PGPPM Policy Folio

EVALUATION OF RASHTRIYA SWASTHYA BIMA YOJANA (RSBY):
A CASE STUDY OF AMRAVATI DISTRICT

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Evaluation of Rashtriya Swasthya Bima Yojana (RSBY): A Case Study of Amravati District

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About the PGPPM

The Post Graduate Programme in Public Policy and Management is a key activity of the Centre for Public Policy (CPP) of IIM Bangalore. CPP was established by IIM Bangalore with support from United Nations Development Programme (UNDP) and Department of Personnel and Training (DoPT) of Government of India (GoI) in 2002. PGPPM is now decade old and is a unique programme designed to strengthen the skills of future leaders and professionals from various civil services, and from social, infrastructure and private sectors.

Since the PGPPM is established within a premier business school, it focuses on imparting skills related to policy making and policy implementation, as well as general management to the participants. Participants undertake coursework which include core modules in policy analysis and in general management areas like decision analysis, finance, strategy, marketing, etc. It offers range of electives which allow the students to specialize in niche areas. Each participant also devotes a year towards researching on and writing a dissertation (a Post Graduate level thesis) on a contemporary public policy issue.

Overall, the programme facilitates inter-disciplinary learning and cross-learning from experience among different services and between public and private sectors. The PGPPM, thus, enables its participants to take up key positions in the fields of policy formulation, implementation and evaluation with International and Indian agencies and organizations engaged with public system.

About the Author

Dr Prateek Rathi is a Medical Professional working in the area of Healthcare Delivery and Administration in the Public Sector for more than 20 years. He has a unique combination of **professional experience and qualifications in Medicine, Business Administration, Law and Public Policy & Management**, bringing to the table business management skills in healthcare, especially in Health Policy planning, formulation and implementation.

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He presented this work at the Global Health Council Conference, June 2011, Washington, USA to the world leaders in Healthcare.

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Foreword

The Post Graduate Programme in Public Policy and Management (PGPPM) at the Indian Institute of Management, Bangalore, will be completing its tenth year. One of the key components of the Programme is the submission of the Dissertation by the participants. Over the years, dissertations have been undertaken on a wide range of policy areas in different sectors like environment, education, health, taxation, infrastructure, transport, etc. These studies have focused on specific aspects of the policy cycle: policy formulation, policy implementation and policy evaluation. Most studies have been empirical, leading to the creation of a good repository of research reports over the decade.

It has been decided to publish a Policy Folio to mark the milestone of tenth year of completion of PGPPM. The Folio contains policy papers, authored by PGPPM alumni, based on selected dissertations from the recent past. These papers are aimed at public policy professionals including policy makers, administrators and researchers. The focus of these papers is on highlighting the empirical evidence and the resulting policy implications from the selected dissertations.

This paper by Prateek Rathi on ‘Evaluation of Rashtriya Swasthya Bima Yojana (RSBY): A Case Study of Amravati District’ seeks to assess RSBY comprehensively taking a district as a case. The study evaluates this programme on multiple dimensions of design, management system, equity, and beneficiary perception. RSBY is an important programme of the Government of India and this policy paper makes useful suggestions for improving its effectiveness.

We thank the Dissertation Guides, Professor Gita Sen and Professor Arnab Mukherji, for guiding Prateek Rathi while authoring this paper. We thank Shahana Sheikh, Research Associate, for assisting in designing the structure of the Policy Folio, and for coordinating and bringing this paper to its final stage. We thank Thyagarajan Babu and his team for helping in producing this Policy Folio series.

G Ramesh
Chairman, PGPPM

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Executive Summary

Workers in the unorganized sector constitute about 94% of the total workforce in the country. One of the major insecurities for these workers is the absence of health cover, leading to medical impoverishment. Thus, with a view to provide health insurance to Below Poverty Line (BPL) workers in the unorganized sector, government has been implementing the Rashtriya Swasthya Bima Yojana (RSBY), a fully subsidized Health Insurance scheme, since 2009.

This policy paper presents findings from a research that was undertaken to evaluate the RSBY in Amravati district, India. Amravati belongs to the backward and poor region of Vidarbha, in Maharashtra, and it was one of the first five districts where RSBY was launched in its first year. The main objective of this research was to evaluate the efficacy of the scheme in terms of equity, beneficiary perception & experience and design & management in Amravati.

A community based survey undertaken in eight out of 13 randomly selected blocks of Amravati District from July 2010 to October 2010, is the primary basis for the findings of this study. 810 Households (HH), which had RSBY cards, were surveyed and information regarding their demographics, household assets and healthcare needs was obtained. A separate detailed questionnaire was prepared to gain an insight into the experiences and perceptions of HHs who availed the benefits of RSBY and 280 such RSBY beneficiaries were interviewed. The data collected during the survey and study period was analyzed using quantitative and qualitative methods.

The study revealed that the scheme was utilized by all age groups and across either sex and employment. The barriers to utilization of benefits were lack of information, late enrolment and transportation. The tribal blocks which had the maximum poor BPL HHs saw the least enrolment and beneficiaries, while maximum benefit of the scheme was availed by people who were situated close to the district head quarters. Beneficiaries were seen to be concentrated in certain pockets and villages. RSBY cardholders were satisfied with the scheme, had a positive outlook towards it and believed that the RSBY scheme will help in mitigating their healthcare needs. The majority of the benefits availed under the scheme were low end secondary care cold and elective cases and the benefits were availed in a few selected hospitals at the District head quarters. The business model under which RSBY was implemented was found to have certain weaknesses in design and some stakeholders took advantage of the same. The scheme was found to have no mechanism to address patient grievances. Further, it had an adverse impact on ongoing governmental healthcare programs. There was lack of synergy of action from various governmental departments during implementation of the scheme. No public healthcare facility was empanelled for treatment provision under RSBY in Amravati. Private hospitals providing treatment were observed to be making profits by skimming patients and manipulating diagnosis. The administrative cost in terms of design and management of the scheme seems to be very high.

