

**ASSESSMENT OF RSBY IN COMPARATIVE PERCEPTIVE
WITH OTHER HEALTH INSURANCE SCHEMES A
AVAILABLE IN INDIA**

**Dissertation
At
Reliance General Insurance, Mumbai**

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**Under the guidance of
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**MBA Hospital & Health Management
2013–15**


**Institute of Health Management Research
Jaipur
2015**

TO WHOMSOEVER MAY CONCERN

This is to certify that **Vatsal Ajitkumar Chhag** student of MBA Hospital and Health Management from IIHMR University, Jaipur has undergone internship training at **Reliance General Insurance, Mumbai** from **Feb. 09, 2015 to April 30th, 2015**.

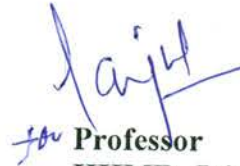
The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his future endeavors.



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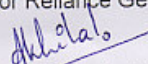
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We wish his all the best in his future endeavors.



For Reliance General Insurance Company Limited.


Akhila Seshadri
(Human Resources)

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **“Assessment of RSBY in Comparative Perceptive with other Health Insurance Schemes Available in India”** and submitted by **Vatsal Ajitkumar Chhag** Enrollment No. **IIHMR/PGDHM/2013-2015/1520** under the supervision of **Dr. Goutam Sadhu** for award of MBA Hospital and Health Management of the university carried out during the period from **February 2015 to April 2015** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.



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Abstract:

Background: Presently India is concentrating towards achieving universal health coverage with the focus on poor and vulnerable population who can't afford health services. In 2008, MoLE launched national level health insurance scheme called Rashtriya Swasthya Bima Yojana (RSBY) which is quite successful and appreciated, recently from last few years some other state level health insurance schemes with same objective like Rajiv Agrogyashri, CMCHIS-TN, Yashaswini, RSBY-Plus also introduced by state government of Arunachal Pradesh, Tamil nadu, Karnataka, Himachal Pradesh respectively which are also proved effective due to their unique scheme model. This study is conducted to understand the level of coverage, efficiency and impact of RSBY scheme by comparing it with other government sponsored health insurance scheme including long running health insurance scheme like CGHS and ESIS.

Objective:

- To provide the outline of RSBY model and compare its efficiency with other successful model of available government sponsored health insurance scheme
- To identify the level coverage of RSBY compare to other government sponsored health insurance scheme.
- To identify the essential key features and their correlation with RSBY coverage.
- To access the possible challenges that reduces effective utilization of RSBY.
- To identify the potential elements that would facilitate significant scale up and sustainability of RSBY in future.
- To provide idea of improvised structure and model for RSBY scheme.

Methodology:

This study is descriptive and exploratory in nature, in this study comparative analysis has been done on basis of institutional structural, implementing processes and by Universal health coverage model, also current challenges and issue of RSBY scheme were re-examine and assess by fishbone diagram, and possible solutions and further scopes discussed in this study. All data and information on individual schemes is obtained from the respective data records, tenders, official annual reports, various publication by researches, and electronic data from respective official websites of various social health insurance schemes.

Results:

RSBY scheme's achievement in terms of coverage with almost 112 million people are enrolled in 2013 is really appreciable also in terms of outcome RSBY is giving noticeable impact with 5.6 % utilization rate and 78% claim ratio. However there are still many loop holes and limitations that are major hurdle for RSBY to become ideal universal health coverage scheme nationwide.

Recommendation:

RSBY have lot of scope to develop and expand as universal health coverage scheme for India, some unique structures of other state level health insurance scheme can be apply on RSBY scheme at implementation level, also merging of the service provider network at common platform for more effective outcomes and sharing the data base is necessary to avoid overlapping and over utilization of resource, also regulation and mentoring at implementation level for RSBY is must to maintain the sustainability of scheme.

Acknowledgement:

I extend my sincere gratitude to Mr. Prakash Thomas, Deputy vice president, Reliance General Insurance (RGI), Mumbai, for giving me the opportunity to do this study and undergoing the process of learning at RGI. I thank him for all the trust and faith he posed in me and I only hope that I have been able to live up to his expectations. His guidance and support was helpful in enhancing my work.

I extend sincere gratitude towards Dr. Vishal singh, Team leader, RSBY department. Reliance General Insurance, who has been my mentor for the summer internship program & has been instrumental in helping me shape this study in a desirable way.

I would also like to thank complete RSBY team, Reliance General Insurance for supporting my work all along and help me throughout my STP.

I would like to express my sincere thanks to Dr. S.D. Gupta, President of The IIHMR University, and my guide Dr. Goutam Sadhu, Associate Professor, The IIHMR University for the proper guidance and cooperation extended by him. I accept the sole responsibility for any possible error of omission and would be extremely grateful to the readers of this project report if they bring such mistakes to my notice.

Table of Contains

Sr. No.	Contains	Pg. No.
A	Introduction	1
1	Background	1
2	Review literature	2
3	Problem statement	4
4	Research question	4
5	Aim of research	5
6	Research objective	5
7	Methodology and Data source	5
B	Institutional and operational framework	6
1	Institutional structure of RSBY	6
2	Governing and implanting agencies	7
3	Stakeholder responsibility and decision making structure	8
4	Selection of providers	10
5	Enrollment process	11
6	Payment of premium	12
7	Utilization of services	13
8	Claim process	14
9	Information technology	16
C	Universal health coverage	18
1	Breath of insurance scheme coverage	19
1.1	Population eligibility and coverage	20
1.2	Risk pooling	21
2	Depth of insurance scheme coverage	22
2.1	Developing provider network	23
2.2	Purchasing healthcare services	25
3	Height of insurance scheme coverage	26
3.1	Revenue collection	27
3.2	Expenditure	28
D	Challenges and solutions	31
1	Maintain PPP model	31
2	Capacities building	32
3	Improve infrastructure and hospital networking	33
4	Lack of marketing concept and awareness	33

5	Lack of quality measures	34
6	Moral hazards, Asymmetric information and Fraud	35
7	Weak monitoring, evaluation and regulation system	36
E	RSBY: The Road Ahead	38
1	Extending the service coverage (Depth) limit	38
2	Extending the population coverage (Breadth) limit	40
3	Integrated model	41
4	Sustainability of RSBY	44
F	References	45

List of Tables and Figures

	Figures	
1	Institutional structure of RSBY	6
2	Enrolment Process of RSBY	11
3	RSBY claim process	15
4	Information Technology enabled schemes	17
5	Universal Health coverage cube- WHO.	18
6	Three dimension and its key features.	19
7	Persons covered under health insurance	19
8	Share of public- Private network.	24
9	Fishbone diagram for RSBY coverage and impact	30
10	Illness cost per household (%)	39
11	Population by expenditure level	40
	Tables	
1	Governing and implanting agency.	7
2	Responsibilities of stakeholders	9
3	Utilization rate and claim ratio	13
4	Eligibility, Area, and Coverage.	20
5	Benefits, service coverage and network hospitals	23
6	Finance and expenditure	26
7	Cost control measures	28
8	Note worthy features to integrate in RSBY	43

Abbreviations:

- AABY: Aam Admi Bima Yojana
- APL: Above poverty line
- BPL: Below Poverty Line
- CGHS: Central Government Health Scheme
- CMCHIS-TN: Chief Minister Comprehensive Health Insurance Scheme-Tamil Nadu
- DKM: District Key Manager
- ESIS: Employment State Insurance Scheme
- FKO: Field Key Officer
- Gol: Government of India
- IRDA: Insurance Regulatory and Development Authority
- MoHFW: Ministry of Health and Family Welfare
- MoLE: Ministry of Labour and Employment
- RGI: Reliance General Insurance
- RGJAY: Rajiv Gandhi Jeevandayee Arogya Yojana
- RSBY: Rashtriya Swasthaya Bima Yojana
- SNA: State Nodal Agency
- TPA: Third Party Administrator

A. Introduction:

1.) Background

- Almost 35 years ago concept of 'Health for all' was also recognized as Alma-Ata declaration in order to promote and protect the health of all people globally. In order to implement this concept countries have introduced demand side health financing mechanism in form of social health insurance, presently there is no universal organized model that can provide health services with minimum or no out of pocket expenditure, most of the developing countries are too poor and disorganized to provide mass primary health care security. Developed countries like United States, United Kingdom, Germany, and Japan adopt different social health insurance model by spending almost 17%, 9%, 11%, and 10% of GDP on health care respectively [1].
- In India according to National health accounts data, Central government, the states, and local governments together account for only 20% of total health expenditures in India and only 2% by external aid by government or NGOs, rest of 78% take the form of un-pooled, out of pocket payments – one of the highest percentages in the world and a main reason for people falling into poverty [2].
- Rashtriya Swasthya Bima Yojana (RSBY) is the national health insurance scheme started by Government of India (GoI) in 2008 for the Below Poverty Line (BPL) family to enhance their access to quality health care and care seeking behaviour. RSBY is a cashless health insurance plan with objective to provide protection to BPL households from financial liabilities arising out of health problems that involve hospitalization. Beneficiaries are entitled to hospitalization coverage up to Rs.30000 per household per year.
- RSBY has been ongoing since 2008, this scheme achieved huge success and popularity by its effective coverage of almost 112 million people from 28 states of India in 2013. Parallel to this scheme there are some other state government sponsored health

insurance scheme like Rajiv Gandhi Arogyashri (Andhra Pradesh and Telangana), CMCHIs (Tamil Nadu), and Yashswini (Karnataka) scheme initiated with tertiary care provision especially for poor population. After success of these schemes more state government follows the concept of health insurance coverage, schemes like RSBY-Plus (Himachal Pradesh), ASBY (Delhi), Mukhyamantri Amrutum Yojana (Gujarat) therefore, the study has made an attempt to explore the potential scope for RSBY for further improvement and take it to the next level by comparing with different existing government sponsored scheme including CGHS and ESIS. This study will also throw some light on RSBY and other government sponsored schemes coverage and key features that are essential for universal coverage by using framework of 'Universal coverage cube' introduced by WHO in 2008.

