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Public-Private Partnerships in the Health Sector
The Case of a National Health Insurance Scheme in India

SONALINI KHETRAPAL

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Faculty of Public Health and Policy

LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE

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Research group affiliation: Public Health Foundation of India

Declaration of Own Work

I, Sonalini Khetrapal, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

A handwritten signature in black ink, appearing to read 'Sonalini', written over a horizontal line.

Sonalini Khetrapal

Abstract

Public-Private Partnerships (PPPs) in the health sector are essential in light of the challenges the public sector is facing in healthcare finance, provision and management. Recognizing the need to provide insurance coverage to those below the poverty line (BPL), Rashtriya Swasthya Bima Yojana (RSBY) was introduced in 2008 by the Ministry of Labour and Employment in India. RSBY is a social health insurance scheme for the informal sector, where health care delivery and management involves a multitude of stakeholders from both public and private sectors who are governed by contractual agreements. A family of up to five pays INR 30/- (£0.30) annually for enrolment for a coverage of INR 30,000/- (£302). The balance of the premium is subsidized and shared by the Central (75%) and the State (25%) governments.

This research aims to evaluate the availability, provision and management of health services under RSBY Public-Private Partnership contracts and factors that might influence them in order to inform policy makers on how to improve scheme implementation for the BPL beneficiary. The study was conducted in the districts of Patiala and Yamunanagar, in the States of Punjab and Haryana respectively. The study has both qualitative and quantitative components using primary and secondary data. The results of the study can be broadly categorized under the main pillars of scheme design and implementation. These include political, regulatory and institutional capacity; stakeholder contracting; enrolment of beneficiaries; empanelment of health facilities; and finally provision and utilization of services.

RSBY has clearly attempted to address the existing gaps in the provision of health services by offering a balanced Public-Private Partnership model that provides some degree of financial protection to the end user. Despite the weaknesses identified, it is a robust and evolving model that needs to be continuously developed, on the basis of lessons learnt from implementation of the scheme.

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Currency Equivalent

As of 1st October 2015

Currency Unit – Indian Rupees (INR)

UK £ 1.00 = INR 99.31

US\$ 1.00 = INR 65.62

Abbreviations

ADB	Asian Development Bank
ADC	Additional Deputy Commission
ANM	Auxiliary Nurse Midwife
APL	Above Poverty Line
ArcGIS	A Geographic Information System
ARHQ	Agency for Healthcare Research and Quality
ARS	Administradoras del Regimen Subsidiado
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga, Unani, Siddha and Homoeopathy
BDO	Block Development Officer
BJP	Bharatiya Janata Party
BMHS	Bachelor of Homeopathic Medicine
BoCW	Building and other Construction Workers
BPL	Below Poverty Line
BRICS	Brazil, Russia, India, China and South Africa
CBHI	Community-based Health Insurance
CEO	Chief Executive Officers
CGHS	Central Government Health Scheme
CGRMS	Central Grievance Redressal Management System
CHAS	Community Health Assist Scheme
CHC	Community Health Centre
CHCS	Co-operative Health Care System
CI	Confidence Interval
CKGA	Central Key Generating Authority
CSMBS	Civil Servant Medical Benefit Scheme
CSR	Corporate Social Responsibility
DFID	Department for International Development
DGLW	Director General Labour Welfare
DPRO	District Panchayati Raj Officer
ESI	Employees' State Insurance
ESIC	Employees' State Insurance Corporation
ESIS	Employees' State Insurance Scheme
FDA	Food and Drug Administration
FKO	Field Key Officer
GDP	Gross Domestic Product
GIZ (nee GTZ)	German Agency for International Cooperation
GoI	Government of India
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HCFP	Health Care Fund for the Poor
HDI	Human Development Index

ICDS	Integrated Child Development Services
ICMR	Indian Council of Medical Research
ICT	Information and Communication Technology
IEC	Information, Education and Communication
IEG	Independent Evaluation Group
ILO	International Labour Organization
IMA	Indian Medical Association
IPHA	Indian Public Health Standards
IRDA	Insurance Regulatory and Development Authority
JSY	Janani Suraksha Yojana
KMS	Key Management System
LIC	Life Insurance Corporation of India
LMIC	Low- and Middle-Income Country
LSHTM	London School of Hygiene and Tropical Medicine
MAP	Medical Assistance Programme
MBBS	Bachelor of Medicine and Bachelor of Surgery
MDG	Millennium Development Goal
MMD	Medically Managed Diseases
MoHFW	Ministry of Health and Family Welfare
MoLE	Ministry of Labour and Employment
MoLHSA	Ministry of Labour, Health and Social Welfare
MoPH	Ministry of Public Health
MoU	Memorandum of Understanding
MPCE	Monthly Per Capita Consumption Expenditure
NaNOs	National Nodal Officers
NFHS	National Family Health Survey
NGO	Non-Governmental Organization
NHIP	National Health Insurance Programme
NHIS	National Health Insurance Scheme
NHRC	National Human Rights Commission
NIC	National Informatics Centre
NPM	New Public Management
NRHM	National Rural Health Mission
OBC	Other Backward Classes
OECD	Organisation for Economic Cooperation and Development
OOP	Out-of-Pocket
OPD	Out Patient Department
PACS	Poorest Area Civil Society
PEPSU	Patiala and East Punjab States Union
PHC	Primary Health Centre
PHFI	Public Health Foundation of India
PHI	Private Health Insurance
PHSC	Punjab Health Systems Corporation
PI	Principal Investigator

PPP	Public–private Partnership
PRI	Panchayati Raj Institution
RA	Research Assistant
RCMS	Rural Co-operative Medical System
RNTCP	Revised National Tuberculosis Control Programme
RSBY	Rashtriya Swasthya Bima Yojana
SC	Scheduled Caste
SHG	Self-help Group
SHI	Social Health Insurance
SISBEN	Sistema de Selección de Beneficiarios
SNA	State Nodal Agency
SOP	Standard Operating Procedure
SSS	Social Security Scheme
ST	Scheduled Tribe
STOC	Smart Card Testing and Certificate
TPA	Third Party Administrator
UCS	Universal Coverage Scheme
UHC	Universal Health Coverage
UHS	Universal Health Insurance Scheme
UID	Unique Identification Number
UNDP	United Nations Development Programme
UPA	United Progressive Alliance
UT	Union Territory
WHO	World Health Organization

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Chapter 1
INTRODUCTION

Chapter 1

INTRODUCTION

In view of the challenges governments are facing in the provisioning, financing and managing health care (Department of Economic Affairs, 2010), public–private partnerships (PPPs) in the health sector are both important and timely. Development of infrastructure and delivery of basic health services are important roles of any government; in some countries, these roles are even mandated by their Constitution. However, with the pressures of increasing population and urbanisation, and the ability of governments to adequately address these needs through traditional means has been severely constrained. This has led governments across the world to increasingly look to the private sector to supplement public investments and provide health services through PPPs. Engagement with the private sector, when appropriately structured and executed, can help address specific cost and investment challenges and increase efficiency through improved service provision and management at reduced costs. It can also enhance service quality through enhanced expertise, more rapid and substantial investments in infrastructure and latest medical technologies, which have the potential to attract and retain better-performing staff (Nikolic and Maikisch, 2006).

For the purpose of this research, a broad definition of PPP has been adopted, similar to that of the United Kingdom (UK) government where PPPs are defined as ‘Arrangements typified by joint working between the public and private sector’ (HM Treasury, 2008). According to the Government of India (GoI), PPPs can cover all types of collaboration across the interface between the public and private sectors to deliver policies, services and infrastructure.

A study by Perrot is of the view that with the increasing complexity of health systems, there was a realization that they could not function in isolation. The need to forge partnerships in a multi-sectoral environment became clear to the diverse stakeholders involved in health care (Perrot, 2006). The simplest way to do that was through interaction. This interaction took various forms and could be on different levels. This resulted in various types of contractual relations-some based on the nature of the

contract (public or private), others on the parties involved and yet others on the scope of the contract (Perrot, 2006).

Various studies/surveys have proposed conflicting views on the efficacy and cost-effectiveness of the PPP model in health care. Palmer reviewed theories and evidence relating to public-private contracts for the delivery of primary care services in low- and middle-income countries, and concluded that reform packages in these countries promote the use of contracts to make publicly funded services more accountable, transparent and efficient, despite the weak capacity of governments and markets to manage them (Palmer, 2000).

A questionnaire survey among public and private stakeholders in Malaysia, which aimed to capture the perceptions of the public and private sectors on the rationale for implementation of PPPs concluded that ‘to enhance private sector involvement in economic development was the only rationale rated (for PPP implementation) as most important by all respondents’ (Ismail and Haris, 2014). There is an increasing interest in the model of Australia, Spain and the UK, where a public authority contracts a private company to design, build and operate an entire hospital.

On the basis of round-table discussions held in Nigeria, Stallworthy et al. concluded that the private sector is a pragmatic necessity in a government-dominant system (Stallworthy et al., 2014). Van Den Heever agreed that private markets for health care are inevitable (Heever, 2012). Ejughemre sees the private sector as a key player in delivering health services through supplementing scarce resources of the public sector (Ejughemre, 2014). Shin recommends the right balance between private health insurance and a publicly funded system (Shin, 2012).

However, McKee et al. concluded that ‘a PPP further complicates the already difficult task of building and operating a hospital’ (McKee et al., 2006). In its analysis of 45 countries, the Independent Evaluation Group (IEG) of the World Bank concludes that ‘there was not much evidence whether private sector involvement was the best option’ (Romero, 2014). Oxfam estimated that PPP hospitals in Lesotho consumed more than half of the total government health budget and at least three times of what the old public hospital would have cost today (Chefa, 2014). The European Network on Debt and Development (Eurodad) surmised that ‘PPPs are by far the most expensive way to fund projects’ (Romero, 2014).

Sood and Higgins reviewed initiatives in payment reform in the public and private sectors, and concluded that the optimal role of the public sector in such reforms is debatable (Sood and Higgins, 2012). Mills believes that ‘the debate continues on the best mix of financing mechanisms outside the formal employment sector’ (Mills et al., 2012).

Amid all the conflicting evidence as detailed above, the GoI was of the view that there was significant untapped potential for the use of a PPP model in the health sector; and towards that end developed enabling tools and activities to encourage private sector investment (Government of India, 2011). The PPP India database indicates that 758 PPP projects costing INR 3833 billion (GBP 38.6 billion) are operational, under construction or in stages where implementation is imminent (Department of Economic Affairs, 2012). The Asian Development Bank (ADB) has been assisting the GoI through a memorandum of understanding (MoU) in mainstreaming PPPs in the health sector since 2007 in 15 states and six line ministries through creating ADB PPP cells with the objective of providing equity, quality and sustainability in health services (Barua, 2012).

India spends 3.7% of its gross domestic product (GDP) on health care. Over 60% of health expenditure is private, of which 61.7% is financed out of pocket, making this one of the highest out-of-pocket spending rates globally (World Health Organization, 2013). High out-of-pocket expenditure indicates a lack of consumption smoothing; a one-time high expenditure on health care can deplete resources dramatically to induce impoverishment (Gertler and Gruber, 2002). Cohen estimated that medical costs impoverished 24% of hospitalized Indians (Cohen, 2006).

To redress this situation, *inter alia*, the GoI adopted a health insurance programme called the Rashtriya Swasthya Bima Yojana (RSBY) in 2008. The RSBY is a national health insurance scheme under the Ministry of Labour and Employment for below poverty line (BPL) families in the unorganized sector, to provide protection from financial liabilities arising out of health problems that involve hospitalization. Every BPL family, which can include five persons - the head of the household, spouse and three dependent children or parents, holding a ration card, is eligible for this scheme. On paying INR 30 (£ 0.30) annually, the family gets a biometric-enabled smart card

containing their fingerprints and photographs. This makes them eligible as inpatients for more than 700 health-care packages specified under 15 categories.

RSBY is India's first social security scheme for BPL families. It involves a multitude of stakeholders from both the public and private sectors who are governed by contractual agreements. The insurer is contracted by the government and is paid a premium (by the Central Government and state governments) for each household enrolled under RSBY. A hospital (public or private) is contracted by the insurance company to provide inpatient services to the enrolled beneficiaries as and when required. For these services, the insurance company reimburses a fixed amount per service type to the hospitals. The scheme also has provision for contracting private partners, i.e. third party administrators (TPAs) to help in smart card implementation and other intermediaries, such as nongovernmental organizations (NGOs) that assist in enrolment and awareness generation. This is an unprecedented development in the Indian health-care financing market for providing financial protection to vulnerable groups.

Although RSBY was introduced in 2008, there is little independent evidence on whether the use of contracts and the PPP model has necessarily led to better service delivery for the poor. Criticisms of RSBY relate to inadequate and ineffective awareness campaigns, power inequity among stakeholders, weak governance structure and poor implementation of the scheme (Narayana, 2010, Das and Leino, 2011, Seshadri et al., 2011). The Centre for Policy Research and Reddy et al. (2011) have supplemented the issues of low enrolment, poor hospitalization, inadequate uptake of the scheme, empanelment and accessibility, as well as noting positive out-of-pocket expenditure incurred by the beneficiaries (Das, 2011, Reddy et al., 2011b).

Those in support of the scheme are of the view that RSBY has catered to the health needs of millions of BPL persons in the unorganized sector. The scheme has enabled households to choose between private and public health-care services for inpatient services of up to INR 30,000 (£ 302) per year, which has not varied since its inception in 2008. As the scheme is cashless, it has the potential of being relatively corruption free; and more importantly, the poor do not have to make payments upfront.

1.1 Aim

The research aims to study the provision, availability and use of health services under PPP contracts in the implementation of RSBY and the factors that can influence such health services, in order to inform policymakers on how to improve the scheme design for the BPL beneficiary.

1.2 Objectives

The objectives of this research were:

- 1) to analyse the external environment (regulatory, institutional, political, etc.) and the contract design of the RSBY scheme in order to understand strengths and weaknesses of the scheme design and the incentive structures created by the assigned roles, responsibilities and relationships within the contracts;
- 2) to evaluate the availability of services by mapping the health-care providers including the packages offered by the empanelled health-care providers, and analysing the utilization patterns;
- 3) to compare the provision of health care *across* both public and private providers for RSBY beneficiaries and *between* RSBY and non-RSBY beneficiaries for a specific type of provider;
- 4) to inform policy on the findings and make recommendations in order to address any problems in the scheme and help improve provision of health care to the target population.

1.3 Methodology

The study was conducted in the districts of Patiala and Yamunanagar in the states of Punjab and Haryana, respectively. The study population comprised both RSBY and non-RSBY beneficiaries (used as control group for RSBY beneficiaries). The study had both qualitative and quantitative components.

To study the first objective, 20 in-depth interviews of various key stakeholders of the RSBY scheme were conducted. These included policy-makers, state representatives, representatives from insurance companies, representatives from TPAs, and public and private providers.

For the second objective, mapping of empanelled and non-empanelled facilities within the districts was undertaken to assess the availability of services in each district. ArcGIS was used as the mapping software. Primary data were collected on availability of services from almost all empanelled facilities. Secondary data analysis was also conducted to address the second objective. Secondary data included the database containing the BPL census data of the population eligible for RSBY and the data on enrolment of households under RSBY sourced from the State Nodal Agency (SNA). Secondary data also included claims data, which contain information on claimants, diseases, transaction details and transaction amounts. This was sourced from the insurance companies via the SNAs.

For the third objective, a total of 12 facilities were selected, with three public and three private facilities in each of the two chosen districts, Patiala and Yamunanagar. An observational and health provider checklist (self-assessment) was prepared and piloted. This checklist was used to address the structural evaluation of provision of care in the 12 selected facilities. Another source of primary data was the exit interviews of RSBY and non-RSBY participants from selected empanelled hospitals. This group mostly comprised poor people, who visited the empanelled hospitals for their health needs. Consecutive interviews (consecutive sampling) were conducted in the selected empanelled hospitals till the desired sample size was achieved in each hospital. Standardization was not actively addressed at the time of planning the study. As the standard comparable group would have been BPL population not enrolled under the scheme, this would have required huge resources in terms of funds and time. However, it was assumed that recruiting participants (RSBY and non-RSBY) from the same facility and same time would yield recruitment of almost similar participants. Socio-economic status of RSBY and non-RSBY participant cannot be matched and this would certainly vary because the classification of RSBY and non-RSBY is based on SES only. A total of 751 exit interviews were conducted with 399 participants interviewed in Patiala district and 352 in Yamunanagar district. These comprised 387 RSBY beneficiaries and 364 non-RSBY beneficiaries. All statistical analyses were performed with STATA Version 9.0. Appropriate tests of significance (chi-square test, student *t*-test) and linear regression analysis were used at places where required.

1.4 Layout

Present thesis is divided into nine chapters. In this first chapter, an attempt has been made to sequentially set a background of PPPs in health care and in India, taking RSBY as a case study. The second chapter consists of a literature review where various articles have been reviewed in the context of New Public Management – historical perspective, PPPs, health insurance and various aspects of health insurance such as adverse selection, cream skimming, moral hazard, risk pooling, equity etc. The third chapter focuses on India and its background. It deals with the health status of India as well as health economics, health systems and the insurance sector in India. The chapter contains a comprehensive review of RSBY – its need, partnerships, regulatory framework, private partners, contracting and scheme design. The chapter ends with a section elaborating the need for research on PPPs using management or contracts for delivery of health services. The fourth chapter details the methodology of the present research. It specifically focuses on the conceptual framework of the study and individual methodology adopted for each objective. It also describes the amendments made in the study protocol during the process of data collection. The fifth chapter presents the results of the first objective of the study, which is to review the external environment looking at, *inter alia*, the regulatory, institutional and political aspects of the RSBY scheme. It also analyses the contract design and its implementation in order to understand the incentive structures created by roles, responsibilities and relationships within the contracts. The sixth chapter deals with the second objective of the study, which is to evaluate the availability of services by mapping the health-care providers, packages offered by the empanelled health-care providers and analyse the utilization patterns. Chapter seven details the third objective, which is to evaluate the delivery of services across both public and private empanelled facilities for RSBY and non-RSBY beneficiaries. This chapter primarily deals with evaluating the provision of care as adapted from the Donabedian Framework (Donabedian, 2005, Donabedian, 1988). Chapter 8 gives an objective wise overview of the findings. Next chapter, chapter 9, is on discussion of the findings of the present study with regard to their practical feasibility. This is followed by conclusions and policy recommendations derived from the findings of the present study.

Chapter 2
LITERATURE REVIEW

Chapter 2

LITERATURE REVIEW

The aim of the literature review is to understand the evolution, development and factors affecting PPPs, both in general and in the context of health insurance in India. The search engines used for the literature review were Google Scholar, PubMed and Embase. The keywords used for the review in this chapter are listed in Table 2.1. Articles were filtered based on their title and abstract. Various peer-reviewed articles, reviews, reports and letters were studied. Apart from using search engines, cross-references were also used to find relevant literature. Contact with experts, and snowballing technique was adopted to identify the grey literature.

Table 2.1: Keywords used for literature review

Sections	Keywords used
New Public Management – historical perspective	Public management, historical perspective, health, government
Public–private partnership	Public–private partnership, PPP, definition, models, contract, theories, advantages, disadvantages, India
Health insurance	Health insurance, revenue, risk pooling, purchase, PPP, public–private partnership

Note: Keywords were used in various combinations.

2.1 New Public Management – a historical perspective

2.1.1 Role of the State

The role of the State in the provision of public goods and services has long been a source of debate. The roots of this debate can be traced back to the need for improvement in ways in which governance is managed and services delivered, with an emphasis on efficiency, economy and effectiveness (Metcalf and Richards, 1987). In this section, evolution of new public management in some of the countries has been discussed.

United Kingdom

The period 1945–1980 is considered as the classical period of the welfare state in the UK (Osborne and McLaughlin, 2002) where the government was expected to meet all the needs of its citizens ‘from the cradle to the grave’ (Beveridge, 2000) by providing at least a minimum standard of living and service to all. The basic argument for government production of goods and services is that in certain circumstances, the market fails; and that planning, collective decision and public provision are more effective in carrying forward certain social purposes than processes of individual exchange (Walsh, 1995). However, dissatisfaction with the welfare model, especially with its inefficient and ineffective public officialdom, brought about a change in the UK from the late 1970s onwards (Osborne and McLaughlin, 2002).

People’s Republic of China

China’s health-care system has also witnessed several transitions since the early 1950s. From the 1940s to the 1980s, in a command economy, the Ministry of Health financed and managed Chinese health service facilities, which basically performed a social welfare function (Hu et al., 2013). In urban areas, health care was administered through two publicly financed schemes, the Labor Insurance System (LIS), which covered workers in state-run enterprises, and the Public Insurance System (PIS), which looked after employees in government, academic and political institutions. In rural areas, a three-tier health-care system operated under the Rural Cooperative Medical System (RCMS), which relied on contributions from the welfare funds of the brigade and the commune (Lennart et al., 1996). Over-utilization and abuse of free medical care was widespread (Guo, 2003). There was no control over costs, either on the supply side or on the demand side. As a result, health-care spending under LIS and PIS increased 28 times between 1978 and 1996, while the fiscal income of the government increased only 6.6 times (Wang, 1999). This disproportional increase in expenditure imposed considerable fiscal burden on government treasuries. Consequently, funding for hospitals from the government declined.

China launched its economic reforms (which included the health institution reforms) in 1978 through the introduction of market competition. The medical establishments were decentralized. The Ministry of Health (MoH) no longer ‘managed’ hospitals. Instead, it ‘supervised’ hospitals. The new health-care insurance system consolidated

PIS and LIS into one insurance programme where government, employer and employee share the cost of health care (Peng, 1996). In rural areas, under the new-style Cooperative Health Care System (CHCS), individuals, economic entities in villages as well as the Central Government contribute to the fund and the local treasury manages the trust fund (Wong et al., 2006). The reform shifted part of the health-care financing burden to individuals. The poor were hit the hardest. In this context, the World Bank commented that ‘Health is a sector that cannot simply be left to market forces’ (William et al., 1997). Government needs to intervene in health care to address the so called ‘market failure’ (Smith et al., 2005). However, there has been very substantial growth in the private medical sector in China.

Myanmar and Mongolia

In the past 20 years, due to the government’s failure in provision of health-care services, Myanmar and Mongolia have transitioned from the first category of centralism¹ to the third category.² Previously, their administrations were highly centralized, with no civil or private sector space for operations and limited engagement with the international community (Grundy et al., 2014).

Over time, health-care costs seem to have an unsustainably increasing trajectory, which can be attributed to growing technology, ageing and demographics, health status of the population, rising personal income, administrative costs, increasing health-care costs and medical malpractice and liability (Schieber et al., 2009). With such increasing health-care costs, it is unlikely that governments will be able to finance health care in totality on a long-term basis. Therefore, the trend now is towards more decentralized models of governance with multiple funding sources to include the civil and private sector, and a corresponding trend of moving away from monolithic and centralized models of administration (Grundy et al., 2014).

¹ This is at one end of the continuum of health system classification, where leadership, management, decision-making and financing are all restricted functions of central-level planners.

² In this category, reforms have moved beyond concept and policy commitment to nationwide scale-up and implementation, but with limited levels of middle-level decentralization and delegation, and limited development of private and civil society constituencies.

2.1.2 Theoretical perspective

From a theoretical perspective, two main theories that seek to explain government failure in providing services to its citizens are *public choice theory* and *property rights theory* (Bennett et al., 1997). Public choice theory rests on the belief that public sector bureaucrats have no incentive to promote technical efficiency (Bennett et al., 1997). They are self-seeking, motivated only by such factors as ‘salary, prerequisites of the office, public reputation, power, and patronage.’ (Niskanen, 1973). As a result, the public sector is wasteful. The property rights theory rests on the belief that the source of inefficiency in the public system is the weakening of property rights and the lack of any obvious threat to the employment of the staff, resulting in a lack of incentive for efficient performance.

In contrast, in the private sector, the basic motivation of the stakeholders is profit, resulting in a strong thrust on the efficient use of resources (Bennett et al., 1997).

2.1.3 New Public Management

Over the years, the organization of health systems has changed significantly. Most countries initiated reforms that resulted in major institutional changes, such as decentralization of health services, autonomy for public service providers, advancement of the profit and non-profit private sectors, separation of funding entities and service providers and expansion of health financing options. These institutional reshuffles led to multiplication and diversification of the actors involved and greater separation of service provision and administrative functions (Perrot, 2006). The vision of the *enabling state* emerged, where the state, at the central and local levels, planned and (at least partly) financed public services, but where provision was located within the ‘independent sector’ comprising both voluntary and community sectors and the for-profit sector (Rao, 1991). The state also retained the role to regulate, oversee quality and standards, and provide stewardship and oversight (Kula and Fryatt, 2014).

According to Osborne and Gaebler, the key to reinventing government is changing the incentives that drive public institutions, or changing the markets that operate within the public sector. They use the phrase *entrepreneurial government* to describe this concept (Osborne and Gaebler, 1992). This new approach adopted competition as central to the provision of public services (Walsh, 1995) and laid greater emphasis on standards and measures of performance (Osborne et al., 1995). Increasing pressure to

improve health services led to a trend towards contracting the private sector to provide traditionally government-run services. Such contracting is perceived as an opportunity to combine the advantages of contracting with the efficiency of the private sector (Heard et al., 2011).

This wave of reforms that has engulfed public sector management in certain parts of the world has conventionally been labelled as the New Public Management (NPM) or the new managerialism (Dunleavy and Hood, 1994, Ferlie, 1996, Hood, 1991, Pollitt, 1993). As Moore et al. point out, ‘The central feature of NPM is the attempt to introduce or simulate, within those sections of the public service that are not privatized, the performance incentives and the disciplines that exist in a market environment’ (Moore et al., 1995).

Critics argue that this approach is concerned more with economy and cost cutting than with effective service provision, and that it assumes the superiority of the private sector and private sector management techniques above those of the public sector and public administration (Metcalf, 1988). Supporters of the approach have claimed that the movement towards NPM ‘has been striking because of the number of nations that have taken up the reform agenda in such a short time and because of how similar their basic strategies have been’ (Kettl, 2000). Others suggest that there are dangers associated with ‘viewing NPM as a coherent and unified set of ideas and practices’ (Newman, 2001) when research on the implementation of NPM reforms illustrates diversity and a complex body of ideas and practices (Lowndes, 1997).

2.1.4 Key elements of New Public Management

New Public Management (NPM) is currently the most dominant paradigm in the discipline of public administration (Arora, 2003). It conjures up an image of a minimal government, debureaucratization, decentralization, market orientation of public service, contracting out, privatization, performance management, etc (Kalimullah et al., 2012). These features signify a marked contrast with the traditional model of administration, which embodies a dominant role of the government in the provision of services, hierarchical structure of organization, centralization and so forth (Kalimullah et al., 2012). The key elements of NPM have been detailed in Table 2.2.

Table 2.2: Key elements of NPM

Doctrine	Meaning	Justification
Hands-on professional management of public organization.	Visible managers at the top of the organization, free to manage by use of discretionary power.	Accountability requires clear assignment of responsibility, not diffusion of power.
Explicit standards and measures of performance.	Goals and targets defined and measurable as indicators of success.	Accountability means clearly stated aims; efficiency requires a 'hard look' at objectives.
Greater emphasis on output controls.	Resource allocation and rewards are linked to performance.	Need to stress results rather than procedures.
Shift to disaggregation of units in the public sector.	Disaggregate public sector into corporatized units of activity, organized by products, with devolved budgets. Units dealing at arm's length with each other.	Make units manageable; split provision and production, use contracts or franchises inside as well as outside the public sector.
Shift to greater competition in the public sector.	Move to term contracts and public tendering procedures; introduction of market disciplines in public sector.	Rivalry via competition as the key to lower costs and better standards.
Stress on private-sector styles of management practice.	Move away from traditional public service ethics to more flexible pay, hiring, rules, etc.	Need to apply 'proven' private sector management tools in the public sector.
Stress on greater discipline and economy in public sector resource use.	Cutting direct costs, raising labour discipline, limiting compliance costs to business.	Need to check resource demands of the public sector, and do more with less.

Source: (Hood, 1994)

2.2 Public–Private Partnerships

2.2.1 Definition

The principles of NPM encouraged the establishment of PPPs as a new tool. There has been much confusion around the use of the term PPP. Linder noted that there exists multiple grammars of PPPs, with governments avoiding the terms ‘privatization’ or ‘contracting out’ in favour of ‘partnerships’ (Linder, 1999). However, Mitchell-Weaver and Manning point out that ‘privatization is privatization and subsidies are subsidies; public private partnerships they are not’ (Mitchell-Weaver and Manning, 1991). They define PPP as ‘primarily a set of institutional relationships between the government and various actors in the private sector and civil society’. Dutch public-management scholars van Ham and Koppenjan define PPPs as ‘co-operation of some sort of durability between public and private actors in which they jointly develop products and services and share risks, costs and resources which are connected with these products’ (Van Ham and Koppenjan, 2001). The World Bank (Independent Evaluation Group - IEG) looks at PPPs as ‘long-term contracts between a private party and a government agency for providing a public asset or service in which the private parties bear significant risks and management responsibility’ (Stallworthy et al., 2014, Romero, 2014). For the Canadian Council for Public-Private Partnerships, PPPs are ‘a cooperative venture between the public and private sectors, built on the expertise of each partner that best meets clearly defined public needs through appropriate allocation of resources, risks and rewards’ (Canadian Council for Public-Private Partnerships, n.d., Ejughemre, 2014). The European Commission defines PPPs as ‘the provision, finance, long-term operation and maintenance of public infrastructure and/or provision of public services by the private sector. A PPP should have been initiated by the public sector, involve a clearly defined project with specification of outputs or outcomes, the sharing of risks with the private sector, be based on a contractual relationship which is limited in time, and have a clear separation between the public sector and the borrower’ (European Commission, 2013, Mitchell, 2000). The European Union (EU) is of the view that ‘PPP can provide effective ways to deliver infrastructure projects, to provide public services and to innovate more widely in the context of recovery efforts.’

There is thus no single definition of PPP. For the purpose of this research, a broad definition of PPP has been adopted, similar to that of the United Kingdom (UK)

government where PPPs are defined as ‘Arrangements typified by joint working between the public and private sector’ (HM Treasury, 2008). The Government of India (GoI) also defines PPPs as all types of collaboration between public and private sectors to deliver policies, services and infrastructure.