There cannot be a substitute for a well functioning, effective and efficient public healthcare system. Health insurance schemes, like RSBY, which have been formulated with a sophisticated voucher program, to target the health needs of BPL families can play a

complementary role in reducing out-of-pocket (OOP) payments. The public healthcare delivery system should play a key role in not only delivering services under RSBY but also as a gate keeper to minimize frivolous claims. OPD treatment should be covered under RSBY as it constitutes more than 70% of OOP expenditure of poor HH on healthcare. Certain high frequency low end secondary care healthcare events should be excluded and tertiary care events should be added under RSBY which will enable better utilization of public resources and also help in mitigating catastrophic medical expenditure while keeping the cost of insurance the same. Over a phased manner, RSBY should also take care of loss of wages due to illness which is a cause of medical impoverishment and many poor HHs do not seek medical care because of the same. Policymakers ought to recognize that parallel schemes which utilize public money can only introduce wastage and inefficiencies into the system unless they are well designed in terms of management.

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Background[1]

Recognizing various inequities and inefficiencies in its health delivery and financing, the Government of India has introduced various measures to solve these problems. One such measure is an increase in the budgetary allocations for healthcare. The National Rural Health Mission (NRHM) (2005) promises to increase government spending on healthcare from the current 0.9% of GDP to 2%-3% of GDP. However, increasing the budget is not a solution in itself. The absorptive capacity of the public healthcare system has been observed to be inadequate; even the current spending by the government is not being properly utilized. The NRHM also brought in several reforms in the healthcare sector with a focus on healthcare delivery. Innovative healthcare financing models were introduced and community-based health insurance and health insurance specifically for the poor were incentivized. The focus was on financing mechanisms on the demand side, which would promote efficiency in the system.

Health being a state subject, state governments introduced many such health insurance schemes based on different models (community-based like the Yeshasvini scheme of Karnataka, state-sponsored like the Rajiv Aarogyashree of Andhra Pradesh, Mukhya Mantri Jeevan Raksha Kosh (MMJRK) of Rajasthan with a PPP model and partial funding/subsidy from the state) with different financing structures and benefits. With the aim of having a uniform health insurance scheme to meet the healthcare needs of the economically backward, the Government of India launched the Rashtriya Swasthya Bima Yojana (RSBY).

More recently, in 2010, the Government of India formulated a High Level Expert Group (HLEG) with the mandate of Universal Health Care (UHC) and developing a framework for providing easily accessible and affordable healthcare to all Indians. Financial protection is the principal objective of this initiative. In 2011, the HLEG made recommendations and submitted a report to the planning commission. The HLEG's vision of UHC moves beyond 'insurance' by providing an 'assurance' of healthcare for multiple needs. UHC should address health in all of its dimensions and emphasize prevention and primary health care (with 70% of all healthcare expenditure to concentrate on these areas), which are ignored, neglected or even undermined by the usual systems of health insurance. All government-funded health insurance schemes, including RSBY, should be integrated with UHC, with RSBY and its institutional capacities at the core, and should be transferred to the Health Department. It is to be seen how many recommendations of the HLEG are accepted by the government and implemented in the coming days.

Poverty, health and income opportunities are known to be closely intertwined, particularly in developing countries (Dasgupta and Ray 1987; Strauss and Thomas 1998). A robust health system that tackles health challenges effectively holds the key not only to individual and population health, but also to tackling the challenges of an aging population, and to harvesting the demographic dividend (Bloom et al. 2010).

[1] DISCLAIMER: The contents of this policy paper reflect the personal views of the author and do not reflect the official views of the Government of Maharashtra or the Government of India.

A key aspect of any national health program is its financing, and private health insurance as a financing mechanism has had a checkered past. The United States healthcare system is arguably the most complex of any health insurance system (Schoen et al. 2006). While not without problems of design and access even in the US, the idea of charging small but non-negligible amounts during healthy periods to finance costs incurred when ill is particularly problematic in developing countries. Overwhelming poverty makes market-determined insurance premia unaffordable for most people (Rao 2004; GoI 2010). At the same time, with variable public health infrastructure, the burden of seeking care has been largely left to the private individual with almost 80% of total care estimated to be on out-of-pocket medical expenditures (Ahuja and De 2004). With such out-of-pocket expenditures, a large fraction of the population is unable to access care, and as much as 40% of the population is forced to borrow to make healthcare related payments (Rao 2004). Even though better health is one of the most effective ways of fighting poverty, medical care itself impoverishes 150 million people worldwide each year. A number of papers show that households fall into poverty due to health events in the family.[2] In such a setting, a government-supported program such as the RSBY can provide gains to the entire economy; not only does it reduce morbidity and encourage greater labor force participation today by reducing and managing the current disease burden, it also limits entry into poverty and therefore poverty in the future.

With three years of RSBY experience now in place, a few researchers have begun focusing on the experiences of different aspects of the RSBY program (Mitchell et al. 2011; Rajshekhar et al. 2011; Das and Leino 2011). This paper focuses on a number of design-related issues in the RSBY program that are currently impairing the outreach of the program and need resolution sooner rather than later. We do this on the basis of empirical research and analysis of the roll-out of the RSBY program in the district of Amravati (Maharashtra), a poor district with weak health infrastructure. Our analysis combines insurer data pertaining to RSBY claims with survey data from 811 households. Separate questionnaires for eligible households, for beneficiary households and for each hospital visit episode allow us to discuss overall program trends as well as the pattern of roll-out, program usage and perceptions among beneficiaries.