2.) Review literature:

- Presently, 37.7 million BPL families are currently enrolled in RSBY as this scheme has been implemented in 512 districts across 28 States and Union Territories, Around 6.58 million hospitalization cases from BPL families have benefitted since 2008. **[RSBY Connect, Issue No. 25, February-2014.]**
- As RSBY provides for hospitalization cover only, this means that only 3-6% of the beneficiaries utilize it. The rest of the enrolled families would renew only if they see some value in the scheme **[Evaluation of Implementation Process of Rashtriya Swasthya Bima Yojana in Select Districts of Bihar, Uttarakhand and Karnataka, German Development Cooperation (GTZ), December 2012]**
- RSBY is yet to provide benefits to the resource poor households in terms of increased utilization of health care services particularly for the institutional care. It also shows that there are a number of issues related to design and implementation of the scheme which may hinder it from achieving its intended objective of providing financial security from

catastrophic health expenses to those families for whom the program is meant for. [**A Critical Assessment of Indian National Health Insurance Scheme – Rashtriya Swasthya Bima Yojna (RSBY)**, Rajesh kumar sinha, European Academic Research, Vol. I, Issue 8/ November 2013]

- RSBY beneficiaries were mostly satisfied with the services provided but there was a major lag in their knowledge regarding the benefits provided under RSBY. They were unaware regarding all benefits under RSBY which they can avail from the scheme. Thus IEC activities should be enhanced to increase the awareness among the RSBY card holders so that they can use better service for themselves and their families. [**Post Utilization Survey of RSBY Beneficiaries In Civil Hospital, Ahmadabad: A Cross Sectional Study**, Jaimin Patel, Janmesh Shah, Medhavi Agarwal, Geeta Kedia, Department of Community Medicine, B.J. Medical College, Ahmedabad, Gujarat, India, DOI: 10.5455/ijmsph. 2013.230820132, 28 August 2013]
- To maintain credibility and relevance RSBY scheme, we recommend that state nodal agencies are strengthened to provide the necessary supervision and regulation of the scheme. These agencies could and should play a more prominent role in ensuring that the enrolment process is inclusive, that benefits actually reach the poor and that there is no abuse of the system. Insurance companies need to be more proactive in strategically purchasing care from hospitals and ensuring that the providers adhere to the contract. Finally, higher awareness among the population about the RSBY scheme and their rights as enrolees needs to be ensured. [**Promoting universal financial protection: evidence from the Rashtriya Swasthya Bima Yojana (RSBY) in Gujarat, India**, Narayanan Devadasan, Tanya Seshadri, Mayur Trivedi and Bart Criel, Devadasan et al. Health Research Policy and Systems 2013, 11:29]

- Based on the evidence presented in study there are some serious issues like, coordination between the various departments entrusted with the implementation of RSBY needs to be improved. It appears that the level of organisation was much greater in districts where the district collector took an active personal interest in the scheme and its rollout, Also hospitals were recruited (empanelled) late in the process. The attention paid to proper installation and training of hospital staff in the use of the necessary technology has been inadequate. There is an urgent need to improve communication between hospitals and the other actors. [**Implementing Health Insurance: The Rollout of Rashtriya Swasthya Bima Yojana in Karnataka**, D Rajasekhar, Erlend Berg, Maitreesh Ghatak, R Manjula, Sanchari Roy, **EPW Economic & Political Weekly** (may 14-2011 vol. xlvi, NO 20)]

3.) Problem statement:

RSBY scheme involve stakeholders like private and public health service providers, insurance companies, TPA agencies and NGOs in its unique structure. This multiplicity of agency also bring incoordination and other information asymmetry directly or indirectly it affects the coverage determinates from both supply and demand side in RSBY scheme, also there are some challenges that need to resolve and some limitation that RSBY need to overcome with to become a standard national health insurance scheme in terms of universal health coverage.

4.) Research question:

- What are the measures for different aspect of coverage levels of existing health insurance schemes including RSBY in terms of universal coverage?
- What are the impacts and challenges in various institutional and organizational structures of available health insurance schemes sponsored by government?

- How RSBY model can be improvised further so that it can extend its coverage and sustainability in future.

5.) Aim of research:

- To produce the integrated model of RSBY scheme for effective coverage, utilization and sustainability.

6.) Research objective:

- To provide the outline of RSBY model and compare its efficiency with other successful model of available government sponsored health insurance scheme
- To identify the level coverage of RSBY compare to other government sponsored health insurance scheme.
- To identify the essential key features and their correlation with RSBY coverage.
- To access the possible challenges that reduces effective utilization of RSBY.
- To identify the potential elements that would facilitate significant scale up and sustainability of RSBY in future.
- To provide idea of improvised structure and model for RSBY scheme.

7.) Methodology:

Type of study: Analytical study has been done by comparing RSBY scheme with other government sponsored health insurance schemes on basis of institutional structural, implementing processes and by Universal health coverage model, also current challenges and issue of RSBY scheme were re-examine and assess by fishbone diagram, and possible solutions and further scopes discussed in this study.

Data source: Obtain all data and information on individual schemes from the respective data records, tenders, official annual reports, various publication by researches, and electronic data from respective official websites of various social health insurance schemes.

B. Institutional and operational framework:

Institutional structure represents the fundamental mechanism of the health insurance scheme model, by its features like governing agencies, executing agencies, structural hierarchy, process flow, technology and monitoring and evaluation.

1.) Institutional structure of RSBY:

Every health insurance scheme model has their institutional structure on basis of their governing, executing, and regulatory agencies, and it also establish the structural hierarchy according to their responsibility distribution.

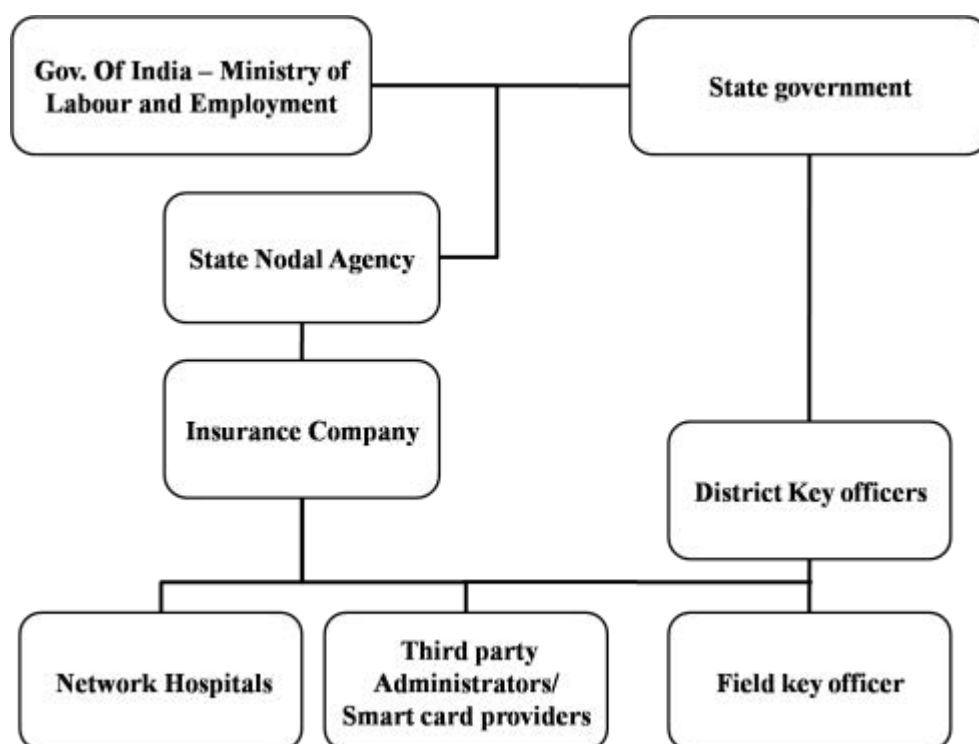


Figure-1: Institutional structure of RSBY

RSBY launch by central government under Ministry of Labour and Employment (MoLE), as per figure-1 being on top of structural hierarchy MoLE plays the major part in implementation, policy making, operational process and regulation of scheme. RSBY scheme implement on state level by creating state nodal agency (SNA) which registered as independent society or trust. Selection of insurance company and implementation of

scheme at state level according to MoLE guidelines is a responsibility of the SNA. SNA also plays major role in supervising and regulation of scheme at state level.

Insurance company have to empanel hospitals and provide all require operational infrastructure for scheme, beneficiary enrolment with help of field key officers and district key officers provided by state government, furthermore insurance company can hire Third Party Administrative to support the responsibility [3].

2.) Governing and implementing agencies:

	Governing agency	implementing agency	Insuring agent
RSBY	MoLE, State nodal agency	State nodal agency + Insurance company	State wise different insurance company
ESIS	ESIC (autonomous corp.) + MoLE	ESIC + State ESIS Dept.	ESIC
CGHS	MoHFW	MoHFW	CGHS
Yashasvini	Yashasvini co-op. Farmers health care trust (Co-op. Societies + State Gov. + Private hosp.)	Yashasvini co-op. Farmers health care trust +TPA	Yashshwini trust
Rajiv Arogyashree	Arogyashri health care trust (autonomous body by AP Gov.)	Arogyashri health care trust + Insurance company	Selected insurance company
CMCHIS-TN	TN health system society	Insurance company	Insurance company
Vajpayee Arogyashri	Suvarna Arogya Suraksha trust (By Karnataka Gov.)	Suvarna Arogya suraksha trust +TPA	Suvarna Arogya suraksha trust
RSBY Plus	HP Swasthya bima yojana society (autonomous body by HP Gov.)	HP State HFW department	Insurance Company under RSBY
RGJAY	Rajiv Gandhi Jeevandayee Society	Insurance company	Insurance Company

Table-1: Governing and implanting agency.

It is a fact that almost all Government sponsoring schemes are sustained and manage by government funding and political support, but as per table-1, few more institutional factors can be put into light to compare the RSBY structure to other available scheme.

Here as per table-1, almost all state schemes are governed by autonomous society or trust created by their respective state government, ESIS runs by autonomous corporation funded by MoLE while CGHS runs under ministry of Health and Family Welfare (MoHFW). Yashasvini scheme handle by autonomous trust which is collaboration on corporate societies, Karnataka state and private hospital network. RSBY is mainly governed by MoLE but at state level implementation handles by SNA. When it comes to implementation of scheme except CGHS and ESIS almost all insurance scheme including RSBY largely depend on private insurance company or Third party administrator (TPA), also insurance company and governing trust or society are the insuring agent in most of the schemes.

3.) Stakeholder responsibility and decision making structure:

- **CGHS** operated by the Director CGHS, who is directly appointed under the Ministry of Health. The funds of CGHS are allocated from the Ministry of Health and Family Welfare; therefore there is no separate autonomous body or fund manager for effective administration of CGHS scheme. CGHS established medical stores department (MSD) which is responsible for drug procurement and distribution of drugs at outpatient facilities.
- **ESIS** manage by autonomous body 'Employee State Insurance Corporation' has adequate representation from all stakeholders. To administering the scheme standing committee constituted from among the members of the corporation and medical benefit council. Network of providers also owned by the corporation and the outsourcing arrangement to private hospitals for provision of tertiary care. Decision-making machinery of ESIS is now evolving to provide more autonomy to state ESI departments by incorporating them into a corporation on the lines of ESIC.

	RSBY	Yashasvini	Rajiv Arogyashree	CMCHIS-TN
Oversight of scheme	• Central Gov. • SNA	• State Gov.	• Rajiv arogyasri trust	• State Gov.
Finance management	• Central Gov. • SNA	• State Gov.	• State Gov.	• State Gov.
Contract to insurance company / TPA	• SNA	• Yeshasvini trust	• Rajiv arogyasri trust	• TN health system society
Selection of care provider	• Insurance company	• Cooperative societies	• Rajiv arogyasri trust	• Insurance company
Enrolment process	• SNA • Insurer	• Cooperative societies	• Insurance company	• Insurance company
Claim process	• Insurer	• TPA	• Insurance company	• Insurance company
Monitoring and evaluation	• Central Gov. • SNA • Insurer	• Yeshasvini trust	• Rajiv arogyasri trust	• Insurance company • District administration

Table- 2: Responsibilities of stakeholders

- **Rajiv Aarogyasri scheme** is owned and managed by the Aarogyasri Health Care Trust under the chairmanship of chief minister of Andhra Pradesh, majority the decision making of the scheme is done by the Trust and minimal decision capacity is provided to the Insurance Company. Other stakeholders are moreover responsible for implementers then decision making. There is no regulatory body for any insurance specific regulation except insurance company.
- **CMHIS-TN:** Insurance Scheme launched by the Tamil Nadu State Government through the United India Insurance Company, scheme is majorly oversight and funded by state government of Tamil Nadu (TN). Administration and implementation decisions done by state health system society, at district level monitoring is done by district administration department. Insurance company born the responsibility like beneficiary enrolment, hospitals empanelment and day-to-day monitoring.