2.2.2 PPP models

A PPP arrangement consists of three main elements - the participating partners; the different roles these partners might play, depending on their different interests; and the different forms of partnership from among the spectrum of forms that the partnership may take, due to the differing roles each might want to play. The following roles are usually common (Jütting, 1999):

- a. *Provision and management:* Partners supply the desired service or facilitate management of activities, e.g. provision of health care, management of funds, facilities, etc.
- b. *Financing:* In the health sector, public financing means financing by the central or local government and state-owned enterprises. Private financing includes private out-of-pocket payments, private insurance premiums and services provided by the private corporate sector.
- c. *Regulation and monitoring:* The setting of standards regarding price, buildings and quality in the provision of services is a precondition for a functioning PPP.

Choosing among various roles that partners might play, the resulting PPP arrangement could depend on a number of factors, including (a) the degree of control desired by the government; (b) the government’s capacity to provide the desired services; (c) the capacity of private parties to provide the services; (d) the legal framework for monitoring and regulation; and (e) the availability of financial resources from public or private sources (Gentry and Fernandez, 1998). Ideally, a PPP model would constitute shared responsibility between the parties involved, along with an appropriate distribution of the assumed risk.

2.2.3 Contracting

In the health sector, PPPs can take a variety of forms, with varying levels of distribution of responsibilities and risks between the public and the private sector. However, they are characterized by the sharing of common objectives, as might be

defined in a contract or manifested through a different arrangement so as to effectively deliver a service or facility to the public (Nikolic and Maikisch, 2006). From an economic perspective, the replacement of direct, hierarchical management structures by contractual relationships between purchasers and providers is said to promote increased transparency of prices, volumes and quality in trading, as well as managerial decentralization, both of which should enhance efficiency (Mills and Broomberg, 1998). International development agencies have been advocating for an open competitive contracting of goods and services. With the increase in funding for the health sector for Millennium Development Goals (MDGs), contracting private purchasers and providers of health services could help provide an alternative option to channel funds when the government's absorptive capacity is weak and there is local resistance to changing resource allocation patterns (Mills and Palmer, 2006). It can also be argued that resources already exist within the private sector that can be rapidly mobilized through contracts.

Perrot believes that 'contracting is one of the tools increasingly being used to enhance the performance of health systems in both developed and developing countries' (Perrot, 2006). Experience from around the world shows a growing tendency in the public sector in both developed and developing countries to contract the non-state sector to improve access, efficiency and quality of health services. Mills and Palmer are of the view that this is more so in developing countries, where contracting may act less as an enabling agent to promote competition and more as a resource to fill in a functional gap, that in its absence could not have been filled by the public sector. Evidence indicates that the majority of care-seeking behaviour in developing countries such as India, Sri Lanka, Nepal and Bangladesh is within the private sector, therefore involving these existing resources through the use of contracts may help improve health outcomes (Mills and Palmer, 2006).

2.2.4 Contracting theories

Contracting is inherently an issue of changing organizational form; and much of neoclassical economics fails to comprehensively analyse the effects of contracting, given its standard assumptions of costless transactions, perfect foresight and complete information (Hart and Moore, 1990). This realization that neoclassical economics is insufficient to accommodate a number of important economic phenomena has resulted

in economists turning to other approaches to study contracts that might offer a better understanding of how economic institutions and incentives inherent in such structures can affect performance and efficiency. Other ‘conscious’ factors of institutional arrangement and organizational integration are important in bringing about coordination besides the price mechanism. The term *new institutional economics* affords recognition to factors such as uncertainty and bounded rationality, giving rise to a more useful analysis of markets, hierarchies and networks as alternative modes of economic organization.

MacNeil classified contracts as classical, neoclassical and relational contracts (MacNeil, 1974). Classical contracts are discrete transactions between strangers brought together by chance, who may never see each other again. Such an event could involve only a barter of goods. All that is of relevance to the transaction will be contained within the act of exchange, implying that discrete transactions can be planned with complete accuracy. Neoclassical contracts face some limitations in their planning for different contingencies (third party determination of performance and single party control of terms) and therefore utilize a range of techniques and processes within the contract to create flexibility over the long term. Relational contracts move beyond the bounds of both classical or neoclassical contracts and the primary need is of harmonizing conflict and preserving the relationship. The reference point ceases to be the contract itself and becomes the entire relationship as it has developed through time (MacNeil, 1974, MacNeil, 1978).

The principal–agent theory is a theory that helps shed light on contractual relationships. The argument for contracting to the private sector hinges on the issue of whether it is better to produce goods and services within the public sector organization or to purchase them in the market, which, in the industrial context would be seen as a ‘make or buy’ decision (Walsh, 1995). It involves a move from the hierarchical to a market based approach in the organization of public services, wherein the roles of the principal and agent are clearly separated and property rights are more explicit (Walsh, 1995).

The role of the public sector or the principal is to define what is needed and to monitor the implementation, whereas the role of the non-state agent is to deliver the goods and services. But a standard problem for principal agent theorists is how to

incentivize the agent (informed) to act in the best interests of the principal (uninformed) when the agent has an informational advantage over the principal and often has conflicting interests over the latter (Walsh, 1995, Mills and Broomberg, 1998). Solutions usually involve a self-enforcing mechanism which relies on observable actions by the economic agents and which can be verified by each actor or by a court of law. The conditions under which self-enforcing contracts are possible may not always hold, as relationships are usually complex and the focal point solution may require unrealistic assumptions about the economic agents (Hart and Moore, 1990). The problem of asymmetry of information lends itself to an emphasis on the degree of trust between the principal and the agent as a factor of how efficiently asymmetries of information are dealt with. The distribution of risk and responsibility between the principal and the agent, the role of incentives as a means of remuneration and the level of trust lead to variations in contractual design. According to Walsh, contracts can be grouped into two broad categories: outcome/performance based and methods based. Outcome based contracts lay more emphasis on specifying the final outcomes rather than the process adopted in achieving that output. In other cases, outcomes can be far less specific and more difficult to articulate. Therefore, in such scenarios the purchaser may choose to design a contract that lays more emphasis on the method to be adopted in delivering the service (Walsh, 1995).

The price of the contract can depend on various factors, including the kind of service to be contracted and uncertainty of the workload. Similarly, payment methods and incentives put in place for the agent can vary from solely salary (little incentive to apply effort), to fee-for-service, to capitation/block contracts. Block and capitation approaches have the advantage from the point of view of the purchaser of placing a cap on total contract cost, unlike cost per case or per unit of service which may represent an open-ended commitment and thus shift the financial risk to the contractor and lead to higher risk premiums (Mills, 1995). However, this is a double-edged sword, and by placing a cap on the total contract cost, the incentive is reduced and the quality of service or products could suffer (Walsh, 1995). The contract design will depend partly upon who can most effectively bear the risks that are involved, and also upon the relative power of the purchaser and provider in addition to the nature of the service being delivered (Walsh, 1995).

The work of Williamson (Williamson, 1985) went one step further in recognizing the costs of writing, monitoring and managing contracts and observing that transactions that are not costed, as often assumed in neoclassical theory, are a logical construction rather than something encountered in real life. Contracting out services will increase transaction costs, e.g. costs involved in negotiating and monitoring contracts and servicing of contractual commitments (Saltman and Otter, 1992, Robinson, 1990). Relational contracting is seen as a response to the increasing duration and complexity of contracts where the idea of a sharp firm-based hierarchy has become blurred and is being modified towards network relations, which are neither markets nor hierarchy, but rather hybrids.

2.2.5 The contracting milieu

The cooperation implied by increasingly complex and relational contracts relies upon the presence of a social, institutional and organizational framework within which to operate, and to some extent the nature of contracts will be determined by this framework. In the case of developing countries, where well-functioning judiciary systems are usually absent, some argue that NPM could lead to higher corruption rather than greater accountability, because the tendering for service delivery and separation of purchasers from providers may lead to increased rent-seeking behaviours (Batley, 1999).

MacNeil termed this as ‘socio-economic support’, or the ‘social matrix’, noting that it may be moral, legal, economic, social or otherwise. Norms and conventions embedded in the social, institutional and organizational arrangements of the contracting environment allow the generation of trust, enhance the operation of the system and may determine how widespread and successful the use of contracts is (Burchell and Wilkinson, 1997, Deakin and Wilkinson, 1995).

Sources of institutional norms include the legal system, mechanisms of economic management directly available to the state (taxation, public spending, industrial and macro-economic policy), other forms of regulation and non-state bodies of various kinds, including trade associations. Organizations, including firms, network relations and also markets themselves are less stable and operate within the general framework set by institutional norms, while themselves also operating as structures for the governance of exchange (Deakin and Wilkinson, 1995).

The classical theory of contract places legal enforcement at centre stage. However, both Williamson and MacNeil comment on the assumption in classical contracting theory that every contract is accompanied by effective laws which will be resorted to where necessary (Williamson, 1985, MacNeil, 1974). While some studies argue that the role of the legal system in underpinning relational contracting is arguably greater than has been previously allowed for (Arrighetti et al., 1996), many theoretical and empirical studies question any emphasis on the role of the law in underpinning contractual relations. This is both on account of the difficulty for the courts to be able to assess the values of parties' ex-ante contractual expectations and, more importantly, because taking recourse to court orders is very harmful to long-term relations (Deakin and Wilkinson, 1995, Arrighetti et al., 1996, Williamson, 1985).

There are also other institutional factors that influence the contracting environment. These include those related to labour legislation, norms of employment, income protection and the activities of trade associations and other professional bodies (Deakin and Wilkinson, 1995). The norms established by these means serve to minimize the risk to firms in trusting other firms and in entering into long-term asset-specific relationships. Efficiency and effectiveness of the regulatory environment is another key influence upon the contractual environment. Mackintosh (Mackintosh, 1997) highlights the desirability of a cooperative rather than controlling approach to regulation, as well as the importance of social and professional norms and reputation in influencing contractual behaviour.

It has been argued that the key role of external factors determining a contractual environment is the role which they play in fostering and maintaining trust between contracting parties (Burchell and Wilkinson, 1997). Trust plays an essential role in underpinning efficient contractual relationships, reducing the need for complex and expensive information and monitoring inherent in principal-agent relationships (Arrow, 1974, Deakin and Wilkinson, 1995). Therefore, the capacity of the contractual environment to engender trust is vital to the success of long-term cooperative relationships. Mackintosh emphasizes the learning process in the development of trust and the important link between the expectations of another's behaviour and the determination of one's own (Mackintosh, 1997).

2.2.6 Evidence on contractual relationships

Evidence on existing contractual relationships in health systems in developing countries and the advantages and disadvantages of the approach are still scarce. Some potential difficulties with contracting in the health sector in developing countries include concerns that: (i) contracts will not be feasible on a sufficiently large scale to make a difference at the country level; (ii) contracts will be more expensive than government provision of the same services, partly because of greater transaction costs; (iii) contracts might increase inequities in health service delivery; (iv) governments will have limited capacity to manage contracts effectively; and (v) even if successful, contracting will not be sustainable (Loevinsohn and Harding, 2005).

According to a recent report by the United Nations Development Programme (UNDP), the experience of governments and sub-national governments in developing countries that have contracted services demonstrates a widespread lack of capacity on the part of governments to handle relatively new and complex functions such as making contracts, regulating private providers and making relationships (Batley and Scott, 2010). In the case of contracting private health providers, a delicate combination of trust and the ability to monitor and control are also needed (Batley and Mcloughlin, 2010). Additionally, a strong legislative framework and guidelines and tools for managing partnerships are important (Kula and Fryatt, 2014). Moreover, without adequate capacities such as budgeting, raising and managing resources, basic administration, information gathering and analysis, together with a lack of transparent governance and a proper degree of oversight by other parts of government, local contracting can slip into cronyism (Batley and Scott, 2010). A study in South Africa by Palmer and Mills states that organizational and institutional capacity are likely to influence a contractual outcome (Palmer and Mills, 2005). Another consideration is that the notion of contracting being superimposed on an existing hierarchy of traditional relationships and interdependency can also influence outcomes (Palmer, 2000). A study in South Africa on scaling up of public–private relationships by Kula and Fryatt concludes that even though there is a long-standing relationship between the public and private sector, experience is still limited and poorly documented (Kula and Fryatt, 2014). Reform packages often promote the use of contracts despite the weak capacity of markets and governments to manage them (Palmer, 2000).

Sall et al., who contributed significantly to the development and implementation of national policies on contracting in their own countries, namely Chad, Madagascar and Senegal emphasized the need for regulation in contracting practices (Sall et al., 2006, Kadaï et al., 2006, Mills, 1998). The review of literature confirms the need for the state to have effective regulation in order to oversee quality and to provide oversight (Kula and Fryatt, 2014).

Lönnroth reviewed 15 initiatives of private providers engaged through contractual arrangements in tuberculosis control efforts and concluded that for-profit providers can be effectively involved in TB control through informal, but well defined drugs-for-performance contracts (Lönnroth et al., 2006). The drugs-for-performance contracts minimized the complexities of handling the legal and financial aspects of classical contracting. However, contractual relationships, their operation, and the nature of cooperative behaviour within them get influenced by the degree of market competition. It may lead to cooperation within contractual relationships due to lack of alternative providers, or a higher degree of competition may encourage purchasers to move away from relational contracting to a more transactional approach.

The World Health Organization (WHO) conducted a multi-country study in countries of the Eastern Mediterranean Region to assess the range of health services contracted out, the process of contracting with the private sector and its influencing factors (Siddiqi et al., 2006). While Jordan, Lebanon and Tunisia outsourced hospital and ambulatory care services, Afghanistan, Egypt, Iran and Pakistan outsourced primary care services and Bahrain, Morocco and Syria outsourced non-clinical services. The findings reveal that most countries promoted contracting with the private sector, with governments looking at it as an opportunity to have greater control over the private sector and the private sector being content with the regular source of revenue and enhanced credibility (Siddiqi et al., 2006). It also identified three main risks in contracting: the limited number of providers in rural areas, parties with vested interests gaining control over the contracting process and poor monitoring and evaluation mechanisms (Siddiqi et al., 2006).

Although the channels through which contracting out increases service delivery are unclear, it seems to be an effective option in settings where the government is unable to reach populations adequately (Ekman et al., 2008, Lagarde and Palmer, 2009). A

number of other experiences, including some reviewed here, underline the usefulness of contracting out to private providers where the public sector is absent or too weak. This is the case for under-served areas or post-conflict settings (Marek et al., 1999). In such settings, it might be quicker to re-deploy public funds to private providers than to build up a public health system (Ekman et al., 2008, Lagarde and Palmer, 2009).

There is limited understanding of the preconditions for the successful use of contracting and the resources needed for their appropriate use and sustainability. A study of large-scale contracting of NGOs in Pakistan (Zaidi et al., 2012) concluded that the origin and implementation of contracting was an inherently political process affected by the wider policy context. This necessarily needed to match the capacity of the partner, which was an important determinant in contract implementation. Another study in India provides valuable information on large-scale contracting which can guide policy of other governments choosing to contract for such services (*see* following chapter). A careful approach is needed in contracting of NGOs (Tuan et al., 2005, Zaidi et al., 2012), taking into account acceptance of contracting NGOs, local NGO capacities and potential distancing of NGOs from their traditional attributes under contracts (Zaidi et al., 2012).

2.2.7 Challenges in partnerships

While the health system as a whole has common objectives of equity, efficiency, quality and accessibility, public and private providers interpret the contents of these objectives differently (Wagstaff, 2010, Raman and Björkman, 2008). The intention of the government is usually to provide health-care services to all, but this cannot be done by the government alone. Moreover, the private sector can be present in the form of non-qualified rural practitioners, not-for-profit private organizations, e.g. NGOs and for-profit private organizations.

Bennett et al. and Rosenthal reported problems associated with delivering of public health services by private for-profit organizations. Some of the issues they identified were unethical means to maximize profit, less concern about public health goals, lack of interest in sharing clinical information, creating 'brain drain' among public sector health staff and lack of regulatory control over their practices (Bennett et al., 1994, Rosenthal, 2000). However, Bloom et al. suggested that the private sector is neither so easy to characterize nor easy to neglect (Bloom et al., 2000). The strength of the

private sector lies in its innovativeness, efficiency and learning from competition. Management standards are generally higher in the private sector. The private sector can play an important role in transferring management skills and best practices to the public sector.

2.3 Health insurance

Financial constraint is one of the major barriers of access to health care for marginalized sections of the society in many countries (Peters et al., 2002, Ranson and John, 2002, Wagstaff and van Doorslaer, 2003, Garg and Karan, 2009, Pradhan and Prescott, 2002, Xu et al., 2003). It has been estimated that a high proportion of the world's 1.3 billion poor have no access to health services simply because they cannot afford to pay for the needed health services (Dror and Preker, 2002). Many of those who do use services and pay for them suffer financial hardship, or even impoverishment (WHO, 2010). Over the past decades, many low- and middle-income countries (LMICs) have found it increasingly difficult to sustain sufficient financing for health care, particularly for the poor. As a result, international policy-makers and other stakeholders have been recommending a range of measures, including conditional cash transfers, cost-sharing arrangements and a variety of health insurance schemes, including social health insurance (SHI) (Ekman et al., 2008, Lagarde and Palmer, 2009).

Moving away from out-of-pocket payments for health care at the time of use to prepayment (health insurance) is an important step towards averting the financial hardship associated with paying for health services. Financing a basic package of health services is accomplished through revenue collection, pooling of revenue and risk and purchasing services; while the role of policy-makers is to ensure that these financing mechanisms are efficient, equitable and sustainable (Gottret et al., 2008).

Health insurance can be defined as a way to distribute the financial risk associated with the variation of individuals' health-care expenditures by pooling costs over time through prepayment, and over people by risk pooling (Organisation for Economic Cooperation and Development, 2004). For classifying health insurance models, the Organisation for Economic Cooperation and Development (OECD) taxonomy (Organisation for Economic Cooperation and Development, 2004) uses four broad

criteria: i) sources of financing; ii) level of compulsion of the scheme; iii) group or individual scheme; and iv) method of premium calculation in health insurance, i.e. the extent to which premiums may vary according to health risk, health status or health proxies, such as age. Based on the criteria of ‘main source of financing’, there are principally two types of health insurance - private and public. Both have further sub-classifications. According to this criterion, public schemes are those mainly financed through the tax system, including general taxation and mandatory payroll levies, and through income-related contributions to social security schemes. All other insurance schemes that are predominantly financed through private premiums can be defined as private.

2.3.1 Revenue generation, risk pooling and purchasing

To expand coverage to promote health outcomes and to ensure financial protection, countries need to raise sufficient and sustainable revenues efficiently and equitably and manage these revenues to pool health risks (Gottret et al., 2008). They also need to ensure the purchase of health services in an allocative and technically efficient manner (Gottret et al., 2008, World Health Organization, 2000).

In many countries, revenue collection is often challenging because of their large rural and informal sector population which limits the taxation capacity of their governments (Preker and Carrin, 2004). For the health system as a whole, out-of-pocket payment as a percentage of total health spending offers a rough estimate of financial protection (Gottret et al., 2008). However, the extent of out-of-pocket financing alone does not give a complete picture because the distribution of out-of-pocket payments among population income groups, the severity of catastrophic spending and the impoverishing effect of out-of-pocket payments on households are all also important to assess (Gottret et al., 2008). According to the International Labour Organization (ILO), ensuring financial protection means that no household should spend so much on health that it falls into a level of poverty that it cannot overcome (Baeza et al., 2002).

Purchasing is a process by which pooled funds are paid to providers in return for delivering services. This can be performed passively or strategically. Passive purchasing implies following a predetermined budget or simply paying bills when presented, whereas strategic purchasing involves a continuous search for the best

ways to maximize health system performance by deciding which interventions should be purchased, how, and from whom (World Health Organization, 2000).

The different types of health insurance schemes include voluntary health insurance or private health insurance (PHI), social health insurance (SHI) and community-based health insurance (CBHI) or insurance offered by NGOs. In PHI, buyers are willing to pay a premium to an insurance company that pools risk and insures them for health expenses. The key distinction is that the premiums are set at a level based on an assessment of the risk status of the consumer and the level of benefits provided, rather than as a proportion of the consumer's income (Sein et al., 2004). SHI, which is often government run, could include an earmarked fund set up by the government with explicit benefits in return for payment of premium. It is usually compulsory for certain groups in the population with premiums determined by income (and hence ability to pay) rather than related to health risk (Sein et al., 2004). The benefit packages are standardized and contributions are earmarked for spending on health services. In CBHI schemes, members usually prepay a set amount each year for specified services and the premium is usually a flat rate (not income-related) (Sein et al., 2004).

2.3.2 Aspects of Voluntary Health Insurance

Health Insurance can thus be of varying types depending on risk sharing, financing, benefits, premium and nature (voluntary or mandatory). Details of different types of health insurance (Social, Voluntary, Employer-based, Community-based, and State-subsidized Health Insurance) are given in the next chapter. This section provides a review of the various aspects of voluntary health insurance such as adverse selection, cream skinning, moral hazard, risk pooling, etc. followed by aspects of social health insurance.

Adverse selection

Adverse selection can be defined as strategic behavior by the more informed partner in a contract against the interest of the less informed partner(s) (Belli, 2001). In the health insurance field, this manifests itself through healthy people choosing managed care with lower premia and less healthy people choosing more generous plans (Belli,

2001). Adverse selection is a situation where an individual's demand for insurance is positively correlated to the risk of loss associated with it.

In health insurance markets, with regard to adverse selection, asymmetry of information lies between the consumer (patient) and the seller, where the consumer, rather than the seller, has an advantage of having more information pertaining to the quality of their own health. If the clients hide their poor health status from the insurer, the actual number of claims and payouts will be higher than presumed by the insurer, thus leading to a loss to the insurer. In order to ensure profit, the insurer increases the premium. Further, an increased premium would inhibit a healthy population from getting insured, thus increasing the average risk of those remaining in the insured pool. This would further force the insurer to increase the premium and thereafter a vicious circle of increasing average risk and increasing premia ensues (Belli, 2001).

To summarize, adverse selection is likely to be a problem in all health insurance schemes based on voluntary membership, whether motivated by profit or social concerns. In a private market, the insurer may eventually go out of business if adverse selection is not dealt with and, typically, will further price discriminate in response. In non-profit schemes, such discrimination is rarely used as a policy tool, often creating pressures for greater public subsidy (Belli, 2001).

Adverse selection is perceived to be a major source of market failure in insurance markets. Adverse selection may also lead to three classes of inefficiencies, i.e. on a benefit-cost basis individuals select the wrong health plans; desirable risk spreading is lost; and health plans manipulate their offerings to deter the sick and attract the healthy (Cutler and Zeckhauser, 1998).

Dynamic Adverse selection

Dynamic models of adverse selection differ in a way that the passing time is introduced in the model and its effect is also modelled (Zryumov, 2014). In health insurance, dynamic adverse selection can be stated as - over the time, the low risk individuals opt out (lapse) from the health insurance (as they perceive premium to be high for them) and high risk individuals are more inclined towards health insurance, which increases adverse selection over time. Dynamic adverse selection primarily

occurs in social health insurances where the premium is not dependent on the risk and in long term care insurance (Konetzka, 2014).

Cream Skimming

The provision of health care services is characterized by uncertainty and asymmetry of information with regard to cost of treatment. Asymmetry of information exists where the purchaser and the provider share the same information set, but the purchaser can find some relevant information (free or at a cost) before taking a decision. On the other hand, the ability to observe patients' severity can be used for an advantage by the hospital (principal-agent) through two alternative behaviours:

- They can choose to treat only patients with specific diseases ('horizontal' cream skimming)
- They can affect the state-of-the-world probability distribution opting for specific 'patient type' within the same ailment group ('vertical' cream skimming)

These behaviours, defined as 'market cream skimming', alter the competition among hospitals causing relevant effects in the whole market system (Ellis, 1997, Lewis and Sappington, 1999). Horizontal cream skimming arises because of poor regulations, i.e. the regulator or policy makers have not capped the prices of services correctly and the hospital finds it convenient to specialize in some specific outputs (which may produce profit). Vertical cream skimming, on the other hand, offers health care only to the patients that have low cost. It is an illegal behavior which might be solved through control and sanctions rather than incentives.

In health systems where private hospitals coexist with tax-funded public hospitals, cream skimming arises not just because of their different roles but also of differences in how work in the public and private sectors is remunerated (González, 2005). Consequently, a high risk patient will be rejected by the private hospitals and will have to be treated by the public hospitals. Consequences of vertical cream skimming:

- Public hospitals will usually have a deficit since they will treat a higher proportion of patients with higher cost;
- Welfare is reduced;

- Private hospitals make a surplus that is not related to a higher degree of efficiency;
- The cost to provide health care is higher than in first-best.

The empirical evidence of cream skimming is relatively thin. Duggan (2000), for example, exploits a policy change in Californian hospitals where the reimbursement of poor patients became more generous, and finds evidence that private non-profit and for-profit hospitals cream skim profitable patients, leaving unprofitable patients to public hospitals. In a UK study, Street et al. (2010) investigate whether patients treated in English public hospitals differ in complexity compared to those in (private) treatment centres and find that patients in the former setting are more likely to be from deprived areas, have more diagnoses, and received significantly more medical procedures (Street et al., 2010). Using Italian hospital data, Berta et al. (2010) quantify the extent of treatment selection by developing a cream skim index, and find that private hospitals cream skim at a much higher intensity than public or non-profit hospitals (Levaggi and Montefiori, 2003, Berta et al., 2010).

Moral Hazard

Moral hazard is the tendency of an individual to behave differently with regard to a particular event depending on the presence of insurance (Arrow, 1974). In the context of health insurance, moral hazard is manifested in the tendency of individuals to increase utilization of medical services paid for by insurance compared to those services not covered. As insurance coverage increases, demand for services covered by such insurance likewise increases. Specifically, moral hazard has been shown to vary with copayment, or portion of the medical bill paid by the insured-patient.

There are several economic principle theories for moral hazard. First, economic theory is based primarily on the assumption that individuals act in their own best economic interest. It is, therefore, completely rational that for insured services, as the marginal cost of medical services is reduced the patient will tend to consume more. In fact, studies have consistently shown that those who have health insurance consume more medical services than those without insurance. A second cause of moral hazard in health insurance is the inequity of information between patients and providers. By the nature of their specialized training and experience, physicians have an enormous amount of information regarding treatment options, risks, and prognoses, none of

which is completely shared with patients. Patients may not possess sufficient information to even determine whether an episode of care is appropriate or whether self-care will be adequate. This contributes to moral hazard in that patients who are understandably ignorant regarding their options must put substantial trust in the physician (**Glied, 1992**). The third related cause of moral hazard in health insurance is the inequity of information between the insurer and individual insured. The insurer cannot know going in, the risks involved with insuring a given individual (Vera-Hernandez, 2003). The insurer may, and generally does, have greater information relating to which providers have better medical outcomes for specific diagnoses and treatments, as well as which treatment options have proven most successful (French and Kamboj, 2002). A fourth cause of moral hazard is the fact that insured patient is insulated from the costs involved with treatment decisions. Even if there was perfect information sharing regarding the treatment options and their efficacy, the insured patient is not price-sensitive to these options (Cheah and Doessel, 1985).

Risk Pooling

The extent to which health risks are pooled varies, based on the type of health insurance purchased. The first distinction is between (1) large group coverage and (2) individual and small group coverage (Monahan, 2008). Large group coverage, offered by an employer, provides a high level of risk sharing (Abraham, 1986). In such plans, all eligible employees typically pay identical premiums, regardless of age or health status (HIPAA, 1996). With respect to covered benefits, risks are both pooled and cross-subsidized (Abraham, 1986). The extent of the risk pooling and cross-subsidization varies based on the size of the group. The larger the group, the more heterogeneous it is likely to be in terms of risk, providing a greater amount of risk pooling and cross-subsidization (Hyman and Hall, 2001). Individuals and small groups are susceptible to two related risk-pooling problems. The individual market is particularly susceptible to adverse selection. Small groups are at a disadvantage in risk-pooling because they lack a diversified pool of purchasers (Brennan, 1993). Small groups, while endogenous, do not have size sufficient to reflect community-wide risk levels and therefore are susceptible to poor experience rating and resulting high premiums (Enthoven and Singer, 1995).

Health insurance protects against two primary types of risks: macro level risk and micro-level risk. Macro-level risk is the risk associated with medical expenses generally (Aaron et al., 2005), while micro-level risk is the risk associated with incurring losses associated with particular medical treatments or services (Monahan, 2008). While individuals with health insurance pool their macro-level risks, the particular scope of their insurance contracts determines which micro level risks are pooled. For example, if an individual's health insurance policy does not cover cancer treatments, risk of loss associated with cancer treatments is retained at the individual level and not pooled.

At the macro-level, the goal is easy. As the coverage increases, the risk-sharing and therefore social solidarity increases. But with increase to macro-level risk sharing, it is important to guard against stripping away the micro-level coverage provisions (Monahan, 2008). To decrease the cost of coverage, there may be a temptation to exclude more and more services from health insurance contracts. Even if such efforts do increase health insurance coverage, they will reduce social solidarity by eliminating the sharing of risk associated with the treatments at issue. We therefore cannot have effective macro-level risk pooling without effective micro-level risk pooling (Monahan, 2008).

Enrolment

Adequate enrolment is a major concern in social health insurance schemes. For voluntary social health insurance schemes, even an enrolment rate of two-thirds is considered to be a fair enrolment (Acharya, 2012). In most of the voluntary social health insurance schemes in the LMICs, low enrolment rate is noticeable.

The Vietnamese insurance offered before 2002 with co-payment of 20 percent had a very low uptake of about 20% (Jowett et al., 2004). However, the insurance offered after 2002, the Vietnam Health Care Fund for the Poor (VHCFP), had no co-payment, and was seen to have varied rates of enrolment, varying from 20-60% across areas (Axelson et al. 2009; Wagstaff 2007). In Mexico (King et al., 2009) and Nicaragua (Thornton and Field, 2010), the enrolment was again poor, and even educating the public did not result in better enrolment.

The factors that play a role in enrolment are the degree of risk aversion, education, wealth and trust. Families headed by the more educated head of households are the ones that are more likely to participate in insurance schemes (Chankova et al., 2008, Xavier et al., 2008). Also, families with higher per capita expenditure (richer families) are more likely to get enrolled in insurance schemes (Acharya et al., 2012). Acharya et al. (2012) reported that the families residing in villages at a distance from health facilities are not likely to get enrolled, nor are individuals from hard to reach areas.