RSBY: Health Insurance for the Poor

The spread of health insurance coverage in India is rather limited. The private insurance market has been able to cover only 5.2% of the total population as of 2009, since its entry into the insurance market in August 2000. Thus, most of the population continues to remain uninsured even today (IRDA 2011). A major problem for insurance coverage stems from the fact that about a third of the population is below the poverty line with a very limited ability to pay for insurance. Using employer-mandated insurance schemes to expand insurance coverage also has limited feasibility in India, where 93% of the workforce is employed in the informal sector (NCEUS 2007). Thus, with a view to expanding the reach of health insurance to include those below the poverty line, the Central Government's Ministry of Labor and Employment designed

[2] Rao (2004), van Doorslaer et al. (2006), O'Donnell (2007) and Garg and Karan (2008) look at data on a number of developing countries (including India) to document not only the high cost of healthcare to private pockets but also the poverty burden of such expenses.

the RSBY scheme. The main objectives of the scheme are: a) to protect household assets for the poor in the event of financial liabilities arising out of hospitalization, b) to enable them to access better healthcare, c) to provide choice across providers for beneficiaries, and d) to enable easy access for even illiterate individuals. RSBY provides insurance coverage for secondary care that is generally provided at Community Health Centers, District Hospitals and Medical Colleges; it excludes both primary care and tertiary care.[3] It has an ambitious plan to cover the entire population below the poverty line by 2012-13.

On enrollment in RSBY, households have to pay a one-time registration fee of Rs. 30 in order to become entitled to hospitalization coverage up to Rs. 30,000 (total for the household) for treatment at a hospital for a large range of health needs. There are fixed treatment package rates for each type of hospital intervention that is covered under RSBY. Importantly, pre-existing conditions are covered, and there is no age limit. Coverage extends to five members of the family, which includes the head of the household, his/her spouse and up to three dependents. Unlike private insurance, the RSBY healthcare package provides comprehensive cover for all direct and indirect costs (travel, drugs, meals etc.). At the time of hospitalization, the service is cashless for the beneficiary. The Central (75%) and State Governments (25%) pay the enrollee's premium to the insurer, which is selected by the State Government following a competitive bidding process. By September 2011, 24 million families had been enrolled in RSBY in India. Thus, this is already by far one of the largest insurance schemes in the world.

The RSBY scheme started in our study site, Amravati district, in February 2009. The first insurer was a public sector entity, the New India Assurance Company. After the first year, the scheme stopped functioning for seven months from February 2010, while negotiations were on with a new insurer, ICICI Lombard Limited. Data for this analysis was collected from multiple secondary sources as well as from primary sources using a detailed survey questionnaire. Secondary data on district-wide enrollment and claims was collected from the Labor Office in Amravati. Similarly, data regarding the distribution of below poverty line (BPL) households was collected from the District Rural Development Authority. Finally, individual level data on claims, enrollment and health camps was taken from the third party administrator (TPA) engaged for the period Feb 2009 to Jan 2010.

[3] Primary care refers to healthcare services that act as a first point of consultation for all patients within the healthcare system. Secondary care refers to healthcare services, usually inpatient, provided by medical specialists and other health professionals who generally do not have first contact with patients, for example, physicians, surgeons and dermatologists. Tertiary care is specialized consultative healthcare, usually for inpatients and on referral from a primary or secondary health professional, in a facility that has personnel and facilities for advanced medical investigation and treatment, such as a tertiary referral hospital.

Study Sample: Amravati

Amravati is one of 35 districts of Maharashtra and was ranked 15th amongst them in 2001 on the Human Development Index in Maharashtra (GoI 2002). Its annual per capita income was approximately Rs.17,168, about Rs, 5,000 below the state average, and it is one of the 250 most under-developed districts in India as per the Planning Commission (GoM). Amravati, viewed as a poor and economically disadvantaged district, was one of the first five districts in Maharashtra in which the RSBY scheme was initiated, and the scheme was implemented in 13 of the 14 blocks in the district. We randomly selected one tribal (out of two tribal blocks) plus seven non-tribal blocks for the study - Chikhaldara (a tribal block), Amravati, Anjangaon, Chandurbazar, Daryapur, Morshi, Nandgaon Khandeshwar and Teosa. The average medical expenditure per hospitalization case in the state of Maharashtra was estimated to be Rs. 6,538 for rural areas and Rs. 9,477 for urban areas in 2004. Amravati division has one of the lowest hospitalization episode costs, at Rs 4597 for rural areas and Rs 5164 for urban areas; one possible implication of this is that secondary and tertiary care needs are under-served in Amravati making the roll-out of RSBY particularly important (NSSO 2004). In terms of public health facilities, Amravati district has 78 beds per one lakh persons, which is below the state-wide average of 90 beds. There are 22.37 doctors per lakh people in Amravati, well below the norms currently mooted in parliament for adequate healthcare (one doctor per 1000 people or about 100 doctors per lakh). Thus, access to healthcare is poor, and in general is somewhat worse than the state average.

Study Design

To understand enrollment concerns, usage patterns, and community perceptions, we collected primary data from 811 households across eight blocks in Amravati over the July 2010 to October 2010 period. This primary data was collected using standard survey research techniques that pertain to questionnaire development, sample size calculation, and sampling design. Separate questionnaires were prepared for the household and beneficiary surveys. The household survey had questions regarding socio-economic and demographic details of the household as well as healthcare needs of the members. The beneficiary questionnaire was used to collect data on enrollment, medical needs, nature of medical problem, transportation, indoor experience and the beneficiary's perception and experience of the RSBY scheme. Draft questionnaires were pilot tested and subsequently finalized for the data collection.

A simple sample size calculation was based on the assumption that being enrolled in the population is a binary variable whose population mean is given by the administratively recorded district wide average enrollment rate of 39%; this suggested a sample of 733 households (assuming a 95% confidence interval and with a 2.4% error margin). Villages were identified by rotating a pencil in the block headquarters to identify a direction at random and then randomly selecting a distance to identify a village in that direction. In each village, households were surveyed until about 30 beneficiaries were identified. This meant often surveying the entire village if it was a small one; consequently, our final sample size is 811 households, a little larger than what our sample size calculation suggested.

