

## Is RSBY India's platform to implementing universal hospital insurance?

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**Background & objectives:** In 2008, India's Labour Ministry launched a hospital insurance scheme called Rashtriya Swasthya Bima Yojana (RSBY) covering 'Below Poverty Line' (BPL) households. RSBY is implemented through insurance companies; premiums are subsidized by Union and States governments (75 : 25%). We examined RSBY's enrolment of BPL, costs vs. budgets and policy ramifications.

**Methods:** Numbers of BPL are obtained by following criteria of two committees appointed for this task. District-specific premiums are weighted to obtain national average premiums. Using the BPL estimates and national premiums, we calculated overall expected costs of full roll-out of the RSBY per annum, and compared it to Union government budget allocations.

**Results:** By March 31, 2011, RSBY enrolled about 27.8 per cent of the number of BPL households following the Tendulkar Committee estimates (37.6% following the Lakdawala Committee criteria). The average national weighted premium was ₹ 530 per household per year in 2011. The expected cost of premium to the union government of enrolling the entire BPL population in financial year (FY) 2010-11 would be ₹ 33.5 billion using Tendulkar count of BPL (or ₹ 24.6 billion following Lakdawala count), representing about 0.3 per cent (or 0.2%, respectively) of the total union budget. The RSBY budget allocation for FY 2010-11 was only about 0.037 per cent of the total union budget, sufficient to pay premiums of only 34 per cent of the BPL households enrolled by March 31, 2011.

**Interpretation & conclusions:** RSBY could be the platform for universal health insurance when (i) the budget allocation will match the required funds for maintenance and expansion of the scheme; (ii) the scheme would ensure that beneficiaries' rights are legally anchored; and (iii) RSBY would attract large numbers of premium-paying (non-BPL) households.

**Key words** Below-poverty-line - Health insurance - Healthcare - India - non-BPL - RSBY

From the time of its independence, India's National Health Policy, endorsed by Parliament in 1983 and amended in 2002<sup>1</sup> has been to improve the health of the population. While funds have been committed by the Union Government of India (GOI) and at State

government levels for the provision of healthcare services to the entire population, the amounts allocated are insufficient to pay for universal coverage of even rudimentary services, let alone costs of comprehensive access to preventive, curative (primary, secondary and

tertiary) care and rehabilitative care. Consequently, most Indians pay their own medical costs. According to the World Health Organization (WHO), private expenditure represented 73.5 per cent of total health expenditure in India in 2007 (of which out-of-pocket expenditure of households was about 90%), when public funds covered only 26.5 per cent of total healthcare costs<sup>2</sup>.

Many reasons have been raised to justify generalized access to some form of publicly organized health financing scheme, at least to the most costly types of care<sup>3-5</sup>. The costliest care differs across countries; for example, in OECD (Organisation for Economic Co-operation and Development) countries median costs of hospitalizations are the costliest component of health expenditure (*e.g.*, Australia 38.3%, Germany 34.9%, Italy 44.1%, Norway 40.9%, Switzerland 47.6%; and median cost of inpatient care for all OECD countries at 35.3% of total health expenditure)<sup>6</sup>. In India, particularly rural India, the highest component of cost is due to medicines, not hospitalizations. According to one source using 2005 data, drugs represented about 49 per cent of total<sup>7</sup>; another source, analyzing data from 1999-2000, suggested that expenditure on drugs constituted up to 75 per cent of out-of-pocket expenditure (77% in rural areas and a little less than 70% in urban areas)<sup>8</sup>; and a third source estimated the overall share of drugs in out of pocket spending (OOP) at 77 per cent in rural and 69 per cent in urban India<sup>9</sup>. It has been reported that hospitalization of a person belonging to the lowest monthly expenditure class in rural India cost in 2004 ₹ 2,530 in a government institution and ₹ 5,431 in a private institution (representing over 10 and 25 times, respectively, the monthly income of the households)<sup>10</sup>, and another study suggested that hospitalizations were the source of impoverishment due to low insurance penetration and heavy reliance of patients/payers on current income and short-term borrowing<sup>11</sup>.