Scheme Utilization

Social Health Insurance does not necessarily mean higher scheme utilization (Acharya et al., 2012). Evidence from social health insurance schemes of Mexico (King et al. 2009) and Georgia (Bauhoff et al., 2011) do not show higher scheme utilization when compared to non-insured. A study by King et al. (2009) on a large sample in Mexico found no difference in utilisation between those insured under Seguro Popular (SP) and uninsured for a period of 10 months after the insurance was rolled out through a campaign. Bauhoff et al. (2011) report no effect on utilisation from the Georgian insurance for the poor.

However, there are several evidences of increased health care utilization by the insured in Egypt, Ghana, Vietnam and other LMICs. Egyptian insurance for children yielded higher usage of medical care for the insured among the lower income groups (Yip and Berman, 2001). Similarly in the Ghanaian SHI, Mensah et al. (2010) find higher utilization for the insured. For the earlier Vietnamese insurance, pre-2002, with co-payment as a feature of the insurance, Jowett et al. (2004) report that insurance yields higher usage of inpatient services; this value is lower for the wealthier insured. Overall, the result for SHI scheme utilization is mixed among various countries.

Out-of-pocket expenditure

It is not always the case that insurance is able to reduce OOP expenditure for the insured (Acharya et al., 2012). The results are highly mixed for social health insurance schemes from LMICs. Significantly, two large studies, one from China and other from Mexico, show a decline in OOP expenditure (refs) Yip and Berman (2001) from Egypt report higher utilization rates across income class and savings in OOP expenditure was reported for only the middle classes. In Vietnam, Axelson et al.

(2009) and Wagstaff (2010) show lower OOP expenditure for the insured. It is difficult to conclude that SHIs have helped uniformly in reducing OOP expenditure, neither has it always engendered higher utilization. Acharya et al. (2012) reported that both OOP expenditure and healthcare utilization could be higher for the insured. They further stated that increase in utilization may not be an indicator for better health (Acharya et al., 2012).

Equity

Guaranteeing equity for the poor is a major challenge for health care systems in developed countries. Overall, equity is an ethical issue related to judgments about health care accessibility. At the same time, an economic concept of horizontal equity deals with “an equal treatment for equal need” (Wagstaff et al., 1991, Culyer and Wagstaff, 1993) and “means that persons in equal need of medical care should receive the same treatment, irrespective of whether they happen to be poor or rich” (Wagstaff et al., 1991b). In practical terms, there is a general agreement about striving for “minimal variation of [health care] use with income” (Newhouse et al., 1981) and ensuring equity for the poor (Cutler, 2002). According to theoretical predictions, a well-designed social health insurance system may provide an equitable redistribution of medical care between the rich and the poor (Zweifel and Breyer, 2006).

Equity has different dimensions, such as equity in access, financing, and health outcomes. A report published by DFID in 2004 reports that equity can be effectively addressed with three strategies (1) establishing contractual arrangements that specifically encourage providers to serve the poor and underserved; (2) contracting with private providers in areas that are predominantly poor (geographic targeting); and (3) contracting out services that are of most benefit to the poor and underserved (England, 2004). Many countries consider health insurance to be a useful component of social protection policies designed to achieve UHC. However, there is need for caution against taking a too narrow focus on health insurance as the sole means for reducing financial risk, and as the lynchpin for achieving UHC. Ridde and Haddad (2009) note that protection against household impoverishment, catalyzing more equitable distribution of social welfare benefits across society, and complementary effects to education and other welfare measures from health maintenance are all equally valuable outcomes.

Liu et al. (2004) assessed 18 different contractual arrangements of government with the private sector to deliver primary health services in LMICs and amongst them only three had the clear objective of improving the poor's access to basic health care (Liu et al., 2004). All these three projects showed significant improvement in access by the targeted poor, indicating improvement in equity in access. In Georgia, the case study indicates that it is feasible to set up a contract for specified services and to target the poor with a larger subsidy than for the non-poor.

Liu et al. (2004) have concluded that contracting out has the potential to improve equity in both access to care and financing if the poor and the services that mostly benefit the poor are well targeted in the contracting-out initiative.

Some findings also suggest that policies intended to promote equity can lead to a reduction in quality of services and that adverse selection (of higher risk participants) is often a feature due to the voluntary nature of CBHI (Carrin et al., 2005).

Quality of care

Perceptions of quality have been increasingly accepted as valid and important measures of health care quality (Blendon et al., 2007, Cleary and Edgman-Levitan, 1997). Furthermore, perceptions of quality have been associated with health outcomes (Cleary and Edgman-Levitan, 1997, Cleary, 1999). Perception of quality of care depends on various aspects. Presumably, consumers are more likely to perceive a lower quality of care if they experience inadequate care due to their inability to cover medical care costs, or if they have other pressing financial obligations that must be set aside to cover these costs (Schoen et al., 2008).

A considerable body of health policy research has documented differences in hospital characteristics as contributing factors to differences in the quality of care (Parson, 2013). An article by Gaskin et al., (2009) examines the extent to which a patient's type—or lack—of insurance may play a role (Gaskin et al., 2009). Authors had compared hospital quality for patients according to their insurance status using pooled 2006-08 State Inpatient Database records from the Agency for Healthcare Research and Quality (AHRQ). They concluded that within-hospital differences in quality exist across payer types. In particular, patients with Medicare appear to receive notably worse care than patients with private insurance on the majority of Inpatient Quality

Indicators. Mortality rates are also influenced by the characteristics of both hospitals and patients, which suggests that specific policy interventions should vary by Inpatient Quality Indicator, type of hospital, and type of payer (Parson, 2013).

Another study from Latin America examines the effects of insurance on perceptions of quality of care received using a national Latino population sample. The results conclusively demonstrated the consistent effects of health insurance for improving perceived quality of care in Latino patients (Perez et al., 2009). However, Devadasan et al. (2011) from India showed that user satisfaction was almost similar between the insured and uninsured group. The main reason for satisfaction was the outcome of the treatment. Patients who were cured or healed had a higher probability of being satisfied (Devadasan et al., 2011).

Conclusively, it can be said that perception of quality of care is multi factorial and examples from across the world show that insurance status may or may not affect user satisfaction.

Capacity Challenges

SHI schemes should provide assurance of promised health insurance benefits to the insured. In order to achieve this, healthcare facilities should not only be part of the health insurance benefit package but these should be created by the authorities where these do not exist. This is possible only with the availability of adequate human resources, healthcare services infrastructure, and the other essential basic elements of provision of health services. These are vital to the success of an SHI scheme. In their absence, government can lose trust of the people which can result in reluctance to pay health insurance contributions (Carrin, 2002). Also, there may be a situation where services are existent in principle but providers do not comply with the new SHI scheme (Carrin, 2002). The chief reason for such a situation may be the uncertainty of the providers about the impact of health insurance on their income. This lack of collaboration was initially observed in Vietnam, where a few doctors refused to provide health services to beneficiaries (Axelson et al., 2009; Wagstaff, 2010). It was mainly because the doctors were hoping to continue to receive under-the-table payments keeping in mind the meagre level of their official salaries. On the contrary, the beneficiaries thought that after making their contributions, there was no need to

give such payments to doctors. When doctors observed this behavior, some of them did not want to treat the insured patients (Axelson et al., 2009).

Governments may neither have the required level of managerial or administrative capacity to design a suitable health insurance scheme nor thereafter implement the same (Ron and Adlung, 2001). Moreover, the chances of success to manage health insurance schemes are greater with better knowledge of the fundamental principles of health insurance. This enables the government to explain these principles to the people (Carrin, 2002). The scheme should explain well that those healthy now may not get immediate or regular benefit from the scheme now but they may need these facilities later when they suffer from any serious illnesses or accident. At times it is difficult for the governments to introduce compulsory membership for all population in one go and it is easier to start insuring the salaried working class in public and private sectors (Carrin, 2002). Normally, health insurance contributions are levied on wages. Information on wages should in principle facilitate the collection of these contributions. However, there always remains the risk of low compliance with agreed contribution rules and other arrangements, certainly at the start of a health insurance scheme (Carrin, 2002). This is why monitoring by the scheme itself of members' wages and contributions is indispensable. In one province in Vietnam, a chapter of a bank stated that all employees, from the senior manager to the janitor, had the same nationally defined minimum wage (Axelson et al., 2009). Obviously this led to a serious underestimation of the contributions that were due. One explanation for this behaviour is that the required solidarity and the level of health insurance contributions exceeded what the population would accept, which made both employers and employees misrepresent reality. Still, enrolment of the population in the agricultural and informal sectors is likely to be even more difficult. Income for this population fluctuates and spontaneous willingness to declare true income and pay regular contributions is low (Axelson et al., 2009). Often, then, health insurance remains voluntary for this group. This means that in order to secure or increase enrolment, extra marketing efforts are needed (Carrin, 2002).

2.3.3 The role of PPPs in health insurance

The partnership between for-profit bodies and the government has been widely discussed (Mitchell, 2000, Bennett, 1991). PPPs have been used in health insurance for a variety of roles ranging from service provision to financing and management.

The role of a majority of PPPs in developing countries is service provision. We take a look at PPP arrangements within health insurance schemes, or those that have a component for the benefit of low-income individuals

Country experiences

Vietnam introduced a Health Care Fund for the Poor (and other underprivileged groups) at the taxpayers' expense in 2003. The poor were fully subsidized and made no copayment (Dao, 2012). In 2005, Vietnam reformed its health insurance programme to improve private sector participation to achieve universal coverage by 2020 (Dao, 2012). Initially, health care under the HCFP scheme could be obtained at public facilities including public hospitals and commune health centres, but following a 2005 government directive, the social health insurance agency contracted private providers giving HCFP beneficiaries access to private providers (Wagstaff, 2007). HCFP increased both outpatient and inpatient utilization and substantially increased inpatient care. It has also succeeded in reducing out-of-pocket health spending among the insured group (Wagstaff, 2010). In 2009, Vietnam passed the Health Insurance Law (HIL) which created a national SHI program thus making a policy choice to finance health care primarily through SHI (Rousseau, 2014). It was an important law because it integrated the existing health insurance program with the program for the poor, thus bringing together all groups in one program. In June 2014, Vietnam made participation compulsory by categorizing membership of health insurance into 5 groups based on contribution responsibility (Rousseau, 2014). The revenues of HI funds come from employee, employers, social health insurance fund, and state budget. The government is responsible for fully subsidizing the health insurance premium for children under six, the elderly, and the poor, and for partially subsidizing premiums for the near-poor (70% of the premium) and students.(Rousseau, 2014). Health care providers include public and non-public providers. All public providers had been automatically approved to participate in social health insurance prior to November 2011, while private providers needed certification and permission (Rousseau, 2014).

In Philippines, National Health Insurance Programme (NHIP) and PhilHealth as the corporation that managed the Social Health Insurance programme was established in 1995. Its charter was to provide all citizens of the Philippines with the mechanism to gain financial access to health services. The government would spend for public

health and the essential health package; the other remaining services would be financed privately or by social insurance (Republic of the Philippines, 1995). Since government resources were limited, diversity and competition in provision of health services and insurance was encouraged through social or private insurance for clinical services outside of the essential package. A distinction was made between *public health services* and *personal health services* with the government being responsible for providing public health services for all groups such as women, children and indigenous people, while PhilHealth focused on the provision of personal health services. Within PhilHealth, eligibility was limited to households whose members have a per capita income of US\$ 250 per annum or lower. In the absence of an accredited public health service provider, indigent families could avail services at private sector facilities (Tobe et al., 2013). In June 2013, the president of the Philippines signed a law (Republic Act 10606) that mandated PhilHealth enrollment for all Filipinos, including workers in the informal sector (Chiu, 2013). This is considered a move from social health insurance towards universal healthcare coverage (Viswanathan and Avanceña, 2015).

After the 1993 health sector reform, Colombian citizens are entitled to health care access via mandatory health insurance through a benefits plan. (Vargas-Zea et al., 2012). In Colombia, the role of the private sector is more expansive. It includes management as well as service provision for the subsidized health insurance scheme for the poor, referred to as the ‘subsidized regime’. The identification of beneficiaries is through a six-level scaled system called Sistema de Selección de Beneficiarios (SISBEN), and households classified at the first or second level (considered poor) are eligible to receive total subsidies to health insurance paid by local governments (Vecino-Ortiz, 2008). Local governments contract not-for-profit insurance companies (Vecino-Ortiz, 2008). Insurers can avail medical services from both public and private providers based on their ability to offer the government-defined health package at the lowest costs. There are also supplementary (voluntary) health insurance schemes known as prepaid medicine, all of which offer additional coverage to the basic benefits plan. These plans are completely funded from private spending (Vargas-Zea et al., 2012).

In South Africa, the private sector doctors are efficiently and effectively used to treat public sector patients to target key populations, address specific health concerns, serve as a stop-gap measure to meet urgent health needs or maintain treatment outcomes over time (Igumbor et al., 2014). Van den Heever studied South Africa's private health systems to ascertain the role of health insurance in deepening health coverage through mobilizing revenue from wage earners (Heever, 2012). He was of the view that measures to enhance risk pooling expands coverage and becomes increasingly fair and sustainable. Without such risk pooling, the system becomes less stable and fair as costs rise and people with poor health status are systematically excluded from cover. Therefore health insurance 'presents an opportunity to policymakers to achieve social protection objectives through the strategic management of markets rather than exclusively through less responsive systems based on tax-funded direct provision. This is especially relevant as private markets for health care are inevitable, with policy discretion reduced to a choice between functional or dysfunctional regimes' (Heever, 2012).

South Africa is in the process of introducing an innovative system of healthcare financing (Department of Health, 2015) - the National Health Insurance. This is a health financing system that is designed to pool funds and will ensure that everyone has access to affordable, efficient and quality health services for their health needs, irrespective of their socioeconomic status. The government's white paper was released in December 2015, which proposed that NHI would be implemented over a period of 14 years. 11 Pilot districts were established in all nine provinces (Matsoso and Fryatt, 2013). National Health Insurance (NHI) proposes a single, compulsory medical scheme for all, with private medical schemes being reduced to offering "complementary services" only (Department of Health, 2015). Possibilities of raising these funds, according to reports from 2012, include a pay roll levy for all employed South Africans, and increase in VAT, or an income tax surcharge. A central NHI Fund will buy health services from accredited healthcare providers, both public and private (Department of Health, 2015)

The Government of Ghana established a National Health Insurance Scheme (NHIS) in 2003 to provide a basic package of services to the poor. It covers both public and private health-care providers at all levels of the health system. NHIS has yielded some

verifiable positive outcomes such as higher utilization of health-care services by the insured population (Mensah et al., 2010). Seddoh et al., while highlighting the aspect of equity, state that the NHIS has ‘brought on board private sector participation and allowed it access to government funding’ (Seddoh et al., 2011). The Ghanaian government has made it known that it would like the share of private health-care provision in total provision to increase from 35% to 65% by 2017 (Gyapong et al., 2007). In the medium to long term, enforcement of the National Health Insurance Act which makes membership in the NHIS mandatory for residents of the country would be a positive step towards achieving universal coverage (Kusi et al., 2015).

Netherlands has a dual-level health system. All primary and curative care (i.e. the family doctor service and hospitals and clinics) is financed from private obligatory insurance. Long term care for the elderly, the dying, the long term mentally ill etc. is covered by social insurance funded from earmarked taxation. It is a socially organized system with substantial private involvement and stringent regulations. Private insurance companies must offer a core universal insurance package for the universal primary curative care, which includes the cost of all prescription medicines. The same premium is paid whether young or old, healthy or sick. Risk variances between private health insurance companies due to the different risks presented by individual policy holders are compensated through risk equalization and a common risk pool. Funding for all short-term health care is 50% from payroll taxes paid by employers, 45% from the insured person and 5% by the government. Those on low incomes receive compensation from government to help them pay their insurance. All insurance companies also receive additional funding from the regulator's fund. It is illegal in The Netherlands for insurers to refuse an application for health insurance or to impose special conditions (e.g., exclusions, deductibles, co-payments, or refuse to fund doctor-ordered treatments). Therefore, in Netherlands, a compulsory insurance package is available to all citizens at affordable cost without the need for the insured to be assessed for risk by the insurance company. The public insurance system is implemented by non-profit health funds, and financed by premiums taken directly out of the wages (together with income taxes). Hospitals in the Netherlands are mostly privately run and not for profit, as are the insurance companies. Most insurance

packages allow patients to choose where they want to be treated. To help patients to choose, the government discloses information about provider performance.

In Netherlands, given the system of managed competition in which market forces play an increasingly important role, policy makers are facing new challenges regarding quality, costs and access (Berg et al., 2010). Insurance companies mainly compete on the price of health insurance policies and the cost of health care services and not on the quality of care. One of the underlying problems is that quality of care lacks transparency. Easy access to health services is an important achievement. However, there might be a trade-off between access and quality (Berg et al., 2010). There is evidence that concentration of especially highly complex surgery improves quality and critical purchasers of care are looking for high quality providers and may selectively contract with those providers, which are few, that may lead to access issues for the insurers. The same is true for the tradeoff between prices and access. Health insurers can offer cheap policies that restrict freedom of choice. By contracting only a limited number of health care providers, health insurers are able to negotiate for cheaper care for many services, thus leading to access issues (Berg et al., 2010).

2.4 Conclusions

In this chapter, the evolution, development and factors affecting PPPs and their role in health insurance have been reviewed. With the increasing complexity of health systems, there is a realization that the public sector can no longer fulfil the needs of the population by itself. The need to forge partnerships is clear. These partnerships can take different forms and be at different scales, depending on the needs of a country. Each country, therefore, has to look for its most optimal solution based on the nature and scope of the need.

New Public Management points to contracts as an efficient tool for implementation by introducing elements of increased competition, managerial decentralization and an increase in transparency and accountability. However, there is limited evidence to support the above, especially in the case of developing countries; and examples where introduction of contracts has led to genuine competition among health service providers are rare. New institutional economics helps us to understand the motivation

for the tendency towards relational contracting as opposed to a purely market-driven competitive approach.

A review of the literature points to the fact that while policymakers are focused on discussion of competition and choice, empirical findings on contractual relationships tell a different story, reflecting the existence of an infinite variety of contract forms in a myriad of settings. Moreover, with respect to empirical studies on contracts for health-care provision, review of the literature has highlighted the lack of clarity on the nature of contracts and their implementation in terms of classical contracting. This is usually the basis of policy reforms and actual relationships that emerge, which lean more towards relational contracting.

Review of the literature on contractual theory, new public management and new institutional economics points to the use of contracts as a potentially effective method to improve performance of public health systems. However, empirical evidence to support its use in insurance arrangements is limited and the results have been mixed, especially for developing countries where the regulatory frameworks are weak and there is a constraint on the resources available.

The contracting milieu is mainly governed by the social, institutional and organizational framework within which to operate. In the case of service delivery, specifically for health care, there are a number of factors that make information asymmetry particularly acute on the part of the beneficiary. Therefore, long-term contractual arrangements and other external factors such as trust are important in delivery of health services. The institutional and organizational environment also plays a vital role in determining the nature of contracts and their implementation.

PPPs have been used in health insurance primarily for service provision, and to a much lesser extent for financing and management. The PPP model has been used for service delivery by a number of countries like Vietnam, Philippines, Colombia, South Africa, Ghana, and Netherlands, as described earlier. Colombia and Philippines, however, have also used the model for health-care management. Although there is some description of the role of PPPs within state-sponsored health insurance, there is very little evaluation of their role, especially where the private sector acts as financial intermediary rather than just a health-care provider. Further analysis would help to

determine the equity of utilization and the impact of reforms on fairness of the health-care system.

There is insufficient literature to understand the dynamics of PPPs in social health insurance, especially where enrolment is voluntary. Adverse selection, cream skimming, risk pooling, moral hazard, equity and out of pocket expenditures may lead to undue profit and market failure. From the limited evidence observed in the review, the case for social health insurance for the poor in developing countries is mixed. Further research would be required to understand the nature of PPP, the contracting milieu and how it affects accessibility and utilization. Specifically, it is important to explore the distribution of roles, responsibilities and risks among stakeholders of PPPs with management or service delivery contracting.

Against this backdrop, RSBY is therefore a very apt topic for further research.

Chapter 3
INDIA - BACKGROUND AND CONTEXT

Chapter 3

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This chapter looks at India in the context of PPPs and health insurance. It summarises the health-care status, financing and infrastructure of India. It looks at health insurance in its historical context and in the context of the existing health regulatory framework. The chapter then examines the RSBY scheme, its design, the use of contracts in its implementation, the challenges faced, what is currently known about the functioning of the scheme, and the need for further research. Google India was used as a search engine. The keywords used for the literature review are given in Table 3.1.

Table 3.1: Keywords used for literature review

Domains	Keywords used
India – background and context of the RSBY scheme	India – health status, health economics, social factors, expenditure, insurance, government, private, PPP, public–private partnership, history, commercial, situational analysis, ESI, employee state insurance scheme, Rashtriya Swasthya Bima Yojana, RSBY, community-based health insurance, CBHI, private providers, contracts, scheme design

Note: Keywords are used in various combinations

Over the past several years, India has made considerable progress in improving the health status of its people. The current death rate stands at 7 per thousand, birth rate at 21.4 per thousand, infant mortality rate at 40 per thousand live births (Registrar General of India, 2013) and life expectancy for men at 67.3 years and women at 69.6 years (Ministry of Health and Family Welfare, 2014). However, many challenges remain - elimination/eradication of communicable diseases; increasing incidence of non-communicable diseases; neglect of maternal and neonatal health and environmental degradation. Only 35% of the people use improved sanitation facilities (WHO and UNICEF, 2013). All this is marked by considerable regional variations.

India spends about 3.7% of its GDP on health. Government expenditure on health is 1.04% of its GDP. Government expenditure on health as a percentage of total health

expenditure is 28.2%. The OOP expenditure on health as a percentage of total health expenditure is as high as 61.7% (World Health Organization, 2013). The high level of OOP expenditure often leads to financial impoverishment of the people, trying to meet their health-care needs. Public funding is focused on preventive, promotive, curative and rehabilitative care, while private expenditure is primarily for curative care. Despite a significantly higher gross national income than other countries in the region, India's ranking remains low in the Human Development Index (Malik, 2014). Health finance and delivery in India has developed along four main co-existing lines – out-of-pocket expenditures, tax-financed public delivery, social insurance and voluntary private insurance. The first and by far the largest is OOP spending by households. Nearly all this spending is directed to fee-for-service private providers, but some is for user fees collected at public facilities (La Forgia and Nagpal, 2012).

In the latest Human Development Report 2014 released on 24 July 2014, India stands at 135 in Human Development Index (HDI) out of 187 countries (Malik, 2014). Smaller countries like Sri Lanka (73) and Maldives (103) are above India in their rankings. Among all the BRICS countries, India has the lowest HDI with its life expectancy higher only than South Africa (which is still grappling with second generation HIV/AIDS patients). Russia, Brazil and China are in the high HDI category with rankings of 57, 79 and 91, respectively (Malik, 2014). The Human Development Report 2014 shows that while human development levels continue to rise globally, they do so at a slower pace than before. This deceleration is due to a slowdown in economy, slow growth in expected years of schooling and declining growth rates of life expectancy, particularly in Asia (Ghosh, 2014).

The Gender Inequality Index (GII) (which measures gender disparity, using three dimensions – reproductive health, empowerment, and labour market participation) ranges between 0 and 1, with 0 representing 0% inequality, indicating that women fare equally in comparison to men, and 1 representing 100% inequality, indicating that women fare poorly in comparison to men (Malik, 2014). At 0.563, India's GII is the highest in South Asia. In HDI, India fares even worse once adjustments are made for all inequalities that are a result of social and economic disparities (Malik, 2014). Discounted for inequality, India's HDI falls to 0.418 – a loss of 28.6%. The average loss for inequality for medium HDI countries is 25.6% (Malik, 2014). For South Asia, the average loss is 28.7%. Among Brazil, Russia, India, China and South Africa

(BRICS), Brazil comes second in terms of inequality losses with its HDI reduced by 26.3% (Malik, 2014). Among 145 countries, India ranks 98 in inequality-adjusted HDI as against 95 for Brazil and 45 for Russia (Malik, 2014).

During the past six decades, India has developed a large public health infrastructure with 355 medical colleges (Medical Council of India, 2012) and 605 district hospitals. As of March 2012, there were 605 district hospitals, 4,833 community health centres (CHCs), 24,049 primary health centres (PHCs) and 148,366 sub centres functioning in the country (Ministry of Health and Family Welfare, 2012). In addition, there exists a large number of private health facilities scattered throughout the country.

The growth in infrastructure in the last few years can be assessed from the comparative figures of 2005 and 2012:

- At the national level, there was an increase of 1,487 CHCs between 2005 and 2012. The number of CHCs functioning in government buildings has increased from 91.6% to 97% during the same period.
- PHCs have increased by 813. The percentage of PHCs functioning in government buildings has increased significantly from 78% to 90.2%.
- The number of sub centres has increased from 146,026 to 148,366.

There is ample information on the predominance of the private for-profit health-care sector in India (Raman and Björkman, 2009). The private sector dominates service provision of high-end curative services (Selvaraj and Karan, 2009). Evidence from national household surveys demonstrates the expanding role of the private sector over the last two decades and its emergence as the predominant provider of inpatient care (Selvaraj and Karan, 2009). About 63% of the total beds for inpatients are with the private sector, which created over 70% of the new beds during the period 2002–2010 (Gudwani et al., 2012). Data from the National Family Health Survey (NFHS) III also confirms that the private medical sector remains the primary source of health care for the majority of households in urban (70%) as well as those in rural areas (63%). The number of government hospital beds in urban areas is more than twice the number in rural areas (Central Bureau of Health Intelligence, 2010), and the rapid development of the private sector in urban areas has resulted in an unplanned and unequal geographical distribution of services (De Costa et al., 2009). The doctor-to-population

ratio in India is 1:1,800 (Deo, 2013) in contrast to other neighbouring countries such as Thailand (4:2500) or Sri Lanka (1:1250) (World Bank, 2010).

A study led by a World Bank economist Jishnu Das published in Health Affairs (2012) examined the quality of primary care delivered by private and public health-care providers in rural and urban India. The study found that many providers do not have medical degrees; the quality of medical training is low; and less than half of them provide correct diagnoses (Das et al., 2012).

Against this backdrop, government intervention in making health-care available, accessible and affordable is essential to meet the objectives of universal coverage and effective health-care delivery. The Government is also focusing on strengthening the rural health architecture, especially through the National Rural Health Mission (NRHM) and the Janani Suraksha Yojana (JSY).

The NRHM was launched in April 2005, aimed at strengthening public health management and enhancing service delivery to provide accessible, affordable and quality health care to the rural population, especially the vulnerable and underserved groups. The mission is intended to adopt a synergistic approach by relating health to determinants of good health such as nutrition, sanitation, hygiene and safe drinking water. The Mission attempts to achieve these through a set of core strategies including enhancement in budgetary outlays for public health, decentralized village- and district-level health planning and management, appointment of accredited social health activists (ASHAs) to facilitate access to health services, strengthening the public health service delivery infrastructure – particularly at village, primary and secondary levels, improved management capacity to organize health systems and services in public health, promoting the non-profit sector to increase social participation, community empowerment, inter-sectoral convergence, upgrading public health facilities to Indian Public Health Standards (IPHS) and reduction of infant and maternal mortality through the JSY (Ministry of Health and Family Welfare, 2005, Ministry of Health and Family Welfare, 2015).

JSY was given emphasis as its objective is to reduce maternal and neonatal mortality by promoting institutional deliveries among poor pregnant women. A cash incentive is provided to mothers who deliver their babies in public or private health facilities rather than at home. There is also a provision for cost reimbursement for transport and

incentives to ASHAs to encourage mothers to go in for institutional deliveries. JSY is a 100% Centrally-sponsored scheme, which integrates cash assistance with delivery and post-delivery care (Ministry of Health and Family Welfare, 2015).

3.1 The insurance sector in India – historical context

In India, insurance has a deep-rooted history. It finds mention in the ancient writings of Manu (Manusmrithi), Yagnavalkya (Dharmasastra) and Kautilya (Arthasastra) (Insurance Regulatory and Development Authority, 2007b). These writings mention pooling of resources that could be redistributed in times of calamities such as fire, floods, epidemics and famine (Newar, 2013). This was probably a precursor to modern day insurance. It evolved over time, drawing from other countries' experiences, particularly the United Kingdom. It came to India as a legacy of the British occupation.

Formal insurance in India commenced in 1850 with the establishment of the Triton Insurance Company Ltd. in Calcutta by the British (Insurance Regulatory and Development Authority, 2007b). In 1907, the Indian Mercantile Insurance Ltd. was set up. This was the first company to transact all classes of general insurance business. The General Insurance Council, a wing of the Insurance Association of India, was formed in 1957 (Insurance Regulatory and Development Authority, 2007b). The General Insurance Council framed a code of conduct for ensuring fairness and sound business practices.

The General Insurance Business (Nationalization) Act, which was notified in 1972, nationalized the insurance market. A total of 107 existing insurers were amalgamated and grouped into four companies—the National Insurance Company Ltd., the New India Assurance Company Ltd., the Oriental Insurance Company Ltd., and the United India Insurance Company Ltd. In 1993, the Government set up a committee under the chairmanship of RN Malhotra, former Governor RBI to propose recommendations for reforms in the insurance sector in keeping with the reforms in the financial sector. The committee submitted its report in 1994 wherein it recommended, inter alia, that the private sector be permitted to enter the insurance industry by floating Indian companies, preferably joint ventures with Indian partners (Law Commission of India, 2003).

Following the recommendations of the Malhotra Committee report of 1994, the Insurance Regulatory and Development Authority (IRDA) was constituted in 1999 as an autonomous body to regulate and develop the insurance industry. The IRDA was incorporated as a statutory body in April 2000 (The Gazette of India, 2001). The key objective of the IRDA was enhancement of competition so as to improve customer satisfaction through increased consumer choices and lower premiums, while ensuring the financial security of the insurance market.

Once approved by Parliament, insurers including health insurance companies will be able to raise the much-needed capital from foreign partners and expand their business. According to estimates, the raising of the cap could bring in as much as US\$ 6 billion in funds to the country (Singh, 2014a).

The term ‘insurance’ is primarily associated with life insurance – the most popular form of insurance in India (around 570 million insured lives in 2011) (Ministry of Finance, 2011). There are two reasons for this – first, with the low life expectancy (37 years in 1951) and a tightly knit family structure, people primarily sought financial security. Second, life insurance has been traditionally positioned as a tax-planning tool. Health insurance evolved slowly in tandem with general insurance, with both sharing key landmarks. The historical development of insurance and health insurance is summarized in Table 3.2.