Table 1: Amravati Sample Summary Statistics

	Households	Beneficiaries	P-value
Sample Composition			
Families Surveyed	811	94	
No. of Family Members	3471	280	
Sex Ratio			
Males/(Males + Females)	52.0%	48.6%	
Age			
1-14yrs	23.1%	7.9%	
15-29yrs	29.2%	17.9%	
30-44yrs	26.4%	32.9%	
45-59yrs	12.2%	23.6%	
60yrs & above	9.1%	17.9%	0.014
Religion			
Hindu	74.9%	76.8%	
Muslim	12.2%	9.6%	
Buddhist	12.3%	13.6%	
Other	0.6%	0.0%	0.000
Caste			
SC	23.2%	27.1%	
ST	12.1%	2.1%	
OBC	41.0%	52.9%	
Other	23.7%	17.9%	0.013
Occupational Structure			
Unemployed	44.0%	30.7%	
Agriculture	37.1%	50.4%	
Non-Agriculture	17.6%	15.7%	
Can't work due to disability	0.7%	2.9%	
Others	0.6%	0.4%	0.003

Source: Primary Data collected by Author from Amravati

Note: The P-value is from a test of homogeneity to compare the distribution of households and those who received benefits on a range of categorical variables.

Quite surprisingly, given the poverty-targeting nature of RSBY, our survey did not find a single beneficiary in the tribal block of Chikhaldara. In fact, TPA data reveal that there were no claims from the other tribal district (Dharni) while only 7.8% of those enrolled in Chikaldhara had claimed any benefits (although they did not turn up in our survey). Since roll-out to the poor is a key goal for RSBY, we studied this failure through a re-survey of RSBY cardholders who were non-beneficiaries; we selected an additional 32 households from Chikhaldara from the same villages surveyed earlier and 31 households from Daryapur, a non-tribal block, to contrast the experience in tribal and non-tribal blocks.

Table 1 presents summary statistics of the Amravati sample. We compare and contrast the distribution of the household samples with the beneficiary sub-sample on a range of categorical variables. We find that the beneficiaries tend to be older, with almost 42% of the beneficiary sample older than 45 years, whereas the sample itself has only 21% of the sample older than 45 years. Similarly, the beneficiary sub-sample tends to be by and large more employed than the entire sample, with almost 50% of the sample being employed in agriculture. In terms of caste we find that Scheduled Tribes tend to be significantly underrepresented in the beneficiary sample. Thus, there appears to be some very clear differences between beneficiaries and the rural population – some of these are expected, such as the differential age profile of beneficiaries versus non-beneficiaries, but some of these may be of concern, such as the under-use by Scheduled Tribes, a social group known to be significantly marginalized and in need of health services.

Results

Enrollment in RSBY

Despite built-in financial incentives for enrolment in RSBY, the enrollment ratio for the entire district of Amravati was only 39% of the total BPL population. Block level enrollment ratios are presented in Table 2, and wide variation within the same district is obvious. For example, the two tribal blocks, Chikhaldara and Dharni, had enrolment ratios of 17.82% and 11.35% respectively, while Nandgaon and Warud had enrollment ratios of 52.84% and 55.7% respectively. Since being on the BPL list is an eligibility criterion, this implies that even in the blocks with the highest enrolment, 40% or more of the BPL population remained under-served, while in blocks like Chikaldhara and Dharni that have large scheduled tribe populations, RSBY had failed to reach over 80% of those on the BPL list as per Labor Office Records.

Table 2: RSBY Block Level Enrollment Ratios in Amravati District

Block Name	# of BPL Families	# Cards Distributed	Enrollment Ratio	Claims Ratio
Dharni	19913	2261	11.35%	0%
Chikhaldara	15425	2749	17.82%	7.8%
Amravati	13469	4203	31.20%	50.1%
Anjangaon Surji	10823	3933	36.34%	8.9%
Achalpur	13978	5453	39.01%	9.2%
Teosa	10408	4298	41.30%	7.82%
Chandurbazar	16983	7098	41.79%	8.5%
Chandur Railway	9564	4203	43.95%	11.2%
Dhamangaon	14091	6195	43.96%	1.0%
Morshi	14091	6195	43.96%	18.2%
Daryapur	16744	8424	50.31%	15.3%
Nandgaon Khand	12156	6423	52.84%	10.8%
Warud	17248	9607	55.70%	2.2%
Bhatkuli	BPL data problematic			
Total	184893	71042	38.42%	11.47%

Source: Records in Labor Office, Amravati District and TPA

Note: Enrollment in the program is prior to receiving of cards, but without a card the program benefits are not accessible. The numbers enrolled and the number of cards distributed is almost the same in each district and the ranking of districts is unaltered using either measure. The Claims Ratio is the Number of Claims divided by the number of cards distributed.

A natural follow-on question is how this enrollment is distributed within the block – are some villages completely excluded while others have all the coverage, or is the coverage roughly uniform across villages? Table 3 presents the distribution of enrollment rates at village level for each of the blocks. The first thing to note is that there are a large number of villages in each block that have zero enrollment ratios. Again, both the tribal dominated blocks, Chikaldhara and Dharni, have by far the largest fraction of villages with no RSBY coverage. Interestingly, in almost every block, there are villages that have full RSBY coverage of those on the BPL list; blocks such as Nandgaon and Dhamangaon have 10% or more of their villages with full coverage. A simple Pearson correlation between the fraction of villages with 75% or more coverage and the total number of villages in a district is a -0.47, suggesting that blocks with fewer villages actually saw better coverage. Of course, this may be another way of capturing the tribal and non-tribal block distinction, since the two blocks with the largest number of villages in Amravati are Chikaldhara and Dharni. Since we collected data on eligible BPL household members who were not enrolled in the RSBY even though their family had an RSBY card, we specifically asked the eligible non-enrollees why they did not enroll in the scheme. Almost 60% of those not enrolled reported that they were not present during enrollment visits from the TPA.

