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RSBY Working Paper

Can Rashtriya Swasthya Bima Yojna help bridge the quality chasm?*

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Abstract

Rashtriya Swasthya Bima Yojna (RSBY) or the National Health Insurance Program can play an important role in improving the quality of care through regularization and financial incentives. Following a roadmap that encourages hospitals to adopt small but incremental changes over time can go a long way in improving the quality of health care. This paper looks at the early experience of hospitals in Delhi as a starting point for the discussion.

1. Can Rasthriya Swasthya Bima Yojna help bridge the quality chasm?

Health insurance can help improve the quality of health care. First, an insurance scheme requires certain minimal criteria to be fulfilled by the hospitals before they can be empanelled in the programme. This ensures that the empanelled hospitals follow at least some basic standards, be they in infrastructure, staff requirements, processes or data keeping. Second, the hospitals in the network can be brought under regulatory and accountability mechanisms by the insurance provider. For the Rashtriya Swasthya Bima Yojna (RSBY), these can be implemented by the insurance companies themselves or, by an independent regulatory body overseeing the programme to ensure the best use of public money.

Having said this, we would like to hypothesize that the RSBY, or the National Health Insurance Programme, which provides an insurance cover to the BPL (below poverty line) households, can provide an impetus to improve the quality of care. The RSBY empowers beneficiaries by providing them a smart card worth INR 30,000 and empanels hospitals that comply with its guidelines. The insurance company has to ensure that the hospitals they empanel have some minimum facilities. The hospitals, in their turn, will have an incentive to meet these requirements and will want to be empanelled to attract clients who now have the purchasing power to avail of quality treatment. Thus, the RSBY can play an important role in improving the quality of care through standardization and a financial incentive. Indeed, the financial incentive provided by the BPL households' ability to pay may make it easier for the Ministry of Health and Family Welfare to push through and implement the Clinical Establishments Bill which will require all hospitals, both public and private, to follow certain minimal criteria.

In this paper we seek answers to the following questions:

1. What attributes of RSBY can help improve quality of care?
2. Are the empanelled hospitals different from the non-empanelled ones in terms of infrastructure, staff or processes?
3. How can policy guidelines be tweaked to bring about further improvements in quality?

The answers to these questions are derived from two surveys we did to get a measure of the quality of care being provided under the RSBY. The first was the "Facilities Survey" -- a survey of hospitals in Delhi --- and the second was the "Post-Transaction Survey" -- a survey of individuals who have transacted with

hospitals using the RSBY smart-card system. The paper thus focuses on the role of RSBY in bridging the health care quality chasm.

Section 2 deals with those RSBY attributes that have a direct bearing on the quality of care provided. Section 3 deals with the methodology of the two surveys. Section 4 details the major findings from the two surveys. Section 5 discusses the results so obtained and, finally, Section 6 deals with how the lessons learnt can complement policy guidelines to create an enabling environment for improving quality.

2. The scheme

The Ministry of Labour and Employment, Government of India, has rolled out the Rashtriya Swasthya Bima Yojna (RSBY) or the National Health Insurance Scheme to provide health insurance coverage to below poverty line (BPL) families. The objective of the scheme is “to improve access of BPL families to quality medical care for treatment of diseases involving hospitalization and surgery through an identified network of health care providers.”¹ The beneficiaries under RSBY are entitled to an insurance cover of INR 30,000 for most of the diseases that require hospitalization. The Government has fixed package rates for medical and surgical interventions, or procedures, for a large number of interventions. Pre-existing conditions are covered from day one and there is no age limit for the insured. Coverage extends to a maximum of five members of the family which includes the head of the household, the spouse and up to three dependents. Beneficiaries have to pay INR 30 as registration fee. At each hospital visit, if an ailment is covered in the list of pre-defined illnesses, a pre-determined amount will be withdrawn from the card in favour of the hospital. The central government pays 75 per cent of the premium and the remaining 25 per cent is paid by the state government. The insurance company is selected by the state government on the basis of competitive bidding.

The following attributes of RSBY create an enabling environment for improving the quality of health care provided. First, the scheme places control over a significant amount of resources in the hands of the beneficiaries. This makes them visible as potential sources of revenue, worth pursuing by the health care providers. Every BPL household is now a potential client from whom the hospitals can earn significant revenues if they can get themselves empanelled and provide quality health care. A hospital has the incentive to provide treatment to a large number of beneficiaries as it is paid per beneficiary treated. Even the public hospitals have an incentive to treat beneficiaries under RSBY, as the money from the insurer will flow directly to the public hospital which can use the money in any way it wants. RSBY provides the participating BPL household with freedom of choice between public and private hospitals, between the empanelled and non-empanelled hospitals, as well as between two empanelled hospitals.

Second, the scheme requires hospitals to have adequate facilities to provide services as stipulated in the empanelment guidelines. A given hospital is empanelled only after being inspected by a qualified technical team and approved by the state government or a state government approved nodal agency.² Both public and private health providers capable of providing inpatient care and/or day care services are eligible for empanelment under the RSBY. A hospital has to comply with the following guidelines before it can be empanelled.