Table 3.2: Comparison between general insurance and health insurance

	General insurance	Health insurance
Pre-independence	<p>1818: Life insurance in its current form was introduced in 1818 when the Oriental Life Insurance Company began its operations in India.</p> <p>1850: General insurance was however a comparatively late entrant in 1850 when the Triton Insurance Company set up its base in Calcutta.</p>	<p>1912: Health insurance introduced when the first insurance act was passed.</p> <p>1947: In 1947, the Bhole Committee Report made recommendations for the improvement of health-care services in India.</p> <p>1948: The Central Government introduced the Employees' State Insurance Scheme (ESIS) for blue-collar workers employed in the private sector.</p>
Nationalization	<p>1956: Life insurance was the first to be nationalized in 1956. Life Insurance Corporation of India was formed by consolidating the operations of various insurance companies.</p> <p>1973: General Insurance followed suit and was nationalized in 1973. General Insurance Corporation of India was set up as the controlling body with New India, United India, National and Oriental companies as its subsidiaries.</p>	<p>1954: The Central Government Health Scheme (CGHS) was set up for Central Government employees and their families.</p> <p>1986: Mediclaim was introduced by government insurance companies in 1986.</p>
Liberalization	<p>1991: The process of opening up the insurance sector was initiated against the background of the economic reforms process. Malhotra Committee was formed during this year that submitted its report in 1994.</p> <p>1999: Insurance Regulatory Development Act (IRDA) was passed.</p> <p>2001: Indian insurance was opened for private companies and private insurance companies effectively started operations.</p>	<p>1999: Marked the beginning of a new era for health insurance in the Indian context. With IRDA, the insurance sector was opened to private and foreign participation.</p> <p>2003: Introduction of UHIS – early attempts by government to introduce health insurance for informal sector. Universal Health Insurance Scheme (UHIS) was a hospitalization indemnity product voluntarily purchased from any state-owned insurer at a heavily subsidized price (INR165, less than US\$ 4 a year).</p>

Source: Health Insurance Evolution in India: An Opportunity to Expand Access (Shetty, 2014)

3.2 Health insurance in India

The health insurance industry was launched in 1986 and has grown significantly, mainly due to the liberalization of the economy and general awareness of the population (Jacob, 2013).

The Indian health insurance scenario is a mixed bag. The existing schemes can be categorized as follows:

- SHI schemes, which are mandatory or government-run schemes;
- voluntary health insurance schemes or private for-profit schemes;
- employer-based schemes;
- community based health insurance (CBHI) or insurance offered by NGOs;
- subsidized voluntary health insurance schemes for the poor.

3.2.1 Social health insurance

SHI is based on income-determined contributions from the mandatory membership and can be an effective risk-pooling mechanism that allocates services according to need and distributes the financial burden according to the ability to pay (thereby ensuring equity in access). As Rao points out, in India with its large rural and informal sector accounting for 90% of the population, lack of cohesion and solidarity and poor institutional capacity, such schemes are difficult and expensive to implement (Rao, 2005). The existing mandatory health insurance schemes in India such as the Employees' State Insurance Scheme (ESIS) and the Central Government Health Scheme (CGHS) were first started as pilot projects in 1948 and 1954, respectively in the context of achieving universal coverage via the SHI.

Under the ESI Act, 1948 the ESIS provides protection to employees against loss of wages due to inability to work because of sickness, disability or death due to an employment-related injury. It also provides medical care to employees and their family members without any fee for service. The Employee's State Insurance Corporation (ESIC) is a corporate semi-government body headed by the Union Minister of Labour and Employment as its Chairman. The Act compulsorily covers (1) all power-using non-seasonal factories employing 10 or more persons; (2) all non-power using factories with 20 or more employees; and (3) service establishments like shops, hotels, restaurants, cinemas, road transport and newspapers. The scheme is compulsory and contributory in nature and provides a uniform package of medical and cash benefits to the insured persons. The scheme is implemented through special ESI hospitals and diagnostic centres, dispensaries and empanelled doctors.

3.2.2 Voluntary health insurance schemes or private for-profit schemes

The IRDA legislation in 2000 served as a key milestone in health-care insurance. It opened up the health insurance industry to private players. Health insurance membership quadrupled between 2007 and 2011 (300 million in 2011) and is expected to be 600 million by 2015 (Shetty, 2014). There are stand-alone health insurers (private for-profit) along with government sponsored health insurance providers. To improve awareness, the General Insurance Corporation of India and the IRDA have held several awareness campaigns for all segments of the population (Jacob, 2013).

In private insurance, buyers are willing to pay premiums to an insurance company that pools people with similar risks and insures them for health expenses. Premiums are based on an assessment of the risk status of the consumer (or of the group of employees) and the level of benefits provided, rather than as a proportion of the consumer's income (Sein et al., 2004). Prior to liberalization, the insurance sector consisted of the government-owned Life Insurance Corporation of India (LIC) that had a monopoly on life insurance business and the General Insurance Corporation of India and its four non-life subsidiaries namely, National Insurance Co., New India Assurance Co., Oriental Insurance Co. and United India Insurance Co. Health insurance was first introduced in November 1986 under a product called Mediclaim, offered by the General Insurance Corporation of India and its four non-life subsidiaries (BearingPoint, 2008). As a part of its financial sector reform agenda, the GoI liberalized the Indian insurance industry through the enactment of the Insurance Regulatory and Development Authority Act, 1999 which led to the opening up of the sector to private insurance companies (BearingPoint, 2008). According to the IRDA Annual Report 2009, IRDA has licensed 36 private insurance companies and eight public sector insurance companies.

3.2.3 Employer-based schemes

Employers in both the public and private sector offer employer-based insurance schemes through their own employer-managed facilities by way of lump sum payments, reimbursement of employee's health expenditure for outpatient care and hospitalization, fixed medical allowance (monthly or annual, irrespective of actual expenses), or covering them under the group health insurance policy (Sein et al., 2004). The population coverage under these schemes is minimal, about 30–50 million people in all (Sein et al., 2004).

3.2.4 Community-based health insurance

CBHI schemes are small-scale, voluntary health insurance programmes, organized and managed in a participatory manner, which are designed to be simple and affordable and to draw on resources of social solidarity and cohesion to overcome problems of small risk pools, moral hazard, fraud, exclusion and cost-escalation (Tabor, 2005). The efficacy of the programme is based on two implicit principles: one, that the community has adequate homogeneity or social coherence that gets easily translated to a capacity to mobilize resources; and two, that the willingness to prepay will be influenced by self-interest when each individual perceives his marginal benefit exceeding his costs, i.e. accessing something of value which can be obtained easily and better in quality through prepayment (Rao, 2005). Often, there is a problem of adverse selection because of a large number of high-risk members whose premiums are not based on an assessment of individual risk status. Exemptions made as a means of assisting the poor might also have an adverse effect on the ability of the insurance fund to meet the cost of benefits (Conn and Walford, 2002). There are two types of CBHI schemes in India. In the first type, an NGO acts as an intermediary between a formal insurance provider and the insured community, e.g. Self Employed Women's Association (SEWA) in Ahmedabad. In the second type, the NGO itself provides insurance to the target community (Ahuja, 2004).

3.2.5 State-subsidized voluntary health insurance schemes for the poor

India has a few examples of state-subsidized voluntary health insurance schemes for the poor. The largest of them is the RSBY, which is considered separately later since it is the subject of this thesis. A few other examples are mentioned below.

The Government of Andhra Pradesh has set up the Aarogyasri Health Care Trust and formulated a voluntary health insurance scheme for BPL families called the Rajiv Aarogyasri Community Health Insurance Scheme. The Star Health and Allied Insurance Co. Ltd., a private insurance firm which was selected through a competitive bidding process, has been contracted to implement the scheme and a MoU was signed with the company in April 2008 (Mallipeddi et al., 2009). The scheme began as a pilot in the three most backward districts of Andhra Pradesh and now covers the entire State. It provides coverage for meeting the expenses of hospitalization and surgical procedures of beneficiary members up to USD 4,000 per family per year in any of the network hospitals (Mallipeddi et al., 2009). Moreover, the network hospitals provide the following additional benefits to the BPL beneficiaries: (i) free outpatient

consultation; (ii) free tests and medical treatment for beneficiaries who might not avail any surgery or therapy procedures; (iii) a minimum of 24–26 free health camps per year in villages for screening of the BPL suffering from identified ailments; and (iv) free transport to the patient identified for surgery or therapy. The Government covers the insurance premium and the entire scheme is cashless for the patients. As of May 2009, this scheme has covered over 250,000 operations, over 1.5 million patients have been screened and US\$ 168 million have been claimed (Mallipeddi et al., 2009).

In 1988, the Government of Goa along with the New India Assurance Company developed a medical reimbursement mechanism. This scheme can be availed by all permanent residents of Goa with an income below INR 50,000 (£ 504) per annum for hospitalization care, which is not available within the government system (Sein et al., 2004). The non-availability of services requires certification from the dean of the hospital or Director Health Services. The overall limit is INR 30,000 (£ 302) for the insured person for a period of one year (Sein et al., 2004).

The Government of Jharkhand launched a health insurance scheme in April 2008, targeting BPL families. The scheme has no exclusion clauses. It is an all-disease inclusive scheme and extends its coverage to people living with HIV. It was designed to be a mandatory scheme for BPL families and covers the whole family without any age bar. One of the innovative features of the scheme is to involve, on a long-term basis, all industrial groups in the financing of the insurance component under the corporate social responsibility (CSR) principle. Figure 3.1 shows the financing structure and the benefits under the scheme.

Fig. 3.1: Financing and benefits under the health insurance scheme (Jharkhand)



Source: India: State government sponsored health protection programme (ILO Subregional Office for South Asia, 2008)

The premium to be paid by each member of the family is INR 20 (£ 0.2) per year, with an INR 170 (£ 1.8) subsidy (ILO Subregional Office for South Asia, 2008). The

scheme is managed by a public–private trust and engages both public and private providers in delivery of care.

The Government of Kerala started the Comprehensive Health Insurance Scheme (CHIS) in 2008 to cover the non-BPL population. This complements the RSBY scheme (Government of Kerala, 2008). The non-RSBY population is divided into two categories: (i) those belonging to the BPL list of the State Government but not to the list as defined by the Planning Commission,³ and (ii) the above poverty line (APL) families that belong neither to the State Government list nor to the list prepared as per guidelines of the Planning Commission (Government of Kerala, 2008). In the case of families of the first category, the beneficiaries pay INR 100 (£ 1) per annum per family as beneficiary contribution, and the State Government meets all the remaining expenses including the cost of the smart card. In the case of families of the second category, the beneficiary contribution covers the entire amount of the premium plus the cost of the smart card. In other words, the beneficiary contribution is INR 30 (£ 0.3) per family per annum for RSBY families, INR 100 (£ 1) for families belonging to category (i) and the entire amount for families belonging to category (ii) (Government of Kerala, 2008).

The Chief Minister's Relief Fund in Madhya Pradesh was set up to provide immediate financial assistance to the victims of natural calamities such as flood, fire, earthquakes and accidents, and also to people suffering from various ailments. The Rajasthan Chief Minister's Relief Fund gives assistance to accident victims.

Gujarat has the Mukhyamantari Amrutam Yojana, which addresses the key vulnerability faced by the BPL population, that of catastrophic health expenditure. Kerala has the Chief Minister's Distress Relief Fund which provides financial assistance for distressed people affected by major natural calamities such as flood and drought. It also provides financial assistance to individuals in need of treatment for major diseases such as cancer, cardiac surgery, kidney transplant, brain tumour, liver disease and multi organ failure.

In Tamil Nadu, the Chief Minister's Comprehensive Health Insurance Scheme is an insurance scheme launched by the Tamil Nadu State Government through the United India Insurance Company Ltd. (a public sector insurer headquartered at Chennai)

³ Since replaced by NITI Aayog

which provides free medical and surgical treatment in government and private hospitals to the members of any family whose annual family income is less than INR 72,000 (£ 725) (as certified by the Village Administrative Officer).

3.2.6 National Universal Health Insurance Scheme

The national UHIS was launched by the GoI in July 2003 for providing financial risk protection to the poor. The scheme offered health insurance via four public insurance companies, and was managed with the help of TPAs (discussed later). It was initially designed as a group insurance scheme with membership of at least 100 families and only covered those who were members of some group such as cooperative societies, handloom weavers, etc. The premium for joining the scheme varied according to family size 1) Individual Person INR 365/- (£ 3.7) per annum; 2) Family (not exceeding five members) consisting of Insured, Spouse and first 3 dependent children Rs.548/- (£ 5.5) per annum; 3) Family not exceeding 7 members consisting of Insured, Spouse, first 3 dependent children and dependent parents Rs.730/- (£ 7.4) per annum. In case of hospitalization, the scheme provided medical expenses up to INR 30,000 (£ 302) per family and the Government provided a fixed subsidy of INR 100 (£ 1), irrespective of family size. Due to poor enrolment in the first nine months (Ahuja, 2006), the scheme was redesigned in May 2004 with a higher subsidy (increased to INR 200 (£ 2), INR 300 (£ 3) and INR 400 (£ 4) to individuals, families of five and seven, respectively) and restricting eligibility to BPL families only (Rao, 2005).

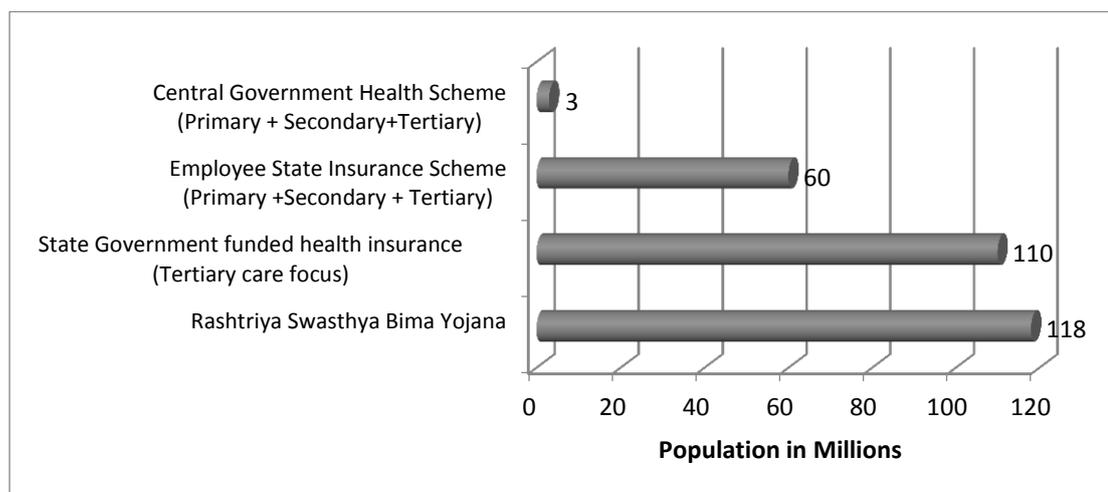
Building on the experience of UHIS in 2008, the GoI launched yet another state-managed national health insurance scheme targeting the BPL informal sector workers called Rashtriya Swasthya Bima Yojana (RSBY) with certain design changes from the UHIS. This scheme is the focus of the present research. Under RSBY, the role of the private sector is much wider and a lot of the responsibility for scheme implementation rests outside the public sector.

3.3 Current status of health insurance

It is estimated that only 25% of the Indian population is under some form of health insurance (Reddy et al., 2011a). Currently, Centre-funded insurance schemes cover an estimated population of 181 million through the following schemes: ESIS – 60 million, CGHS – 3 million, and RSBY – 118 million (World Health Statistics 2013)

(Figure 3.2). While ESIS and CGHS provide for comprehensive health care, RSBY only provides for hospitalization cover with a benefit limit of INR 30,000 (€ 302) per enrolled household per year (United Nations, 2014). In addition, 110 million people in the southern states (70 million in Andhra Pradesh, 35 million in Tamil Nadu and five million in Karnataka) receive coverage under health insurance schemes funded by the state governments. However, most of these schemes cover only inpatient care, and mainly at the tertiary level.

Fig. 3.2: Population coverage under various health schemes in India



Source: World Health Statistics 2013 (<http://www.in.one.un.org/task-teams/universal-health-coverage>)

Most health insurance products offered by private entities are similar to the government-defined product, Mediclaim, and are indemnity-based. Given its high premiums, most Mediclaim and similar policy holders belong to the middle and upper classes.

While the urban population has witnessed a proliferation in the means of health-care financing and delivery over the past two decades, the rural population lacks basic health-care delivery and financing. Though community health insurance schemes managed by non-governmental organizations (NGOs) are evolving to cater to the needs of the rural population, health-care delivery and finance still leave much to be desired (Planning Commission, 2011).

3.4 Identifying below poverty line population

The Planning Commission defines poverty lines on the basis of monthly per capita consumption expenditure (MPCE). The parameters used for estimating poverty are -

land holdings, type of house, availability of clothing, food security, sanitation, ownership of consumer durables (TV, electric fan, kitchen appliances, cooker, radio, etc.), literacy status of highest literate, status of household labour, means of livelihood, status of children, type of indebtedness, reasons for migration and preference for assistance. For each of these parameters, households are awarded scores. A low score indicates a higher level of poverty and deprivation and vice-versa. The Planning Commission decides on a cut-off score for identifying the BPLs. However, the states have also been given the liberty to decide on the cut-off score of their own for determining the total number of BPL households, either uniformly across the districts or even below the district level, depending on their budget allocation. It is the responsibility of the state to identify the households who fulfil the BPL criteria. Table 3.3 shows the poverty ratio and number of poor in India.

In December 2005, the Planning Commission constituted an expert group under the Chairmanship of Prof. Suresh D. Tendulkar to review the methodology for estimation of poverty. This was the basis on which estimates of poverty for 2009–10 were made. Based on the Suresh Tendulkar panel's (Tendulkar et al., 2009) recommendations, in 2011–12, the poverty line was fixed at INR 27/day for rural areas and INR 33/day for urban areas.

Another expert group was constituted in June 2013 under the Chairmanship of Dr. C. Rangarajan (ex-Governor, Reserve Bank of India) to once again review the methodology for the measurement of poverty. The report by the Rangarajan Committee came up with a new BPL criteria, according to which those spending over INR 32 (£ 0.3) a day in rural areas and INR 47 (£ 0.5) in urban areas should not be considered as BPL (Singh, 2014b).

Table 3.3: Poverty ratio and number of poor in India

	Poverty ratio (%)			Number of poor (million)		
	Rural	Urban	Total	Rural	Urban	Total
1. 1993–94	50.1	31.8	45.3	328.6	74.5	403.7
2. 2004–05	41.8	25.7	37.2	326.3	80.8	407.1
3. 2011–12	25.7	13.7	21.9	216.5	52.8	269.3
Annual average decline: 1993–94 to 2004–05 (percentage points/annum)	0.75	0.55	0.74	–	–	–
Annual average decline: 2004–05 to 2011–12 (percentage points/ annum)	2.32	1.69	2.18	–	–	–

Source: Press note on poverty estimates (2011–12). Planning Commission, GoI; 2013 (accessed 30 December 2014)

3.4.1 Regulatory framework

Health regulation in India encompasses a variety of actors and issues. These include promulgation of legislation for health facilities and services, disease control and medical care, human resources (education, licensing and professional responsibility), ethics and patients' rights, pharmaceuticals and medical devices, radiation protection, poisons and hazardous substances, occupational health and accident prevention, elderly, disabled and rehabilitation, family, women and child health, mental health, tobacco control, social security and health insurance, environmental protection, nutrition and food safety, health information and statistics, custody and civil and human rights, to enumerate a few. However, given the scope of this research, the focus is on the regulatory environment around private providers/clinical establishments and the insurance companies/TPAs, keeping in mind the PPP arrangements under the RSBY scheme design.

The preamble to the Constitution of India, coupled with the Directive Principles of State Policy, enjoins the State to make 'improvement of public health' its primary responsibility. Furthermore, Articles 38, 42, 43 and 47 of the Constitution provide for promotion of health of individuals as well as health care (Planning Commission, 2006). The Constitution of India also enumerates the separate and shared legislative

powers of Parliament and state legislatures in three separate lists—the Union List, State List and Concurrent List. For the Concurrent List, which includes criminal law, marriage, divorce and all other personal law matters, economic and social planning, population control and family planning, social security and social insurance, employment, education, legal and medical professions, and prevention of transmission of infectious or contagious diseases, the Parliament and state legislatures share authority. However, laws passed by Parliament with respect to matters on the Concurrent List supersede laws passed by state legislatures. The Parliament generally has no power to legislate on items from the State List, including public health, hospitals and sanitation. However, two-thirds of the Rajya Sabha may vote to allow Parliament to pass binding legislation on any state issue if ‘necessary or expedient in the national interest’. In addition, two or more states may ask Parliament to legislate on an issue that is otherwise reserved for the states. Other states may then choose to adopt the resulting legislation (Planning Commission, 2006). Thus, for RSBY stakeholders, the regulatory frameworks that influence social security, social insurance and the medical profession are under the Concurrent List, though public health and hospitals are under the State List.

3.4.2 Private providers and clinical establishments regulation

The private health sector in India consists of, on the one hand, private general practitioners, consultants of different systems [allopathic medicine and AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy)] and a variety of non-qualified practitioners; and on the other hand hospitals, nursing homes, maternity homes, specialty hospitals, etc. (Duggal and Nandraj, 1991). Besides this, there are the pharmaceutical and medical equipment manufacturing industries, which are overwhelmingly private and predominantly multinational. There are also laboratories, which conduct tests from the basic blood testing to CAT scans (Duggal and Nandraj, 1991).

Post-independence, the private health sector in India has grown greatly and is thriving. At the time of Independence, the private health sector accounted for only 5% to 10% of total patient care (Rao, 2012). In 2004, the share of the private sector in total hospitalized treatment was estimated at 58.3% in rural areas and 61.8% in urban areas (Planning Commission, 2008). Data from the National Family Health Survey (NFHS) III confirms that the private medical sector remains the primary health-care

source for the majority of households in urban areas (70%) as well as in rural areas (63%) (Rao, 2012).

Legislation exists with respect to licensing of medical professionals such as doctors, nurses, dentists and pharmacists with a view to control their entry into the market. Important among these national level laws are the Indian Medical Council Act, 1956; the Indian Nursing Council Act, 1947; the Indian Medicine Central Council Act, 1970; the Homoeopathy Central Council Act, 1973 and the Pharmacy Act, 1948. Almost all of these laws mandate establishing of statutory regulatory councils to monitor the standards of medical education, promote medical training and research activities and oversee the qualifications, registration and professional conduct of doctors, dentists, nurses, pharmacists, and practitioners of other systems of medicine such as ayurveda, yoga, unani, siddha and homoeopathy (AYUSH). In addition, each statute directs establishment of a central registry for individuals certified to practice in the field of medicine. Councils also often prescribe standards of professional conduct and determine which actions amount to professional misconduct (Planning Commission, 2006).

As regulation of clinical facilities is a state subject, some state legislation was introduced by union territories/states for regulation of clinical establishments such as The Bombay Nursing Homes Registration Act, 1949; Delhi Nursing Homes Registration Act, 1953 and the Tamil Nadu Private Clinical Establishments Act, 1997. In 1996, the death of a patient in a private hospital due to medical negligence was reported to the National Human Rights Commission (NHRC). This led to the Planning Commission directing the GoI, Medical Council of India and the Delhi Government to examine the registration of private hospitals to ensure availability of minimum facilities, with violation to be made a cognizable offence (Planning Commission, 2006). Thereafter, the Central Council of Health and Family Welfare at its Fifth Conference held in January 1997 recommended that the National Institute of Health and Family Welfare be assigned the responsibility of drafting model legislation. At its Sixth Conference held in 1998, the Central Council examined the matter afresh and resolved that the Central Government may frame norms and standards for ensuring proper health care for different categories of institutions in consultation with the state governments for private hospitals/nursing homes/clinical establishments, to be followed by all the state governments. These norms would

prescribe the minimum standards of staff and infrastructure for all such institutions. The Central Council further resolved that state governments may enact laws to provide for compulsory registration of private hospitals, nursing homes and clinical establishments in order to ensure minimum facilities for different forms of treatment. Since it would also be necessary to regulate fees charged by the private health institutions, the laws could also provide for compulsory exhibition of fees, qualification of doctors, equipment available, etc. To implement the above mandate, a national workshop was organized by the GoI at New Delhi in 1999 with the assistance of WHO and the Medical Council of India. The aim was to provide a platform for discussion among the service providers of nursing homes and hospitals for the purpose of presenting the minimum standards for their registration. It was, however, felt that uniform enforcement of minimum standards would require Central legislation. Therefore, in 2000, another draft bill was prepared, called Clinical Establishments Regulation and Accreditation Bill. During this entire period, various states also enacted their own legislations for regulating clinical establishments.

The Clinical Establishments (Registration and Regulation) Act, 2010 was passed by the Parliament of India amidst much opposition from the Indian Medical Association (IMA), which proposed that the regulatory powers rest in the hands of the autonomous Hospital Authority of India. The primary reason for this was the perception in the medical community that licensing of health-care institutions by the Government will lead to harassment, corruption and nepotism (Indian Medical Association, 2013). In 2012, the Act was notified by the Union Government which made it mandatory for all clinical establishments to provide medical care and treatment necessary to stabilize any individual who comes or is brought to the clinical establishment in an emergency medical condition, particularly accident cases and women who come for deliveries (The Hindu, 2012). It provides for mandatory registration of all clinical establishments including diagnostic centres and single-doctor clinics across all recognized systems of medicine, both in the public and private sector, except those run by the defence forces. The Act lays down standard treatment guidelines for common disease conditions. All states were asked by the MoHFW to adopt the law by passing resolutions in their respective assemblies. National Council for Clinical Establishments, which is a multi-member body under the Chairmanship of the Director General of Health Services with representatives of

various stakeholder institutions, is under notification. Work on the categorization of clinical establishments and development of minimum standards has been initiated in association with the Quality Council of India and the Indian Medical Association. A committee has also been formed for the development of standards for electronic records maintenance systems, to be adopted in the hospitals.

3.4.3 Insurance regulations

The IRDA was constituted by an Act of Parliament called the Insurance Regulatory and Development Authority Act, 1999 (The Gazette of India, 1999) and duly passed by the GoI (Rediff News, 1999). IRDA regulates and promotes the insurance industry in India and protects the interests of holders of insurance policies.

One of the main responsibilities of the Authority is to regulate, promote and ensure the proper growth of the insurance business in India. The Authority has been entrusted with several powers and functions relating to regulations on investment of funds by insurance companies, regulating maintenance of the margin of solvency, settlement of disputes between insurers and intermediaries, overseeing the functioning of the Tariff Advisory Committee, specifying the percentage of premium income of the insurer, to finance schemes for promoting and regulating professional organizations and identifying the percentage of life insurance business and general insurance business to be undertaken by the insurer in the rural or social sector. The Authority provides a certificate of registration to life insurance companies and is responsible for the renewal, modification, withdrawal, suspension or cancellation of this certificate of registration. It also specifies the requisite qualifications, code of conduct and practical training for insurance intermediaries and agents (Insurance Regulatory and Development Authority, 2007a, Nagree-Mahtani, 2002).

The IRDA opened up the market in August 2000. Foreign companies were allowed ownership of up to 26% of the total market. From 2000 onwards, the IRDA has framed various regulations ranging from registration of companies for carrying on insurance business to protection of policyholders' interests under Section 114A of the Insurance Act 1938.

In December 2000, the subsidiaries of the General Insurance Corporation of India were restructured as independent companies. At the same time, GIC was converted into a national reinsurer. In 2002, the four subsidiaries of GIC were delinked from

GIC by an Act of Parliament. GIC with its four subsidiary companies and Life Insurance Corporation of India (LIC) provide various health insurance products. In a decision of the Cabinet Committee on 25 July 2014, the GoI cleared 49% foreign direct investment in the insurance sector from the earlier 26%.

The IRDA, which licenses and regulates the TPAs, has specified that a TPA should be a commercial entity with a minimum capital of INR 10 million in equity shares and a working capital amounting to INR 10 million. One of the directors of the TPA should be a qualified medical doctor registered with the Medical Council of India. A participating foreign company's equity shares cannot at any time exceed 26% of the paid-up equity capital of the TPA. The licence is usually granted to a TPA for a period of three years and the licence fee is INR 30,000 (£ 302). A TPA whose application has been once rejected by the Authority cannot apply again for a period of two years from the date of such rejection.

The other bodies, which also play roles in regulation of insurance schemes, are the Tariff Advisory Committee and the Life Insurance and General Insurance Council. The Tariff Advisory Committee is a body corporate that controls and regulates the rates, advantages, terms and conditions offered by insurers in the general insurance business. It has the authority to require any insurer to supply such information or statements necessary for discharge of its functions. The Life Insurance and General Insurance Council conducts examinations for individuals wishing to qualify as insurance agents (Nagree-Mahtani, 2002).

3.5 Rashtriya Swasthya Bima Yojana (RSBY)

Despite the expansion in health facilities, illness remains one of the most prevalent causes of human deprivation in India. About 94% of the Indian workforce or 400 million people are working in the informal sector (Birdsall, 2015). The informal or unorganized sector in India refers to those enterprises whose activities or collection of data are not regulated under any legal provision, or those who do not maintain any regular accounts (Bhardwaj et al., 2004).

Apart from deteriorating infrastructure, a lack of awareness and low literacy levels, and a widespread lack of health insurance as outlined above compounds the health-

care challenges that India's poor face. The rapidly increasing gap between demand and availability of affordable health care makes health care an expensive proposition and insurance a pertinent need. As at present, the majority of the informal sector lacks access to effective social protection systems. The vulnerability of the poor in the informal sector increases when they have to pay fully for their medical care, with no subsidy or support. On one hand, such workers do not have the financial resources to undertake medical treatment; and on the other, the health infrastructure leaves a lot to be desired.

Thus, there is ample justification for introducing health insurance (Ahuja, 2004). Firstly, even low-income people can make small periodic contributions, thereby taking some financial burden off from the already strained state revenues. Secondly, the insured individuals could be given the option of going to either public or private service providers, which in turn would generate competition among providers for better services. Finally, health insurance can be used to promote certain desirable behaviour such as family planning, immunization, reduction of tobacco and alcohol consumption, etc.