With the view to remedying flaws of healthcare funding through out-of-pocket spending, some European countries developed a model of “national health insurance” (Germany<sup>12</sup>; Netherlands<sup>13</sup>, several industrialized western European countries<sup>14</sup>). The general thrust has been that the government establishes rules for operation of one or more insurance schemes that pay for access to healthcare of all or most of the population, and beneficiaries are required to pay contributions. In recent years, several low and middle income countries (LMICs) have launched national health insurance schemes, *e.g.* China 2003<sup>15,16</sup>, Georgia

2006<sup>17</sup>, Ghana 2003<sup>18</sup>, Indonesia 2004<sup>19</sup>, Mexico 2001<sup>20</sup>, Vietnam 2003<sup>21</sup>.

The basic model in these LMICs is similar in principle to the European model in that the scheme is contributory, with some matching contributions from national governments. However, different LMICs have varying levels of subsidization of the premium due from poor people, ranging from partial (*e.g.* 80% in China<sup>15</sup>) to full subsidization (Georgia, Ghana, Indonesia, Mexico, Vietnam).

In India, the Union Government (GOI) has already taken steps to develop hospital insurance with premium subsidization of low-income beneficiaries. For instance, in 2003, the GOI paid insurance companies a subsidy (of ₹ 100 per family per year) towards premiums of “Below Poverty Line” (BPL) families under the “Universal Health Insurance Scheme” (which was priced at ₹ 1/- per day for an individual, ₹ 1.50 per day for a family of five, and ₹ 2/- per day for family of seven)<sup>22</sup>. However, this subsidy was discontinued as the scheme attracted a meagre 68,296 families by 2005-2006<sup>23</sup>.

In 2008, the GOI introduced the “Rashtriya Swasthya Bima Yojana” or National Health Insurance Programme (RSBY)<sup>24</sup>. RSBY is uniquely mandated to cover the entire territory of India and all occupational groups. Eligibility for RSBY coverage applies to all the BPL population, entails full premium subsidy, and the GOI extended the same terms to certain “above poverty line” (APL) groups.

Considering that BPL and APL constitute the entire population, one can ask whether India is creating eligibility for all or most of the population to access hospital care that would be paid for by an insurance scheme organized by the government? Is RSBY India’s flagship platform for the introduction of Universal Hospital Insurance? We explored this question by looking at the share of the target population that was covered by RSBY and discussed the findings.

### Material & Methods

RSBY follows the Planning Commission’s definition of BPL to determine eligibility in each State/district. Two definitions have been valid since 2008, when RSBY was launched: (i) The Lakdawala Committee definition (1993); and (ii) and Tendulkar Committee definition (2009). The first estimated a poverty line and then defined households below the estimated value as “poor”<sup>25</sup>. The second suggested

inclusion of expenditure on health and education besides food<sup>26</sup>. Both Committees gave State-specific poverty and weighted national level poverty ratios [based on the National Sample Survey Organization (NSSO) consumer expenditure data 2004-2005]<sup>27</sup> rather than actual numbers of BPL households. We estimated the actual number of BPL households by applying the headcount ratio proposed by the committees to the most recent population estimates<sup>28</sup>, divided by the household size as per the 2001 census data<sup>29</sup>. The number of the poor as per the Lakdawala committee criteria was 27.5 per cent, and 37.2 per cent as per the estimate of the Tendulkar Committee.

The data published by RSBY on its website on March 31, 2011 on the number of BPL households targeted and enrolled in the districts where it operates, were used. For an estimate of the fiscal burden, we calculated the State level and all-India average premium (by weighting district-wise premiums by the BPL population in that district). We then compared GOI allocations towards the RSBY (as per the GOI Budget Bills) to the GOI share of the premium in respect of all the eligible BPL.

The major data sources for this study were the RSBY website (<http://www.rsby.gov.in>), official documents of the Planning Commission of India<sup>30</sup>, ministry of finance budget documents<sup>31,32</sup>, and other relevant information.