¹ Tender 22.09.2009.doc accessed at <http://www.rsby.in/Documents.aspx?ID=1>

² RSBY.Guidelines13.3.08_rev.pdf accessed at <http://www.rsby.in/Documents.aspx?ID=1>

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1. All Government hospitals (including Primary and Community Health Centres) and Employees State Insurance (ESI) hospitals can be empanelled provided they possess the facility to read and manage smart cards.
2. The criteria for empanelling private hospitals and health facilities are:
 - a) At least 10 inpatient medical beds for primary inpatient health care.
 - b) Fully equipped and engaged in providing medical and surgical facilities, including diagnostic facilities, i.e. pathology testing and X-ray, E.C.G. etc for the care and treatment of injured or sick persons as inpatients.
 - c) A fully equipped operating theatre where surgical operations are carried out.
 - d) Fully qualified, round the clock, doctors and nurses
 - e) Basic recordkeeping to furnish details of the insured patient to the insurer or its representative/government/trust as and when required.
 - f) Registration with income tax department.
 - g) Telephone/fax and internet facilities, and smart card readers.

Third, the Ministry of Health and Family Welfare is in the process of presenting the Clinical Establishments (Registration and Regulation) Bill before the Cabinet this year. This will make it mandatory for public and private hospitals to meet established minimum standards in order to operate. Thus if RSBY hospitals follow the minimal criteria in the bill in addition to the empanelment guidelines given by the RSBY, all the hospitals in the network will be complying to a certain set of standards which will be over and above that required to be followed by the non-empanelled hospitals. RSBY can further introduce additional requirements over and above the basic ones that it now requires and thereby move the hospitals in its network up the quality ladder.

This, theoretically speaking, will also have a spillover impact on the quality of services provided by the non-empanelled hospitals. Imagine a scenario where a non RSBY patient is in need of inpatient care. Given that the empanelled hospital provides better care, this patient would prefer going to the empanelled hospital. Thus, in order to attract the non-RSBY patients or, to get empanelled with the scheme, the non-RSBY hospitals will also have to improve their quality of services. Therefore, even without the Clinical Establishments Bill the quality of health care may improve!

3. The Surveys

3.1 *The Facilities Survey*

The facilities survey was a study of empanelled and non-empanelled hospitals in Delhi with a view to assessing evidence of hospital infrastructure, staff and other indicators that will provide useful information on the quality of these facilities.

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Two questionnaires were designed to collect data from the facilities. One questionnaire was for the investigator to fill up and the other was to be filled up by the health personnel in the hospital. The investigator collected data based on observations made in the hospital and by asking the appropriate questions listed in the questionnaire. For the one to be filled in by the hospital staff, the investigator left the questionnaire behind with the hospital personnel and then collected it after a week. This questionnaire included information drawn from hospital records.

The questionnaires for the survey required a lot of technical inputs and knowledge about various procedures, which is why medical doctors were chosen as investigators. Twenty five interns were interviewed from the Ayurvedic and Unani Tibbia College, Delhi, from which a team of fourteen was selected.

A total of 72 hospitals were empanelled under the RSBY in Delhi at the time of the survey. For the purposes of our survey we selected 41 empanelled and 40 non-empanelled hospitals. The empanelled hospitals were selected from the list of hospitals provided by the insurer and the non-empanelled hospitals were selected from a list of hospitals registered under the Delhi Nursing Home Act. Two important criteria for the selection of the empanelled hospitals were that first, there was representation from all the 9 districts of Delhi, and second, that the hospital had already had some RSBY transactions. Once these two criteria were met, the empanelled hospitals were randomly selected from each district. We took a letter of permission from the Ministry of Labour and Employment to allow the investigators to do the survey in selected hospitals. We contacted the hospitals on phone to obtain their consent for participation in the survey.

The non-empanelled hospitals were selected from the neighbourhood of the selected empanelled hospitals. For surveying the public hospitals we had to take permission from the Government of Delhi. We sent formal letters seeking permission for the survey and had formal meetings with the respective medical superintendents of these facilities. However, since the participation in the survey was voluntary, we could not adhere to this strategy for the *private* non-empanelled hospitals. We could include only those facilities that were willing to participate. Moreover, ideally, both the empanelled and non-empanelled hospitals should have had the same number of beds for the purpose of comparison. Once again, this could not be ensured because the private non-empanelled hospitals had to be chosen from those who were willing to be surveyed.

3.2 *The Post Transaction Survey*

The post-transaction survey was a survey of individuals who had used the RSBY scheme to access an empanelled hospital. The post-transaction survey was designed to evaluate the issues and experiences that individuals enrolled under the scheme were going through when accessing empanelled hospitals so as to determine the quality of care received by the beneficiaries.

We gathered information on 388 hospital visits. However after data cleaning and validation the number was brought down to 383 hospital visits. These visits included visits to the hospital by the same patients as well as different members within the same household. Our unit of observation is the hospital visit.

Ideally we would have liked to select an equal probability random sample from the list of hospital visits. However, due to problems encountered in tracing households who used RSBY, we adopted the following strategy:

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1. From the list of hospital visits provided by the insurance agency, we selected areas that have a high number of hospitalizations.
2. We then sampled a large number of households from each of these areas. Four such lists were drawn. The investigators were divided into two groups of four investigators each. Two lists were given to each group. The list of households that the investigators started with were the "primary" households and the second list served as a replacement list for primary households that could not be traced. The process of tracing the households was as follows:

First, the households in the primary list were traced.