- **Yeshasvini scheme** is governed by a board of twelve trustees from which six are from the Department of Co-operation including its Principal Secretary who acts as chair of the Trust, the Director of the Karnataka Health Department, and five additional appointed Trustees from the medical profession. The cooperative societies have the main responsibilities as a stockholder and the board of trustees governs the scheme, claims process, sets growth targets, and approves inclusion of new hospitals. As there is absent of insurance company as stockholder, the risk management is very limited. Partnership with Karnataka co-operation that enrol the member its helps in scheme's marketing and enrolment.
- **RSBY** have level wise decision making approach and that lead to well defined objective and responsibility to all potential stakeholders that are central and state government, state nodal agency (SNA), insurance company, network hospitals and NGOs. Central Government do the most decisions making but always with involvement of other suitable stakeholder. The state nodal agency or the state government takes active part in decision making in most of scheme implementation. State nodal agency can also take independent decisions like the choice of providers of care and selection of insurers.

4.) Selection of providers:

There are certain criteria for selection of service provider by ever health insurance scheme, and formation of network of hospitals, this selection procedure is a responsibility of insurance company or trust in majority health insurance scheme.

Minimum criteria of selection by RSBY are 10 inpatient beds, operation theatre, medical, surgical and diagnostic facilities, adequate nursing staff and doctor Whereas state health insurance scheme like Rajiv arogyashri and CMCHIS-TN have minimum criteria of having at least two ventilators also adequate bed numbers and all adequate facility including specialized doctors required for tertiary care. Vajpayee Arogyashri has same criteria as other state scheme plus they required minimum 50 bedded hospitals [4].

5.) Enrolment process:

As per RSBY objective, enrolment process is mainly concentrate on BPL population especially from rural and outreach area, so they can access healthcare services without any financial burden. In Figure-2, shows the work flow of RSBY enrolment process. This enrolment unit is family and process occurs every year, each time beneficiary has to pay INR 30/- as registration fees per family to enrol in scheme and beneficiary get smart card on the spot, so that they can utilize the scheme from the day one.

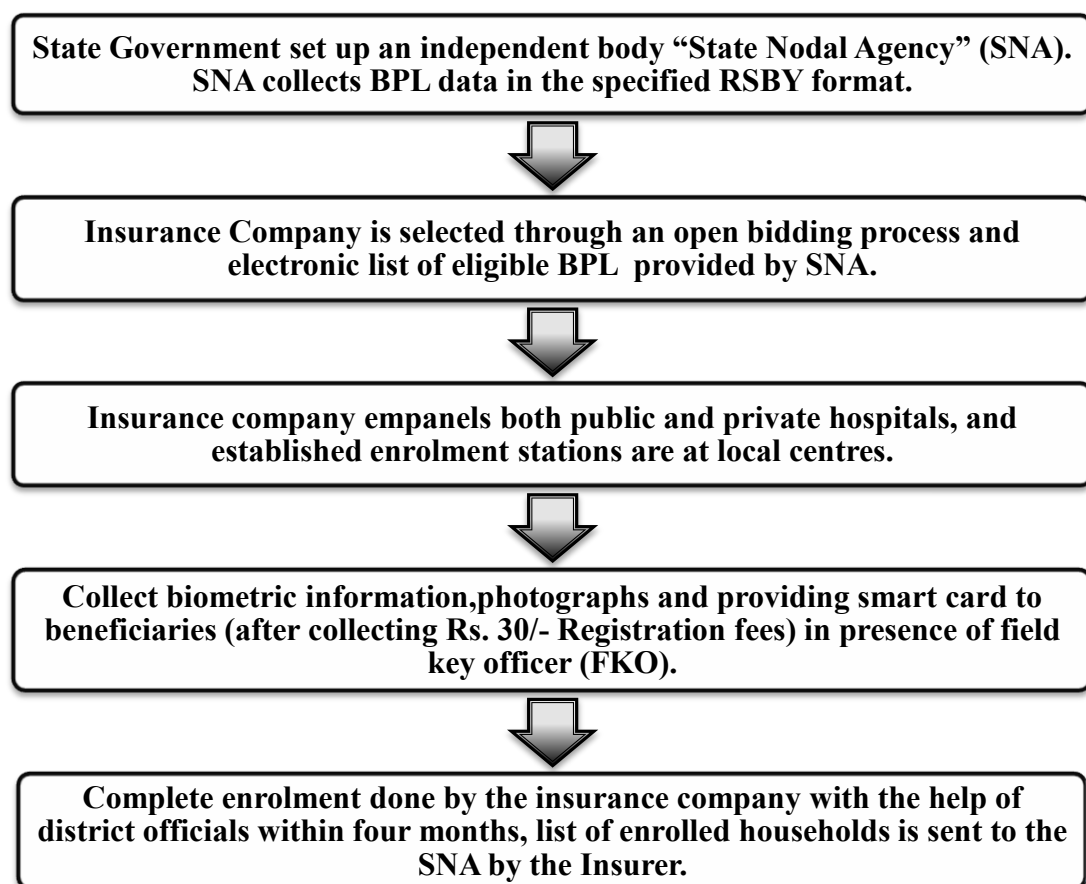


Figure-2: Enrolment Process of RSBY

Insurance company collect the biometric information from all listed eligible beneficiaries and register them in presence of field key officer (FKO), this key management system use to prevent the fraud and improve accountability at enrolment level. Insurance Company with support of FKO and NGO carry out complete enrolment process within the time limit of four month [5].

All Available government sponsored health insurance scheme enrolment unit is per family, household head have to enrol and his family also get all scheme's benefits. Unlike RSBY all other government health insurance scheme beneficiaries do not need to pay anything to get enrolled in scheme. Usually enrolment validity is for one year in all health insurance schemes, therefore every beneficiary have to re-register every year, except ESIS in which person is benefited till he is working in the formal sector, and even after retirement he can continue the scheme by paying one time life premium. For CGHS, the enrolment is for the period of five years and the beneficiary automatically gets re-enrolled after a period of five year [5].

6.) Payment of Premium:

Generally all government sponsored health insurance scheme premium to insured company or to the TPA by the central or state government except CGHS and ESIS, which collect premium from beneficiaries according to their pay grade, and relocate to state level according to number of beneficiaries.

- In RSBY, premium paid to insurance company in three instalments [3], which is following:
 1. First installment: The insurer or its representative collects the registration fee of INR 30 from each beneficiary family unit, at the time of enrolment and on delivery of the Smart Card.
 2. Second installment: it is paid by the State Nodal Agency to the insurance company after verifying the enrollment data by matching it from data collected by field key officer (FKO) downloaded from key district manager (DKM) server.

Second installment calculated by following formula:

$$N * [\{ 25\% \text{ of } (X-60) \} - 30]$$

$$N * [\{ 10\% \text{ of } (X-60) \} - 30] \text{ (For north eastern states and J\&K)}$$

(X being the premium amount per family and N is number of cards)

3. Third installment: once second instalment is paid by state nodal agency, this last instalment is release by central government via state nodal agency. It is in following formula:

$$N*[\{75\% \text{ of } (X-60)\} + 60]$$

$$N*[\{90\% \text{ of } (X-60)\} + 60] \text{ (For north eastern states and J\&K)}$$

(X being the premium amount per family and N is number of cards)

- In formula INR 60 is smart card cost which completely paid by central government to selected insurance company [3].

7.) Utilization of services by beneficiary

Past few years utilization rate has been increase under various schemes especially government health insurance coverage initiative like RSBY, CMCHIS-TN, yeshswini, and rajiv arogyashri. Even private health insurance sector also developed.

As per IRDA report private health insurance accounts for roughly 54% of all health insurance expenditure in the country, the rest 46% of health insurance spending comes from the government sponsored/social health insurance schemes, however as per figure-7 given below, population coverage is way higher by government insurance with almost 72% of total insured population and rest 28% covered by private insurance scheme.

	Total no of beneficiary	No. of hospitalization	utilization rate	Income (crore)	Benefits cost (crore)	Claim ratio
ESIS	72000000	421290	0.6%	8500	5993	70.5%
RSBY	112500000	6300000	5.6%	1137.6	887.32	78.0%
Yashaswini	3450000	161723	4.7%	94	58.55	62.3%
Rajiv Arogyashri	71050000	1756110	2.5%	752.95	685.54	91.0%

Table-3: Utilization rate and Claim ratio (2012-2013).

Above table-3 shows the utilization and claim ratio, as per 2012-2013 data yashaswini scheme of Karnataka is most utilizing scheme yet showing low claim ration compare to

other given scheme, on other hand Rajiv Gandhi arogyashri shows lowest utilization rate among given scheme but its claim ratio is way higher than any other scheme. This asymmetric information mainly occurs due to unnecessary utilization of recourse by provider to gain maximum benefits from insured individual.

In RSBY, beneficiary can use the smart card for services from any empanelled hospitals across the India, during hospitalization hospital or service provider send all procedure and status of patient online to government and insurance company and post discharge hospital send claim data to insurance and government and get online reimbursement from insurer, this whole process conduct paperless and electronically [6].

Other government sponsored health insurance scheme follows the same process flow, expect on some state scheme like rajiv arogyashri and CMCHIS-TN who provide tertiary care mainly need preauthorization for treatment or Procedure from autonomous trust before treatment starts. As per RSBY data in 2013, total hospitalization case 6.3 million, hospitalization frequency increases from round 1 district where hospitalization rate is 2% increased to 5% in round 3 districts. It is also noteworthy that, average burnout ratio of round 3 districts is 104% whereas round 1 district burnout ration is 76% [6].

8.) Claim process:

As per figure-3, State wise RSBY claim process is similar in all enrolled state in terms of flow except minor changes. For example, some insurance company hire TPA as intermediaries for claiming process and some prefer not to. In some state empanelled hospitals send claims to the insurance directly, some send it via SNA, or they send to Claim and reimbursement data to all major stakeholder.