## Results

*How many households are "BPL" in India?:* The basic RSBY policy document published by the Ministry of Labour was used to calculate both the total eligible BPL population and the share already affiliated.

State Governments have administrative responsibility to determine which households are BPL, entailing eligibility to coverage by RSBY. We have not found a source clarifying what definition, method or information guides states in determining BPL status, or whether the same criteria apply uniformly across India. As RSBY is supposed to follow the Planning Commission's BPL definitions, we compared the number of BPL households targeted by RSBY (based on the lists provided by the State governments) to the estimates derived by using the Planning Commission criteria. (Table I, columns 8 and 9). As these are available only for entire states, the comparison with State lists used by RSBY is possible only in those States where RSBY has reported enrolment in all districts. On

March 31, 2011, there were 10 such States; of these, the RSBY number was within the range of BPL households estimated according to the two methods in five States (Gujarat, Himachal Pradesh, Punjab, Tripura and Uttar Pradesh). In the other States, the numbers were outside the range; in two (Chandigarh and Goa) the RSBY number underestimated the BPL numbers, and in three States (Delhi, Haryana, and Kerala) the number of BPL households was overestimated. The reasons for these discrepancies were not clear.

*Enrolment rates:* On March 31, 2011, RSBY operated in 24 of the 30 States/territories; RSBY covered all districts in only 10 States; in the others, enrolments occurred in part of the districts, ranging from one district out of nine in Manipur to 12 districts out of 13 in Uttaranchal; in total, enrolment was reported in 334 districts out of 621 in the 30 States. RSBY publishes the number of enrollees and the number of eligible BPL households per active district, making it possible to calculate the percentage of enrolment as shown in Table I (column 7).

We used the estimated number of eligible BPL households calculated following the Lakdawala and the Tendulkar Committee models to express the enrolment of BPL households as a percentage of all eligible BPL households in India (Table I). Based on these calculations, the affiliation rates of RSBY on March 31, 2011 for whole country were 27.8 per cent of eligible BPL households (Tendulkar Committee model) or 37.6 per cent (using the Lakdawala Committee model).

On March 31, 2011, the 10 States with enrolment in all districts contributed 22 per cent to total enrolments, whereas three large States (Bihar, UP and West Bengal) contributed over 55 per cent to the total.

*Cost of providing RSBY health insurance to all "BPL" households:* Calculating the cost of implementing RSBY requires knowing the premium per State. However, premiums are contracted per district, not per State or uniformly for India; RSBY attributes exclusive rights to licensed (public and private) insurance companies to enrol members (and collect the premium from the government) through district-specific bidding. This leads to competitive bidding among insurers, and to different premiums for the uniform package of ₹ 30,000 per family and year. On March 31, 2011 premiums ranged from a low of ₹ 331 to a high of ₹ 825 per household per year. Consequently, we calculated the estimated average premium per State (Table II, column 2) by weighting the premium