If the household was not found then another household was selected from the second list in the same area. For example, if a primary household in Seelampur area could not be traced then the investigator selected another household residing in Seelampur from the second list to replace the primary household. If the replacement household too could not be traced then any household from Seelampur who had undergone hospitalization using the RSBY card was selected.

3. A separate "contact sheet" was maintained by each surveyor which mentioned clearly the reason for non-completion: the household refused, the house was locked, the household/person has moved, the household/person could not be located, address was right but the name of the head of household was wrong.
4. In case of families where there was more than one hospitalization or, where the same member was hospitalized more than once, separate questionnaires were filled for each hospital visit.

The biggest challenge that we encountered during the course of the survey was that out of 980 households in the sampling list, only 257 households could be interviewed. The reasons for this were many:

1. Some houses could not be traced.
2. Addresses were right but the name of the head of household was wrong.
3. In some cases we found the head of the household but the address was different.
4. In one particular instance the entire colony had been relocated and as a result the entire set of people (15) could not be traced.
5. There were a few instances where the houses were locked.

There were about 2500 hospitalizations under RSBY till June and we wanted to survey at least 10 per cent of the people hospitalized. Since we had difficulty in locating households, we therefore decided to take a large enough number of households.

We did not take non-RSBY hospitalized cases in this particular survey. It was decided that we will take only a sample of the beneficiaries who have taken treatment under RSBY so that we can see what the ground level situation is regarding the services that should be provided by the hospital.

4. Quality of Health Care

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The results of the two surveys are presented together so that the results from one complement the other. In presenting the results, therefore, we do not follow any sequence or order for both the surveys. Instead, the results have been presented in such a way so that the line of thought is not interrupted.

4.1 Characteristics of the facilities and access to care

Table 1 shows the type of hospitals that were selected for the survey. As mentioned before, we collected data from 81 hospitals. Of these 41 were empanelled and 40 were non-empanelled. Only private hospitals were empanelled in Delhi at the time the survey was conducted. Therefore, no public hospitals were taken in the empanelled group. But since the scheme is open to both public and private hospitals we were curious to know why public hospitals were not included in the panel. For this, we included 5 public hospitals in the non-empanelled group. The distribution of the type of hospitals is given in table 1 below.

Table 1: Type of hospitals surveyed

Facility type	Empanelled	Non-empanelled	Total
Public	0	5	5
Private for profit	36	29	68
Private not for profit	5	6	9
Total number of facilities	41	40	81

An important aspect of the scheme is the accessibility of the empanelled hospitals. In our survey, 51 per cent of the patients had to travel less than (or equal to) 10 km to reach the empanelled hospitals. Amongst these who travelled less than 10 km, 75 per cent travelled less than 5 km. However, around 47 per cent of the patients travelled 10 to 15 km to get treatment.

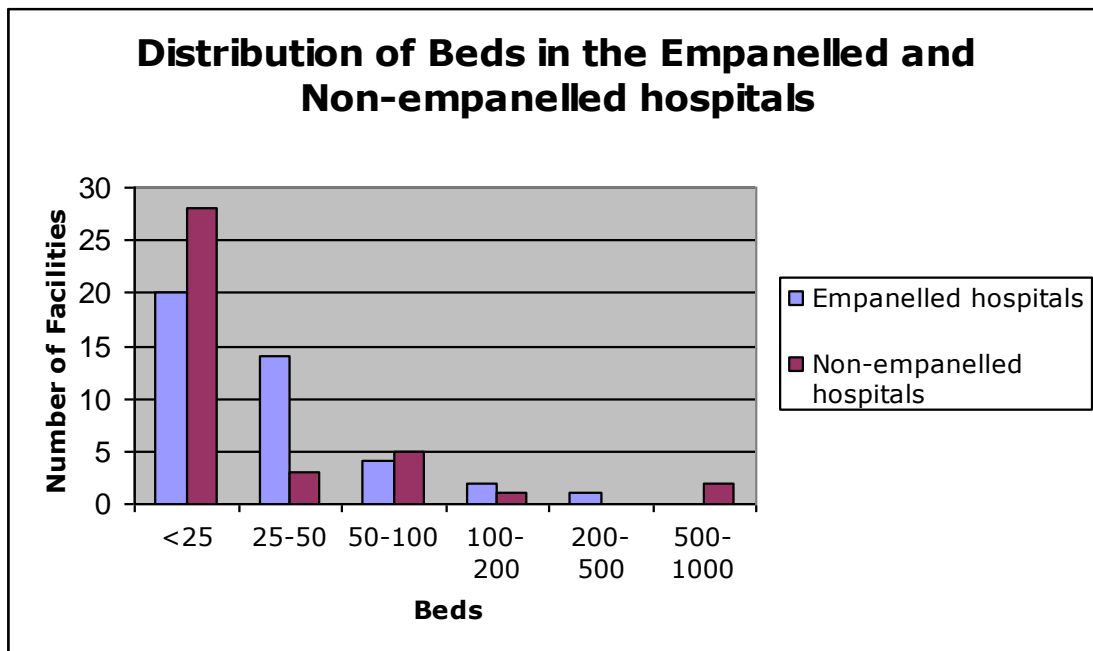
Thus, while for some there is suitable access, there continues to be a need for getting more hospitals in the network so that people do not have to travel long distances. In other parts of India the situation could be very different because the patients already travel long distances to get to a hospital. There are chances that the empanelled hospital is further away. The scheme therefore has to encourage those hospitals to join the network which are nearest to the beneficiaries. Improving physical access to care is the first step towards improving the quality of care.