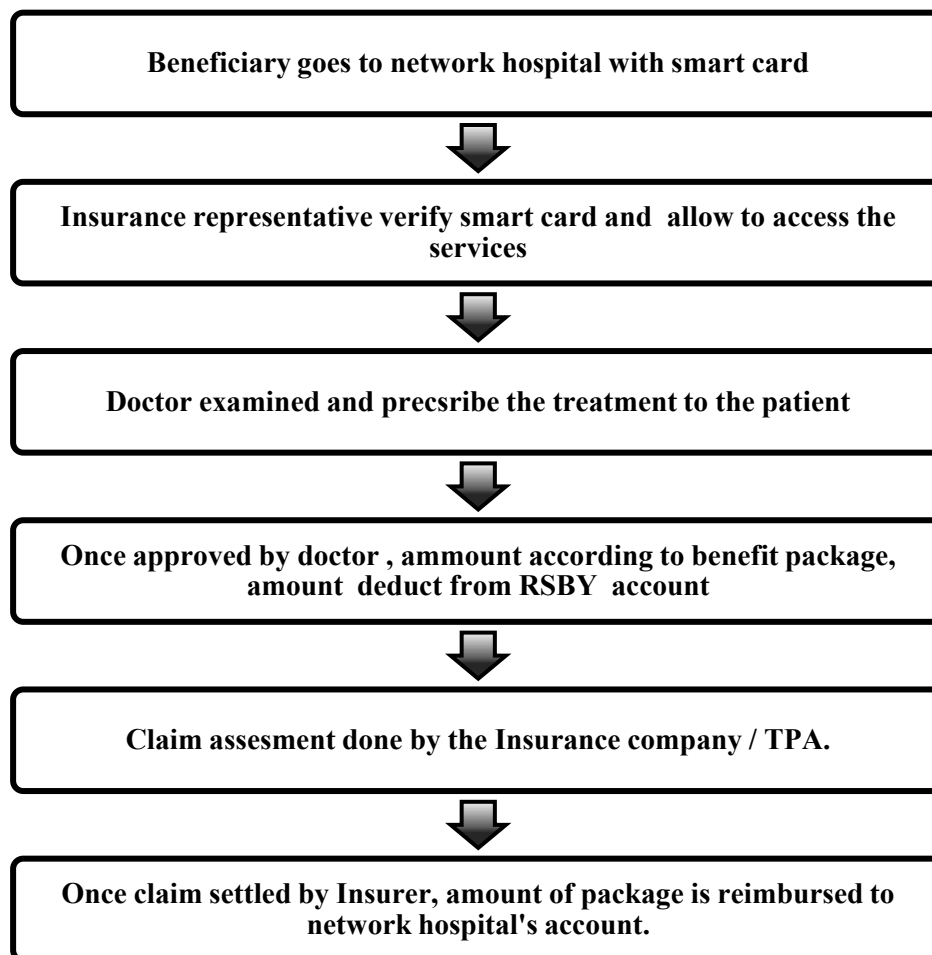


Figure-3: RSBY claim process

Same process is followed by state health insurance scheme CMCHIS-TN and Rajiv Aarogyasri, except the beneficiary have to undergo pre authorisation process. Pre authorisation of diagnosis and procedures are sent to the insurance company electronically for approval, then the panels of medical doctors approve the claim, based on the need and then services are provided to the beneficiary [4]. Post service utilization data is also provided to insurance provider and approval of it is needed for claim settlement.

In RGJAY (Maharashtra) provide “Run Off Period” of one month, this will be allowed after the expiry of the policy period, This means that pre-authorizations can be done till the end of policy period and surgeries for such pre-authorizations can be done up to one month after the expiry of policy period and such claim will be honoured by the Insurance Company

9.) Information technology system:

All recent government health insurance scheme like RSBY, rajiv arogyashri, CMCHIS-TN are IT enable, in order to do all process seamlessly and accurately various processes of health insurance scheme like enrollment, electronic data process, claim processing, monitoring and regulation are manage by one or more information technology (IT) system. One of the most crucial roles of IT in this scheme is monitoring and accountability of entire scheme

RSBY is one of the innovative models in terms of IT involvement. The aim of the scheme is to use technology not only for control of fraud and monitoring, but also to find innovative solutions. For example, the enrolment software has been designed in a way that if the spouse is part of the BPL list, then the software makes it compulsory to insure her also [6]. There are some main features that are highlighted from RSBY scheme.

- **Biometric ‘Smart card’ technology:** To all RSBY beneficiaries enrolled by collective their biometric information, and providing them smart card, this smart card holds individual beneficiary’s identity information like, thumb print, name, location and unique identity number (UID), which is use for identity verification during hospital admission of beneficiary. These smart cards are provided immediately to the beneficiary on the time of enrollment, which they can use for cashless healthcare services from empanelled hospital around the India.
- the smart card serves two purposes, it identifies the insured member and carries the available sum insured for utilisation at any given point of time during course of policy period (start and end date of policy are given in the card) [7].
- **Key management system (KMS):** This system mainly use for monitoring, preventing enrollement level fraud and improve accountability. In key management system,

government key field officer (KFO) who has to be present at enrolment centre, verified, and finalised each enrolment household list by using their smart card and finger print [7].

- **Data transfer/ Robust Technology Platform:** All data transfer process in RSBY is paperless and online, that include process like data upload, networking with healthcare providers, fixed cost of procedures, transaction uploading and claim payment processing, MIS and analytics etc, each process of the scheme is administered through online and by standard IT software. This is mainly called Robust Technology Platform [7].
- Presently almost all government sponsored schemes are fully or partial IT enable, and IT involvement and utilization is increasing gradually in these schemes, figure: 4 showing the different level of IT tools and technology use by different government health insurance schemes.

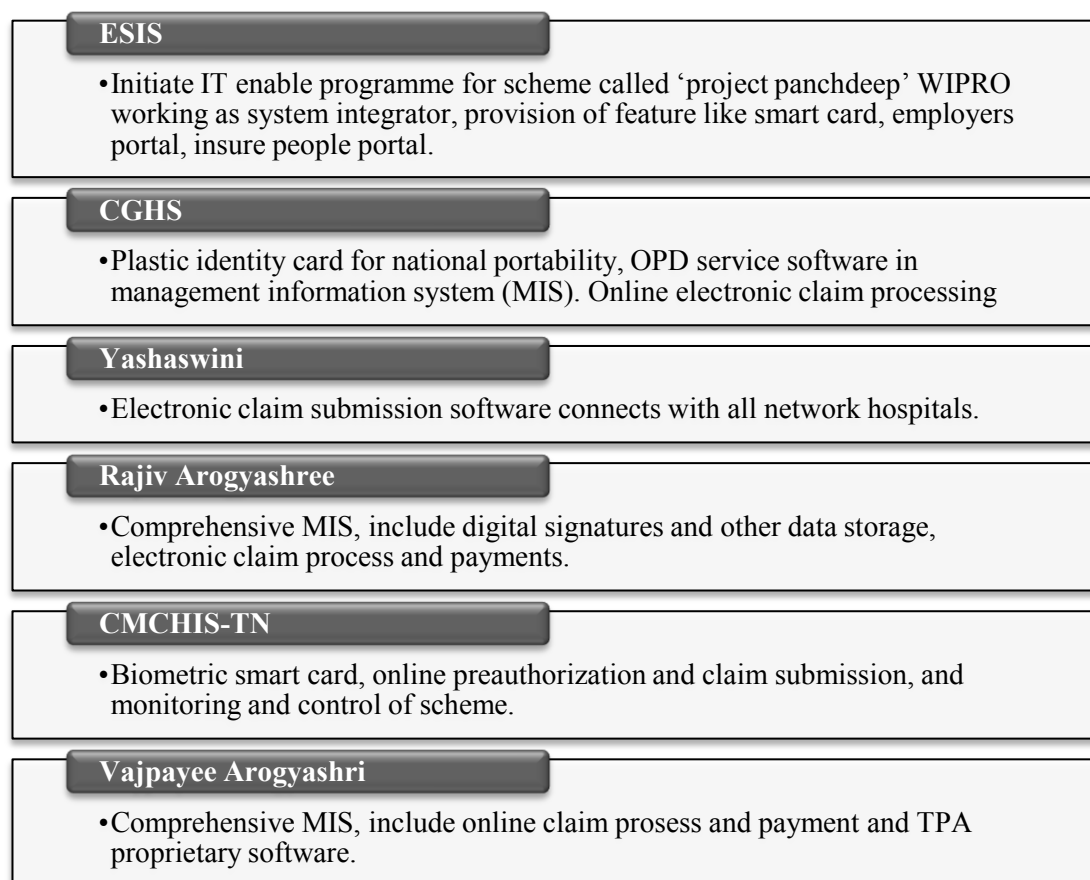


Figure-4: Information Technology enabled schemes

C. Universal health coverage:

- The country's public financing for health care is less than 1 per cent of the world's total health expenditure, although it is home to over 16 per cent of the world's population.
- According to world health organization's frame work adopted in world health report 2008 (figure-5), there are basically three dimensions to check the impact and magnitude of health insurance coverage. In order to scale the RSBY scheme and compare with other government sponsored health insurance scheme, we apply this frame work in this study.

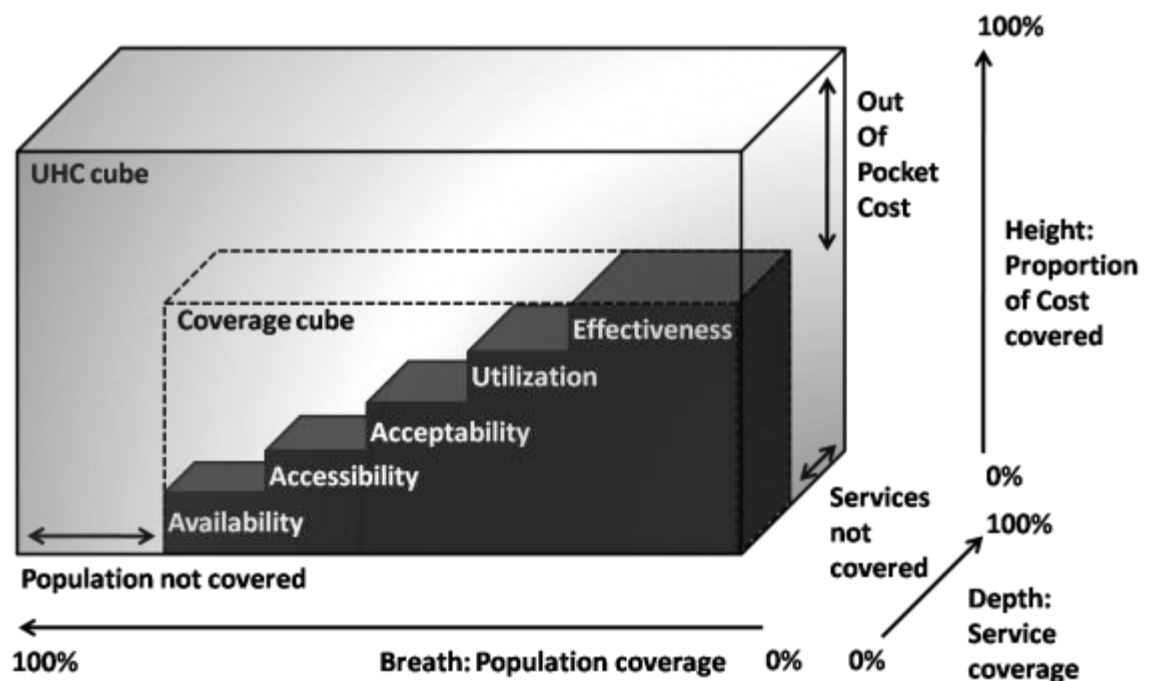


Figure-5: Universal Health coverage cube- WHO, Integrated with Tanahashi model.