Table 3: Distribution of Enrollment Ratios within Blocks

Block	No Coverage	(0%-25%]	(25% to 50%]	(50% - 75%]	(75%-100%]	No. of Villages
Chikhaldara	51%	19%	22%	7%	1%	162
Dharni	53%	28%	13%	5%	1%	146
Nandgaon Kh	25%	4%	17%	41%	13%	117
Anjangaon	24%	13%	37%	26%	1%	101
Dhamangaon	6%	7%	30%	47%	10%	81
Chandurbazar	17%	11%	37%	33%	2%	128
Chandur Railway	21%	9%	41%	25%	4%	85
Daryapur	8%	6%	34%	49%	4%	131
Achalpur	24%	15%	29%	29%	3%	132
Morshi	15%	9%	34%	34%	7%	87
Total	27%	13%	28%	28%	4%	1170

Source: Records in Labor Office, Amravati District

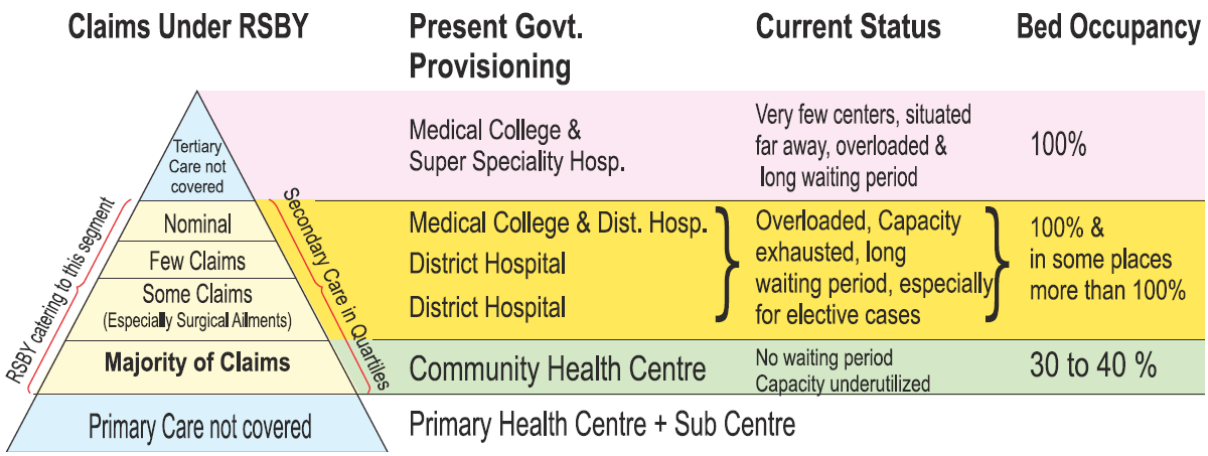
RSBY Claims

From the TPA data, we know that the average claim in Amravati district was Rs. 5,334 from over 8,225 claims made during the March 2009 to February 2010 period. The RSBY program started off with 10 empanelled hospitals in March 2009; by July, another 11 had been added, and this process continued so that by the end of the year, 44 hospitals had been empanelled. As many of these hospitals came in very late, there is a distinct time pattern for all claims; almost 70% of the claims were made in the last four months. Only six hospitals were empanelled at the block level, three in Achalpur, two in Anjangaon and one in Daryapur. All other empanelled hospitals were located at the district headquarters of Amravati. The top two hospitals, in terms of claims processed, together account for almost 43% of the claims. Both of these hospitals (Belokar Hospital and Parashree Speciality Hospital) were empanelled from the start of the program and are also located in Amravati city, far from the more remote scheduled tribe dominated blocks. Thus, access was significantly constrained for a number of potential beneficiaries.

Breaking down the claims data according to the type of hospitalization, we find that 43% of the beneficiaries used RSBY for medical problems while 51% and 5% of them availed benefit for surgical procedures and gynecological problems respectively. RSBY is predominantly meant for secondary care, and it is possible to classify secondary care into four quartiles on the basis of disease severity (see Figure 1). On mapping the claims data to the four disease severity quartiles, we find that the bulk of the usage of RSBY has been for low severity problems such as fever, weakness, debility, backache, abdominal pain; a range of ‘cold’ or elective cases such as cysts, hydrocele, hernia, piles, fissure, fistula, otitis media, and deviated nasal septum; and a few emergencies like appendectomies and acute exacerbation of asthma. Only in rare instances have claims been filed for cardiac ischemia, organo-phosphorous poisoning (attempted suicides), septicemia, congestive cardiac failure, poly-trauma, hysterectomies, and cholecystectomies, even though these are covered under RSBY. Ideally, many of these medical

issues could have been treated or these procedures performed in government facilities such as community health centers. These centers tend to not only be situated in closer proximity to the patient, but also to have underutilized resources. The rarity of claims for high severity problems and complex surgical procedures raises questions about quality of care in such public facilities; these may need to be addressed to allow the RSBY scheme to mature into one that enables BPL families to access care in higher disease severity quartiles.