In December 2008, the Indian Parliament passed a legislation called the Unorganised Workers Social Security Bill that mandated the Union Government to 'formulate, from time to time, suitable welfare schemes for the unorganized workers.' This legislation has a schedule which includes the RSBY as a new scheme (Department of Labour & Employment and Jharkhand State Labour Welfare Society, 2010).

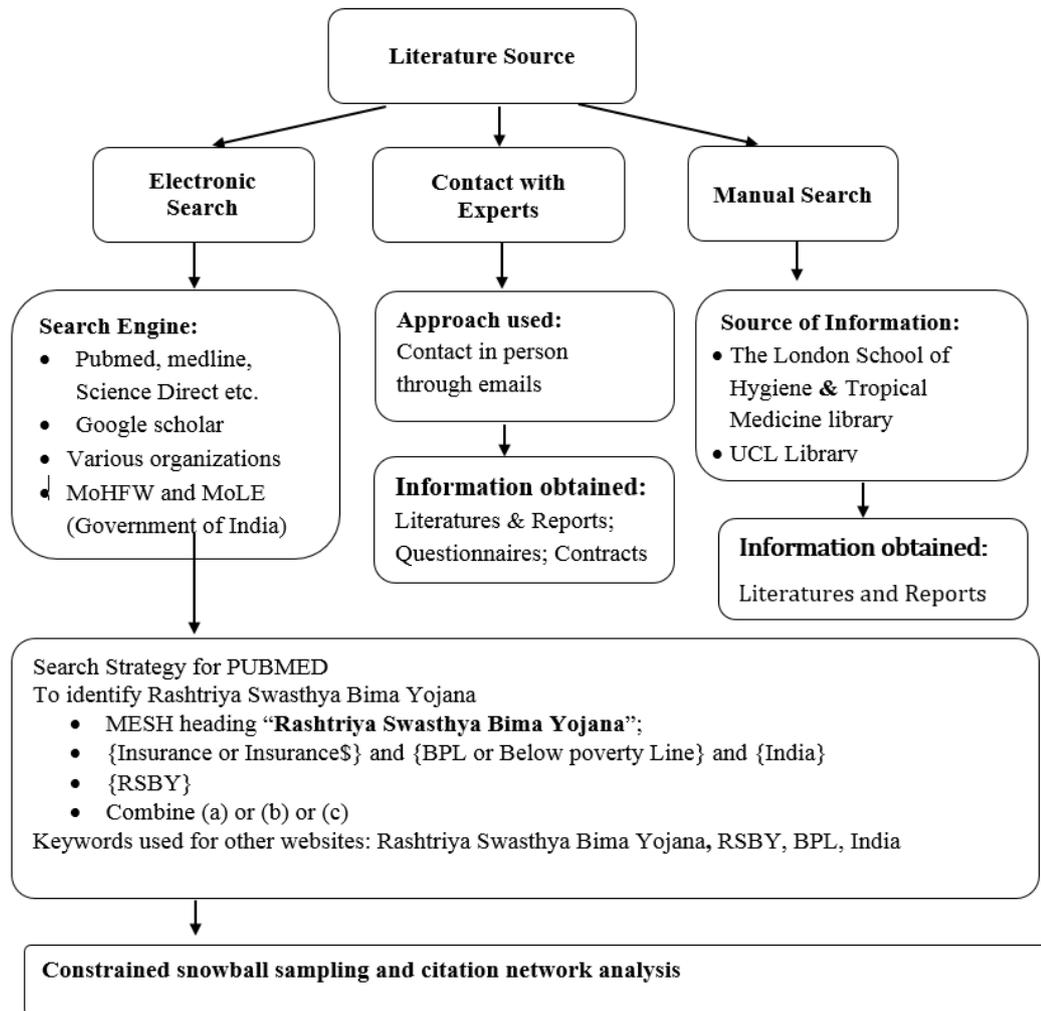
RSBY is a GoI initiative that uses contracts as a PPP tool. The objective of RSBY is to provide protection to BPL households from financial liabilities arising out of health shocks that involve hospitalization. Every BPL family holding a ration card is eligible for this scheme and can include in the scheme up to five family members – the head of the household and four others who may be the spouse, children and parents. The family is issued with a biometric-enabled smart card on a payment of INR 30 (£ 0.3). This card contains their fingerprints and photographs and entitles them to inpatient services consisting of more than 700 packages under 15 categories, up to a limit of INR 30,000 (£ 302).

The RSBY is a flagship programme of the Central Government. It aims to increase the scope and extent of coverage of the scheme, so that ultimately UHC is achieved.

The focus of the scheme is specifically on the BPL population. At the same time, by covering over 700 hospitalization packages, RSBY aims to protect the poor from major health shocks and increase the depth of coverage. Finally, by introducing a cashless mechanism through a smart card, the number of beneficiaries is also enhanced as the poor will not have to pay OOP at the time of hospitalization (Narayana, 2010, Das and Leino, 2011, Seshadri et al., 2011). RSBY is thus a big step towards UHC.

A systematic review was conducted to study and analyze the RSBY documents. The search strategy is given in detail in Figure 3.3. Various peer reviewed articles, reviews, reports and letters were considered for the review. The review was conducted through electronic search, contact with experts and manual search in libraries. The objective of this review was to identify all documents (published and unpublished) that could provide some insight into the background, launch and sustainability of the RSBY scheme, its situational analysis, contract design, contract milieu, external environment, stakeholders and implementation.

Fig. 3.3: Literature review search strategy for RSBY documents



\$ – Wild card; MoHFW – Ministry of Health and Family Welfare; MoLE – Ministry of Labour and Employment

3.5.1 RSBY and partnership with the private sector

Health care is one of India’s largest sectors, which had a total worth of more than US\$ 34 billion before the launch of RSBY (Pate et al., 2007). The private sector accounts for more than 80% of total health-care spending, providing about 60% of all outpatient care and as much as 40% of all inpatient care (Pate et al., 2007). It is estimated that nearly 70% of all hospitals and 40% of hospital beds in the country are in the private sector (Pate et al., 2007). In the Indian market, these private sector providers contribute to provider competition, which may help enhance efficiency. A resource-rich and expanding private sector in health care makes it an important

source to be partnered by the public sector. From the public sector point of view, there are certain benefits and challenges in partnering the private sector (Table 3.4).

Table 3.4: Pros and cons of collaborating with the private sector in health

Sub-sector	Pros	Cons
Informal*	Accessible Client-oriented Low cost	Poor quality of care Difficult to mainstream Poorly educated
Not-for-profit**	High quality Targeted to the poor Low cost Involves the community	Small coverage Lack of resources Cannot be scaled up Ad hoc interventions
For profit	High quality (in select disciplines) Huge outreach/coverage Innovation	Ad hoc interventions High cost Variable quality Clustered in cities

Source: World Bank India Report (Patel et al., 2004) (accessed on 30 December 2014)

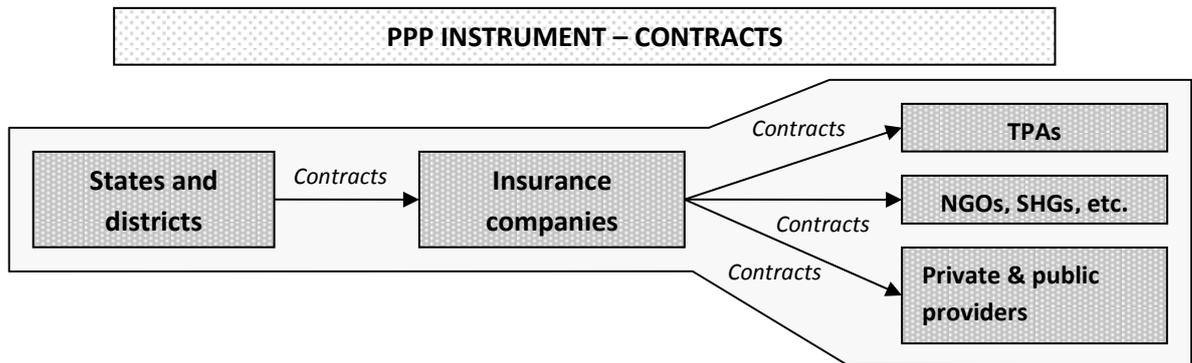
* – Non-qualified medical practitioners in the informal private sector; ** – non-governmental organizations (NGOs)

Partnership with the private sector for health care in India had hitherto been primarily in the form of management and/or service contracts. However, in the RSBY scheme, private stakeholders participate in enrolment, management and provision of health-care services. The RSBY scheme contracts private insurance companies, private hospitals, TPAs and NGOs for assisting in enrolment and insurance management. Policymakers of RSBY have given a choice to the beneficiary to avail benefits from either public or private facilities, thus shifting the financing from the health-care supply side to the demand side. By including public facilities, RSBY may be able to push and direct insurance funds into the existing resource-constrained public health-care system. This in turn could mean that insurance might not just be viewed as a financing instrument but also a tool for governments to fund their own systems.

3.5.2 Use of contracts in the implementation of RSBY

Contractual relationships take various forms in the RSBY scheme implementation (Figure 3.4).

Fig. 3.4: Use of contracts in the implementation of RSBY



Contracts between the states and insurance companies: State governments set up a competitive bidding process and select a public or private insurance company licensed to provide health insurance by the IRDA. An insurance company that fulfils technical criteria and has the lowest premium is usually chosen (officials at the Ministry of Labour and Employment (MoLE) and MoHFW) . While more than one insurer can operate in a particular state, only one insurer can operate in a single district at any given point in time. The period of the contract with the successful bidder is three years from the effective date subject to renewal on a yearly basis, based on parameters (performance indicators) fixed by the state government/nodal agency.

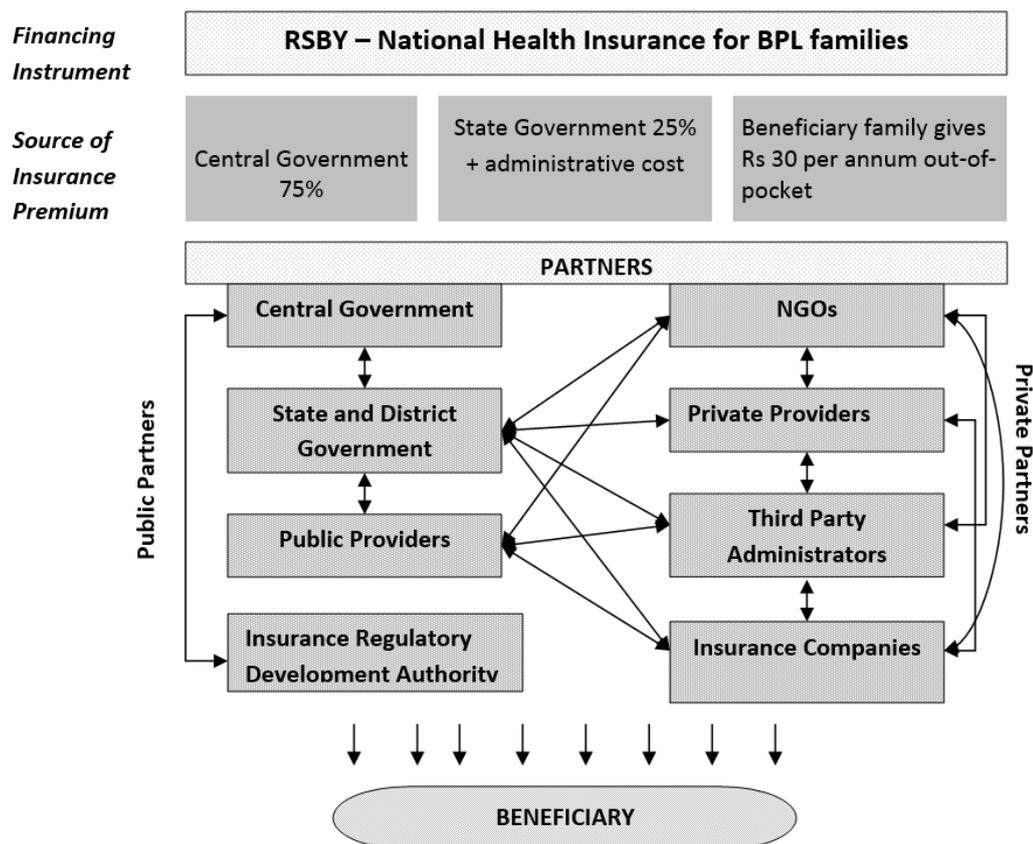
Contracts between the insurance companies and TPAs: According to the GoI guidelines, the process is required to be completely cashless for the beneficiary, which in turn requires the use of smart cards that need to be issued to all members. Thus, the insurance company needs to arrange sub-contracts with qualified smart card providers who are referred to as TPAs. The role of the TPAs can also include establishing provider networks, collection and analysis of data, negotiating rates for procedures with providers, contracting providers, processing claims and making direct payments to them. They can arbitrate on any dispute between the subscriber and the provider. For the services provided by a TPA, the insurance companies pay between 5.2% to 5.4% of the total amount of premium collected under the policy (BearingPoint, 2008). The insurer also engages intermediaries with local presence (such as NGOs) in order to provide grass roots outreach and assist members in utilizing the services after enrolment. The insurance company is tasked with empanelling/certifying both public and private care providers. The process is based on prescribed criteria that the service providers need to possess, such as specified basic facilities. For example, the service

provider may be required to have at least 10 inpatient medical beds, or have specified medical, surgical facilities and diagnostic facilities, etc.

3.5.3 RSBY Scheme design and implementation

Figure 3.5 helps identify the various partners involved in the implementation of the RSBY scheme. The arrows represent the interaction between partners.

Fig. 3.5: Partners involved in implementation of RSBY



Benefits: RSBY provides the beneficiary a total benefit of up to INR 30,000 (£ 302) per BPL family per annum, on a family floater basis, whereby the total benefit can be availed individually or collectively by a maximum of up to five enrolled members of the family. The ‘family’ would comprise of the household head, spouse and up to three dependents. The scheme covers pre-existing conditions subject to minimal exclusions, coverage of health services related to hospitalization and services of a surgical nature that can be provided on a day care basis. Though OPD facilities are not covered under the scheme, OPD consultation fees are almost negligible in public hospitals. There is also a provision for pre- and post-hospitalization expenses for one day prior to and five days after hospitalization. The scheme includes a transport

allowance (actual, limited to £ 1.65 per visit) but subject to an annual ceiling of £ 16.5 (Ministry of Labour and Employment, 2010).

Funding: The GoI contributes 75% of the estimated annual premium of £ 12.5, subject to a maximum of £ 9.2 per family per annum. Additionally, the cost of a smart card (see below) is also borne by the Central Government at £ 1 per card. Contribution by the state governments is 25% of the annual premium, as well as any additional premium in cases where the total premium exceeds £ 12.5. The beneficiary pays £ 0.5 per annum as registration/renewal fee. Any administrative and other related costs of administering the scheme in each state, not otherwise included in the premium cost, are borne by the state governments (Ministry of Labour and Employment, 2010).

State nodal agency: The scheme as designed at present has a number of stakeholders. At the apex is the Union Government represented by the Ministry of Labour and Employment (MoLE), followed by the concerned state government as the next tier which sets up an independent state nodal agency (SNA) for implementation of the scheme. Different state governments have chosen different departments under which to place the SNAs. Therefore, the impact of RSBY may vary from state to state, depending on the efficiency of the SNA and its controlling department (Table 3.5).

Table 3.5: Nodal agency for RSBY implementation

Name of state	State nodal agency
Delhi, Goa, Jharkhand, Karnataka, Kerala, Maharashtra, Manipur, Nagaland, Orissa, Tamil Nadu, Tripura	Department of Labour
Arunachal Pradesh, Uttar Pradesh	Department of Rural Development
Assam, Uttarakhand	National Rural Health Mission
Bihar, Haryana, West Bengal	Directorate ESI
Chhattisgarh, Gujarat, Meghalaya, Punjab	Department of Health and Family Welfare
Jammu and Kashmir	Directorate of Family Welfare
Himachal Pradesh	H.P. Swasthya Bima Yojana Society
Mizoram	Mizoram State Health Care Society

Source: Based on RSBY's official website <http://www.rsby.gov.in> (Ministry of Labour and Employment, n.d.) (accessed on 15 February 2015)

Management of the scheme and smart cards: There are many stakeholders involved in the oversight and execution of RSBY at national, state and district levels. One key stakeholder for administrative functions is the insurance company. The nodal agency seeks bids from registered public or private insurance companies. Each contract is district specific, with the insurer agreeing to establish a separate project office for implementing the scheme and coordinating activities with the state nodal agency in the state capital. The insurer must agree to cover the benefit package prescribed by the Central MoLE through a cashless facility. Annually, an electronic list of eligible BPL households is provided to insurers by each participating state's MoLE. The insurance company prepares an enrolment schedule for each village, along with dates, with the help of district officials. The insurance companies are provided a maximum of four months to enrol BPL families in each district. Insurers are compensated on the basis of the number of smart cards issued, i.e. households covered. Smart cards enable foolproof biometric identification of the beneficiary and make the scheme completely cashless. The eligible beneficiary, whose information is included in the district BPL list, needs to come to the enrolment station (in remote areas the insurance company travels to the beneficiaries to make the card) and the identity of the household head needs to be confirmed by the authorized official in order to issue the smart card. The card is personalized and delivered on the spot, along with an information packet describing the benefits, hospitals in the network and other relevant information. There is also a provision for insurance coverage across states by providing split cards under the scheme at the time of first issue, or subsequently at the district kiosk. The split value can be decided by the head of the family, provided the total amount on both the cards is equivalent to the total amount available on the primary card before the split. This could prove useful to a large number of unorganized sector workers in India who migrate from one state to the other in search of employment.

Insurance companies: The unit of implementation under RSBY is a district. There can be more than one insurance company operational within a state. Under the IRDA, there are 27 health insurance companies listed for the year 2013–14 (Insurance Regulatory and Development Authority, 2014). Some of these health insurance companies are providing health insurance under RSBY scheme. The list of insurance companies contracted in various states of India in 2013–14 is at Table 3.6.

Table 3.6: List of insurance companies contracted in various states (2013–14)

S No.	State	Insurance companies (districts)	No. of districts for which data was available
1	Andhra Pradesh	Reliance General Insurance (1)	1
2	Arunachal Pradesh	Royal Sundaram Alliance Insurance (10)	10
3	Assam	National Insurance Company (23)	23
4	Bihar	ICICI Lombard(10); HDFC (5); Cholamandalam MS General Insurance (6); National Insurance (1); Tata AIG General Insurance (4); Max Bupa Health Insurance (2); United India Insurance (5); Reliance General Insurance (1); Apollo Munich Health Insurance (2)	36
5	Chandigarh	ICICI Lombard	6
6	Chhatisgarh	Oriental Insurance Company (27)	27
7	Delhi	Oriental Insurance Company (9)	9
8	Goa	New India Insurance (2)	2
9	Gujarat	Oriental Insurance Company (8); National Insurance Company (3); Tata AIG General Insurance (6); Star Health Insurance (5)	22
10	Haryana	National Insurance Company (9); United India Insurance (12)	21
11	Himachal Pradesh	New India Assurance (12)	12
12	Jammu and Kashmir	United India Insurance (1)	1
13	Jharkhand	IFFCO-TOKIO General Insurance (1); Tata AIG General Insurance (2); Cholamandalam MS General Insurance (7); Star Health and Allied Insurance (8); ICICI Lombard (6)	24
14	Karnataka	IFFCO-TOKIO General Insurance (14); Tata AIG General Insurance (10)	24
15	Kerala	Reliance General Insurance (13)	13
16	Madhya Pradesh	IFFCO-TOKIO General Insurance (3)	3
17	Manipur	New India Assurance (6)	6
18	Meghalaya	ICICI Lombard (10)	10
19	Mizoram	National Insurance Company (8)	8
20	Nagaland	New India Assurance (11)	11
21	Orissa	Star Health Insurance (5); IFFCO-TOKIO General Insurance (8); ICICI Lombard (4)	17
22	Punjab	Reliance General Insurance (18); Star Health Insurance (3)	21
23	Rajasthan	National Insurance Company (22); Land T (8)	30
24	Tamil Nadu	United India Insurance (2)	2
25	Tripura	Royal Sundaram Alliance Insurance (7)	7
26	Uttar Pradesh	United India Insurance Co. Ltd. (13), National Insurance Company (10); ICICI Lombard (13); Religare Health Insurance Company Limited (6); The Oriental Insurance Co. Ltd. (7); Royal Sundaram Alliance Insurance (8); HDFC ERGO General Insurance (17);	74
27	Uttarakhand	United India Insurance (13)	13
28	West Bengal	United India Insurance (4), National Insurance Company (8); ICICI Lombard (1); Cholamandalam MS General Insurance (3); The New India Assurance (2)	18

Source: Adopted from RSBY Website (Ministry of Labour and Employment, 2014) (accessed on 20 March 2015)

Note: Data was not available for the following states/UTs - Andaman and Nicobar, Dadra and Nagar Haveli, Daman and Diu, Lakshadweep, Maharashtra, Pondicherry and Sikkim

Management information system: The scheme's management information system is built centrally for all state-led RSBY schemes to enable the collection of standardized information on all daily transactions at hospitals. This information is uploaded through an internet/phone line to a database on a district server. Data from all districts flow to the Central Government at periodic intervals.

Service provision: The insurance company is tasked with empanelling/certifying both public and private care providers in the programme. The empanelled facilities must agree to set up a specific RSBY desk with smart card reader and trained staff. RSBY has negotiated a package rate for all expenses, e.g. medicine, tests, bed charges, materials, food etc. related to the treatment of covered services, and payments are made to the provider on a case-based payment system. An empanelled hospital should not charge anything from the patient for treatment related to the list of diseases under package rates. Under RSBY, a list of 727 package rates has been developed (Annexure 1). To get empanelled under the scheme, a facility needs to sign a MoU with the insurance company.

A prerequisite for empanelling is to have appropriate infrastructure for inpatient and day care services. This process is carried out by the insurer. However, states may assist to complete the task.

All government hospitals (including PHCs and CHCs) and ESI hospitals can be empanelled. The criteria for empanelling private hospitals and health facilities are as follows:

- at least 10 inpatient medical beds for primary inpatient health care;
- fully equipped and engaged in providing medical and surgical facilities, including diagnostic facilities, i.e. pathology testing, X-ray, ECG, etc. for the care and treatment of injured or sick persons as inpatients;
- fully equipped operating theatre where surgical operations are carried out;
- fully qualified doctors and nursing staff under its employment round the clock;
- maintaining of necessary records as required to provide necessary information on the insured patient to the insurer or his representative/government/trust as and when required;
- registration with the Income Tax Department;

- telephone/fax and internet facilities;
- machine to read and manage smart card transactions.

As of October 2014, 10,311 hospitals (6,093 private hospitals and 4,218 public hospitals) were included in the RSBY delivery network (Ministry of Labour and Employment, 2014). To avail benefits, a RSBY beneficiary visits a provider and goes to the RSBY help desk where the patient's identity is verified through fingerprints. The patient then visits the doctor who assesses his/her health condition and prescribes a treatment. The assistant at the RSBY help desk checks whether the procedure is in the list of pre-specified packages. If the procedure is on the list, an appropriate prescribed package is selected, the patient is scheduled for the procedure, and the amount to be paid is blocked on the smart card. If the procedure is not on the list, the help desk checks with the insurer regarding the price and gets approval to conduct the procedure. At the time of discharge of the beneficiary from the hospital, the smart card is swiped again with fingerprint verification for the amount spent and the amount remaining and the beneficiary is paid INR 100 (£ 1.0) by the hospital as transportation expense. The pre-specified cost of procedure is deducted from the amount available on the card and the hospital sends an electronic report and claim to the insurer/TPA. The insurer/TPA reviews the records and information and makes payment to the hospital (electronically) within a specified time period (agreed upon between insurer/TPA and hospital). The funds received get into the user fee revenue of public hospitals and are utilized as per the guidelines of the user fee and for private hospitals, the amount reimbursed is a fee for the service provided by the facility.

3.5.4 Challenges associated with the RSBY scheme

Several evaluations have been conducted by the state governments and various other organizations in recent years to assess the process and outcome of the RSBY scheme. As far as has been ascertained, these state-level evaluations have been conducted in Jharkhand, Bihar, Uttar Pradesh, Kerala, Karnataka, Himachal Pradesh and Gujarat. The Centre for Development Studies in Trivandrum and the Amsterdam Institute for Social Science Research, with support from the Hivos Knowledge Programme, monitor the implementation of the scheme in the states of Punjab, Gujarat, Odisha, Andhra Pradesh and Kerala – states sufficiently distinct from each other in their political, economic and social configurations and also situated in different parts of the country (Kannan and Varinder, 2012).

The RSBY scheme is considered by some as a success (Swaroop, 2012). But according to other sources, the scheme offers limited financial protection, suffers from corruption, abuse and cost escalation; and has skewed public resources to curative rather than preventive care (Balooni et al., 2012, Sinha, 2012, Shivakumar, 2013, La Forgia and Nagpal, 2012).

Out of a total of 29 states and 6 UTs, 26 states and 3 UTs are implementing this scheme. A district-wise study in 2013–14 shows that out of a total of 505 districts (in the RSBY implementing states), 416 (82.4%) districts have been covered (Ministry of Labour and Employment, 2014). A total of 37.5 million (approximately 55% coverage of total poor households) card holders provide coverage to a total of 112.5 million beneficiaries at an average premium of approximately INR 400 (£ 4). For the year 2013–14, a total of 2.5 million beneficiaries have availed hospitalization services at an average claim payout of approximately INR 5000 (£ 50.3) (RSBY Committee, 2014).

The real test of coverage lies in the number of people actually enrolled. Even after the completion of about four years, the fact that eight states have achieved a coverage of less than half of the estimated BPL families should have been a matter of concern, both to the concerned states as well as the Union Government (Kannan and Varinder, 2012). A review of the present status of RSBY reflects a huge disparity in uptake of RSBY at the state level. States like Delhi and Karnataka have less than 20% enrolment, while Himachal Pradesh has more than 85% of its BPL population covered under the scheme (Ministry of Labour and Employment, 2012a). The overall enrolment coverage of the scheme in 2012 was around 42.2% of the BPL population (Kannan and Varinder, 2012). This has grown slowly and reached only 55% in 2014 (Table 3.7).

Table 3.7: Enrolment and empanelment under the scheme in various states

State	BPL population		Empanelled hospitals					
	BPL population (%)	% BPL population Enrolled	Private hospitals	Public hospitals	Total hospitals	Share of public in total hospitals (%)	Empanelled hospitals per 10,000 RSBY cards	Empanelled hospitals per 10,000 RSBY poor households
Andhra Pradesh	9.2	-	3	4	7	42.9	-	-
Arunachal Pradesh	34.6	-	-	11	11	-	0.5	0.28
Assam	31.9	52.4	28	134	162	17.3	2.4	0.27
Bihar	33.7	54.6	865	100	965	89.6	1.12	1
Chandigarh	21.8	61.3	4	4	8	50.0	-	-
Chhattisgarh	39.9	59.2	349	279	628	55.6	5.45	3.5
Delhi	9.9	-	35	-	35	-	-	-
Gujarat	16.6	42.3	937	487	1424	65.8	8.47	4.7
Haryana	11.1	30.7	429	33	462	92.9	12.25	7.39
Himachal Pradesh	8	71.6	23	171	194	11.9	8.85	7.08
Jammu and Kashmir	10.3		5	15	20	25.0	2.31	0.14
Jharkhand	36.9	50.8	217	220	437	49.7	4.38	2.15
Karnataka	20.9		546	328	874	62.5	9.1	2.03
Kerala	7	84.8	146	161	307	47.6	2.02	2.57
Maharashtra*	-	-	1181	15	1196	1.25	5.49	1.51
Madhya Pradesh	31.6	49.6	76	44	120	63.3	-	-
Manipur	36.8	48.2	6	-	6	100.0	1.25	0.28
Meghalaya	11.8	40.9	10	188	198	5.1	10.81	10.29
Mizoram	20.4	21.7	15	78	93	16.1	20.11	30.68
Nagaland	18.8	20.7	6	1	7	85.7	1.03	2.57
Orissa	32.5	65.0	137	408	545	25.1	3.3	0.86
Pondicherry	9.6	34.5	4	-	4	100.0		
Punjab	8.2	51.6	175	161	336	52.1	23.54	5.41
Rajasthan	14.7	72.1	229	453	682	33.6	-	-
Tripura	14	64.2	1	53	54	1.9	1.12	1.02
Uttar Pradesh	29.4	37.8	1254	729	1983	63.2	4.99	1.81
Uttarakhand	11.2	38.3	49	94	143	34.3	5.39	2.91
West Bengal	19.9	55.3	544	62	606	89.8	1.08	0.85
Total	21.9	55	6093	4218	10311	59.1	3.8	1.4

Source: RSBY Website, and Kannan and Varinder (Ministry of Labour and Employment, 2014, Kannan and Varinder, 2012)(accessed on 20 February 2015)

*Recent data regarding hospitals empanelled was not available for Maharashtra on the RSBY website

Physical access to hospital treatment is another important aspect of the assessment of the success or otherwise of RSBY. Card holders are entitled to get inpatient treatment only in empanelled hospitals, which could be either public or private hospitals, thus giving the beneficiaries a choice of selection of a health facility. Narayana (2010) in a review of the scheme states that the percentage of public hospitals out of those empanelled in the sample states varies from 45.8% in Kerala to 4.95% in Haryana to none in Maharashtra (a situation slightly different in 2014 as indicated above). Nationally, 70% of the empanelled hospitals are from the private sector while the remaining 30% are public sector hospitals (Narayana, 2010). Only eight out of 22 states show a higher number of empanelled public hospitals than private hospitals in

more recent years than the Narayana study. However, the process of empanelment is not transparent and remains independent of the public domain. Hospitals with highly inadequate facilities were reported to be empanelled under the scheme (Nandi et al., 2012). Distribution of the empanelled hospitals mainly in the urban areas makes accessibility a major concern for the RSBY beneficiaries. The absolute number of empanelled hospitals is not a sufficient condition to gauge the physical access to inpatient treatment (Table 3.7). There are many other details that need to be marshalled to make a proper assessment, some of which can only be gathered through case studies. In terms of the number of empanelled hospitals per 10,000 RSBY cards, most of the states are lagging behind (Ministry of Labour and Employment, 2014, Kannan and Varinder, 2012) (Table 3.7).