- As per figure-6, there are mainly three dimensions to understand and compare the health insurance schemes, 1) Breath, 2) Depth, and 3) Height, and each dimension have their particular key features that are necessary for any health insurance scheme model to achieve success and sustainability.

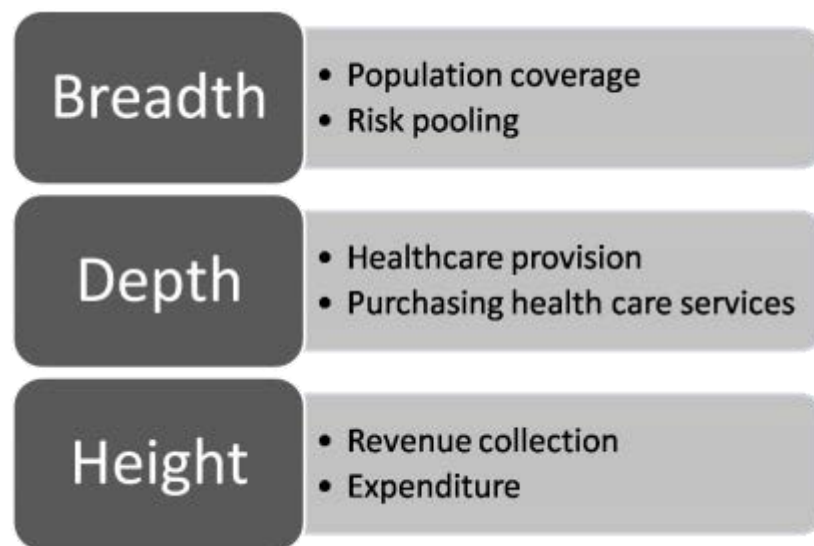


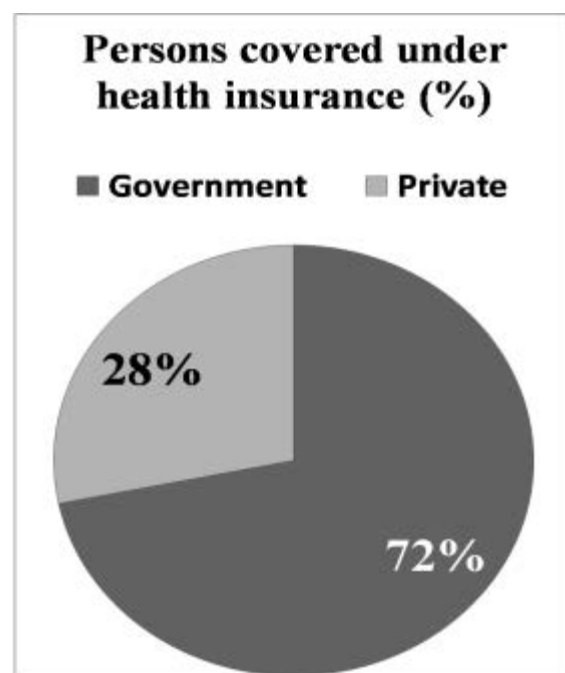
Figure-6: Three dimension and its key features.

1.) Breadth of insurance scheme coverage: this dimension indicates the percentage of covered population by insurance scheme.

- Recently in India have seen noticeable change in the matter of health insurance coverage in last five years, mainly due to RSBY and state government initiative like Rajiv Aarogyashri in Arunachal pradesh, CMCHISTN Scheme in Tamil Nadu, Yeshasvini and Vajapayee Arogyasri in Karnataka.

Figure- 7
Source: IRDA Annual report (2013-2014)

Persons coverage under health insurance (In lakh)	
Government	1553
Private	610
Total	2163



- According to Insurance Regulatory and Development Authority (IRDA) estimation, number of people covered by health insurance in India are 21.62 crore people, or 18 per cent of the total population, were covered by health insurance at the end of March 2014.
- And as per figure-7, from almost 18 % of covered population 72% coverage are provided by government sponsored scheme and other 28% of coverage done by private insurance companies.

	Eligible population	Area	No. Of beneficiary*
RSBY	BPL + vulnerable group	Pan India (25 states)	112 ('13)
ESIS	All employees and their dependants	Pan India ; Notified area	72 ('13)
CGHS	Employees of Gov. & semi-Gov. Org; member of parliament & dependents	Pan India	3 ('10)
Yashasvini	Member of rural co-op. Society (BPL + APL)	Karnataka	3.4 (13')
Rajiv Arogyashree	BPL + APL (Annual income < 75,000)	Andhra Pradesh	80 ('11)
CMCHISTN	BPL + APL (Annual income < 72,000)	Tamil nadu	36 ('10)
Vajpayee Arogyashri	BPL	Karnataka (7 dist.)	7.5 ('10)
RSBY Plus	BPL under RSBY	Himachal Pradesh	0.8
RGJAY	BPL + APL (Annual income <1,00,000)	Maharashtra	0.8 ('12)
Private insurance	Voluntary	Pan India	55

Table: 4 – Eligibility, Area, and Coverage.

*beneficiaries in millions

Key feature:

- 1.1) Population eligibility and coverage:** Any insurance scheme have their target population according to their product and its objective, almost all government insurance scheme have objective to provide universal coverage to below poverty line (BPL) population, informal labour group and government employees, to protect them from financial burden of healthcare services.

- RSBY also expanded its eligibility criteria for beneficiary from below poverty line (BPL) population to BPL and venerable groups like building construction worker, riksha pullers, railway porters and domestic workers [8].
- As per table-4, RSBY covers 112 million populations in 2013 [6], which is appreciable but still a lot to go ahead for complete coverage when the eligible population is BPL and venerable population of pan India. On other hand Andhra Pradesh state government has been involved in extending the insurance cover for at least 85% of the population by Rajiv arogyashri yojana and reportedly Tamil Nadu state government covers over 52% of the population by CMCHISTN [5].

1.2) Risk pooling: It means accumulation of funds from individual on regular basis and uses it to pay for their treatment during illness, so that financial burden can be distributed among each other.

- According to table-4, Population coverage is a major factor of the risk pooling feature, especially in commercial health insurance where individual beneficiary is the source of funding. On other hand majority government sponsored schemes including RSBY, government mainly bear the major expenditure by funding the scheme.
- Yeshashwini scheme which covers APL and BPL population mainly of rural area where risk pooling by beneficiaries is the major part of funding (58%) and state government pays 42% of premium. ESIS beneficiaries also pool the risk by contributing from their income and by their employers [5].
- RSBY pooling by accumulating the fund is bear by both central government and state government, as their contribution is 75% and 25% of premium respectively, therefore state government can finance other state level health insurance scheme for addition coverage.

2.) Depth of insurance scheme coverage: This dimension represent the services that are covered by insurance scheme i.e. out/inpatient service, Primary/ secondary/ tertiary care treatment, critical illness.

- As per table-5 given below, all the schemes are providing only hospitalisation cover to the beneficiaries except ESIS and CGHS. All government sponsored health insurance schemes cover pre-existing conditions but private insurance scheme don't, their coverage package depend upon their premiums.
- The RSBY gives annual inpatient benefits of Rs. 30,000 on a floater basis for a family of five, without any conditions on pre-existing diseases. Also, it covers the 1 day pre and 5 days post hospitalization cost of follow up and medication and 100 as transportation compensation per hospitalization
- In other state government scheme like Rajiv Aarogyasri and CMCHISTN schemes, benefit package can go up to Rs. 2 lakhs for a defined 938 medical and surgical procedures and Rs. 1.5 lakhs for 1016 predefined procedures for a family per annum respectively.
- The sharp distinction between various schemes is visible in terms of benefit-packages as their priorities and objectives. With the ceiling of Rs.30,000 per year RSBY's package has been limited to mainly at secondary care provision while Rajiv Aarogyasri and CMCHISTN scheme have been concentrated on tertiary care and critical illness coverage.

	Benefits package	Max. Coverage	Empanelled hospitals
RSBY	All hospitalization episode + Maternity + pre existing condition	30,000	6147-Private, 2537 Public
ESIS	Comprehensive coverage	No limits	151 -ESIS hospitals + 400 -private
CGHS	Comprehensive coverage	No limits	1083 -private
Yashasvini	hospitalization for 823 surgeries	2,00,000	513 - private + 30 -public
Rajiv Arogyashree	938 predefined package (Secondary + Tertiary)	1,50,000 + 50,000 (Buffer)	241- private, 97- Gov.
CMCHIS-TN	1016 predefined procedure including, 23 diagnostic +113 follow-up package	1,50,000 per years	778 hospitals
Vajpayee Arogyashri	402 predefined package (only tertiary)	1,50,000 + 50,000 (Buffer)	86- private, 8 -Gov.
RSBY Plus	RSBY + Tertiary care	1,75,000 + 30,000 (RSBY)	22-private, 155-Gov.
RGJAY	971 predefined procedure + 121 follow-up package	1,50,000	N/A
Private Insurance	All Hospitalization except, Pre existing not covered, Certain Copayments, Deductibles, Product wise Sub limits.	Ranges from 50,000 to 500000	More than 10,000

Table-5: Benefits, service coverage and network hospitals

Key Feature:

2.1) Developing provider network: Health care provision is one of the features that need strong service provider network for success and sustainability of scheme.

- Provider network of public and private hospitals are involve in almost all available scheme in India, and beneficiaries can choose any service provider. However currently this provider network is weak in rural are compare to urban areas in terms of availability, infrastructure, and quality.