Figure 1: Quartiles of Health Care



Source: Based on Author's calculations

Interestingly, the TPA data remains un-audited as it consists solely of hospital self-reports. Not only does this mean that the available data are subject to misclassification errors, but on occasion, there are obvious concerns about the veracity of the claim itself. An example of this is listing patients with ophthalmic symptoms and abdominal pain as undergoing surgical procedures, or those with fever and minor discomfort as having ICU stays. Overtly inaccurate claims have been filed, such as having the same patient undergo multiple surgeries within short periods of time, or reporting disease incidences that are far in excess of past incidence figures. To benchmark the TPA data, we asked our beneficiaries about the gravity of their medical problem and how soon they sought medical care; we found that 12% of patients were admitted as emergency cases needing urgent medical attention and another 30% were admitted as semi-emergencies. Importantly, 58% of beneficiary patients were admitted as elective or 'cold' cases, suggesting a strong demand for treating pre-existing problems that patients may not have been able to seek help for in the absence of the RSBY. Thus, while there is an overwhelming use of the RSBY system for simpler procedures and problems, concerns emerge about the way claims are filed and processed and therefore how taxpayer money is being spent.

Finally, conversations with doctors and medical staff at empanelled hospitals suggest partial explanations for why the higher diseases severity quartiles remain unused. The first relates to poor access; given the geographic concentration of empanelled hospitals in district headquarters or key towns, it is often difficult for sicker patients or patients with complications to access this distantly located healthcare. The second relates to the uncertainty in cost structures for treating diseases in a higher severity quartile. For the lower quartiles, treatment and hospital stays and even the use of consumables are often predictable; however, this is not so for higher

quartiles. Diseases in the higher quartile often require follow-up post-discharge and costs of care are uncertain; RSBY-defined treatment packages tend to be unattractive for such treatments for hospital providers, as they may not recover their costs based on the current RSBY definitions.

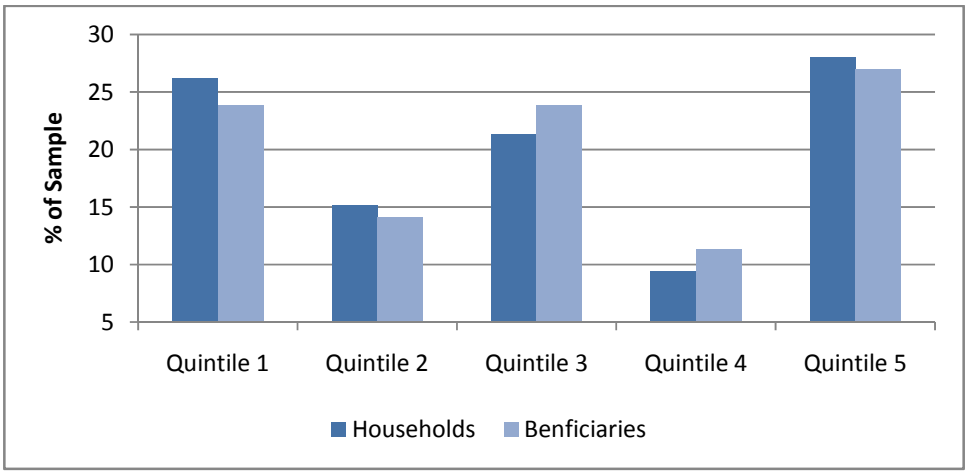
Wealth Neutral Access to RSBY in Amravati Sample

Using survey data on household asset ownership, we construct a Standard of Living Index (SLI) to capture economic status of enrolled households. Following Filmer and Pritchett (2001), we construct the SLI by using factor analysis to identify a common set of factors across a set of 25 asset classes; these common factors identify the economic status of each household. The set of assets that underlies the SLI includes the type of house (pucca, semi-pucca), access to piped water, nature of toilet facility, access to drainage, electricity, type of cooking fuel used at home, land owned and other assets owned. On arriving at the SLI factor score for each household, we classified the entire sample into 5 quintiles to create SLI quintiles.

As expected, blocks such as Chikaldhara and Dharni tend to have most households in the 1st quintile (the poorest) while Nandgaon and Teosa have most of the households in the 5th quintile (the richest). Figure 2 plots the SLI quintiles for RSBY beneficiaries and enrolled non-beneficiary households.

We conducted a chi-square test of equality between the SLI quintile distributions of RSBY beneficiaries and enrolled non-beneficiary households; we failed to reject the null hypothesis that the distributions are identical. This asset neutral access to RSBY benefits may be driven by the fact that there are few enrolled households in Chikaldhara in the program (17.8%) and none in our sample, and thus, the poorest may not even be enrolled. Additionally, while all enrollees are on BPL lists, therefore reducing heterogeneity in asset distribution, asset inequality may remain a concern in districts with large inequalities within BPL lists. Thus, conditional on being enrolled, claims under the RSBY program in Amravati have been asset neutral.

Figure 2: Standard of Living Index (SLI) Quintiles for Households and Beneficiaries



Source: RSBY Household and Beneficiary Survey by Author

Note: A chi-square test of equality of SLI quintiles across enrolled households and beneficiary households failed to be rejected with a p-value of 0.91

Out of Pocket Medical Expenditure in the Amravati Sample

Illness directly affects a household's financial status through loss of income as well as through out-of-pocket (OOP) medical expenditures. To understand this better, we also asked respondents about their ability to work and their OOP medical expenditures over the duration of the scheme. Seventy percent of the sample report loss of wages due to inability to work, while another 33% report OOP expenditures prior to reaching an RSBY empanelled hospital. The biggest component of OOP expenditure was drugs (50%) followed by transportation and diagnostics (18% each). With many drugs out of price control, drug costs have increased manifold, and even essential drugs have become very expensive. The RSBY scheme provides for only five days of medicines after discharge. Seventy-nine percent of the sample had OOP expenditures on drugs after discharge as many were chronic patients or needed drugs for a period longer than five days. OOP expenditures ranged from Rs. 300 to Rs. 2,000 with an average of Rs. 1,190 per disease episode.