Traditionally, accessibility has been measured in the literature in terms of distance but a better indicator would be travel time which takes into account the geographic terrain, traffic and mode of transport, condition of roads etc.. Empanelling neighbourhood hospitals could help to a great extent to reduce travel time which becomes particularly important when a patient needs immediate attention. Though some health plans suggest a travel time of not more than 30 minutes to a general hospital it is beyond the scope of this paper to suggest a guideline in the Indian context.³

³ Bosanac et. al. (1976).

Size of the facilities is another important parameter. As shown in Figure 1 below, about 83 per cent of the empanelled facilities had less than 50 in-patient beds. About 72 per cent of the non-empanelled hospitals had less than 25 beds. As is evident from the chart, most of the empanelled hospitals are small to medium sized hospitals. (Our sample size represents 56 per cent of all empanelled hospitals in Delhi.) If it is natural for hospitals of such sizes to get empanelled before bigger hospitals, the government’s first focus should be to check whether smaller hospitals require guidelines that are different from the larger ones. Uniform guidelines for all sizes of hospitals may prevent the small and medium hospitals from being empanelled. This is important because these are precisely the hospitals that were picked up for empanelment by the insurance companies. By focusing on upgrading the quality of neighbourhood⁴ hospitals the RSBY can to a large extent, reduce the burden on super speciality hospitals and public hospitals. This, in turn, will improve the quality of care in the larger referral centres as it will reduce the burden on their already overworked staff.

Figure 1: Distribution of beds in the hospital



Physical infrastructure can also vary widely. About a third of empanelled and half of non-empanelled hospitals in our sample had no compound wall or fencing around them. About 20 per cent of empanelled hospitals and 10 per cent of the non-empanelled hospitals did not have well-plastered walls with intact plaster. The architectural finish of the hospital ideally should be of such quality that better hygiene is restored.

⁴ We call these hospitals the “neighborhood hospitals” because at least 50 per cent of these are within 10 km from the residence of the beneficiaries.

Around 59 per cent of the empanelled and 53 per cent of the non-empanelled hospitals had ramps. It was discouraging to see that only 29 per cent of the empanelled and 25 per cent of the non-empanelled hospitals had separate toilets for the differently-abled. The National Policy for persons with disabilities requires all places with public utilities to be barrier free for the differently-abled. A barrier-free environment enables people with disabilities to move about safely and freely, and use the facilities within the built environment. The goal of barrier free design is to provide an environment that supports the independent functioning of individuals so that they can move without assistance⁵.

During the survey, it became evident that bio- medical⁶ waste disposal was an area of grave concern. According to the Biomedical Waste (management and handling) Rules, 1998⁷, it is the duty of every hospital to ensure that all the biomedical waste generated by the hospital is handled with minimum damage to human health and environment.

98 per cent of the empanelled hospitals and 90 per cent of the non-empanelled are registered under the Biomedical Waste (management and handling) Rules, 1998. In 76 per cent of the empanelled and 65 per cent of the non-empanelled hospitals, most of the hospital staff was aware that the bio-medical waste should be segregated. According to the bio-medical waste management guidelines for proper waste segregation, four different colored bags are required. Though colour coded bags for waste segregation were present in 88 per cent of the empanelled and 80 per cent of the non- empanelled hospitals, in practice only 17 per cent of the empanelled hospitals and 7 per cent of the non-empanelled hospitals used four coloured bags. Thus though there was a commitment by the hospital to follow proper processes, in actual practice the situation was different. It is thus essential for the hospital authorities to ensure that creating awareness amongst staff is not sufficient but it is also important to ensure that guidelines are put into practice.

Table 2 below summarizes the characteristics of both the empanelled and non empanelled hospitals. The table clearly shows that the facilities available with empanelled and non-empanelled are quite similar. This could be a good sign as it suggests that potentially more hospitals can be empanelled allowing greater choice to the beneficiaries and greater neighbourhood access. However, this may also suggest that, as far as hospital infrastructure is concerned, government-supported RSBY requirements for empanelment are not that different from what the market is already providing. This is perhaps not surprising at such an early stage of the scheme.

However, if hospital infrastructure plays a role in the quality of care, the government, through the RSBY is not demanding any improvement in the standards. Another important point is that in order for the government to demand better infrastructure, the metrics and inspection process would need to be defined.

Yet a third view could be that competition makes hospitals follow “best practices” and the government can provide the required impetus for gradual improvement in the facilities in all hospitals.

5 <http://www.disabilityindia.org/nationalpolicyfordisable.cfm>

6 Biomedical waste is defined as any waste generated during diagnosis,treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production /testing of biological services.