One of the pre-requisites for a scheme to function reasonably well is the level of awareness and capabilities of the persons who are entitled for inclusion in such schemes. Despite the scheme being managed from the state level, many beneficiaries are unaware of its benefits (Das and Leino, 2011). Ineffective information, education and communication (IEC) has been reported in the scheme (Trivedi and Saxena, 2013). The case of Punjab is aptly reported by Gill et al. (2013) who state that ‘most of the BPL families which the study team met did not know the benefits of RSBY’ (Gill et al., 2013). Das (2012) narrates the statement of a *sarpanch* of a village from Orissa: ‘although people have received the card, they do not know how to use it. Similarly, they do not have any information about the hospitals empanelled under the RSBY scheme and how money is to be claimed using this card’ (Das, 2013). In the absence of this important information, there was no effective communication of benefits. Two instances are quoted by Das and Leino to illustrate the ignorance of the beneficiaries. In one, the card holder did not get benefits due to non-empanelment of the hospital where he was rushed for treatment; and in the other, only partial benefit could be reimbursed as the smart card expired during the course of the treatment. Poor enrolment, limited empanelment and low hospitalization rates are indicative of the poor awareness of the scheme among RSBY beneficiaries. Research undertaken by Das and Leino in 2011 indicates that although spreading awareness through IEC did not have a major impact on scheme enrolment, it did nevertheless have an impact on the utilization rates for those who finally became enrolled (Das and Leino, 2011).

Surveys of the health-care industry in India have shown that the quality of service provided in different facilities varies considerably and that many hospitals do not follow standard operating procedures (SOPs). In a study by the National Labour Institute, only one third of the study population reported the services to be satisfactory while the remaining were not satisfied (Kannan and Varinder, 2012).

A report by Amicus Advisory as well as several media reports have flagged the issue of a large number of ghost cards (Singh, 2010). There are also cases of suspect procedures being performed needlessly without treatment protocols. There is no way to judge if there is any truth in these charges (Shivakumar, 2013).

It is reported by Kunhikannan and Aravindan (2012) that in the state of Kerala, there are cases where hospitals have retained patients for longer periods than necessary to claim a higher amount (Kunhikannan and Aravindan, 2012). It is understood that a usual practice of hospitals is to hold patients' cards, which they can then freely manipulate until the transaction is completed in the system. Many of the hospitals keep their patients in the dark by not informing them of the amount availed from the card and the remaining balance, in spite of the stipulation of giving a printout of these details to the patients. Some of the malpractices give a clear indication of unreasonable rates being charged under the scheme. Kunhikannan and Aravindan point out several worrisome instances that clearly indicate the rigidity in operations, which negates the effective implementation of this scheme (Kunhikannan and Aravindan, 2012).

The scheme is designed to be cashless at the time of utilization. However, not infrequently, the difficulties in using the card have resulted in cardholders paying for the treatment themselves (Seshadri et al., 2011). Lack of knowledge of procedures and services, with doctors and hospitals being guarded in accepting cards only for claims regarding which they are certain of the coverage, has led to many beneficiaries having to pay for their treatment themselves despite the fact that RSBY does indeed provide coverage (Seshadri et al., 2011). One of the major problems reported is that while the scheme incentivizes hospital treatment, it has no incentives for medical management since OPD costs are not covered. Many evaluations have reported high use of surgical packages when other options could have been taken (RSBY Committee, 2014).

An RSBY committee constituted by the MoLE, GoI reported that RSBY has been faced with multiple weaknesses on the operational front. Some of the key weaknesses pointed out were (RSBY Committee, 2014):

- There is a conflict of interest with the insurance company conducting enrolments, empanelment/de-empanelment of hospitals as well as the insurance claims settlements, in some cases through the TPAs.
- The transaction management software at the field level is flawed, leading to no data or inaccurate data being reported.
- No key performance indicators were defined for monitoring the scheme.
- Lack of checks and balances at the operational level has led to multiple frauds in the scheme.
- The TPAs have been operating the scheme in various states whereas the contract was signed with the insurance company. This has led to instances where the states have had to coordinate with the TPAs, who have no direct stake in the RSBY.
- Inadequate staffing of the SNAs is another issue. This has led to negligible or a low level of involvement of the SNAs in the states.

3.6 Need for research

RSBY affords the ideal setting for exploring the role of PPPs in insurance. It is an innovative health insurance scheme targeting the BPL beneficiary to the extent that it uses contracts with the private sector at different levels of implementation. Although RSBY was introduced in 2008, there is little independent evidence on how well the use of contracts has worked. Moreover, because this is a Central Government scheme, with the unit of implementation being the district within the states, the scheme design allows for flexibility in implementation to the states right down to the district level, which lends itself to different structures with a varying role of different elements in the design of contracts.

Research should aim at providing data required by policy makers at all levels – Central, state and district, to decide between different mechanisms of scheme design. This research should directly address various data needs to help improve scheme

design and implementation. Particular areas that have been neglected and deserve attention are discussed below.

3.6.1 Areas for research

Four areas of research motivate this thesis.

Firstly, in PPPs using management or service delivery contracts, it is crucial to understand the allocated roles and responsibilities of partners and the division of risk and responsibility between them, including the incentive structures for different partners that are built into the scheme design. It is also crucial to understand the role of external factors.

Secondly, since insurance companies are one of the key stakeholders in the implementation of RSBY, it is important to understand their objectives and the incentives they function under. For example, insurance companies receive a fixed income from the premium; and if they are for-profit, they may wish to minimize expenditure by empanelling a limited number of facilities, empanelling facilities that offer a limited range of services/packages, or empanelling facilities which are not within close proximity to a high percentage of the BPL population in order to make it difficult for the beneficiaries to avail the benefits they are entitled to. Moreover, an initial review of the policy documents reveals the loose language used in contractual arrangements as is evident from statements of the following type: ‘The insurer shall empanel *enough hospitals* in the district so that beneficiaries need not travel *very far* to get the health-care services’, or ‘*adequate network of hospitals/health facilities* which meets minimum standards for service delivery and operation’, which leaves scope for variation in empanelment of facilities. The criterion for empanelment of facilities makes no mention of the packages to be offered at the facility or within the district. Additionally, the enrolment in the scheme currently stands at an average of 3.5 members per family (as against the maximum permissible limit of 5 persons for the same fixed premium) and the marketing of the scheme rests with the insurance companies (personal communication with the RSBY policy unit in the Central Government). The insurance companies have an incentive to encourage enrolment of the family but it adds to their profit margin to minimize the number of members enrolled per family.

Thirdly, the scheme design entitles a RSBY beneficiary to a package of 727 number of treatments (the number of treatments for each package on the list being pre-negotiated) but it is possible that the empanelled private sector facilities, for cost considerations, would take on only the simpler cases or chose to treat only selected packages (due to inadequate reimbursement through capitation for some of the treatments within the package).

Fourthly, pre-negotiated capitation rates for treatments within the package could result in reduced provision of adequate services. This indicates a continuing trade-off between risk/responsibility and the price of the contract between the principal and the agent. Thus, an important question to address regarding the pre-negotiated payment for an RSBY beneficiary is whether the quality of care differs for RSBY patients from that delivered to non-RSBY patients. In addition, does this differ across different types of providers, both public and private, since motivation to maximize income from the contracts may vary by type of provider?

Chapter 4
RESEARCH PROTOCOL

Chapter 4

RESEARCH PROTOCOL

4.1 Aims and objectives

4.1.1 Aim

To study the provision, availability and use of health services under PPP contracts in the implementation of RSBY and the factors that can influence such health services, in order to inform policymakers on how to improve the scheme design for the BPL beneficiary.

To meet this aim, all objectives have been examined through contractual arrangements in two different districts belonging to different states. The focus is not to look for attribution of findings to types of contracts, but to report on the use and provision of health services under contractual arrangements for factors such as range of services, patterns of utilization and provision of care; and to seek explanations for the patterns seen.

4.1.2 Objectives

The objectives of the study are:

- 1) to analyse the external environment (regulatory, institutional, political, etc.) and the contract design of the RSBY scheme in order to understand strengths and weaknesses of the scheme design and the incentive structures created by the assigned roles, responsibilities and relationships within the contracts;
- 2) to evaluate the availability of services by mapping the health-care providers including the packages offered by the empanelled health-care providers, and analysing the utilization patterns;
- 3) to compare the provision of health care *across* both public and private providers for RSBY beneficiaries and *between* RSBY and non-RSBY beneficiaries for a specific type of provider;
- 4) to inform policy on the findings and make recommendations in order to address any problems in the scheme and help improve provision of health care to the target population.

4.2 Conceptual framework

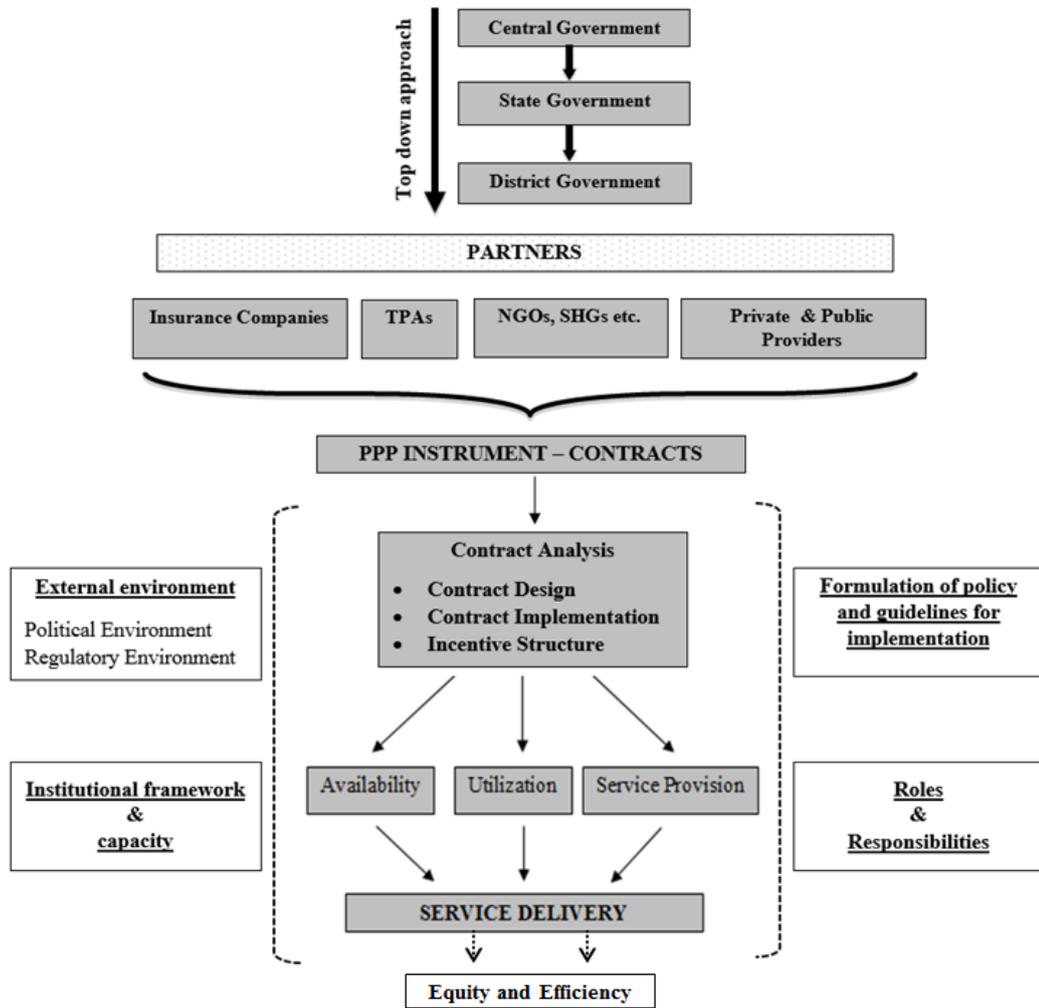
The RSBY scheme follows a top-down approach. Policies are decided at higher levels (Central Government, flowing down to state governments and districts) and are communicated to partners at subordinate levels who are then charged with the technical, managerial and administrative tasks of putting policy into practice (Figure 4.1). Different partners such as insurance companies, TPAs, NGOs, self-help groups (SHGs) and private and public providers are contracted to deliver the services to the RSBY beneficiaries. It was expected that the contract design would have an influence on three elements - availability, utilization and service provision, which in turn would affect service delivery and equity and efficiency under the scheme.

This research thus focused on studying service delivery in terms of availability, utilization and provision of health services under PPP contracts in the implementation of RSBY and the factors that might influence it. Means of influence include payment methods, incentive structures, stipulation for sanctions, etc. Other external factors such as organization and institutional capacity, and the political and regulatory environment that could influence implementation, were also studied. Transaction costs, the market and degree of competition, and degree of trust have not been formally considered as a part of the analysis due to constraints of resources and accessibility to information.

4.3 Study setting

The study focused on one district in the state of Haryana (Yamunanagar) and one district in the state of Punjab (Patiala) (Figure 4.2a, 4.2b, 4.2c).

Fig. 4.1: Conceptual framework

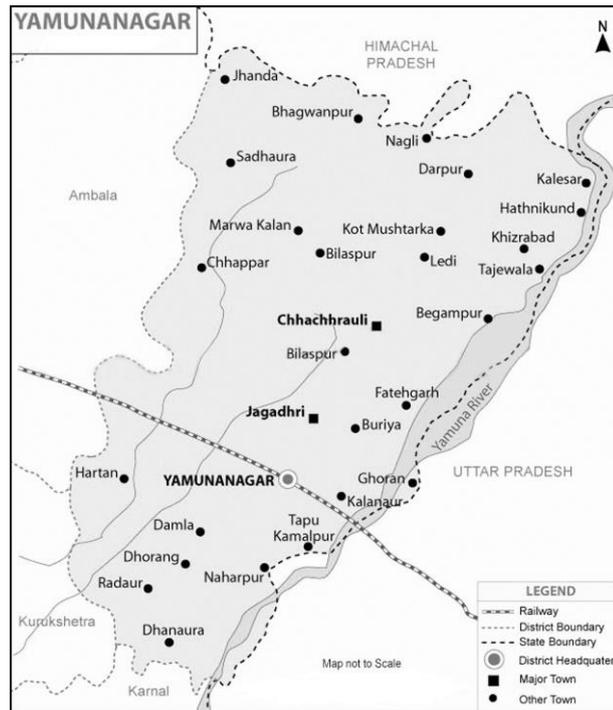


TPA – third party administrator; NGO – non-governmental organization; SHG – self-help group; PPP – public–private partnership

Fig. 4.2a: Map of India showing the states of Punjab and Haryana

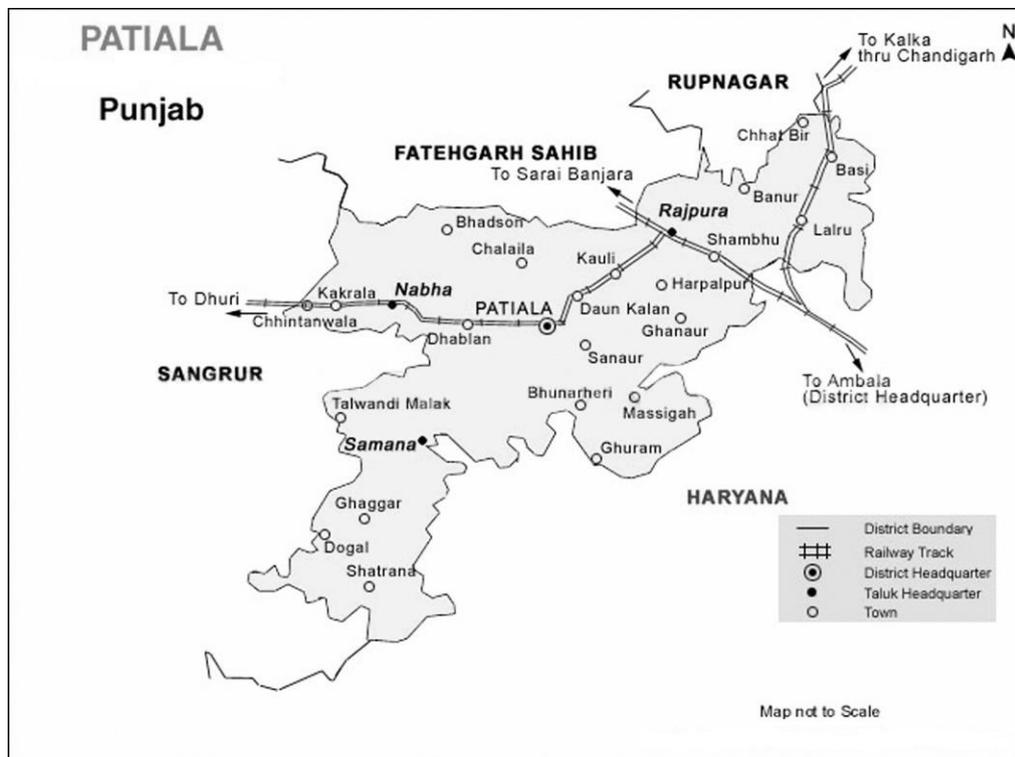


Fig. 4.2b: Map of Yamunanagar district (Haryana)



Source: <http://www.mapsofindia.com/maps/haryana/railways/yamunanagar.htm> (Yamunanagar)

Fig. 4.2c: Map of Patiala district (Punjab)



Source: <http://www.jnvpatala.org.in/MainMenu/Location.html> (Patiala)

4.3.1 Choice of states/districts

The reasons for selection of these states and districts were:

- Buy-in from various stakeholders at the national and state level, including the TPAs and insurance companies involved in the implementation of the scheme.
- Choosing two different states helped capture the various elements relating to capacity, governance, regulation, etc. across states, as states are the primary implementers of the RSBY scheme, with the unit of implementation being the district.
- RSBY had greater than two years of implementation in the districts at the start of the study, which helped in collection of reliable data.
- RSBY had a different set of partners involved in each district and it was hoped that choosing one district each in two different states would capture variations, if any. It also afforded the opportunity to explore various design and local (non-contract) factors that might influence implementation in terms of availability, utilization and provision.

4.3.2 District profiles

Yamunanagar, Haryana state (Government of Haryana, 2010)

Yamunanagar district came into existence on 01 November 1989. It has an area of 1,756 sq km, in which there are 655 villages, 10 towns, two subdivisions, three tehsils and three sub-tehsils. Before being named as Yamunanagar, it was known as Abdullapur. A large part of the district lies in the Shiwalik foothills. Sugarcane, wheat and rice are the main crops. Yamunanagar is an important industrial district and has metal, utensil and plywood industries.

Patiala, Punjab state (Government of Punjab, 2010)

Patiala is an erstwhile princely state. It was the capital of Patiala and East Punjab States Union (PEPSU), which was a state of India between 1948 and 1956. It is a district headquarters and is situated in the Malwa region of Punjab. Malwa has the largest number of districts in the reorganized Punjab, and antiquity of some of the cities goes back to the ancient and early medieval period. Patiala is a relatively young

city, a few years more than two centuries old. It is surrounded by the districts of Fatehgarh Sahib, Mohali and the UT of Chandigarh to the north, Sangrur district to the west, Ambala and Kurukshetra districts of the neighbouring state of Haryana to the east and Kaithal district of Haryana to the south. Patiala is a predominantly rural district.

4.4 Access and ethical approval

The aim of the research was first shared with the policymakers in the GoI and state governments. Discussions were held with the TPAs and insurance companies at the state level. Thereafter, the proposal was submitted to the Ethics Committee at the London School of Hygiene and Tropical Medicine. In addition, the proposal was submitted to the Institutional Ethics Committee (IEC) at the Public Health Foundation of India (PHFI), which undertook a full review of the proposal as recommended in the Indian Council of Medical Research (ICMR) 2006 guidelines. Strict confidentiality was maintained for all the data collected including facility data, hospital claim data and exit patient interview data.

The study used both qualitative and quantitative methods to study the use and provision of health services under contract. In addition, both primary and secondary data were used for quantitative research, with multiple methods employed to allow for the triangulation of data in order to enhance the rigour of the research and help improve the validity of the data. All data, both primary and secondary, were collected under the supervision of the principal investigator (PI) with the assistance of research assistants (RAs). Review of the existing documents and reports was carried out by the PI with support from the RAs.

4.5 Methods for Objective 1

Objective 1: To analyse the external environment (regulatory, institutional, political etc.) and contract design of the RSBY scheme in order to understand the strengths and weaknesses of the RSBY scheme design and incentive structures created by roles, responsibilities and relationships within the contracts.

Research questions

- What is the political environment in the selected states with regard to RSBY?
- What regulations govern the contracts within and across different states?
- What is the institutional capacity in the selected states for implementation of RSBY?
- What is the allocation of roles and responsibilities to different partners within the states? How does this vary across states?
- What is the contract design including the incentive structure for various partners/stakeholders? Do these vary across states?

Data sources and study tools: Data for Objective 1 was collected using key informant interviews and review of key documents. The key informants included the key personnel at national, state and district levels, key personnel from insurance companies operating at district levels, NGO representatives, TPAs and public and private sector health-care providers (Table 4.1). Key documents reviewed included contracts, programmatic reports, policy documents, evaluations etc. These documents were retrieved through the RSBY and Ministry of Labour and Employment website. Other sources of these key documents were Government offices, including state nodal agencies of the studied states, and personal communication with the central level policy makers. The contract between the Central Government and the state government, and between the SNA and the insurance company were obtained from the SNA. The contracts between the providers and the insurance company were made available by the providers. In most cases, the actual signed contractual agreement was available; in some others, a draft contract was shared with the understanding that the signed document was exactly similar.

Table 4.1: In-depth interviews conducted

SNo.	Key personnel interviewed	Number of interviews
1	RSBY implementers at the national level	3
	<i>Punjab</i>	
2	Special Secretary RSBY heading the SNA	1
3	Representative of the SNA	1
4	Representative of the insurance company	1
5	NGO representative at the district level	1
6	Third party administrators	1
7	Public sector health-care providers	1
8	Private sector health-care providers	1
	<i>Haryana</i>	
9	Director Employees State Insurance (ESI) heading the Nodal Agency (Nodal Agency: Directorate of ESI Health Care)	1
10	Representative of the insurance company	1
11	Representative of the SNA	1
12	NGO representative at the district level	1
13	Third party administrators	1
14	Public sector health-care providers	1
15	Private sector health-care providers	1
16	Other stakeholders (key personnel involved in the implementation of the scheme)	3
	Total	20

A semi-structured in-depth interview guide (for key stakeholder interview) was developed by the PI with valuable feedback from the Advisory Committee (Annex 2). The Advisory Committee included experts in various fields of study who, in addition to having knowledge of prevalent global and India-related issues relevant to RSBY specifically and social health insurance broadly, provided valuable feedback on design of the study tool. In addition, expert local advice was sought to ascertain the nuances in scheme implementation at district level. The interview guide was pilot tested on stakeholders. These stakeholders were subsequently not included among the study participants. The guide included questions on the political and regulatory environment, institutional and organizational capacity, roles and responsibilities and contract details.

Methods

Interviews were done in a mix of languages—English, Hindi and Punjabi, and lasted from 20 to 60 minutes. The interviews were conducted by the PI. Permission was

sought from key stakeholders to audio record the interviews for ease of reference and transcription. The audio recordings were reviewed and transcribed in English. A transcription agency was used in the initial phases to facilitate the process of transcription. However, due to the technical nature of the responses, requiring an understanding of the scheme design and the implementation process, transcription was later done by the PI.

The data was evaluated using thematic analysis (Braun and Clarke, 2006). Two members of the research team (PI and one RA) coded each transcript independently, with discrepancies being resolved through consensus. The codes were generated based on data in relation to the research question. The codes for each interview were entered in the Microsoft excel sheet. Thereafter, identification of key themes was done based on various categories of questions in key stakeholder's interview guide. The codes were then grouped together under appropriate themes and conclusions were drawn on the basis of the responses under each theme.

Key documents (contracts between various stakeholders, programmatic reports, policy documents, ongoing or previous evaluations, bidding documents as well as the promotional material used by the insurance companies, TPAs and NGOs) were systematically reviewed by the PI and RA independently. Relevant data pertaining to the following themes were extracted: external environment (political and regulatory), institutional framework and capacity; policy and guidelines for implementation; and roles and responsibilities. Any discrepancy noted was resolved through consensus. .

The PI and RA critically reviewed the contract documents under the following heads - ownership; objective; length of the contract; payment mechanism; completeness and comprehensiveness; monitoring mechanisms; specification of sanctions; and incentives structure. In case of any discrepancy, inputs from supervisors were sought.

To assess the market competition, SNA of Punjab provided the list of insurance companies who had participated in the bidding process over the years (2008-12) under the RSBY scheme. A similar list was not available for Yamunanagar district.

4.6 Methods for Objective 2

Objective 2: To evaluate the availability of services by mapping the health-care providers including the packages offered by the empanelled health-care providers, and analyzing the utilization patterns.

Research questions

- Is there a clustering of facilities within the district?
- What is the range of services/packages offered by the empanelled facilities?
- What is the utilization pattern including utilization by/from a specific population group (gender, medical condition), provider (public or private), patterns for imparting care, etc.?

Data sources and study tools

Primary data was used for assessment of availability of services and certain category of enrolment. While devising the methodology it was anticipated that secondary data on availability of services might be lacking, and hence it was planned that primary data be collected through personal interviews with the health-care providers. A checklist for availability of services in empanelled hospitals was used. This checklist consisted of availability of 20 services which were based on categories defined under the list of package rates of RSBY scheme.

For assessment of access to services, a secondary database of empanelled facilities was sourced from the insurance companies. Information was also requested from the district medical officers regarding the total number of registered medical facilities in the chosen districts. Thereafter, a comprehensive list of facilities eligible for enrolment was compiled. Secondary data of BPL census (block-wise) was also used for assessment of access to services. This database was retrieved from SNAs of both the states. The BPL population is the population eligible for enrolment under the RSBY scheme. The SNA procured the data for eligible candidates (BPL population) from the office of Registrar General of India. Line listing of the individuals (BPL population) was available for both the districts and contained the following information – name, age, gender and address (blocks).

For assessment of enrollment, a secondary database was analysed which was retrieved from the SNAs of both the states. SNA procured the enrolled data from the insurance

company. For Patiala district, line listing of enrolled individuals with the following information - name, age, gender was available. Also, line listing at household level with the following information - name, age and gender of HoH and number of individuals enrolled was available. However, in Yamunanagar district, line listing of enrolled individuals was not available though line listing at household level was available which included information on name, age and gender of HoH and number of individuals enrolled. To analyze off-target and leakages under the enrolment, primary data (Exit interview) was used. Information on BPL status and RSBY enrolment of the studied participants during the exit interviews was used to assess off-target and leakages.

To assess the utilization pattern under the scheme, secondary data on claims made by the providers was used. This secondary data comprised of information on the claimant, disease, transaction details and transaction amounts. These were sourced from the insurance companies via the SNA. The SNA does not store claims data itself; hence, data for utilization of the scheme by beneficiaries for the selected study period was obtained from the empanelled insurance companies. Claims data set was sourced for one complete annual cycle of enrolment, from September 2011 to December 2012. However, extension for the enrolment cycle was sought in both selected states, which took the enrolment period to the beginning of 2013. A total of 992 claims from Patiala district and 6,043 claims from Yamunanagar district were made during the study period. The claims data had the following information:

- Unique identity of the smart card
- Date of enrolment
- Dates of admission and discharge
- Amounts claimed and reimbursed
- Relationship of the claimant with the head of the household
- Diagnosis
- Age and sex of the beneficiary
- Type of hospital
- Name of the hospital.

Methods

Assessment of possible clustering of facilities to assess the level of access within the district was undertaken by mapping the empanelled and non-empanelled facilities within the district. Based on the criteria used for empanelment formulated by the state governments, a methodology was devised to only include facilities in the mapping that would be eligible for enrolment (as stated in chapter 3). For public facilities, CHCs, subdivisional hospitals and civil hospitals were considered. Primary Health Centres and Sub-centres were not included as they do not have sufficient in-patient facilities to make them eligible for empanelled under RSBY scheme. For private facilities, diagnostic centres were not included. Tele-communication was used to ensure the absence of in-patient facilities in these diagnostic centres. ArcGIS[®], a geographic information system, was used as the mapping software and three types of maps were generated for both Patiala and Yamunanagar. These included maps of empanelled facilities (Public and Private), empanelled and non-empanelled facilities, and all eligible facilities (Private Empanelled, Private Non-empanelled, Public empanelled, and Public Non-empanelled). In addition, available data on the volume of BPL enrolled families at block level was used to colour code blocks based on BPL family density. Four different categories were used: <50000, 50000-60000, 60000-70000, and >70000.

To assess the availability of services, the 20 sub categories included were - Neonatal care; Burns; Snake bite; Oncology; Urology; Endocrinology; Paediatrics; Orthopaedics; Ophthalmology; Neurosurgery; Hysteroscopy; Endoscopic procedures; Gynaecology; General surgery; ENT; Dental; Medical general ward – ICU; Medical general ward – nonsurgical; Medical general ward – surgical. The checklist was filled by trained interviewers in consensus with the providers. There were some instances where the provider refused to release information on availability of services within the agreed package and therefore had to be excluded from the data set. Data was collected in English and was entered into Microsoft excel sheet customized for this purpose. Descriptive analysis was performed for availability of services. An assessment was made of the total services available in the private and public hospitals by summing the total number of services available in each facility and dividing it by the maximum possible services available (20 multiplied by number of facility available for analysis

in the present study). Data for availability of services was entered in Microsoft excel and STATA was used for analysis.

Descriptive analysis was performed for enrolment using STATA software. For both the districts, enrolment at individual level and family level was calculated. Apart from this, the average number of individuals enrolled per family and the gender of the HoH was also calculated. For Patiala district, age and gender-wise (individual level) enrolment status was also analysed, however, this could not be done for Yamunanagar district as line listing of enrolled individuals was not available. Exit interview was used for assessment of off-target and leakages under the scheme. Off target was defined as the BPL population which was not enrolled under the scheme while leakage was defined as RSBY enrolled population but not BPL. STATA was used to run binary logistic regression analysis to find the determinants for off-target and leakages. The factors (independent variables) which were adjusted were education status; caste; age; gender and district. All the information available in the exit interviews was studied carefully and possible factors which could determine off-target or leakage were identified for in discussion with supervisors. Correlation among these independent variables was assessed and finally put in the regression model. Amongst the selected independent variables; the exposed groups considered were illiterate or literate up to primary level; females; SC/ST population; and Yamunanagar. The association was represented in the form of p-value and adjusted odds ratio. A p-value of less than 0.05 was considered to be statistically significant.