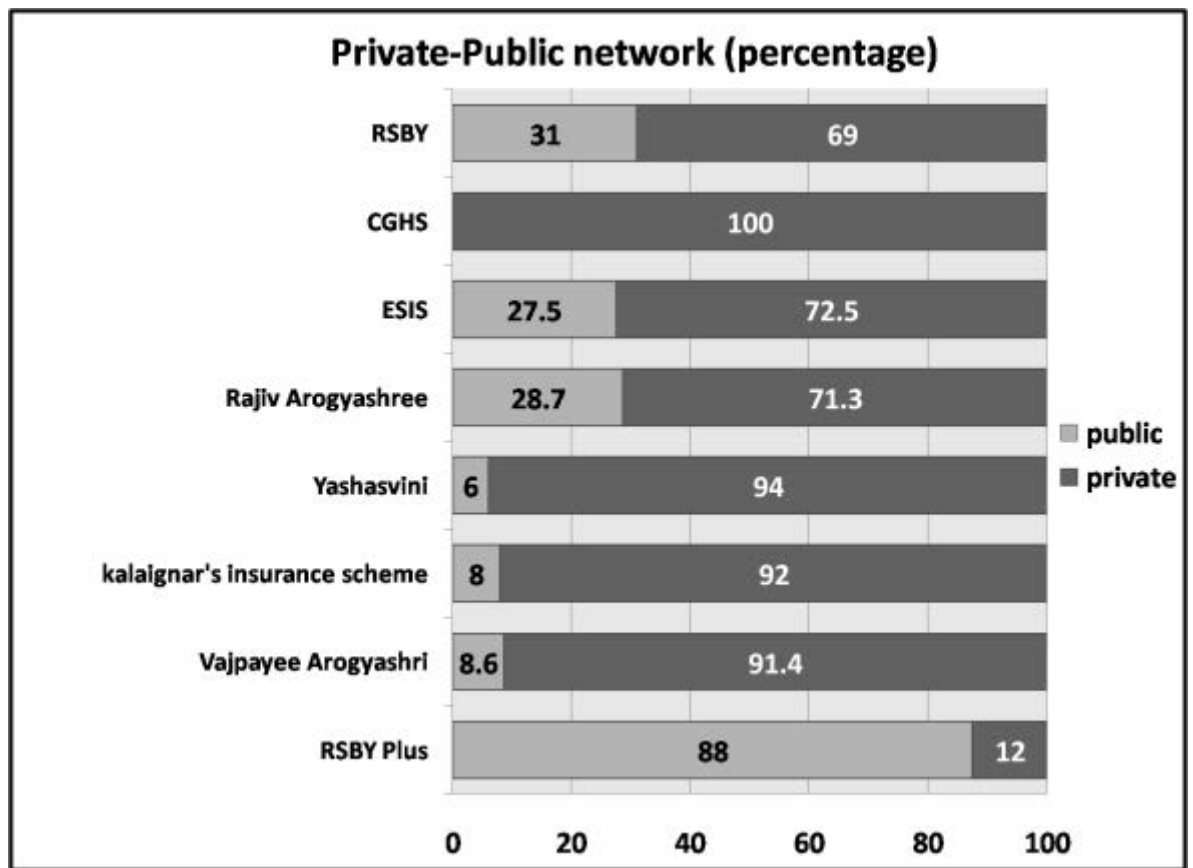


Figure- 8: Share of public- Private network.

- As per table-5, there is more dominance of private hospitals regarding number of empanelled hospital network except RSBY plus scheme, admissions and utilization. Figure -8, shows that almost all available health insurance schemes more than 50% of health providers in network are private hospitals. RSBY plus is on top with maximum empanelling of public health facility compare to other government sponsored schemes with coverage 88% of public hospitals of total empanelled hospital network in 2013.
- This situation leads to shifting of the government funding to private health facilities and on other side public health facilities are lack of fundamental infrastructure and service provision due to lack of funding. This makes public health facilities unavailable or non-eligible to get empanelled even for government sponsored scheme, which results in double spending of government on health insurance scheme funding as well as spending on public health facility [5].

However RSBY has been designed in such a way as to allow public hospitals to compete for and retain revenues in the context of a completely different incentive system. Public hospitals can compete with private hospitals for RSBY patients and generate resources that they control and can use to upgrade facilities and compensate staff [9].

2.2) Purchasing health care services: purchasing care means paying to services providers behalf of beneficiary for their health care services in terms of benefit package.

- As per table- 5, In India majorly two schemes complete comprehensive treatment package that is CGHS and ESIS, where as RSBY provide secondary care hospitalization treatment, presently all state government sponsored scheme are mainly focused on tertiary care provision, where BPL population get financial protection from critical illness. Almost all government sponsored schemes covers pre existing disease except yeshswini yojna.
- Private health insurance schemes are provide benefits for hospitalization and not for any pre existing disease or outpatient services. Primary care benefits are not provides in any scheme.
- In provider paying system, most of the scheme prefers the pre-decided package rates, this way beneficiaries are can be prevented from financial risk and open ended fee-for-services (FFS) [5].
- In RSBY coverage is also by prefix package rate but it can modified based on suitability to a particular area (state wise). RSBY provide around 1500 packages based on the feedback from insurers in terms of target populations at hospitals.

3.) Height of insurance scheme coverage: This dimension indicates the cost coverage of benefits that are in provision under the health insurance scheme.

- According to Table-6, RSBY is the only government sponsored scheme that charge Rs.30 annually as registration and renewal charges. All government sponsored schemes except CGHS and ESIS, central and state government are major funding source of schemes, and therefore prepayment and risk pooling, and entire burden of hospitalization care for the covered population are borne by the government.

Table-6: Finance and expenditure

	No. Of beneficiary	Source of funds	Total	Premium Rate
RSBY	112 ('13)	75% from central Gov. + 25% from state Gov. + 30 Rs. From beneficiaries	1057 ('13)	276 ('13)
ESIS	72 ('13)	Contribution of employee (1.75%) and employer (4.75%) of income + one-eighth by state Gov.	5,729 ('13)	3,831 per family ('13)
CGHS	3 ('10)	Employee contribution, Central Gov. Funds depend on salary (Rs. 50 to Rs. 500 per month) + Central government funds.	1,600 ('09-'10)	N/A
Yashasvini	3.4 (13')	58% by beneficiaries and 42% by state Gov.	59 ('13)	Rs. 210 per family ('13)
Rajiv Arogyashri	80 ('11)	100% by state Gov.	1,075 ('09-'10)	439 ('09-'10)
CMCHIS-TN	36 ('10)	100% TN State Gov.	517 ('9-'10)	Rs. 469 ('9-'10)
Vajpayee Arogyashri	7.5 ('10)	100% from state government	N/A	N/A
RSBY Plus	0.8	100% State Gov.	8.56 ('10-'11)	Rs.364 ('09-'10)
RGJAY	0.8 ('12)	100% state Gov.	N/A	N/A
Private Insurance	55	Self funded	7000 ('09-'10)	1216 per Individual per year. ('09-'10)

* Beneficiary are in million

* Expenditure in crores

* Premium in INR

- On other hand, the private insurance sector, where households and individual bear the costs of premium, in ESIS and CGHS, contributions from employees and employers are obtained according to their pay grads and at minimum level.

Key features:

3.1) Revenue collection: It means collection of funds from the source of fund. In case of government schemes source of funds can be from tax revenue, part of premium from beneficiary's salary. Normally in government sponsored scheme premium are predefines by insurance company selected by open tender bidding or handle by the government funded trust.

- As per table- 5 above, Scheme like CGHS mainly finance by central government from tax revenue while ESIS generate revenue from employee's and employer's contribution and finance by state government. This contribution is depend on employee's salary grad and varies from Rs.50-500, there is also ceiling of enrollement as ESIS scheme is only for employee earns less than Rs.15000 per month, while in ESIS total expenditure in year 2013-14 is 10140 crores with employee contribution of 8500 crores.
- RSBY also collect revenue from state (25%) and (75%) from central government, while Karnataka state initiative yeshaswini yojana collected annual premium from beneficiary (58%) and rest of added by state government (42%). State initiative like Rajiv arogyashree and CMCHIS-TN are 100% funded by the state government and chief minister relief fund which is allotted as premium per household that is Rs.439 and Rs.469 respectively.
- If the average claim ratio increase mainly due to overutilization services by providers, it affects the premium rate of the scheme that usually bears by government, thus for cost containment different measures obtain by governing and implementing agencies of different health insurance scheme given in following table-7.

RSBY	Smart card verification , claim assessment
ESIS & CGHS	Healthcare provision through its own network, outsourced diagnostic, contracted private practitioners
Yashasvini	Preauthorisation, screening, claim examination and assessment
Rajiv Arogyashri	Preauthorisation, MIS monitoring, claim assessments
CMCHIS-TN	Preauthorisation. Screening camps, claim assessments
Vajpayee Arogyashri	Preauthorisation. Screening camps, claim assessments
RSBY Plus	Preauthorisation
RGJAY	Preauthorisation, claim assessment
Private Insurance	Preauthorisation, MIS monitoring, claim assessments

Table-7: Cost control measures

3.2) Expenditure: Expenditure in terms of health insurance scheme is mainly on paying for the healthcare services and other administrative cost, where only healthcare services cost known as benefits cost which is given in table-3 in chapter-B.

- Further from table-3, ratio total health benefits cost and the premium cost gives the claim ratio and by comparing the claim ration and the utilization rate one can understand the efficiency of the scheme.
- As per table-5, It is noteworthy that CGHS currently covers about 3 million populations in the country, spends nearly Rs. 1600 crore annually, whereas Rajiv Aarogyasri, which spends in the range of Rs. 1200 crore annually for population coverage of about 71 million people, also Tamil Nadu's model again covers tertiary care of 35 million populations with around Rs. 517 crore during 2009-10. And RSBY spends almost Rs. 2000 crore with coverage of around 108 million individuals.

- On other hand yeshaswini in Karnataka, covers almost 3.5 million population in state with 73.5 crores annually with beneficiary's contribution of Rs. 210, make this scheme one of the largest Self Funded Healthcare Scheme in the country.
- Premium prize per family or individual unit is generally high in scheme which provide comprehensive coverage (in case of CGHS and ESIS) and tertiary care (state government schemes), whereas RSBY expenditure is low compare to other scheme in terms of coverage, but that because it is mainly focus on secondary care provision. Thus all government and private health insurance scheme have benefits cost ceilings except CGHS and ESIS in India to limit the expenditure and control the supply induce demand hazards, but on other hand this cost limitation also prevent the complete cost coverage as insured individual have to pay from their pocket after crossing the cost limits which is INR 30000 and INR 150000-200000 in RSBY and state health insurance schemes respectively, also private health insurance company use copayment or sub limits features in their products.