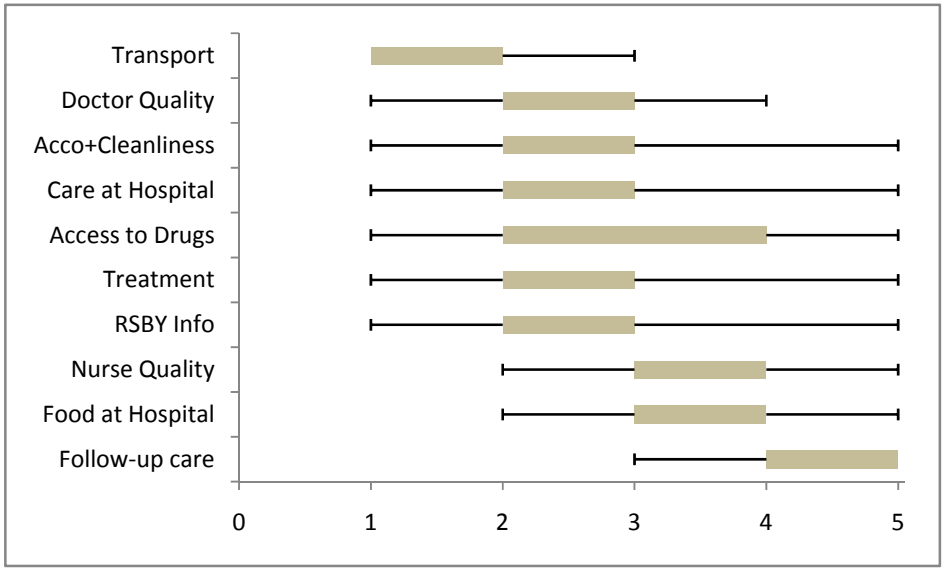
Awareness and Beneficiary Satisfaction with RSBY

A number of interviews revealed that the RSBY card is widely appreciated as a tool to access private health care even by people who had a limited opportunity to use it. We came across cases where the RSBY card helped a family save a life; for example, a woman from Daryapur block found that her son had attempted suicide and by taking him to the hospital she was able to save his life at almost no cost; money was important, as this woman was the sole earning member of the household. A number of such stories have built a lot of goodwill towards the program.

Figure 3 presents box-plots to summarize sample-wide perception of ten key domains of the RSBY program -- information about RSBY, transportation to hospital, treatment at the hospital,

access to medication, care at the hospital, food at the hospital, accommodation and cleanliness at the hospital, quality of consulting with doctors, quality of nursing and support staff and follow-up medical care. Only 15% of the sample reported buying medicines while at the hospital, while 42% of patients reported that some sort of investigation, in the form of blood tests/X-Rays/sonographies, was conducted during their hospital stay. Ninety percent of the patients confirmed that the hospital did reimburse Rs. 100 towards transportation, while only 10% patients said that they were provided food during hospital stay. Overall, the patients were most satisfied with the transportation allowance reimbursed to them. They were satisfied with quality of care and with treating doctors. Patients were also satisfied with regard to cleanliness, treatment and medicines provided by the hospitals. The majority of patients was dissatisfied with follow-up care and food and complained that they were not provided the same. Many were also not satisfied with the nursing care.

Figure 3: Box Plots of Perceptions of Key RSBY Components



Source: RSBY Amravati Beneficiary Survey by Author

Note: Patient Satisfaction was collected on a 5-point scale index on various domains that define RSBY (Score of 1 indicating 'highly satisfied' and score of 5 indicating 'highly dissatisfied')

Only 21% of the patients were given discharge cards or investigation reports at the time of discharge. Eighty percent of patients were given medicines at the time of discharge, but only 10% patients were given bills and told about the balance money left in the card. Many beneficiaries said during the study that in spite of their asking for discharge cards and reports, the hospitals refused to give these to them. Twenty-two percent of the beneficiaries were called for a follow-up by the hospitals, and 20% of them were charged fees during the follow-up. No one in the study sample was visited by the TPA or an officer of the government or insurance company in the hospital.

Findings from the Sub-Sample Survey

Table 4 summarizes the findings from the sub-sample survey. Quite clearly, there is a substantial gap in knowledge about the program in Chikaldhara in comparison to Daryapur, even among the enrolled. While most people found it difficult to identify the program by name in Chikaldhara, non-beneficiaries in Daryapur were able to identify selection criteria for RSBY and most were aware of the benefits under the scheme. Some of these differences can be traced to the prominence given to RSBY in gram panchayats in Daryapur, which was not the case in Chikaldhara. Additionally, with Chikaldhara being further away from the RSBY facilities, costs of travelling too tend to be higher, with almost 72% reporting higher costs than the reimbursement under RSBY.

Table 4: Responses from Sub-Sample Survey

	Chikaldhara	Daryapur
N	32	31
Awareness of RSBY?		
Heard of RSBY?	28%	97%
Aware of who can avail benefits?	19%	94%
Aware of benefits under RSBY?	6%	77%
Average Distance from house to avail transport facility (kms)	8	3
Transportation cost to RSBY Hospital		
[Rs.0 to Rs. 50]	6%	84%
(Rs. 50 to Rs. 100]	22%	3%
(Rs. 100 to Rs. 200]	19%	10%
Rs. 200 or more	53%	3%
Would you benefit from enrolling?		
Yes	47%	97%
Don't know	53%	3%

Source: Sub-Sample Survey by Author in Amravati

Awareness, remoteness and costs affect program enrollment and use; in this respect, it is particularly interesting to note that in our sample, most people learnt about RSBY through their own networks, from newspapers, announcements or from friends, while only a few (15%) learned about the program directly from RSBY defined institutional efforts such as mandated health camps in remote areas or through brokers, or even through direct visits to the hospital (see Table 5).