For assessment of utilization pattern, the claim data was analysed using STATA. Initially the data was screened and cleaned for any outliers. Outliers were noticed for amount claimed and reimbursed and duration of admission. Descriptive analysis was performed for volume of claims stratified over time, type of hospital, district, and gender. Clustering of claims over selected hospital was also assessed. Herfindahl-Hirschman Index (HHI) was used for assessment of clustering of claims in hospitals. It is a commonly accepted measure of market concentration, calculated by squaring the market share of each firm competing in a market, and then summing the resulting numbers. The HHI number could range from close to zero to 10,000. Mean and standard deviations were calculated for reimbursed and claimed amount. Kernel's density diagram was also plotted for reimbursed and claimed amount for type of hospital and district. Multivariate regression analysis was done to assess the

determinant of reimbursement amount taking relationship to HoH, type of hospital, duration of stay, age, district and gender as independent factors. These factors were selected on the basis of their being possible confounder and was discussed with supervisors keeping in view all the information available in the claims data. Before running the regression model, correlation was assessed among these independent variables. Other factors analysed in the claims data were duration of stay, diagnosis and time taken to settle the claims. While running the regression model, each independent variable was entered in the regression model at each step and hence five models were created.

4.7 Methods for Objective 3

Objective 3: To compare the provision of health care across both public and private providers for RSBY beneficiaries and between RSBY and non-RSBY beneficiaries for a specific type of provider.

Research questions

- Does provision differ across both public and private providers for RSBY beneficiaries?
- Is there any variation in user satisfaction between the private and public facilities, and between RSBY and non-RSBY patients, across the selected states?

A total of 12 facilities were selected with three public and three private facilities in each of the two chosen districts (Patiala and Yamunanagar). Two key factors in selection of the facilities were the volume of RSBY patients coming to the facility, and the management's willingness to participate in the research, i.e. a purposive sampling strategy was used for the selection of the RSBY empanelled facilities. In addition, an attempt was made to include both urban and rural facilities of each type in the selected districts to try and account for variations in delivery of care. One possible reason for variation could be a lower level of accountability on the part of the health provider in a less urban location due to remoteness from the district management (for public facilities) or a less aware patient from a lower socio-economic background (for both private and public facilities).

Evaluation of provision of services was categorized into three sequential stages which were adapted from the Donabedian Framework (Donabedian, 2005, Donabedian, 1988):

1. Structure: Evaluation of structural aspects of care via a standard checklists (health provider checklist, and observational and facility record checklist) e.g. clinic opening hours, access for disabled people, adequacy and state of repair of buildings, adequate emergency equipment, adequacy of toilets, etc.
2. Process: Evaluation of process of care via patient time spent in the clinic, adequacy and comfort of waiting area, patient privacy during the consultation, display of health education materials, etc.
3. Outcome: User satisfaction/perceived quality assessed via patient exit interviews. Measurement of scheme outcome (effects of health care on the health status of patients and population) requires large sample size and long term follow up, which is beyond the scope of this study and hence quality of care provided in the scheme instead of scheme outcome has been selected.

Technical quality of care usually included in the Donabedian Framework was excluded from evaluation due to resource constraints and difficulty in measuring the quality level.

Data sources and study tools

Observational and Facility Record Checklist (Annex 4) and Health Provider Checklist (Self-assessment) (Annex 5): These checklists addressed the structural evaluation of provision of care in the 12 selected facilities. Checklists were prepared by a group of experienced individuals in the field of hospital administration and RSBY implementation on the basis of the study objectives. The checklists were piloted by trained interviewers in hospitals that were not selected for the study.

All observations on the observational and facility record checklist were documented by trained data collectors with a degree in medicine. The health provider checklist was completed by the providers (hospital staff) in the selected facilities. Responses to all the questions were in the format of the Likert scale. The information gathered in the observational checklists and health provider checklists mainly fell under the following headings:

- access and physical facilities;
- patient rights;
- health and safety;
- operating department
- radiology services;
- labour room (if providing maternity services);
- facility records.

Exit interviews with patients (Annex 6): Patients from selected empanelled hospitals were interviewed during their discharge from the hospitals or during the follow-up visits on their inpatient experience. Consent was sought for participation in the study after which a semi-structured, pre-tested questionnaire was used by the trained interviewers. The information collected from the study participants belonged to the following heads:

- socio-demographic characteristics of the study participants;
- amount paid to be registered in the scheme;
- RSBY help desk and signages in the selected empanelled hospital;
- waiting time for being attended to by the hospital staff;
- process for hospital registration;
- cost of treatment;
- diagnostics and medicines from outside the hospital;
- food served in the hospital and its quality;
- discharge from the hospital;
- reimbursement of transportation cost;
- expense reimbursement during post hospitalization period;
- reason/s for choosing the particular health facility;
- previous health facility contacted;
- transportation to hospital;
- family members accompanying the patient.

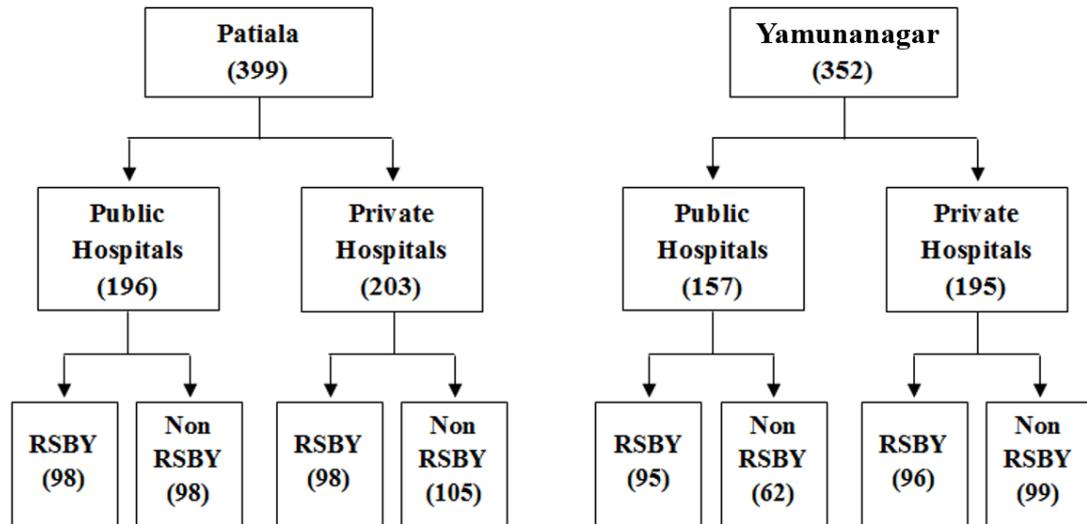
To assess user satisfaction during the hospital stay, a questionnaire was developed based on the structure of the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS, 2012) questionnaire. A modified version of this questionnaire was adapted for the local settings. The HCAHPS survey is the first national, standardized, publicly reported survey of patients' perspective of hospital care. This section of the exit interview questionnaire had seven categories to assess the quality of care given in the hospitals, viz. care during admission, care from the nursing staff, care from the doctors, hospital environment, experiences in the hospital, care during discharge and overall rating by the beneficiaries. There were several questions asked under each category, with various possible responses. The responses to the questions were mainly in an ordinal format.

Sample size and Sampling Technique

The estimated sample size for the exit interview was 752 (376 RSBY beneficiaries and 376 non-RSBY patients), considering it to be a case control study design, with 95% confidence interval (CI), 80% power, expected frequency of exposure (scheme implementation) in the control group 20% and percentage exposure among the cases as 10%. Epi Info 6 was used for the estimation of sample size.

Consecutive interviews were conducted (consecutive sampling) in the selected empanelled hospitals till the desired sample size was achieved in each facility. The exclusion criteria for the study were – being enrolled in any other insurance scheme, and patient not agreeing to give written consent for the study. A total of 751 exit interviews were conducted with 399 participants interviewed from Patiala district and 352 from Yamunanagar district. A total of 387 RSBY beneficiaries and 364 non-RSBY beneficiaries were interviewed. Private hospitals contributed with 398 exit interviews while 353 exit interviews were conducted in public hospitals (Figure 4.3). The initial aim of the study was to interview an equal number of RSBY and non-RSBY patients at each facility; however, due to lack of volume of patients in certain facilities and due to financial and time constraints, a more pragmatic approach was adopted.

Fig. 4.3: Enrolled participants for exit interviews



Data analysis

Data collected in the format of observational checklists, health provider and facility record checklist, and exit interviews were entered in Microsoft excel sheet. All statistical analyses were performed with STATA.

In the context of both the checklists, the responses were primarily in the form of five point Likert scale (strongly agree, agree, difficult to judge, disagree, strongly disagree) or in a few cases the responses were bivariate (Yes/No). For the purpose of analysis, scores were given to the responses. A score of one meant ‘strongly agree’ while a score of five meant ‘strongly disagree’. Extreme scores were given to bivariate responses, i.e. either one or five. Therefore, lower the score, the better was the structural aspect of health care. For each category mentioned under the checklist (stated above), mean score of all questions (within the category) were calculated so as to get a consolidated score for each category. Finally, mean scores were calculated for the consolidated score of each category and an intra-district comparison of public and private hospitals was conducted. Mann-Whitney U test was used, data being non-parametric, to assess the statistical difference between the scores of public and private hospitals. However, this statistical test was not applied for intra-district comparison since the sample size of hospitals was very small (only three hospitals in each group).

For exit interviews, descriptive analysis was performed for socio-demographic profile, process of services delivery and user satisfaction. Appropriate statistical tests

were used to assess the statistical difference between the variables. Chi square test was used where the comparisons were made between categorical variables and student's t-test was used to compare continuous variables in two groups. The objective of this analysis was to compare the independent variables between RSBY and non-RSBY participants, between participants from private and public hospitals, and between participants from Patiala and Yamunanagar districts. Data was entered in Microsoft excel sheet and all the analysis were carried out using STATA. Data was cleaned and screened for outliers after the data entry. Determinants of out-of-pocket expenditure were also calculated through multivariate regression analysis (binary logistic regression). The factors adjusted in the regression analysis were gender (male/female), type of facility (public/private), age, district (Patiala/Yamunanagar), BPL status (Yes/No) and RSBY enrolment (Yes/No). The association was represented in the form of p-value and adjusted odds ratio. A p-value of less than 0.05 was considered to be statistically significant.

For analysis of quality of care provided by the health facilities, two different type of analysis was done. Firstly, simple descriptive analysis was done in the form of proportions. Secondly the ordinal responses were converted to scores. The score of the converted responses ranged from one to five. For ordinal responses in the questionnaire a score of one was given to the worst response while a score of five was given to the best response. For the few questions with binary responses, a score of one was given for a negative response while a score of 5 was given for a positive response. The responses were scaled to a five-point scale for questions where the responses were in four-point scale with one being worst and four being the best response. Mean scores were calculated for each of the seven categories stated above so as to get a consolidated score for each category. A comparison was made between the scores of private and public hospitals, between RSBY and non-RSBY beneficiaries, and between Patiala and Yamunanagar. Student's t-test (comparison of means) was used for statistical comparison as the outcome was continuous and the data was parametric.

4.8 Methods for Objective 4

Objective 4: To inform policy based on the findings and make recommendations in order to address any problems in the scheme and to help improve provision of health care to the target population.

Data collection and method

Data collected under other objectives was drawn together and related to the design of the arrangements and the motivation of partners. This helped to explore relationships between observed pattern and design in implementation of contracts as a PPP instrument under RSBY. Triangulation was used as a qualitative data tool by gathering different perspectives from various stakeholders involved in implementation of the scheme. An exploratory qualitative approach was adopted to capture the subtle nuances that might influence the long-term success of the scheme.

4.9 Amendments in methodology

Non-availability of certain information proposed in the initial protocol led to changes in the methodology of the study. Certain data could not be retrieved from the nodal offices, nor was not available with the primary source. The changes were made in consensus with all supervisors of the study. The amendments made in the methods section of the protocol consisted of a change in the number of exit interviews conducted in each facility due to a lack of volume in the number of patients, and financial and time constraints in finishing the data collection process. It was initially envisioned that a total of 752 exit interviews (376 RSBY and 376 non-RSBY beneficiaries) would be conducted. This had to be reduced to planning for 62 exit interviews in each facility, with consecutive patients being interviewed till completion of 31 RSBY and 31 non-RSBY patient interviews. Ultimately, exit interview numbers conducted at each facility varied slightly from this initial number proposed due to a lack in the requisite number of patients in the same facility.

Chapter 5
ANALYSIS OF EXTERNAL ENVIRONMENT
AND CONTRACT

Chapter 5

ANALYSIS OF EXTERNAL ENVIRONMENT AND CONTRACT

5.1 Introduction

This chapter presents the results of the first objective of this study, i.e. to study the external environment (political, regulatory, institutional, etc.) of RSBY and to analyse the contract design and implementation in order to understand the strengths and weaknesses of the RSBY design and the incentive structures created by roles, responsibilities and relationships within the contracts.

The external environment relates to the contracting milieu at the time of the launch of RSBY. The roles and responsibilities of various stakeholders were assessed in order to better understand the incentive structures that are inherent in the scheme design and how these might affect implementation. The institutional framework and capacity was analysed at the central, state and district levels in light of these discussions; the regulatory framework was ascertained from key stakeholders. The key informants included the national, state and district level bureaucrats assigned to oversee the running of RSBY, personnel from insurance companies operating at the district level, NGO representatives, TPAs and public and private sector health-care providers.

Data was drawn from the following sources –interviews with key stakeholders and review of key documents. Details of each database and the methodology adopted have been described in Chapter 4.

The results are described under five headings:

- external environment;
- institutional framework and capacity;
- policy and guidelines for implementation;
- roles and responsibilities; and
- contract analysis

5.2 External environment

The external environment includes those factors that directly or indirectly influenced the launch and sustainability of the RSBY scheme. It includes opportunities and threats that are outside the organization and are not within the control of the management. As Babatunde and Abdebisi state, the management of any organization has little or no influence on the external environment (Babatunde and Adebisi, 2012). The external environmental factors considered are the political environment and the regulatory framework.

5.2.1 Political environment

It is important to understand the political environment under which the RSBY scheme was launched in 2008, considering that it was one of the flagship initiatives of the political party in power, the Congress-led United Progressive Alliance (UPA). In May 2004, the Government presented its National Common Minimum Programme (NCMP), which included a national scheme for health insurance for poor families (Bajpai and Sachs, 2004). Thereafter, the Rashtriya Swasthya Bima Yojana (RSBY) was formally introduced by the Prime Minister on 15 August 2007, aimed at providing health insurance to BPL families. The scheme was launched in April 2008 under a PPP arrangement, driven primarily by formal and informal contracts with a variety of stakeholders. Central level policymakers were of the view that health care was being given this increasing importance mainly due to political reasons. This led to a significant push to launch the scheme without adequate planning, in view of the general elections in 2009. The Congress-led UPA won these elections.

RSBY was projected as a state-managed national health insurance scheme targeting workers in the informal sector living below the poverty line, with certain design changes from the previous scheme, the UHIS. After the challenges faced by the MoHFW in implementing the UHIS scheme, the Ministry was hesitant to take the responsibility of implementing yet another health insurance scheme. Thus, RSBY was initially located in the Ministry of Finance. Considering the complexity of the task, it was later decided to place the scheme with the MoLE.

An important difference between the UHIS and the RSBY is that in the latter, the responsibility for scheme implementation also rests with the private sector in addition to the public sector. Before formulating the scheme, the MoLE researched existing

health schemes in other countries such as the Philippines and Thailand, as well as insurance schemes operational in various states of India. A Central level policymaker stated that ‘Many NGO schemes like SEWA in Gujarat, Arogyashri in Andhra Pradesh, 30 Baht Scheme of Thailand and PhilHealth Scheme of Philippines were reviewed. It is not easy to specifically mention which scheme was taken the most into account...’ Several positive features from other schemes were included in the RSBY design, while also paying critical attention to the negative aspects of these schemes. The biggest challenge during the initial phase of the scheme was getting a buy-in from various implementation levels of government. It was difficult to run the scheme in the initial two years, the biggest hurdle being the government itself, since many people within the government perceived it as a politically-driven scheme with questionable sustainability.

The scheme was designed to be implemented as a PPP. Since the design of the scheme required a high level of participation from the private sector, it was important to actively engage the private players. However, it was initially very difficult to convince the private sector to participate in the scheme, which questioned the sustainability of the scheme asserting that ‘the government keeps coming with weird ideas and after sometime they vanish’ (private provider). To get a buy-in from the private sector, the Central Government ensured a collaborative process so as not to impose the programme on the private sector.

Support from other ministries and external agencies are crucial in launching and sustaining a mass-scale health insurance scheme like the RSBY. A Central-level policymaker stated that while the Planning Commission⁴ was not of much help during the launch of the scheme, the World Bank played a substantive role in providing technical assistance. The MoHFW was part of the approval committee for RSBY and was supportive in allowing the funds coming from the claims reimbursement under the RSBY to the empanelled public hospitals to be retained by the public health facilities under their user-fee fund.

The opinion of policymakers at the Central level was sought to understand the role the political environment at the state level would play in the implementation of the scheme, and if having the same or different ruling parties at the Central and state

⁴ Since superseded by the NITI Aayog

levels would have an effect on the success of the scheme. They felt that this would not make much of a difference in the implementation of the scheme. Examples were cited of Congress-ruled states like Andhra Pradesh and Maharashtra which had not done well, while states such as Chattisgarh where the main opposition party (the Bharatiya Janata Party [BJP]) was in power had done well. Further, the state of Delhi, housing the national capital of India and led by the Congress party, had not adopted the Scheme. Over the years, the Scheme had transcended political boundaries, and different political parties at the Central and state levels had minimal or no impact on the success of the scheme in any particular state. However, as at the Central level, it was initially a challenge to convince the various implementers at the state levels to participate in the RSBY model. The primary reason for this was that the states did not take the responsibility and did not dedicate enough time to the implementation of the scheme, which is a fairly complex model involving a multitude of partners. Initially, at the state level, there was no ownership of the scheme and the partnership between the public and private sector was less collaborative.

In the chosen states of Punjab and Haryana that this thesis examines, during the period from the latter part of 2011 to the beginning of 2013, Haryana had a Congress-led government while the ruling party in Punjab was the Akali Dal, which was strongly in opposition to the Congress. Both the states decided to adopt the scheme in 2008 in a phased manner by staggering the enrolment, starting with a few of the districts and progressively adding districts each year. Both the selected districts, Yamunanagar in Haryana and Patiala in Punjab, have been associated with the programme from the start of the implementation period. The design of the RSBY requires political commitment at the state level, since the state government is the key player in the implementation of the scheme and a variety of players from the public and the private sector need to be coordinated.

The state-level implementers were also interviewed to understand their perspectives on the political environment and its impact on implementation. In Punjab, it was acknowledged that despite the ruling party having changed, the basic schemes and policies, especially the ones that relate to public welfare, often do not change. The policymakers at the SNA, which is the primary implementing authority at the state level and operates under the Department of Health and Family Welfare, affirmed that for a scheme of this kind to succeed, political support was critical. The MoLE at the

state level did not play much of a role in the progress of the scheme. There were a few hiccups in the phasing-in period of the scheme, but political support within the state helped.

At the district level, the implementers were of the view that the scheme had improved over the years and that political support had facilitated its successful implementation. The insurance companies' representative opined that as private players, the insurance companies had faced no political problems. This could be due to fact that they primarily dealt with the SNA; hence, their exposure to political bottlenecks was limited. A related factor is that a decision had already been taken at the Central level to engage the insurance companies in state-wide implementation of RSBY, thus rendering their work at the state level less exposed to political interference. He was of the view that engagement with the private sector was vital since the demand for quality health care was high and the government would not be able to address that solely through the public sector in a resource-constrained environment.

In Haryana, an implementer from the SNA believed that because the scheme was formulated at the Central level, the State Government was initially unwilling to take responsibility for scheme implementation. In the pilot phase only a few districts were included. However, subsequently all districts in the State were covered. While political commitment for the scheme was present in Haryana, higher political engagement could have been possible if the Central Government had allowed the states to change the name of the scheme to get more political mileage, which the current model for RSBY did not allow. It was felt that the partnership arrangement with the private sector should continue, because in its absence 'the 10% of RSBY work which is going on right now will also halt'. Haryana implementers were of the opinion that the Punjab Government was sceptical about the scheme since there were different political parties at the Centre and state. An official from the SNA in Haryana further commented that in Punjab 'the present State Government is using RSBY to gain political mileage. They are trying to add 10 lakh (one million) BPL people in the scheme'.

5.2.2 Regulatory framework

To understand the regulatory environment, data collected from various sources was triangulated. The sources of data included key stakeholder interviews, and review of

documents Preker et al. believed that health-care services require a strong regulatory environment before governments can rely on obtaining services from the private sector (Preker et al., 2000). If private sector models are to succeed, there would be a need for a strong regulatory, managerial and information capacity (Regional Committee for Europe - WHO, 2002). As noted earlier in Chapter 3 (Sec 3.4.1), regulatory frameworks that influence social security and social insurance including medical professions is under the Concurrent List of the Constitution of India, while public health and hospitals are under the State List.

Medical professionals, facilities and drugs

One of the state nodal agency representatives was of the opinion that despite all legislation, there is hardly any regulation of practitioners' clinics, nursing homes and hospitals even though the Medical Council of India (that sets the standards of medical practice) is mandated to 'discipline' the professionals, monitor their activities and check any malpractices. Doctors who set up clinics, hospitals, nursing homes, etc. have to register with the respective local bodies.⁵ However, the controlling bodies are virtually non-functional. This is not only due to lack of interest, but also weak provisions in the various acts, in addition to the heavy influence wielded by the private health sector as well as their political affinities. Representatives from state nodal agencies also pointed out that at present the national body is preoccupied with accreditation of medical colleges while the state bodies function primarily as registrars for issuing licenses for practicing medicine. The medical councils did not even update the lists of registered medical practitioners properly.

Due to bureaucratic procedures, the public sector is forced to comply with some minimum requirements, e.g. employ qualified technical staff, follow certain set procedures for the purchase and use of equipment/stores, etc. and is subject to public audit. On the other hand, the private health sector operates without any significant controls and restrictions. There is a considerably large presence of private institutional providers in the country. However, information about their numbers, role, nature, structure, functioning, type and quality of care remains grossly inadequate. This has led to questions regarding the quality of care provided by private health-care services. Till recently, clinical establishments were not monitored in the vast majority of the

⁵Municipalities, zilla parishads, panchayat samitis, offices of civil surgeons, etc.

states in India. Only a few states had requirements for registration of private facilities such as hospitals and nursing homes. However, with the passing of the Clinical Establishments (Registration and Regulation) Act, 2010, it was hoped that things would change.

The Food and Drug Administration (FDA) has the jurisdiction to control and regulate the manufacturing, trading and sale of all pharmaceutical products. Although this was the singular authority that had been provided some teeth by law, a private provider stated that its performance was much below expectations, besides being ridden with corruption.

Key stakeholders in the SNAs in Punjab and Haryana were of the view that most medical practitioners of repute would have been registered with the Medical Council. However, it was difficult for them to conclusively state the thoroughness of the registration process, since it was outside the purview of their direct responsibility. At the district level as well, the necessity of registration with the Medical Council was confirmed. However, during data collection, when the study team requested for a comprehensive list of private sector providers at the district level, the response was that the list may not be comprehensive and up-to-date.

Regulation of clinical establishments is directly under the purview of the states. Some States like Delhi, Tamil Nadu, Orissa and Manipur, among others, have successfully introduced regulatory legislation of clinical establishments. Punjab passed the Punjab Nursing Home Registration Act in 1991, which was later repealed due to the influence of the medical lobby. A review of the minutes of the Punjab Indian Medical Association (IMA) presidential address in early 2009 shows the cancellation of the Punjab Nursing Home Registration Act being mentioned as a major achievement of the IMA (Sharma, n.d.). In Haryana, a panel was constituted in 2005 to develop the Registration of Nursing Home Act to curb the mushrooming of illegal nursing homes and keep a check on the quality of health services being provided to the people of the State (Kapur, 2008). The Haryana clinical establishment (registration and regulation) Act was finally passed in 2014 (Haryana Government Gazette, 2014).

Insurance Companies and TPAs

State governments engage in a competitive public bidding process to select a public or private insurance company licensed to provide health insurance by the IRDA or

enabled by a Central legislation, for RSBY implementation. Unlike the regulations for providers, which appeared to be weak and had certain gaps, regulations for Insurance companies and TPAs exist. Both, the insurance companies and TPAs, are regulated by IRDA. There are specific guidelines mandated by the IRDA for insurance companies and TPAs to provide health insurance. Insurance companies can only participate in the bidding process by the state governments, once they have been licenced by the IRDA for provision of health insurance.

5.3 Institutional framework and capacity

To comprehend the impact of institutional capacity on contract implementation, it is imperative to first understand the institutional framework in place and analyse the functioning of various contracts and the role of different institutions in their implementation. The institutional and organizational structure was assessed at all levels – Central, state and district.

According to Central-level policy makers, the RSBY was launched without putting in place any formal organizational structure. The existing structure of the Director General Labour Welfare at the Central level was used to roll out the scheme. It was believed that since RSBY involved a multitude of stakeholders, both public and private, the initial absence of institutional and organizational structures would provide the flexibility to build institutions suited to the needs of the scheme.

5.3.1 Central level

Core Group. Central-level policymakers affirmed that at the Central level the scheme was being driven by a Core Group consisting of representatives of Director General Labour Welfare (DGLW), World Bank, GTZ, MoHFW (in the initial phase of the scheme) and National Informatics Centre (NIC). The Core Group meets once a week and the agenda is need-based, focusing on conceptual and operational issues and the future course of action. A technical cell has been set up in the office of DGLW with the primary responsibilities of piloting projects at the state-level, conducting monitoring and evaluation and providing oversight for effective implementation of the scheme, for which it had an allocated budget.

Key Management System. A Key Management System (KMS) was set up by the NIC to ensure accountability of the beneficiary smart card – its issuance and usage. This entailed setting up a Central Key Generating Authority (CKGA) that regulates and issues keys for use by field key officers (FKOs), hospital functionaries and district kiosk functionaries.

Approval and Monitoring Committee. The Approval and Monitoring Committee was the first formal institution to be set up at the Central level with member representatives from the Ministry of Finance, MoHFW and the Planning Commission, with the DGLW in the MoLE as the convener. The role of the Committee was to periodically monitor and review the progress of the scheme and approve proposals submitted by the state governments.

Health Committee. A Health Committee, with the Secretary, Labour and Employment as its Chairman was the second formal institution created at the national level to deliberate upon and take decisions relating to health and insurance issues. This committee is supported by a group of experts to aid and advice in analysing various health-related technical issues.

Information Technology Committee. A third committee, the Information Technology Committee, was constituted under the Chairmanship of the Secretary Labour and Employment with representatives from Ministry of Information Technology, Ministry of Finance (Smart Card Association of India) and several other experts. This committee gradually evolved as an authority on all technology-related issues. It deals with the implications of software- and hardware-related decisions. For the purpose of certifying various software prepared by the insurance companies, Smart Card Testing and Certification (STQC) was engaged as a testing agency. Certificates were issued by a sub-committee based on its reports.

National nodal officers. Additionally, there are national nodal officers (NaNOs) who are nominees of the insurance companies for single-point interface with the Central Government. A joint meeting is held once a month with the Central Government for discussion and feedback. Quarterly dinner meetings with CEOs of insurance companies have been institutionalized. According to Central-level policymakers, NaNOs have evolved as an important instrument of review of implementation at the

field level and are gradually being empowered by the respective insurance company CEOs to take decisions on their behalf.

Grievance Redressal Committee. In view of the possible frauds under the scheme and to resolve disputes between stakeholders, a Grievance Redressal Committee has been constituted under the Chairmanship of the Deputy Director General in DGLW. This institution, besides being the final reference point for disputes between various stakeholders, also undertakes field visits to take stock of the situation on the ground. Policymakers were of the view that as in the case of other institutions under the RSBY, the role of the Grievance Redressal Committee is also likely to evolve over a period of time.

5.3.2 State level

The policy guidelines issued by the Central Government to the state governments on setting up the SNA⁶ state that ‘there must be a clearly defined institution capable of organizing a health insurance programme. It can be an autonomous body, state government department, a cooperative society or even an NGO. The organization should have the technical skills to understand the concept of health insurance, should be able to design a programme that is technically sound, should have skills to be able to discuss with the community and should have the administrative capacity to organize the programme’ (Ministry of Labour and Employment, 2011a). It is felt that the SNAs have facilitated the flow of premium-related funds from the Central Government to the insurance companies through these societies.

Punjab

In Punjab, the RSBY was launched on 19 July 2008 under the Department of Health and Family Welfare and is being implemented through the Punjab Health Systems Corporation (PHSC), which is the designated SNA under the scheme. PHSC was constituted through a Special Act in 1996 that provided for a corporation for establishing, expanding, improving and administering medical care in the State of Punjab. The Managing Director is the executive officer of the Corporation. He implements the decisions of the Board of Directors and exercises general control and supervision over the hospitals under PHSC. The Board of Directors consists of

⁶The states implementing RSBY have either used an existing institution in the form of an independent legal entity, or have registered a new society that is wholly funded by the state government but operates independently.

secretaries of the Departments of Health and Family Welfare, Finance, Rural Development, Local Government and a representative of the MoHFW, GoI as well as six independent experts, chaired by a distinguished public or medical person.

There are 176 health institutions under the PHSC, which include 21 district hospitals, two speciality hospitals, 34 subdivisional hospitals and 119 CHCs (Punjab Health Systems Corporation, n.d.). PHSC has a health management information systems (HMIS) division in addition to procurement, finance, civil work and IT divisions for implementation of the RBSY. In addition, PHSC has also been able to engage experts with assistance from the Central Government for the implementation of the scheme in the State. A State Coordination Committee has been set up at the state level, which includes members from the State Departments of Labour, Planning, Finance, Rural Development and Panchayats and Local Government. The committee mainly participates in the evaluation of the tender processes and reviews progress of the scheme.