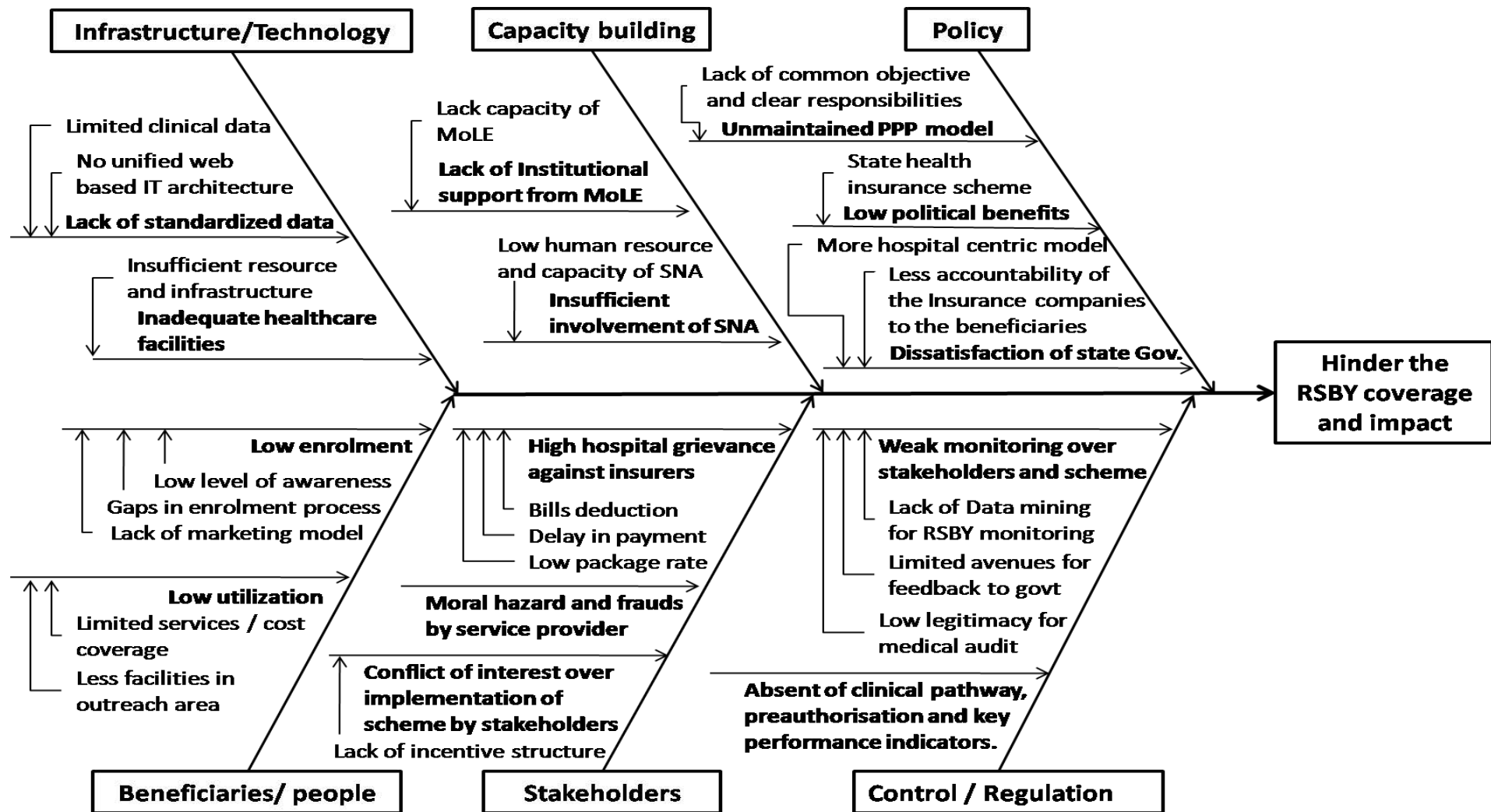


Figure- 9: Fishbone diagram for RSBY coverage and impact.

D. Challenges:

- To identify the core challenges for RSBY scheme to achieve maximum impact and coverage re-examine of RSBY framework and implementation process is need be done. Here figure-9 above present the fishbone diagram (Cause and effect diagram) to identify many possible causes or problem that lead to hinder the RSBY coverage and impact, base on that major challenges and their possible solutions is given below.

1.) Maintain PPP model:

RSBY institutional structure is public private partnership (PPP) model. This innovative structure involve both public and private body as stockholder in this scheme, the challenge is to maintain the coordination between these stakeholders including other ministries at the central and state level, insurance companies, smart card providers and private healthcare providers. There are always differences between state governments and insurers and it sometimes increase, when claims ratios are very low that makes difficult for government to sustain the program and result into the insurer's high profit margins, and on other side if the claim ratio unusually increase then its gives the huge loss to Insurer Companies.

- Additional to that there are some state like Maharashtra, Andhra Pradesh and Tamil nadu, due to their political benefits and dissatisfaction towards RSBY structure as major authority given to Insurance companies and poor monitoring of scheme, they prefer to run their own state health insurance scheme.
- **Solution:** Though RSBY model all potential stack holders are clear with their objectives but it mainly need to get improvise in terms of implementation and proper guidelines and strong grievance committee that provide common ground for all stakeholders of the scheme.

2.) Capacities building:

When there is an objective of national level coverage of population the capacity building is must for the government to provide maximum availability of the services of the scheme. There need to be improvement in human recourse at all administrative level especially for state nodal agency which is currently very low (5-10 staff per state) to cover the complete state. Though RSBY is extensively IT enable and insurance company have the major responsibility but to for seamless administration and regulation of scheme more manpower is needed.

- As per comparison with Philippines, PhilHealth provides hospitalization coverage to around 10 million members with a permanent staff of more than 1000 and another 3000 contract employees. In India, another social security scheme within India, the Employees' Provident Fund, claims close to 50 million individual worker accounts and has a staff of around 20,000 or more than 100 times the estimated number of government staff administering RSBY[5]. Also noticing Rajiv Aarogyasri standards there are 5000 staff including 117 people in the Trust to cover 70 million individuals, comparing to all above with RSBY, which is covering almost 112 million individual of country has only workforce around 10 at the centre and approximately 100 at the state level. This shows an extensive need for improving its staff strength.
- **Solution:** Looking at the variations across states in the staffing structure of SNAs, it is important that the government of India and MoLE should issues clear guidelines regarding this indicating the number and type of people required for the SNAs. This hire qualified staff for SNA can be used to carry out activities such as awareness generation, and audits also, which help in better attainment of the scheme's objectives.

3.) Improve infrastructure and hospital networking:

As for RSBY, target beneficiaries are poor population especially from rural area, but challenge is the health infrastructure is very poor in rural India. As there are well establishment of private hospitals and health facilities in such areas, but due to lack of certain data it can't be confirm. Add on

- **Solution:** Here other large hospital networks of government sponsored scheme like ESIS and other state health insurance schemes should connected to each other with help of centralized and automated claims clearance (including inter-insurance company claims) and automated report-generation to achieve maximum utilization of available infrastructure. Furthermore government have to focus toward public health facilities in terms of basic infrastructure development to making them avail and eligible for RSBY empanelment, by this way public hospital network will improve and government expenditure flow can shifted to public facilities via RSBY claims that make facility sustainable.

4.) Lack of marketing concept and awareness:

As per Reserve bank of India report 2012, there are almost 270 million people lives below poverty which is more than twice of RSBY coverage (41%), this indicates that RSBY in terms to coverage need to go far. Furthermore from enrolled beneficiaries utilization rate is merely 3.6% in 2013-2014 [13]. Mainly because of lack of awareness among the community for such government scheme and its services that lead to weak impact on enrolment. It's been prove in some studies that during enrolment many beneficiaries are not getting any proper information on utilization and benefits like transportation allowance and post hospitalization cost coverage.

- **Solution:** Grass root level workers are one of the important factor not only for enrolment but they can improvise the utilization of scheme also, there is no incentive for

such workers base on the community encouragement for utilization on scheme .Despite of having NGO and grass root activist to spreads awareness about RSBY scheme; there need to be some marketing intervention like partnering with field functionary department to improve awareness. For example, Karnataka government involve the cooperative society in Yashaswini scheme that enrol members gives the huge impact on ennoblement.

- Add on that government need to take steps toward the strengthening of SNA, as SNA have the major responsibility to promote RSBY but due to lack of human resource and capacity building SNA shows less or no involvement. As per SNA's core competency it have strong experience in outreach and publicity, improve hospital networking and medical audit, SNA involvement and major participation in RSBY can be outstanding strategy.

5.) Lack of quality measures:

For health insurance scheme like RSBY, not just coverage but provision of quality treatment is the core purpose but there are no strict guidelines on monitoring of patient safety and quality treatment make this issue more complex furthermore there is no data available on this issue as scheme main focus is on awareness and enrolment. Only healthcare purchaser in this case government can influence the quality seeking health care services. This challenge is concentrated especially in small hospital and health facilities in rural areas due to insufficient resources and infrastructure, this make accreditation base empanelment difficult for RSBY scheme.

- According to study, 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 [10].

- **Solution:** Recently to overcome this challenge, RSBY used as a tool for quality improvement process for both public and private health facilities in order to get quality and consistent services through its network hospitals. This process is on empanelment cum grading basis, where all empanel hospitals have to go through quality audit and get particular grade accordingly and hospitals in the lowest grades will be provided one year time to improve and move to the next higher grade. Hospitals which are not able to do so will be de-empanelled from the scheme. But this initiative is slow and not sufficient enough to achieve quality improvement. Add on that insurance company also have to use the different IEC mediums to enhance the awareness among eligible population.
- However there is absent of standard operating protocols (SOPs) for hospital and RSBY giving no efforts to define any clinical protocols or clinical pathways for any covered procedures. Some state like Maharashtra and Andhra Pradesh provides mandatory investigation of its most utilizing procedures [13].

6.) Moral hazards, Asymmetric information and Fraud: This challenge is one of the most difficult challenges in health insurance industries all over the world. Moral hazard can be occurs from both demand-side as well on the supply side as well. Service provider usually have bigger advantage over patient in terms of information that leads to asymmetric information to patient and results in inappropriate care, unnecessary treatment, excessive laboratory tests or overcharging known as supplier induced demand. Sometimes insurance company also identify and de-empanelled the hospital in case of fraud or for not following procedure standard guidelines. There are also reported incidences where hospital demand unaware patient to incur the out of pocket expenditure.

- Apart from service provider there are other different level where frauds can occur by any stakeholder but as per RSBY structure the majority fraud is detected at service provider level where providers tend to benefit the most from fraud through over billing and supplier induced demand efforts, this is one of the reasons for not covering the drugs and outpatient services in RSBY as all the stakeholders, physicians, pharmacists, patients, can easily influence the outcome [8?].
- As per RSBY 2011 data, state wise variation was significant as highest hospitalization frequency was in Gujarat (4.33%) and Kerala (5.21%) compare to state Assam (0.09%) and Chandigarh (1.14%) mainly due to lack of scheme awareness and newly launch on some, on other hand claim ratio in Gujarat was high (139%) compare to Kerala (100%) shows asymmetry in between claim ratio and hospitalization frequency [4].
- **Solution:** In RSBY structure insurance company is the major stakeholder whose responsibility to prevent any attempt of fraud and it should done with extensive use of IT enable efficient mechanism. For example Reliance general insurance has developed web cloud app with online report submission on real time data control basis and mobile app named 'Evidens' which works on android platform with option of uploading photo and document to assess and prevent the claim frauds. Transparency is must in terms of data generated or outcome by any stakeholders and make it available for research centres, IRDA so that they can detect the gap in structure and provide the solution. Also there need to be a proper control mechanism especially with the cost and package of treatment and patient satisfaction level and it should review regularly.

7.) Weak monitoring, evaluation and regulation system:

Though RSBY is innovatively IT robust system enable that include provision of real time data, There are some monitoring gap at some level is not identified. Especially lack of monitoring and routine audits of RSBY empanelled hospital and weak monitoring guidelines that make the RSBY weak in regulatory aspect. Also there are large amount

of data generate by RSBY, There are some stakeholders which are not regular particular with data feeding including SNA and insurance companies, that need to regulate especially by government as the main reason of this irregularity is due to lack of men power and capacity building.

- **Solution:** In case of RSBY there need to form an independent monitoring scheme that can maintain the regulation at every level by routine audit at hospital and keeping watch over data feeding by different stakeholders. RSBY presently dealing with supervision at multilevel, all generated data collected at central government server and being evaluated by experts from GTZ [8].

E. RSBY: The road ahead

- After comparative study of RSBY and other government health insurance, undoubtedly RSBY achieve the huge coverage and success regarding implementation in very short time as well as this discussion throw some light on many area where RSBY still have scope to get improve and enhance its efficiency to reach towards the goal of universal coverage.

1.) Extending the service coverage (Depth) limit:

RSBY have most focused objective is to prevent out-of-pocket (OPP) expenditure of poor individual in order to receive health care services, but this objective can't be fulfil as scheme itself provide only secondary hospitalization care whereas majority people require out-patient services.