7 <http://envfor.nic.in/legis/hsm/biomed.html>

Table 2: Characteristics of the hospitals

Health facilities ⁸	Empanelled hospitals		Non-empanelled hospitals	
	Number	Per cent	Number	Per cent
Facilities accessible by wheelchair	24	58.54	21	52.5
Railings	15	36.59	12	30.0
Separate toilets for the differently-abled	12	29.27	10	25.0
Building	38	92.68	39	97.5
Compound wall	24	58.54	20	50.0
Plaster on walls	33	80.49	36	90.0
Condition of floor	40	97.56	35	87.5
Privacy during OPD consultation	37	90.24	34	82.9
Presence of female attendant during examination of a female patient	40	97.56	40	100.0
Water supply round the clock	40	90.24	40	100.0
Water storage tank	40	97.56	40	100.0
Water pump	40	97.56	40	100.0
Electricity supply	36	87.80	33	82.5
Electricity back up	38	92.68	39	97.5
Official telephone	40	97.56	40	100.0
Telephone for patients	34	82.93	28	70.0
Separate toilets for women and men	14	34.15	11	27.5
Toilets having running water	39	95.12	39	97.5
Staff awareness about waste categories	31	75.61	26	65.0
Staff awareness about waste segregation	29	70.73	28	70.0

⁸ Percentages in the table have been calculated taking into account the non response rate. There were several instances where data was not provided by the hospital. For these hospitals we have assumed the answer is no. The reasons for non response could be many. First, reluctance to provide information, second, information was not available, third, it was too time consuming to look up records and fourth, there was no incentive to provide information.

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4.2 Availability of services

Table 3 shows the availability of services in the hospitals surveyed. Though it is not prudent to compare hospitals without taking number of beds into account (among other things), the survey data seem to suggest that hospitals that are getting empanelled are definitely a shade better than the non-empanelled hospitals.

RSBY has recently included the maternity benefit package in its coverage. As is evident from the table, more hospitals need to have neonatology services. It was also seen that the blood bank was available in 7 per cent of the empanelled and 5 per cent of the non-empanelled hospitals. Where the blood bank was not available, the facilities for storage of blood were present in 41 per cent of the empanelled and 59 per cent of the non-empanelled hospitals. All these facilities were functional 24X7.

Table 3: Availability of Services

Facilities	Empanelled hospitals		Non- empanelled hospitals	
	Number	Per cent	Number	Per cent
General medicine	38	92.68	38	95.0
General surgery	38	92.68	37	92.5
Obstetrics gynaecology	38	92.68	36	90.0
Paediatrics	37	90.24	37	92.5
Emergency services	39	95.12	38	95.0
Neonatology	31	75.61	22	55.0
Anesthesia	38	92.68	35	87.5
Orthopaedics	37	90.24	33	82.5
Ent	35	85.37	29	72.5
Radiologist ultrasonologist	35	85.37	31	77.5
Ophthalmology	33	80.49	22	55.0
Dermatology venereal	32	78.05	23	57.5
Dental care	19	46.34	12	30.0
Ayush	9	21.95	8	20.0

It is encouraging to see that there is a dedicated doctor for handling emergency situations round the clock in all the hospitals who have an emergency department. Amongst the empanelled hospitals who responded to this question, in 31 per cent of hospitals the doctors handling emergencies were MBBS doctors and in 37 per cent hospitals the doctors were post graduates. In 29 per cent of the non-empanelled hospitals there were MBBS doctors and in 49 per cent hospitals post graduates were handling emergencies.

Since all the empanelled hospitals have emergency departments and 50 per cent of the admissions are through emergency, it is interesting to focus on how RSBY can help reduce the waiting time for patients. Also, RSBY should include in its coverage treatment of cardiac ailments which require immediate attention. The government can hold training sessions for doctors and nurses for triage assessments so that the critical time when the patient will respond to treatment is not lost.

Triage⁹ is an essential function in Emergency Departments (EDs), where many patients may come simultaneously. Triage aims to ensure that patients are treated in the order of their clinical urgency. It also allows for allocation of the patient to the most appropriate assessment and treatment area, and contributes information that helps to describe the departmental case-mix. Urgency refers to the need for time-critical intervention - it is not synonymous with severity. It may be safer for patients triaged to lower acuity categories to wait longer for assessment and treatment though they may still require hospital admission. Ensuring that staff at empanelled hospitals under RSBY is well trained in these areas is another way that the scheme can help improve quality.

4.3 *Hospital processes*

Table 4 shows the processes that the hospitals follow. Processes refer here to standards related to policies, procedures and operating systems that the hospitals must follow in order to ensure good quality care. In 90 per cent of the empanelled hospitals and 77 per cent of non-empanelled hospitals, the financial reports for the last 2 years have been audited by professional chartered accountants. There is a dedicated doctor for handling emergency situations round the clock in all the hospitals. 83 per cent of the empanelled hospitals and 70 per cent of non-empanelled hospitals have regular doctor rounds twice a day.

There is a mechanism for planned maintenance of equipment in 85 per cent of the empanelled and 87 per cent of non-empanelled hospitals. In 90 per cent of the empanelled and 82 per cent of the non-empanelled hospitals, both the radiologist and the ultrasound machine are registered under the PNDDT Act. It was encouraging to see that in all the hospitals the female patients are examined in presence of a female attendant. The attendant could either be from the hospital or from the patient's family.

