data of the National Sample Survey Office, conducted in 2004-05 and 2009-10, Selvaraj and Karan (2012) provided an estimate of catastrophic headcount by hospitalisation before and after the introduction of PFHI schemes. They found that the poorer economic groups in districts with PFHI experienced an increase in the incidence of catastrophic expenditure during the study period, mainly due to an increase in OOP spending on inpatient care. This is a serious concern as the government is pumping money to the tune of hundreds of crores of rupees into schemes such as RSBY but due to serious problems in the basic design of RSBY, this is not translating into significant improvement of healthcare access or financial protection against cost of hospital care for people living below the poverty line. The scheme also does not deal with outpatient care which pushes non-poor households into poverty and the poor further deeper into it. In fact, studies found that lack of outpatient services either refrained RSBY patients from seeking services or forced them to consult informal providers and the focus on only hospitalisation in the scheme provided an adverse incentive to providers for substituting outpatient care with costlier hospitalisations (Virk 2013).

#### **Policy Implications**

Given this evidence, it is important to rethink about the persuasion of PFHI schemes in Maharashtra and elsewhere. Implementation of these schemes through commercial insurance companies has

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been marked by high administrative cost, large-scale exclusions and supply-side moral hazards leading to draining out of precious public resources. The total amount of claims in RSBY never crossed 57% of the total premiums taken in by the companies in all these years in Maharashtra. In fact, on an average, the claim ratio was just about 42% in the last five years. Hence, the role of commercial insurance companies in social health protection programmes such as RSBY needs to be critically evaluated. It is worth mentioning that there is no country in the world which has engaged commercial insurance companies for implementing social health protection programmes.

Another issue is that these schemes are encouraging an unequal competition between the private corporate hospitals and resourcestarved public health facilities to attract beneficiaries. In Maharashtra, not a single public hospital was empanelled by RSBY. Obviously, all these have helped the private providers in capturing the lion's share of the financial resources channelised through the PFHIS. Further, it has been observed by More et al (2012) that states like Andhra Pradesh have experienced a disproportionate increase in public spending on tertiary care through the Aarogyasri scheme while the relative share of public spending on primary and secondary care has declined significantly.

The issues discussed above warrant urgent attention from policymakers. As the new government is likely to announce the road map for the health sector, it should give serious thought on reversing the healthcare financing mechanisms introduced in the last few years. The government needs to enhance public spending significantly to strengthen the public health system. This would not only improve the access of healthcare services of all sections including the vulnerable groups but also reduce oop payments considerably, resulting in improved health outcomes of the population.

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