**Table I.** BPL population effectively covered in India

State	Number of districts where RSBY enrolling	Total number of districts	% districts with RSBY enrolees	RSBY enrolment (at 31.3.2011)	BPL households in 2011 (Lakdawala Committee base)	BPL households in 2011 (Tendulkar committee base)	% BPL enrolled in RSBY (Lakdawala estimate)	% BPL enrolled in RSBY (Tendulkar estimate)
1	2	3	4	5	6	7	8	9
Andhra Pradesh	0	23	0.0	0	2,985,972	5,650,668	0.0	0.0
Arunachal Pradesh	6	16	37.5	15,482	47,807	84,478	32.4	18.3
Assam	5	27	18.5	204,465	1,132,905	1,978,271	18.0	10.3
Bihar	33	38	86.8	5,023,976	7,115,086	9,349,292	70.6	53.7
Chandigarh	1	1	100.0	4,913	17,175	Not available	28.6	Not available
Chhattisgarh	12	18	66.7	1,039,123	2,052,248	2,478,754	50.6	41.9
Delhi	9	9	100.0	106,979	485,745	432,875	22.0	24.7
Goa	2	2	100.0	0	44,019	79,744	0.0	0.0
Gujarat	26	26	100.0	1,919,086	1,939,665	3,671,509	98.9	52.3
Haryana	21	21	100.0	616,794	622,707	1,071,946	99.1	57.5
Himachal Pradesh	12	12	100.0	237,946	137,681	315,289	172.8	75.5
Jammu & Kashmir	0	15	0.0	0	104,736	256,021	0.0	0.0
Jharkhand	21	24	87.5	1,329,254	2,368,163	2,661,980	56.1	49.9
Karnataka	5	30	16.7	157,405	3,008,401	4,019,223	5.2	3.9
Kerala	14	14	100.0	1,796,315	1,058,806	1,390,565	169.7	129.2
Madhya Pradesh	0	50	0.0	0	5,028,005	6,380,184	0.0	0.0
Maharashtra	30	35	85.7	1,489,753	6,969,394	8,649,314	21.4	17.2
Manipur	1	9	11.1	18,259	81,464	178,939	22.4	10.2
Meghalaya	4	7	57.1	50,271	98,979	86,138	50.8	58.4
Mizoram	5	8	62.5	15,240	27,275	33,120	55.9	46.0
Nagaland	3	11	27.3	39,290	61,996	29,366	63.4	133.8
Orissa	5	30	16.7	433,079	4,088,986	5,040,733	10.6	8.6
Punjab	20	20	100.0	193,541	415,564	1,033,962	46.6	18.7
Rajasthan	0	33	0.0	0	2,502,515	3,895,318	0.0	0.0
Sikkim	0	4	0.0	0	25,769	39,872	0.0	0.0
Tamil Nadu	0	32	0.0	0	3,810,156	4,893,934	0.0	0.0
Tripura	4	4	100.0	258,402	143,947	309,220	179.5	83.6
Uttar Pradesh	70	70	100.0	4,397,368	10,149,260	12,655,632	43.3	34.7
Uttaranchal	12	13	92.3	335,042	755,893	624,185	44.3	53.7
West Bengal	13	19	68.4	3,527,137	4,467,899	6,204,411	78.9	56.8
India	334	621	53.8	23,209,120	61,748,218	83,494,941	37.6	27.8

per district (where available) by the number of BPL in that district according to RSBY lists (Table I, column 6). The All-India estimated average premium was obtained by weighting the State-specific estimated average premium by the number of BPL in that State (according to RSBY list) divided by the total targeted BPL in India (RSBY list). In Table II the All-India estimated average premium is shown in States where RSBY does not yet operate.

Table II contains three estimates of the premium cost of enrolling BPL: (i) the annual cost for households already enrolled (column 3), using the

number of BPL households shown in Table I column 5, (ii) & (iii) the projected premium cost for all BPL households (Table II, columns 4 and 5) are estimated according to the two BPL counts adopted by the Planning Commission (shown in Table I, columns 8 and 9).

The GOI share of premium costs for financial year (FY) 2010-11 in respect of BPL population enrolled by March 31, 2011 was about ₹ 9.29 billion. When this cost was compared with the amounts allocated to RSBY within the budget bill: for FY 2010-11, the amount was originally ₹ 3.15 billion, increased to ₹ 4.6 billion with