⁹ <http://74.6.146.127/search/cache?ei=UTF-8&p=hospital+triage&fr=slv8-msgr&u=www.carehospitals.com/ourhospitals/triage.pdf&w=hospital+triage&d=DTqqv-EUaQP&icp=1&.intl=in&sig=BaFK6UzkkCy3Vp6kqHYV1g-->

Table 4: Hospital processes

Processes	Empanelled Hospitals		Non-empanelled Hospitals	
	Number	Per cent	Number	Per cent
Hospital process				
Financial auditing	37	90.24	31	77.50
Doctor for emergency situation	39	95.12	32	78.0
GNM* in charge	33	80.49	33	82.5
Regular doctor rounds	34	82.93	28	70.0
Maintenance of equipment	35	85.37	35	87.5
Radiology and ultrasound machine registration	37	90.24	33	82.5
Female attendant	41	100.0	40	100.0
Cleaning	41	100.0	37	92.5
OT carbolized	39	95.12	35	87.5
Labour room carbolized	33	80.49	34	85.0
Registration under biomedical waste management and handling rules	40	97.56	36	90.0
Patient feedback mechanism	34	82.93	28	70.0
Medical records	34	82.93	32	80.0

*GNM –General nursing midwifery

The non-response rate for the question related to the type of feedback mechanism available was almost 50 percent. However, from the responses received, we feel that the preferred mechanism of feedback was through patient feedback form by empanelled hospitals through verbal communication in the non-empanelled hospitals.

Importantly, medical records of patients have been maintained for at least 5 years in 83 per cent of the empanelled and 80 per cent of the non-empanelled hospitals.

In terms of regulatory compliance, the three most important requirements that determine the quality of services in a hospital are: statutory compliance, safety compliance and quality compliance. Statutory compliance means acting in accordance with laws rules and regulations that are applicable and any

violation may invite legal action. For example under the PNDT act there should be a checklist in the hospital that ensures that the hospital takes all the required actions like registration of all the ultrasound machines owned by the hospital, submission of reports giving details of all the ultrasonologists /radiologists employed by the hospital, displaying notice informing patients that sex determination is prohibited under the PNDT act.

A large percentage of hospitals do not appreciate the importance of statutory compliance. The reasons are many. First there are a plethora of rules in a scattered form which are not easy to interpret due to which hospital owners prefer to feign ignorance. Second, lack of seriousness on the part of regulating authorities who spring into action only after a tragedy or if there is a public outcry. The RSBY can help simplify procedures by providing a charter of statutory compliances that an empanelled hospital must comply with and submit an affidavit of compliance every year to remain empanelled.

As is evident from Table 4, more empanelled hospitals followed defined processes than the non empanelled ones. This has two implications: First, clearly the RSBY is empanelling the better hospitals. These hospitals by following these processes show their willingness and intent to improve their quality of care. Second, it also implies that with little motivation (either by the government or by providing incentives) these facilities can be upgraded

4.4 Compliance Status of Empanelled hospitals

We analysed the data to see if the empanelled hospitals comply with the minimal guidelines prescribed by the Government.

Table 5 shows the criteria that the empanelled hospitals should fulfil. These are in accordance with guidelines given by the GOI. The figures in the table give the percentages of the hospital who comply with the criteria.

As can be seen from Table 5, the IT infrastructure at most of the empanelled hospitals is in good shape and this is irrespective of the size of the hospitals. But this requirement should have been fulfilled by all the hospitals.

There is a need to improve patient and hospital interface as most of the hospitals do not have a special help desk and related signage for patients to be treated under RSBY. This is very important as a majority of the patients are less educated. Also it would greatly help patients and their relatives if there are visual clues and dedicated staff to help them the moment they enter the hospital to facilitate prompt treatment.

Table 5: Hospital Compliance with Empanelment Criteria

Criteria	Number	Per cent
Separate help desk for RSBY	14	34.15
Staff for managing the RSBY help desk	22	53.66
Status of the staff (full time)	28	68.29
Fax facilities	36	87.80
Computers	37	90.24
Internet facilities	36	87.80
Smart Card Readers	32	78.05
Finger Print scanner	32	78.05
Printer	35	85.37
Modem	32	78.05
Any signage indicating how to reach RSBY help desk	14	34.15
Any signage indicating RSBY help desk	13	31.71

The RSBY is a scheme that will route finance to the hospital but it should not be a portal of discrimination between the RSBY and non RSBY patients. It is to be discussed whether a separate help desk for the patients (though convenient for the beneficiaries) will help facilitate any sort of discrimination.

4.5 *Inpatient experience*

The survey results show that RSBY patients were given prompt treatment.¹⁰ About 52 per cent of the patients were attended by the staff within 5 minutes, 32 per cent were attended between 5 to 15 minutes. Indeed, as is evident from table 5, in 84 per cent cases the patients considered the treatment received at the hospitals to be good. Also, in 95 per cases the patients said that all their patient related queries were answered by the hospital staff.