Table 5: Source of Awareness about the RSBY Scheme

Block	Self	Relatives/Friends	Institutional	N
Amravati	46%	25%	29%	48
Anjangaon	62%	38%	0%	13
Chandur Bajar	56%	41%	3%	34
Daryapur	52%	36%	12%	42
Morshi	46%	39%	15%	54
Nandgaon	48%	48%	4%	52
Tiwsa	18%	50%	32%	34
Sample	46%	39%	15%	277

Source: Sub-Sample Survey by Author in Amravati

Note: 'Self' includes respondents who got information from reading newspapers or listening to the radio, information provided at the time of enrollment, etc. 'Institutional' includes respondents owing their awareness to touts and information given at the time of hospital visits.

Policy Implications

RSBY is an innovative program targeting BPL households to provide financial protection from health shocks. As a result, in a matter of 2-3 years, the health insurance penetration has rapidly increased, especially among the poor. An effective prerequisite for the success of RSBY is the ability to target, and this ability is bound to the quality of BPL lists, which has been problematic in many states. In spite of these problems, the RSBY roll-out has provided a way of ensuring households can access improved quality of healthcare across a range of empanelled hospitals -- an option that they never had before. In this paper, we have presented some of the challenges that RSBY currently faces through a detailed study of its roll-out in Amravati district. By and large, program beneficiaries rank RSBY facilities at middling to high levels in response to Likert scale type questions on satisfaction. However, RSBY also faces many challenges; these may be broadly classified as challenges with respect to access, reporting of claims data and RSBY design issues.

Lack of access to the RSBY can occur at multiple stages; at enrollment, during handing of cards, or at the time of visiting an empanelled hospital. Enrollment rates vary widely across states, ranging from 39% in Maharashtra to 81% in Kerala (Narayana 2010). Part of this at least is due to lack of awareness about RSBY. RSBY awareness depends on practices at the gram panchayat level that are difficult to control or even observe for a national or state program. Our survey shows that most enrollees tend to be aware of the program thanks to their own networks and not through institutional attempts to spread awareness. This is in line with the findings of Das and Leino (2011) that information campaigns resulted in limited gains in enrollment in an experimental setting. Access is likely to be most serious problem in backward blocks and blocks with high scheduled caste and tribe populations. Not only are households poorer there but the RSBY also does not distinguish between enrollment in such remote areas or easier to reach BPL households as the insurance premiums are the same for both. In Amravati at least, there

appears to have been a preference for enrollments in larger villages closer to the district headquarters rather than in smaller or more remote villages. Once enrolled, such remotely located RSBY enrollees end up facing larger transport costs that act as a significant deterrent.

RBSY treatment package designs also have had an impact on the nature of diseases seen under the program. A key omission is the lack of coverage for tertiary care that is important and expensive. However, for diseases that are covered, there appears to be no recognition of treatment and, therefore, cost uncertainties for chronic diseases or those with a higher severity. With a pre-defined package for treatment, empanelled hospitals often do not provide such care and stick to treatments and packages that tend to be deterministic in procedure and costs. Additionally, beneficiaries for such complex or chronic ailments continue to face out-of-pocket costs for medicines after being discharged, since coverage is limited to five days of medicines at time of discharge. In this regard, there is a lot to be learnt from the Mukhya Mantri Jeevan Raksha Kosh (MMJRK) experience in Rajasthan that tries to address some of these problems. The MMJRK provides tertiary and outpatient treatment, offers larger coverage, and empanels only public hospitals. The scheme is administered through the hospital management societies, and each hospital has a kiosk with a pharmacist and computer operator recruited by the society to manage the program in each facility.

A goal for RSBY is to directly reduce impoverishment through health costs; however, in the spirit of social health insurance (SHI), it must also protect against the loss of wages that almost every disease episode causes; this is critical for BPL households. Other programs, such as the Employees State Insurance Scheme (ESIS), a SHI scheme for organized sector workers, protect enrollees from healthcare costs and loss of wages during sickness. There are examples of this in the informal sector which are more pertinent for RSBY, such as the Karuna Health Insurance Scheme (KHIS) of Karnataka; under KHIS, while there is wage loss compensation, treatment is limited to public hospitals. Currently, RSBY has no provision for loss of wages incurred due to sickness, and it may be time to consider such a provision.

Clear concerns about quality of claims data being filed emerge from our use of the TPA data. Prevalence of diseases based on claims data do not match with prevalence information from our survey with a much stronger emphasis on semi-emergency and emergency procedures in the claims data. RSBY is still in its initial few years of roll-out, and monitoring and auditing of data needs to improve for the long-term sustainability of the program. Excess billing and performance of unnecessary procedures are standard concerns with hospital systems financed through insurance, and it is not clear how RSBY tackles them as of now. Many other similar teething but structural issues also remain with RSBY; for example, currently the RSBY insurer faces a yearlong contract, at the end of which a new insurer is expected to take charge of the program in Amravati. This creates problems of continuity amongst all stakeholders, with most hospitals not accepting the RSBY card post February 2009 and program enrollees not receiving any services that their card entitles them to. It took upwards of a year to identify ICICI Lombard as the insurer for Amravati district; it will have to restart many of the processes that had been set in motion earlier and then disrupted. RSBY is in its second year with the private insurer, and the claim ratio in the district has fallen dramatically to less than half that of the previous year of which ophthalmic claims (typically cataract surgeries) amount to nearly 25% of total claims. As

the burnout ratio was lower and the insurer was making subnormal profits, the government extended the scheme for four more months in the district, up to December 2011 instead of September 2011. Such contract and program design issues need to be altered to ensure credibility and continuity of the program and better reach in terms of both the patient profile that RSBY serves and the disease profile over which it provides coverage.

The Government of Maharashtra has recently taken a policy decision to discontinue the RSBY scheme in the state and replace it with another health insurance scheme, the Rajiv Jeevandayee Yojana, which is a replication of the Rajiv Aarogyashree scheme of Andhra Pradesh. The focus of the new scheme is on tertiary care rather than secondary care, with entirely different disease coverage. Such frequent policy changes, with no synergy of action between the Centre and the State, may create confusion and affect the building of institutions that can take care of future health challenges.

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