**Table II.** The cost of enrolling in RSBY

State	In ₹ per year			
	RSBY premium	Cost to GOI of RSBY enrolled at 31.3.2011	Cost to GOI for all BPL (Lakdawala estimate)	Cost to GOI for all BPL (Tendulkar estimate)
1	2	3	4	5
Andhra Pradesh	530	0	1,186,140,022	2,244,657,383
Arunachal Pradesh	744	10,366,747	32,011,818	56,566,337
Assam	634	116,708,213	646,660,064	1,129,193,209
Bihar	501	1,887,193,785	2,672,693,135	3,511,944,602
Chandigarh	530	1,951,628	6,822,527	Not available
Chhattisgarh	446	347,243,733	685,799,573	828,325,156
Delhi	542	43,452,463	197,298,561	175,823,888
Goa	697	0	23,010,811	41,686,253
Gujarat	627	903,040,310	912,724,053	1,727,656,243
Haryana	501	231,542,926	233,762,746	402,405,870
Himachal Pradesh	331	59,052,249	34,168,958	78,246,914
Jammu & Kashmir	530	0	49,926,086	122,041,544
Jharkhand	442	440,946,783	785,578,841	883,045,198
Karnataka	475	56,108,586	1,072,374,545	1,432,692,392
Kerala	621	837,132,189	493,432,631	648,041,523
Madhya Pradesh	530	0	1,997,312,118	2,534,448,275
Maharashtra	504	562,869,652	2,633,228,872	3,267,948,535
Manipur	530	8,703,791	38,832,821	85,297,526
Meghalaya	537	24,303,213	47,850,597	41,642,952
Mizoram	530	7,264,679	13,001,750	15,787,840
Nagaland	667	23,571,643	37,193,748	17,618,091
Orissa	601	195,210,359	1,843,110,511	2,272,110,371
Punjab	514	74,573,767	160,121,827	398,398,354
Rajasthan	530	0	994,092,983	1,547,366,453
Sikkim	530	0	12,283,719	19,006,152
Tamil Nadu	512	0	1,463,099,993	1,879,270,658
Tripura	590	137,234,718	76,448,868	164,223,495
Uttar Pradesh	581	1,916,318,007	4,422,920,470	5,515,166,074
Uttaranchal	376	94,436,613	213,059,828	175,935,767
West Bengal	497	1,314,211,246	1,664,739,230	2,311,763,384
India	530	9,293,437,300	24,649,701,706	33,528,310,437

the 2011-12 Budget Bill. The gap between the cost to GOI (₹ 9.3 billion) and the revised allocation (₹ 4.6 billion) is significant.

One could assume, considering the rapid growth in enrolments to RSBY in the last year, that a per-month cost calculation would take account of fewer enrolled BPL households than the number posted to the RSBY website on March 31, 2011. However, RSBY does not publish the historical enrolment data per month and by district. Therefore, it was not possible to verify this assumption that costs would match the budget allocation if calculated on a monthly basis.

Monthly premium calculations might explain the retrospective gap between cost and budget allocation for RSBY, but not a prospective gap, since the policy goal of RSBY is to retain all enrolled BPL households, for which purpose the GOI and the State governments continue to pay the premium. Yet, surprisingly, the financial allocation to RSBY in the Budget Bill for FY 2011-12 is ₹ 2.8 billion, lower than the revised allocation for 2010-11 and only about 34 per cent of the budget required to pay the GOI's share of the annual premium for FY 2011 for the BPL households reported by RSBY as enrolled by March 31, 2011. With that allocation, RSBY would be unable to enrol one additional BPL

household in the current year. Incidentally, the revised allocation to RSBY in 2010-11 represented about 0.037 per cent of total GOI budget, when the GOI share of the premium should be 0.076 per cent of total in FY 2010-11.

*Projecting the cost of enrolling all BPL in India:* The projected annual cost for enrolling all BPL households in India was also estimated. We assumed that the premiums remain unchanged, and applied that cost to the number of BPL households obtained according to the criteria adopted by the Planning Commission (Table II, columns 4 and 5).

The annual cost to the GOI for the premiums of RSBY when all BPL households are enrolled would amount to ₹ 24.6 billion by applying the Lakdawala criteria, or ₹ 33.5 billion when applying the Tendulkar criteria. While it is impossible to know exactly when the GOI would be required to allocate these amounts (*i.e.* 100% enrolment of BPL households), it was noted that these amounts were higher than the 2011-12 budget by a factor of 8.8 or 12.0, respectively, for the alternative two estimates of BPL in India. These cost estimates would represent about 0.2 and 0.3 per cent, respectively of the total budget.