The RSBY policy document mandates certain requirements that the hospital must fulfil when a beneficiary visits the hospital. For example, the hospital requires a fingerprint verification device for identifying the beneficiaries both at the time of admission and at the time of discharge. In 98 per cent

¹⁰ For further analysis of these survey data, see Grover and Palacios (2010).

of cases, the fingerprint verification was done through a fingerprint scanner at the time of admission and in 94 per cent cases, fingerprint verification was done at the time of discharge.

Table 6: Patient satisfaction

Patient satisfaction with treatment	Number.	Percent
Excellent	66	17.23
Very good	119	31.07
Good	136	35.51
Average	48	12.53
Poor	9	2.35
No response	5	1.31
Total	383	100.0

According to the guidelines the package covers the cost of food as well as cost of transport to reach the hospital. In 59 per cent cases the patients were not provided with food during their stay at the hospital as in most cases the facilities for food were not available in the hospital premises. In only 11 per cent of cases was the cost of transport was reimbursed.

It is thus evident that all the hospitals are not following the guidelines. The government has to ensure that this is followed 100 per cent.

4.6 Treatment continuum

There are chances that after admission, a patient is diagnosed with a condition not known to him earlier. Supposing she has to undergo an operation and blood tests reveal that she has diabetes. In this case, RSBY will pay for her operation but her treatment of diabetes will not be covered as it will require a lifelong treatment. Also there are chances that a patient is diagnosed with a heart condition which requires a procedure that is beyond the limit covered under RSBY. Earlier, she was not worried but now she is under stress as there is no money to get treated. It is in such cases the patient has to be advised what to do.

When asked if a RSBY beneficiary is diagnosed with a chronic condition previously unknown to the patient, 56 per cent of hospital personnel said that they would treat the patient charging a subsidized scheme. As seen in table 7 two hospital personnel even said they would ask the patient to leave.

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The problem related to chronic ailments is compounded by the fact that a discharge summary was provided in only 49 per cent cases and in 88 per cent cases the patient was not informed about the balance left in the card.

Clearly, the treatment continuum of the patient is disrupted once the patient diagnosed with a chronic condition leaves the hospital. A provision for such patients must be made in the policy guidelines that allow the patient to be treated by the same hospital. As health care providers gain familiarity with a patient's history, they may more effectively manage chronic conditions or monitor long-term development. This is worrisome because if, for example, a patient is diagnosed with diabetes which requires lifelong treatment the patient would not know what to do. Thus, in such cases the hospitals should have a well defined referral pathway so that such patients can be directed to proper health care facilities. Of course, such a policy change would have significant financial implications.

Table 7: Referral experience

	Number	Per cent
Ask the patient to leave	2	4.88
Treat the patient charging the usual fee	3	7.32
Treat the patient charging a subsidized fee	23	56.10
Others	3	7.32
Non response	10	24.39
Total	41	100.0

5. Discussion

RSBY has created an enabling environment for improving quality of health care. It has empanelled mostly small to medium sized hospitals. These are quite similar in characteristics and terms of availability of facilities to the non-empanelled hospitals. The difference between the empanelled and non-empanelled facilities is evident in terms of adherence to processes and compliance to certain empanelment criteria. We would have ideally liked to compare the facilities in terms of staff availability, but most hospitals were reluctant to provide details of their staff. This may suggest that, as far as hospital structure is concerned, government supported RSBY requirements for empanelment are not

that different from what the market is already providing. However by creating a competitive environment for both the empanelled and non-empanelled hospitals RSBY can go a long way in improving quality of care.

RSBY with its incentives has crossed the first hurdle by making hospitals willing to get themselves assessed and provide information.¹¹ This is not only true for empanelled hospitals but also for the non-empanelled hospitals. Having a basic understanding of the situation on the ground can be useful for policy makers to frame guidelines which can help hospitals move up the quality ladder.

It is also encouraging to see that the RSBY patients are being treated well by the facilities. This further supports the willingness of the hospitals to provide quality care so that they can continue to be the part of the network.

Clearly the hospitals find an incentive in joining the scheme as there is considerable surety of getting their claims settled by the government run insurance programme than the private insurance providers.

It was revealed during the survey that most of the non-empanelled hospitals were not aware of the scheme and when asked they said they were interested in getting empanelled. Therefore, there is scope for empanelling more hospitals in the network. This means access to care can further be improved. However, it must be noted that each empanelment represents additional costs to the insurer and these costs would ultimately be reflected in the premium.

We had assured the hospitals of the confidentiality of the information provided by them. The RSBY can create an environment which allows for public disclosure of information collected in the future. This will give consumers the opportunity to fully characterize the performance of providers when making health care decisions. Public disclosure of information, with necessary patient protections, can also stimulate higher levels of quality by showing providers how their performance compares with that of their peers.

Thus competition, increasing public awareness, subsequent criticism of the services being delivered and the demand for high quality services will further goad the health care providers to respond to the demand for quality in health care service delivery.

6. Policy Implications

Improvement in quality is a long drawn, relentless process and can be further advanced by implementing a carefully planned programme involving participation of all stakeholders. Improvement can be brought about by complying with standards and protocols. There are many guidelines, for example, by the Bureau of Indian Standards, Indian Public Health Standards, and National Accreditation Board for Hospitals and Health Care Providers, Standard Operating Procedures of the armed forces etc. that can be used as reference documents by the hospitals to improve quality. Compliance to the standards given in these guidelines would involve investment of considerable amount of resources. This may serve as a deterrent for many hospitals from getting empanelled. The preferred approach would then be that instead of requiring the hospitals to comply with a certain set of standards and protocols, identify what is the existing situation in the hospitals, and then suggest a road map to move towards quality.