- Here in figure -10 below, almost 83 per cent of OOP expenditure on health is on out-patient services includes consultant fees (33%) and purchasing of medication (50%), whereas single most costly component on average is hospitalization, yet accounted for only 11 per cent of total on an aggregated basis. Add on that all existing state government sponsored schemes also concentrated on tertiary healthcare services and therefore to achieve objective of substantially reducing OOP expenditure on health, government need to extend the benefits package by involving outpatient services. It is noteworthy that mainly OPP occurs in outpatient and inpatient service mainly due to medication, thus outpatient serves without covering medication won't be that useful in terms of OPP.
- According to some studies [6], few experiments were initiated by the government with the help of insurance companies and service provider network to provide OPD benefits to RSBY beneficiaries and results were positive towards health-seeking behaviour and reduced hospitalization events.

- In order to provide outpatient service there are some initial up gradation required like, to cover cost of consultant annual ceiling of fix amount per family insured could be provided under RSBY and cost of medicine can be covered by free drug program under National Health Mission or by contracting the private pharmacy [13].

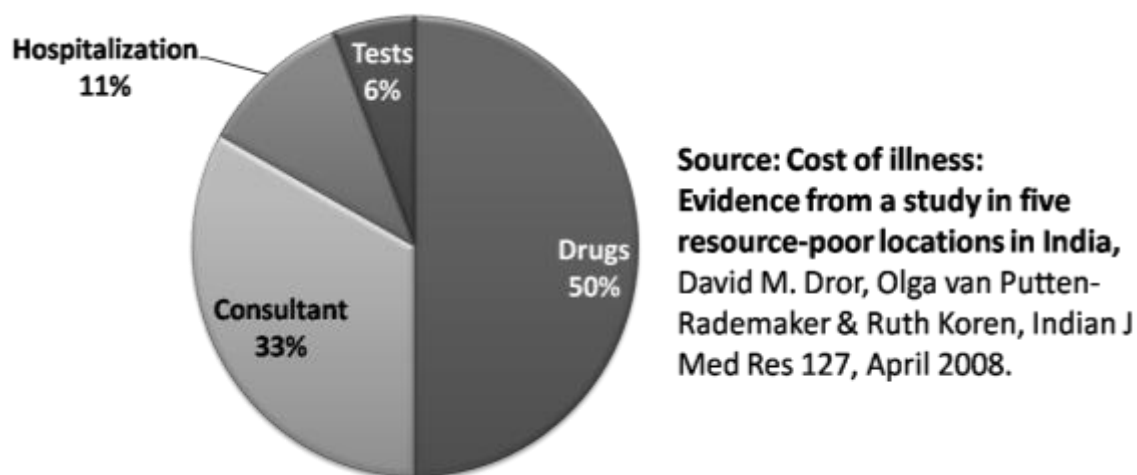


Figure-10: Cost of illness

- There is a need to develop a model of providing primary care based on these experiments and experiences across the country with RSBY. On comparison with CGHS model which provide comprehensive treatment, RSBY need to follow the particular features of CGHS like establishing outpatient dispensaries (wellness centres) with partnering with private hospital as well as public health centres. Also covering the AYUSH health services from public health centres can increase the availability of outpatient services. This outpatient's service can be work as gatekeeper by making referral system mandatory.
- However due to high chance of the moral hazard, fraud and malpractices due to weak monitory and regulatory system in India, insurance company deny to cover the outpatient service and medicine re plus at administrative level it is very expensive to process medicine reimbursement and monitor it, Thus in India its outpatient service

benefits and medicine reimbursement is achievable only under strong regulatory and monitoring norms.

2.) Extending the population coverage (Breadth) limit:

Presently RSBY progression is appreciable in terms of population coverage from 70 million beneficiaries in March 2011 to 112 million beneficiaries in 2013. Recently RSBY broaden its enrolment criteria by adding vulnerable group like urban poor, rickshaw pullers and bidi workers but to achieve nationwide coverage and make RSBY as national health insurance scheme in all manners, RSBY should increase its population (breath) coverage.

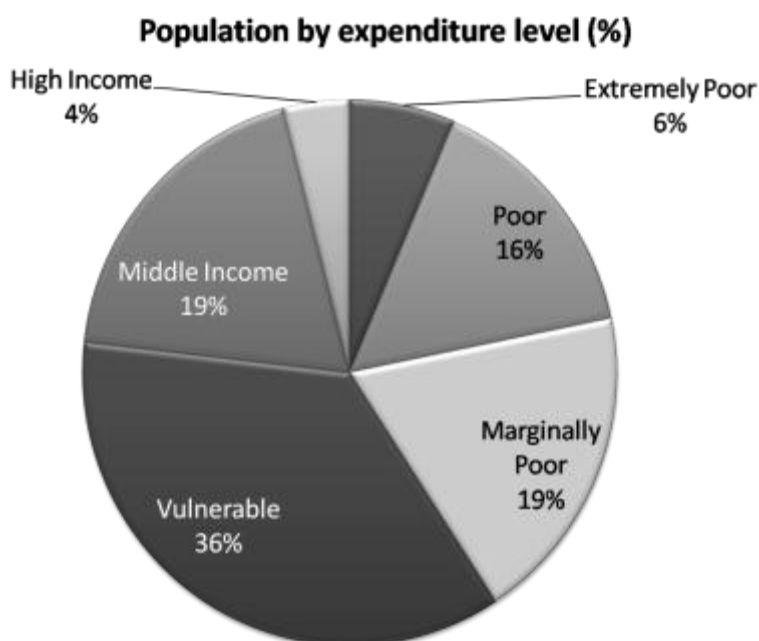


Figure-11: population of India by expenditure level

(Source: NCEUS, Ministry of Labour and Employment, 2009)

- As per figure-10, combining all population below middle income there are almost 77% of total population by adding all vulnerable population. Existing state government health insurance scheme like rajiv arogyashri covered almost 85% of its state population. Almost all state government schemes extended its criteria by enrolling beneficiary according to their ration card and also by their annual income, which is in

the range of INR 75000 to 100000 annually. This part of coverage can be adapted by RSBY to cover not just poor population but also vulnerable population which normally push into poverty due to out of pocket expenditure. Moreover as per New Delhi state initiation RSBY-Plus is basically top-up on current RSBY scheme where state can upgrade the benefits by using their own resources.

- On consideration of estimated number of enrolled and the premiums that government bears, RSBY can be India's flagship platform for the introduction of universal hospital insurance. The impressive progress of the programme in enrolling BPL households, which however limited to secondary healthcare hospitalization currently, also it needs to match the required funds for maintenance and expansion of the scheme. On other hand, RSBY already attract large numbers of APL households, who (unlike BPL) will have to pay premiums to ensure the financial sustainability of the scheme [11].

3.) Integrated model:

RSBY achieve success and sustainability compare to other government efforts for universal coverage due to its design, well defined structure, standardized operation and public private partnership approach, however now it needs to level up. RSBY expand successfully in overall nation in terms of coverage so using this plus point of RSBY, other scheme can be included in the RSBY which have same criteria of beneficiaries, recent example is The Ministry of Labour & Employment (MoLE) & the Ministry of Finance (MoF), GoI, (through Department of Financial Services [DFS]) have decided to extend Aam Admi Bima Yojana (AABY) to all categories of unorganized sector workers under Rashtriya Swasthya Bima Yojana (RSBY), using the RSBY Smart Card platform. Aam Admi Bima Yojana (AABY) scheme provides the life insurance protection and disability cover to the rural and urban poor; Below Poverty Line and marginally Above the Poverty Line population [12].

- Not just be limited to other health insurance scheme but other social programs can also be improvised by using RSBY platform, for example Public Distribution System (PDS) which is one of India's largest and oldest schemes, but also one of the lousy system regarding monitoring and regulation, rather than ration card smart card can be use that hold all biometric information of household which can be swipe at any ration shop across the India and it will deduct the amount form the card, here Instead of an insurer the PDS distributor would be compensated by the relevant government agency based on the uploaded records [7]. There are lot of scope to improvise the RSBY concept and platform for various implementation process and operation.
- Merging other government sponsored health insurance scheme with RSBY on single platform may be theoretically ideal but presently it is very difficult to involve schemes like CGHS, ESIS and RSBY, especially when structural and departmental wise schemes are different, therefore the solution to improve the RSBY efficiency is to merge partially to other government sponsored scheme or adapt the strong aspect of other schemes. Following table-8 shows some important features of the existing health insurance scheme that can be integrated with RSBY system.

CGHS	• Wellness centres and other outsourced private providers for outpatient services, referral system compulsory. • Medical store deport: medical store mainly buying and distribution of medicine in OPD centres and especially procure expensive drugs in limited quantity needed by individual beneficiaries
Yeshswini	• Involvement of cooperative societies as stakeholders, which helps in member enrolment • Coverage of all member of rural co-op. Society (BPL + APL)

Rajiv arogyashri	• Coverage of all poor, marginal poor and vulnerable population according to their income level as per ration card (eligibility : annual income < 75,000) • Mortality Committee reviews hospital deaths within 30 days to determine if the death was preventable and the extent to which an adverse event or improper care was a contributory factor, surprise inspections to monitor and regulate the health provision facilities.
Rajiv Gandhi Jeevandayee Arogya Yojana	• Cover all BPL, Vulnerable population base on their ration card (Annual income < 1,00,000) • Maharashtra state health insurance scheme has developed pathways for some 150 procedures, each of the clinical pathways could provide for the practitioner to differ for reasons to be recorded in writing and consistent deviations could be flagged in medical audit.

Table-8: Note worthy features to integrate in RSBY

- One more suggestion is to bring the major government sponsored health insurance schemes like RSBY, CGHS, and ESIS under one roof and should handle and implemented by autonomous body created by government, adaptation health insurance marketplace model, where government facilitate to bring all potential social and private health insurance schemes under same enrolment process according to scheme eligibility or affordability for all class of population. It will improve the insurance coverage population This will improve the government capacity building and also provide the common platform to all stakeholders and that lead to manage and administrate the data and process with one standard guideline, also it makes easy to implement, monitor and regulate the schemes in singular body.

4.) Sustainability of RSBY:

Every government sponsored scheme's sustainability is depended on the political willing and government funding. RSBY sustainability depend on its consistence success and utilization and all these can happen only when all potential stockholders like government, insurance companies and hospitals maintain the coordination and provide the desire output by fulfilling their responsibilities. Though there are some issues that need to resolve as soon as possible to make RSBY more sustainable.

- RSBY need to monitor progress in this regard through MIS data, surveys and field reports and develop its institutional capacity. Presently the focus of the RSBY is to provide hospitalization coverage of secondary care, on other hand households with no financial risk protection end up spending catastrophic payments in accessing tertiary care from hospital and outpatient services, however presently state government sponsored health insurance schemes are the solution for tertiary care coverage. As per other middle income countries like Brazil and Thailand progress toward primary care focus from hospitalization coverage, India also can apply all suggested integrated model in practical terms once RSBY reach to that sustainability level and with all institutional capacity that is required.

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