As one of the main objectives of the scheme is to increase access to the hospitalisation care among the poor people, the extent to which the scheme has met its objective was examined. We juxtapose the hospitalization rate among the 40 per cent of the Indian population with the lowest income, which was 1.24 per cent in 2004 according to data published by the National Sample Survey Organisation with hospitalization rate of 2.09 per cent among the RSBY beneficiaries (that are at the bottom of the income pyramid by definition). This comparison showed a growth rate of 69 per cent in hospitalizations among RSBY beneficiaries, suggesting impressive success in obtaining the desired results.

### Discussion

Although RSBY has grown rapidly, only a minority of BPL households in India is enrolled so far, and the scheme is yet to achieve presence in all districts of all States, to cover all BPL households all over India, as mandated by the GOI. The number of enrolees reported by RSBY may in fact be an overestimate of the active number of insured, since there is no certainty that every enrolled household has renewed its coverage beyond the first year. The gap between the active and cumulative count

of enrolees could be significant; quantification of the gap would be possible when RSBY, and/or the insurance companies, would publish data on renewals. This information is not available at present. This requires a sustained growth in enrolments, for which suitable budgetary allocations are required upfront. The fiscal effort seems relatively modest, yet the amount budgeted in FY 2011-12 is lower than that allocated in 2010-11, and lower than that required to maintain the enrolment of all BPL households already enrolled, let alone pay the premium to enrol additional households. Thus, the visible evidence suggests that budgetary allocations constrain RSBY in fulfilling its mandate.

The legal foundation of RSBY is also an issue. Beneficiary households cannot invoke rights by virtue of law or regulation, as RSBY has been launched through a decision of the Ministry of Labour, and all contracts are signed between State governments and insurance companies, to which beneficiaries are not party. There is yet another contractual relationship between insurance companies and “empanelled” hospitals that regulates mainly the price the hospitals can bill for services; the insurers pay, once the eligibility of hospitals is cross-checked against the debits on biometrically-enabled debit cards delivered to beneficiaries by insurers enabling them to obtain cashless services in hospitals. This differs from the law and custom in most countries that anchor social rights of citizens in law. It seems justifiable and judicious to give beneficiaries a sound legal basis for their rights, which would enhance trust in RSBY and assure its permanence, thus making it more likely to scale beyond BPL and be sustainable.

Finally, the expressed goal to attain universal hospital insurance would be reached when the majority of the population, *i.e.* the APL, would also be enrolled in RSBY. The GOI declared its intention to do so already in 2008 and again in 2011, but there is no record of (voluntary) affiliation of premium-paying APL yet. Thus it is premature to tell whether the coverage offered by RSBY will attract all or most APL if they would be required to pay the premium.

The RSBY scheme can be reformed by drawing some lessons from other ongoing government health insurance scheme in the country. For example, the Employees’ State Insurance (ESI) Scheme of India, set up through the ESI Act 1948, has been providing healthcare protection to workers and their dependents (55,484,000 beneficiaries on March 2010) under

provisions of the law. This scheme is also financially self-sustainable. The ESI provides outpatient healthcare in addition to inpatient healthcare services. And, unlike the RSBY, the ESI has its own healthcare facilities (ESI dispensaries and hospitals) thus enabling ESI to better control costs and access to services to its members.

In conclusion, on the basis of our analysis we state that implementing RSBY would entail a relatively modest financial burden, considering the estimated number of enrolled and the premiums practiced today. We aim to assess whether RSBY is India's flagship platform for the introduction of universal hospital insurance. The impressive progress of the programme in enrolling BPL households shows promise, which however, will mature only when some conditions are met: the budget allocation must match the required funds for maintenance and expansion of the scheme; this requires suitable arrangements for budgeting of amount that would cover both the premium of those already enrolled, and of all those that are entitled to subsidized benefits. Secondly, the legal status of the scheme should be regularized to ensure that it is permanent, without which the rights-based approach cannot be materialized. And thirdly, the value-proposition of RSBY must attract large numbers of APL households, who (unlike BPL) will have to pay premiums to ensure the financial sustainability of the scheme. At this stage, RSBY is challenged by these conditions, suggesting that GOI, which could fix several core issues, is not yet fully and irrevocably decided that RSBY is the platform to implementing universal hospital insurance in India.

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