¹¹ It is interesting to note that 70 per cent of the currently empanelled hospitals would like to get empanelled next year. The main complaint of the hospitals regarding the program relates to package prices.

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Our study points to certain inclusions in the RSBY policy guidelines that could go a long way in improving the quality of health care. This section thus provides a roadmap that will enable hospitals to adopt small but incremental changes over time and thus go a long way in improving the quality of health care. These include:

- The government should ensure that the hospitals in the RSBY network comply with all the guidelines given in the policy document. This refers to availability of the required IT structure and processes to be followed when the patient enters the hospital till the time she is discharged.
- The government should in its guidelines introduce a charter of statutory compliances that an empanelled hospital must comply with and submit an affidavit of compliance every year to remain empanelled.
- The government should empanel more neighbourhood hospitals to improve access to care. This is in fact the first step in the ladder to provision of quality care.
- In order to ensure that the treatment continuum is not disrupted, a provision for such patients who are diagnosed with conditions not covered by the scheme due to their chronic nature must be made in the policy guidelines. Ideally, the patient should be treated by the same hospital. The government has to mandate hospitals to provide proper discharge summaries to patients.

As discussed earlier, government supported RSBY requirements for empanelment are not that different from what the market is already providing. However by creating a competitive environment for both the empanelled and non-empanelled hospitals RSBY can go a long way in improving quality of care. One of the means of creating competition has already been suggested before which is the public disclosure of the results of surveys. Literature review also shows that there is some evidence which suggests that peer comparisons may be a more powerful force than monetary incentives in encouraging providers to adopt practices that improve quality of care.¹²

Another possible way of encouraging competition is by paying for performance. Results from a recent prospective quasi-experimental evaluation on the impact of a pay for performance study in Rwanda has shown a positive impact on the quality of care provided. One of the important reasons for low quality care particularly in public facilities is that productivity and morale of health workers is low, and paying incentives to the workers helps them perform better which in turn has a positive impact on the quality of care provided. The study examined the impact of pay for performance (P4P) on maternal and child health services in Rwanda. The Government of Rwanda implemented a national P4P scheme to supplement primary health care centres' input-based budgets with bonus payments based on the quantity and quality of key services. It was left to the facilities to use the fund the way they wanted. According to the study providing financial incentives based on performance helped to increase the use and quality of care by motivating providers to put more effort into specific activities and by increasing the amount of resources available to finance the delivery of services¹³.

The Government of Rwanda calculated payments based on a quality index which was defined between zero and one. The quality index was one when the facility meets all the quality criteria which case the facility gets the entire payment and if the facility fails to meet any criteria then the payments are

¹² http://books.nap.edu/openbook.php?record_id=11723&page=21)

⁶ Basinga et. al., 2010.

discounted. This means if 80 per cent of the criteria are met 80 per cent of the payment is given. In the sample of 80 treatment facilities in the study, the P4P payments increased average overall expenditures of the facilities by 22 percent. On average, facilities allocated 77 percent of the P4P funds to increase personnel compensation, amounting to a 38 percent increase in staff salaries.

The RSBY too uses a similar model for improving the quality of care provided by the public facilities. Although, the services to be provided by the public health facilities are free of cost but the patients do end up spending on diagnostic tests and medicine and there is significant absenteeism in many states. The government policy guidelines however do not define guidelines on how the money received by treating RSBY patients can be utilized.¹⁴ Providing financial incentives to the health personnel after they have been assessed on well defined performance criteria can help improve the quality of care.

Also as far as private facilities are concerned, the government can provide financial incentives to facilities where the payments are linked to the achievement of well defined process, structural, output indicators. There should be certain referral indicators and the hospitals can be mandated to submit verification from the referral institute to ensure that the referral was appropriate and that the referred patient received treatment. Random unannounced audits can further verify that the data reported are accurate. The financial incentives could be in the form of accelerated payments or perhaps a greater premium. Their accreditation can also be subsidized by the government.

While the quality of curative services is definitively a matter of prime concern, the cost of quality is and will always remain a limiting factor. It is evident that the concept of quality of health services, which may be highly appreciated by a high income individual, may adversely affect the access for the vast majority of masses who cannot afford to pay for those standards. In addition, further advances in health technology are increasing overall health system costs by prolonging life for a relatively small number of patients and for relatively short periods. It should not happen that one man's medical advance means a deprivation for the other. It is here that the RSBY can play an important role in regulating the empanelled hospitals and shifting their dependence on high technology investigations to greater reliability on clinical acumen and less technology-intensive procedures.

Finally, in order to apply any of these quality-enhancing approaches through RSBY, it is essential that basic information including but not limited to the data gathered in our survey, is systematically collected for empanelled hospitals. Without quantifiable and verifiable indicators, it will be impossible to confirm what is working or not working in terms of bridging the quality chasm.

¹⁴ Some states are beginning to set standard rates for public hospital staff compensation. For example, see Arora and Nadana (2010) for the case of Kerala.

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