Haryana

In Haryana, the scheme was launched under the MoLE and is being implemented through the Directorate of Employees' State Insurance (ESI) Health Care, which is the designated SNA. As stated by state-level implementers in the SNA, the ESI Directorate and health institutions that fall under it are completely independent of the MoHFW. Policymakers at the state level informed that to facilitate the implementation of the RSBY, an RSBY Society had been registered under the Societies Registration Act, 1860 chaired by the Principal Secretary, Labour, with Director ESI as the Secretary and the Labour Commissioner as a member. The RSBY Society in turn hires consultants for effective implementation, based on need.

The insurance company representatives stated that each insurance company is represented at the state level through its regional level office situated in Chandigarh, the capital city of both Punjab and Haryana and is responsible for implementation and overall coordination. ICICI Lombard General Insurance Company is the contracted insurance company for both Patiala in Punjab and Yamunanagar in Haryana and has its regional office in Chandigarh. It was opined that it was easier to work in Punjab than in Haryana. This was because implementation was under the MoHFW in Punjab as against the ESI in Haryana, which was supervised by the MoLE. The latter

organization had limited authority over the entire health service delivery network in the State.

5.3.3 District level

State level policymakers in Punjab confirmed that at the district level, the Deputy Medical Commissioners (senior doctors) had been designated as district nodal officers, with managerial responsibility for the scheme. These district nodal officers were also the district key managers responsible for electronic security through the key management system (KMS) and the FKOs, who are government officials deputed to identify and verify the BPL families and issue smart cards.

In Haryana, however, as stated by state level implementers, implementation was different. Under the ESI Directorate, there were four civil surgeons⁷ for the whole State, each responsible for a cluster of districts. For Yamunanagar, the civil surgeon was stationed in Yamunanagar and was also responsible for the four adjoining districts of Ambala, Karnal, Panipat and Panchkula. The district level policymakers were of the view that given the physical presence of the civil surgeon in the district, he was the de facto District Nodal Officer. They further mentioned that since ESI has hospitals and dispensaries dispersed around the State, the responsibilities of the district nodal officer were taken on either by civil surgeons stationed in a district or by medical officers posted in various ESI dispensaries.

In addition, in both selected districts, there is a District Level Committee, which includes the Additional Deputy Commissioner (ADC), Civil Surgeon, Deputy Medical Commissioner, block development officers (BDOs), District Panchayati Raj Officer (DPRO) and an insurance company representative/TPA. The primary task of this Committee is to monitor enrolment and facilitate in local problem-solving on a day-to-day basis.

The insurance company also reported the presence of an Insurance Company District Project Officer at the district level. ICICI Lombard had designated project officers catering to multiple districts within each state. On an average, each project officer was looking after three to four districts, depending on the volume. In addition, the insurance company had also hired TPAs in both selected districts to facilitate the

⁷ Civil Surgeon is a senior medical doctor who is the head of the medical department at the district/state level and exercises supervisory and administrative control over all government medical institutions within the district/state.

implementation of RSBY. TPA representatives at the district level informed that at the district level there is an assistant director who reports to the TPA regional officer in Chandigarh who in turn reports to the head office in Delhi. Their main duties include facilitating enrolment, supervision and conducting random reviews. Institutional and organizational structures at the Centre, Punjab State and Haryana State are given in Figures 5.1, 5.2 and 5.3, respectively.

Fig. 5.1: Institutional and organization structures at Central level

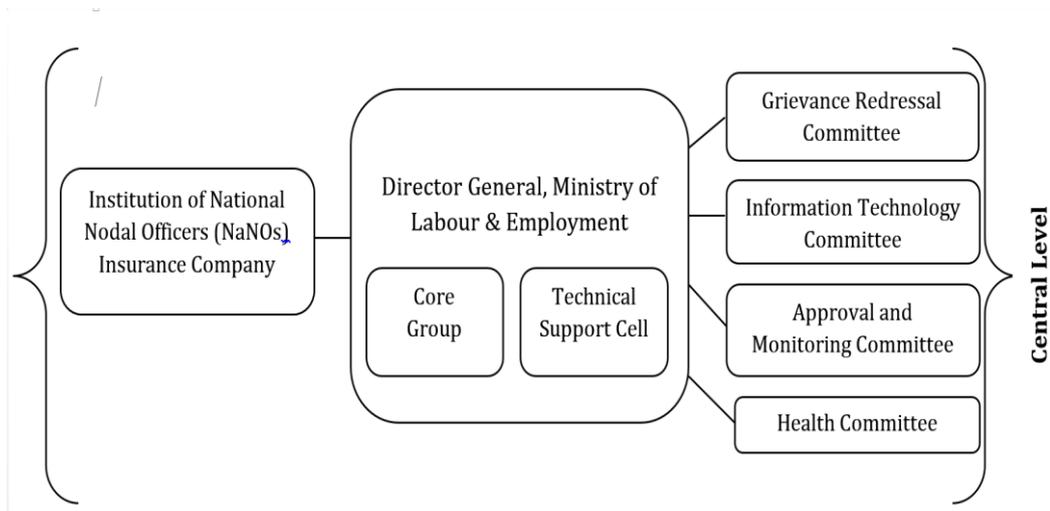


Fig. 5.2: Institutional and organization structures at state and district level –

Punjab

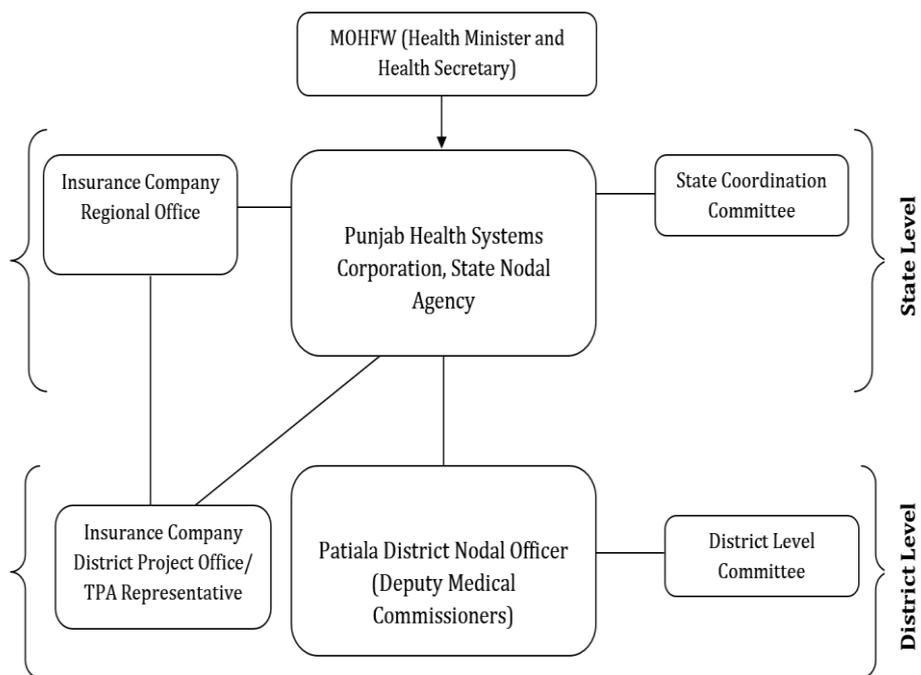
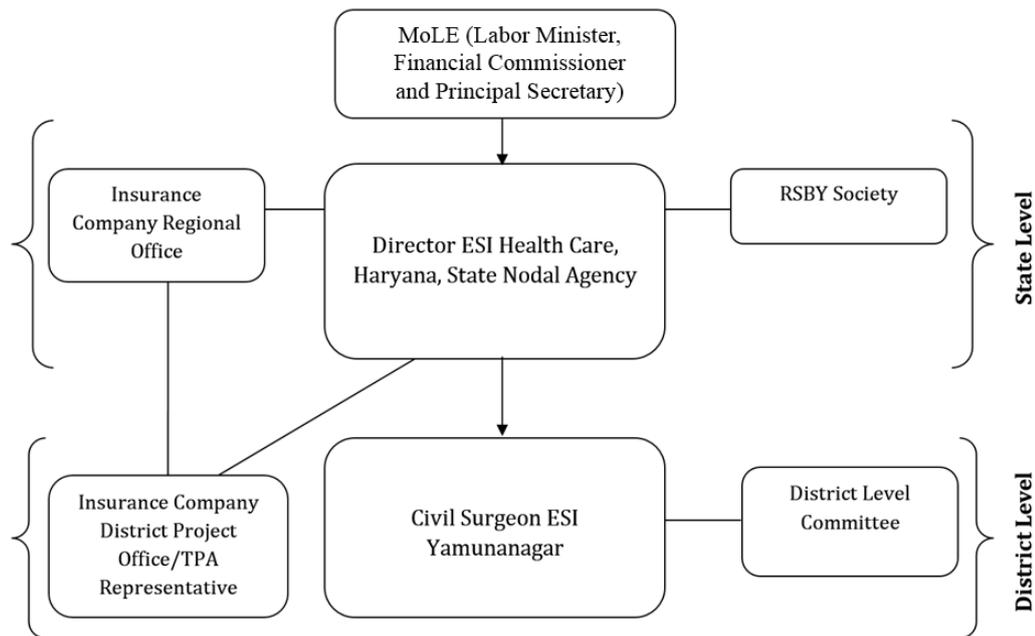


Fig. 5.3: Institutional and organization structures at state and district level –

Haryana



5.4 Formulation of policy and guidelines for implementation

The RSBY scheme delivered to the state authorities for implementation had a fixed all-India design. Although there was room for innovations and additions in the existing framework, this could only be done with the prior permission of the DGLW in the GoI. Designing the scheme, standardizing processes and preparing policy guidelines was the responsibility of the Central Government.

State level implementers from both Punjab and Haryana confirmed that the state governments adopted the policy guidelines formulated by the Central Government. Though state governments had the flexibility to amend these and introduce innovations, this was rarely done, as it needed the prior approval of the central government. Since RSBY has been an evolving model, some of the policy guidelines have been formulated after its launch in April 2008. Depending on the feedback from the state level implementers, additional policy guidelines or changes to previous guidelines have also been introduced in subsequent years. One such example is the enrolment criteria where a household headed by a woman was originally not eligible to be included in the Scheme. State level implementers confirmed that policy guidelines were updated with each subsequent insurance cycle.

The policymakers at the Central level were of the opinion that state-level politicians recognised the political mileage the scheme provided since they could reach more people at a relatively low level of cost. State governments had to allocate a separate budget to fund the innovations that the states proposed. In Punjab, the SNA was of the view that RSBY was the best scheme for BPL families. The State was willing to carry it forward and added 1,500,000 families, which included 450,000 families that were blue-card holders (beneficiaries of the 'Atta-dal' scheme, launched in Punjab in August 2007). Teachers and domestic workers have also been included at the State's cost. The SNA of Punjab stated that '...Punjab piloted the scheme with new benefits in three districts – Ferozepur, Bhatinda and Rupnagar, by introducing OPD services and free medicines apart from hospitalization...' (State Nodal Agency, 3).

The Haryana Labour Commissioner indicated that in Haryana, there were issues related to the BPL list available for enrolment, in that the BPL list from the 2001 census was differed from the list of beneficiaries in other schemes. A survey had to be conducted on behalf of the Central Government to identify the BPL families. The scheme has been extended to other segments of the unorganized population through the Health Insurance Plan for Building and Other Construction Workers (BoCW) in the State, where the premium for construction workers is funded by levying 1% tax on the construction cost. It has also been extended to the Anganwadi workers and to street vendors in nine districts of the State. The extension of RSBY is under consideration for beneficiaries of other schemes, although some of them may already be classified as BPL (The Hindu, 2013).

5.5 Roles and responsibilities

RSBY has a whole network of individuals who are experts in their own fields and who together manage the scheme. It was opined that RSBY is more a partnership model than a contractual model.

In the initial stages of the scheme, there were organizations such as the World Bank and the German Agency for International Cooperation (GIZ) that supported the development of the design and process. There are six primary stakeholders in the scheme - the Central Government, state governments, insurance companies, TPAs,

hospitals and NGOs. The roles and responsibilities of each of the stakeholders are clearly defined in the contract documents.

5.5.1 Central level

At the Central level, the Central Government has various responsibilities such as oversight of the scheme, financing the scheme, setting up parameters (benefits package, empanelment criteria, BPL criteria), hardware specifications (systems and smart card), financing management/training, setting rate schedules for services/reimbursement rates, developing clinical information, developing systems for monitoring/evaluation, monitoring state level use and other patient information and monitoring national RSBY information and training.

Since the scheme was under the MoLE at the Central level, the Director General Labour Welfare, GoI has overall responsibility for the scheme. In addition, the holder of the post is the Chief Executive of the Employee ESI scheme.

During an in-depth interview, the Director General Labour Welfare stated that his work was only to ensure the coordination of the scheme. He further clarified that the role of the Central Government was to design the scheme and standardize it for all states. The Ministry of Labour was supported by several other ministries, such as the Ministry of Rural Development which helped in recruiting field staff at the village level for information, education and communication (IEC) purposes and the MoHFW, which mobilizes government hospitals for the scheme.

5.5.2 State governments and state nodal agencies

The state government, along with the Central Government, also looks at the financing of the scheme and the setting up of parameters like the benefits package, empanelment criteria and BPL criteria. Additionally, the state government has the responsibility of setting up the SNA, which has the overall responsibility of implementing the scheme. The specific role of SNAs are—contract management with the insurer, enrolment, training outreach and marketing to beneficiaries, financial planning and management, setting rate schedules for services and reimbursement, developing clinical information systems for monitoring/evaluation, monitoring state level use and other patient information and training. Some of these functions are done in conjunction with the Central Government.

The head of the SNA varies from state to state depending on which department of the government is implementing the scheme in that state. If the Health Department looks after implementation as in Punjab, then it is the Health Secretary who is the head of the SNA. If the Labour Department takes over implementation of the scheme as in Haryana, then it is the Labour Commissioner or the State Labour Secretary who is in charge.

In Punjab, the SNA head indicated that he was so heavily occupied with the prime responsibilities of the Health Department that he could not devote much time to the RSBY scheme. In fact, according to him he spent only 5% of his time on RSBY. In RSBY his responsibilities included reporting to the Central level and attending to grievances within the State as the Head of the State Grievance Cell. His other responsibilities were related to IEC, enrolment and monitoring of the scheme. He further clarified that the Deputy Commissioner of Patiala district was in charge of the implementation of RSBY and enrolment at the district level.

In Yamunanagar, the Civil Surgeon informed that at the district level, a District Committee is constituted which is chaired by the Additional District Commissioner, with the Civil Surgeon as secretary and the Nodal Officer, BDO and Panchayat as a member. The District Committee's responsibility centred on overseeing, monitoring, enrolment, empanelment, data collection and data transfer. The role of the Nodal Officer is to monitor patients and hospitals, reporting, organizing workshops and assisting the insurance company in terms of enrolment.

The Nodal Officer explained that his work lay exclusively with the RSBY scheme. He indicated that his responsibility included collecting data, organizing workshops and appointing FKO's such as ASHAs and auxiliary nurse midwives (ANMs).⁸

The District Nodal Officer further informed that initially, much of the logistics required for interacting with the private provider were handled solely by the insurance company. However, the state and district authorities have adopted a wider role and therefore now health-care providers maintain the equipment (card reader, printer, computer, etc) as required for successful implementation of the scheme.

⁸ANMs are regarded as the first contact persons between people and the organization. They are female multipurpose workers and are posted at sub-centres.

5.5.3 Insurance companies and third party administrators (TPAs)

The roles and responsibilities of the insurance companies and TPAs were accreditation/empanelment of providers, collecting registration fees, enrolment, actuarial analysis, claims processing and payment, outreach/marketing to beneficiaries, monitoring at provider level and other patient information, customer service and training of hospital staff.

The representative from the insurance company indicated that the role of the insurance company was to enrol participants under the RSBY scheme. While enrolling the participants, the insurance company was assisted by the FKO's such as ASHAs and ANMs. Other activities of the insurance company included customer services and monitoring.

He further informed that the TPA was contracted by the management of the insurance company. Usually, there was one TPA for the entire state who covered all districts for the purposes of enrolment. However, ICICI Lombard General Insurance Company had contracted one TPA for the entire country. He also clarified that there was no bidding for TPA contracts; they were contracted on the basis of their previous association and reputation. During the contract agreement, TPAs are reminded that they need to provide good services at the agreed premium. Their major role is enrolment of participants in the district and processing claims.

TPAs support the insurance companies during the process of enrolment and empanelment. They create awareness among beneficiaries and hospitals and assist in the claims settlement and billing processes, obtaining the essential medical documents and disseminating other relevant guidelines for trouble-free treatment of beneficiaries. They also supervise and monitor the treatment of the patient during hospitalization and conduct post-discharge audits by patient home visits to audit for transportation allowance and post-discharge medication.

5.5.4 NGOs and providers of care

The role of NGOs was primarily to assist the insurance company in raising awareness about scheme while the role of the health-care providers was customer service and service delivery.

5.6 Contract analysis

Contract analysis was done in two phases. First, the contract documents between various stakeholders (Central Government, state governments, insurance companies, public and private providers) were reviewed and critically analysed. Thereafter, the key stakeholders' interviews were analysed to assess the issues related to contract implementation.

5.6.1 Contract design

The RSBY is implemented through both formal and informal contractual arrangements between various partners. This section deals with the study of contracts in the two selected states of Punjab and Haryana at three levels of implementation: (i) between the centre and state; (ii) between the state and insurance company; and (iii) between the insurance company and service provider

The contract between the Central Government and the state government and between the SNA and the insurance company were obtained from the SNA. The contracts between the providers and the insurance company were made available by the providers. In most cases the actual signed contractual agreement was available; in some others, a draft contract was shared with the understanding that the signed document was exactly similar.

A critical appraisal of the contracts was conducted along the following parameters:

- ownership
- objective
- length of the contract
- payment mechanism
- completeness and comprehensiveness
- monitoring mechanisms
- specification of sanctions
- incentives structure.

Contract between the Central Government and states

The contractual agreement between the Central Government and the states was identical for Haryana and Punjab.

The signatories of the contractual arrangement were explicitly mentioned as the Central Government represented by the DGLW, MoLE, GoI and the state government represented by the state authority signing the contract, referred to as the SNA. The contract was not specific regarding which state authority would be signing the contract agreement and allowed flexibility to the states to assign a state implementing agency.

The purpose of the contract was clearly outlined - to provide social security to the BPL workers and their families in the unorganized sector. The contract did not mention any additions or innovations on the part of the state government for either of the selected states that the scheme design allows.

The period of contractual agreement is not mentioned in the contract document. However, it was stated in the contract document that the Central Government reserved the right to discontinue the funding at any stage on being satisfied that the funds sanctioned were not being utilized for the purpose for which they were granted.

The contract states that the Central Government would pay a fixed sum per beneficiary as contribution to the health insurance premium for implementation of RSBY in the selected districts. This amount would be transferred to the SNA when the state government gave its contribution (of premium) to the SNA. The exact schedule of release of payments from the Central to the state government is not mentioned.

The state government could pay a higher amount of premium to accommodate any additional beneficiaries that the state might wish to enrol in the scheme. In addition, the state would bear any administrative costs in implementing the scheme.

The contract clearly defines the roles and responsibilities of both parties involved, the Central Government and the SNA. The Central Government would provide technical assistance to the SNA in facilitating implementation of the scheme. It would review, monitor and determine the information required from the states, though no reporting schedule and format has been prescribed. However, the monitoring mechanism and monitoring parameters of the central government have not been stated in the contract document.

The state government also has a wide mandate of responsibilities. This entails providing the insurance company with a complete list of BPL households (including details of household members) and providing assistance to the insurance company in the registration of scheme participants and the issuing of smart cards through joint visits to each location where smart cards are to be issued. It is also the responsibility of the state government to set up separate legal entities in the form of a society/trust/agency so as to enable them to administer funds in implementation of the scheme.

The state government is required to facilitate, monitor and evaluate the implementation of the scheme as per the guidelines issued by the Central Government. They would also provide information as and when requested by the Central Government.

There was no mention of the empanelment criterion of the health care providers in the contract document. Also there was no mention of the incentive structure under the scheme.

Contract between the state government and the insurance company

The contractual agreement between the state government and the insurance company for the chosen districts was almost identical. Coincidentally, the insurance company for the selected year of study in the chosen districts was ICICI Lombard General Insurance Company for both states.

The contract between the state government and insurance company is the most formal and comprehensive contract in the RSBY scheme. This is due to the large share of responsibility that the insurance company undertakes in the implementation of the scheme. There are 32 articles listed in the contract document, supplemented by 16 annexures. The contract is legally binding and goes into specific details regarding time periods of actionable steps.

The ICICI Lombard General Insurance Company had a contract agreement in Punjab with the Department of Health and Family Welfare through the SNA, namely the PHSC; and in Haryana, with the Department of Labour and Employment through the Directorate of ESI Health Care, which was the nominated SNA.

The contract clearly cites the benefits to be provided on a cashless basis to the beneficiaries and the limit of their annual coverage, subject to other terms and conditions outlined in the contract.

The contract duration is specified and the dates of commencement and termination of the policy are mentioned in the agreement. In case of renewal of contracts, the period of the insurance contract would be for two years, depending on the period for which the insurance company already had a contract with the SNA. Renewal of the policy at the end of the year would automatically happen only when both parties agreed to the same.

The contract mentions the exact amount of payment of premium that the state government has accepted per enrolled BPL household, which includes the cost of the smart card issued to each household. The contract details the method of payment including the specific amount of payment to be released to the insurer under three defined instalment schedules. The premium is to be paid in three instalments - the first instalment of INR 30 (£ 0.3) is paid by the beneficiary, followed by a second premium by the SNA (25% of the total premium) and the last instalment (the remaining premium) by the Central Government.

A coordination committee, under the chairmanship of the SNA, is formed within seven days of signing of the agreement to review performance on a periodic basis. District key managers (DKMs) and field key officers (FKOs) are then recruited. The insurer establishes a state and district project office, call centres and district kiosks within 15 days.

Empanelment is the responsibility of the insurer who ensures that the eligible private health-care providers and government hospitals up to the level of CHCs are empanelled under the scheme. The empanellment criterion for the health care providers has been clearly stated in the contract document.

The state government provides the insurer with the updated list of BPL households for enrolment. It is the responsibility of the insurance company to provide the smart cards to the beneficiaries. The SNA ensures the availability of a sufficient number of FKOs to accompany the enrolment teams. The insurance company is also responsible for all IEC activity at the time of enrolment.

The scheme provides coverage for meeting expenses of hospitalization for medical or surgical procedures including maternity benefit to the enrolled BPL families up to INR 30,000 (₹ 302) per family per year on a floater basis. There is pre-authorization for cashless access in case no package is fixed. The scheme also covers pre-existing diseases.

The insurance company conducts training and orientation programmes jointly developed by the SNA and the insurance company for health-care providers, members of the hospital management societies, district programme managers, doctors, General practitioner members, intermediaries and field agents.

The monitoring strategy was loosely stated in the contract document and the monitoring mechanism and parameters were not defined. There was also no mention of the resources required for monitoring and supervision at district level.

The agreement also refers to claims management, dispute resolution, grievance redressal and termination. There was no mention of the incentive structure for the insurance companies under the scheme.

Contract between the insurance company and the health provider

Two contracts were analysed (between the insurance company and the health provider), one for Patiala district in Punjab state and the other for Yamunanagar district in Haryana state.

In both cases, the contract agreements were drawn between a public hospital and ICICI Lombard General Insurance Company Ltd. The designation of the signatories was not mentioned in the contract document. The contract stated that the insurer had been registered under Section 3 of the Insurance Act, 1938 (Act 4 of 1938) and had to have an official license for functioning.

The objectives of the contracts were not clearly stated. However, the contracts clearly mentioned the benefits for the purposes of the agreement as provided on a cashless basis to the beneficiaries up to the limit of their annual coverage, subject to other terms and conditions outlined in the contract.

The duration of the contract was clearly mentioned in the contract document. In Haryana it was for a period of two years whereas in Punjab it was for a period of one year. Further, both parties reserved the right to inform the public at large of the date of

commencement as well as termination. This clause was mentioned in the contract for Punjab but not in the case of Haryana.

There was no mention of the payment mechanism or the premium in the contract between the insurance company and the health provider. However, the ways that claims would be processed while admitting a RSBY beneficiary were stated clearly. Roles and responsibilities of both the parties and specifications of sanctions were clearly defined in the contract document. Monitoring and supervision strategy was absent and there was no mention of the incentive structure for the insurance company and the providers. In Punjab, the cost of hospital registration fees, documentation, TV and phone usage were to be charged from the beneficiary.⁹ No payment terms were mentioned in the corresponding contract in Haryana.

5.6.2 Contract implementation

Human resources

It was reported in various key informant interviews that human resources were not sufficient for implementation of the scheme at the state and district levels. Starting from the higher administrative positions, which had various other responsibilities apart from the RSBY scheme, the state level nodal officers concurred that dedicated staff were lacking under the Scheme. A Haryana district nodal officer remarked that the only direct employee of the RSBY was the nodal officer. He alone does dedicated work for RSBY and hence was overloaded with work. There is no other permanent employee under the RSBY scheme. He further stated that at the grass roots level, the ASHAs (community workers) were the leading persons who coordinate with families (District nodal officer, 11). This was, however, a part-time activity for them and not their primary responsibility. At hospitals, 24/7 availability of support staff was necessary for RSBY work, but it was not available. Even the insurance companies lacked manpower, with just one officer at district level looking after 2-3 districts at a time, in addition to responsibility for other schemes. A representative of the insurance company confirmed ‘I am looking at other schemes also, apart from RSBY... I am in charge of the state and there are number of people reporting to me...’ (Insurance company, 4).

⁹TV and Phone services are optional facilities available in in-patient private rooms or wards of the hospitals. Availing such facilities are chargeable.

Insurance companies and market competition

A total of 27 health insurance companies are present in the market, providing health insurance coverage to the population of India. Of these, 21 are from the private sector and six belong to the public sector. To analyse the market competition in the RSBY scheme, a list of insurance companies involved in the bidding process (2008-12) was made available by the SNA for Patiala. Similar data was not available for Yamunanagar district. The analysis shows some degree of market competition in Patiala for recruitment of insurance companies. There were 12 (44.4% of total number of health insurance companies) insurance companies who had bid at least once during the five-year period 2008-12. The number of insurance companies involved in the bidding process has fluctuated over the years with seven, six, ten, seven and eight companies bidding in the years 2008, 2009, 2010, 2011 and 2012, respectively. Looking at the bidding status of individual companies, it was observed that there were four companies who had bid for the scheme for all five years, of which three belonged to public sector. There was another insurance company, again from the public sector, who had bid for four years (2008-11). In terms of participation of the insurance companies from the private sector, there was one company that had bid for all five years, two companies that had bid for three years, three companies that had bid for two years, and two companies that had bid for one year only.

From the above, we can conclude that some degree of market competition was present for the insurance companies in Patiala district and this competition, in terms of numbers, varied over the years. Though there were less public sector health insurance companies present in the market, their involvement in the bidding was comparable to the private sector in terms of number of bids made. Also, public sector insurance companies were more consistent in terms of their participation.

Financial resources

Premiums were paid by the Central and state governments in the ratio of 3:1. The premiums varied from state to state, depending on the insurance company. The premium collected by the insurance company from each family was INR 30 (£ 0.3). In both states, the total premium collected was around INR 750 (£ 7.6) per family.¹⁰

¹⁰The premium for RSBY varies slightly in different states depending upon the bidding process.

The representatives of the insurance company stated that this INR 30 (£ 0.30) was used to pay the first instalment to the insurance company.

A declining trend of premiums was observed in most of the states and national average fell from INR600 (£ 6) to INR350 (£ 3.5) (RSBY Connect, 2012). The reason could be that there is realistic premium now with availability of data on eligible families. Moreover, there is competition amongst insurance companies for bidding. Another significant reason could be the decrease in technology costs for smart cards. Furthermore, new insurance companies consider lower premiums as an entry point for participating in a national social health insurance scheme (RSBY Connect, 2012).

Enrolment

Enrolment is a prime responsibility of the insurance company. Insurance company representatives in Punjab mentioned that the insurance company contracts the TPA, which in turn looks after the enrolment. The TPA involves functionaries from panchayats, temples and gurdwaras to enrol eligible people in the scheme. The government also gets involved in enrolment by providing FKO (ASHAs and ANMs), who facilitated enrolment.

Enrolment of beneficiaries is done every year. Starting from the state level policymakers down to the district level officials, all expressed their dissatisfaction with this high frequency of enrolment. Policymakers at the state level suggested that the enrolment could be done once every three years. The district nodal officer of Patiala believed that yearly enrolment was a waste of human and financial resources. The district level officials from Yamunanagar believed that enrolment was a difficult task and was labour and finance intensive.

Obtaining an accurate list of BPL families was also a challenge for the insurance companies. A representative from the SNA of Punjab stated that the updated list of BPL families was not available. The census 2001 list of BPL families, which was used for enrolment, was a decade old. It was a challenge to reach the beneficiaries, as the list did not have complete addresses. Another issue during enrolment was the lack of provision for addition of names in the families already enrolled.

Empanelment of health facilities

Empanelment of health facilities is done by the insurance company in consultation with the state nodal officers. There were several issues raised by various stakeholders regarding the process of enrolment. A Central level policymaker stated that the health-care providers that were empanelled in the RSBY were not certified by any authority for their services and the quality of care provided by them before getting empanelled could not be assessed. He confirmed that ‘...right now we are not doing the certification. We need to do that...’ (Central level policymaker, 1). Moreover, empanelment of private facilities was difficult as the exact number of private facilities present in the district was not available with any authority. However, empanelment criterion was clearly defined in the contract document between the state and the insurance company.

Fixed package rates

Under RSBY, there is a fixed capitation for every treatment in a package of care. The rates within the package (package rates) are predetermined by the Central Government and are supposed to get revised from time to time. The state government has the authority to revise the rate at the state level after approval from the Central Government. However, such amendments were rarely practised.

There were differences in opinion regarding the fixed package rates by different stakeholders. Central level policymakers, SNAs and insurance companies were of the view that the package rates were reasonable and also that the authority with the state government to modify them was sufficient. The private providers felt strongly that package rates were not realistic and were set far too low. They also suggested that it was unviable to have the same package rates across the entire country and that these should be based on the situation in each state. Both individual providers and representatives of the providers’ associations were of the opinion that package rates needed revision. Private providers in Yamunanagar emphatically stated that the set rates for high-cost procedures were too low, especially for complicated cases that entail a high cost to the provider. A private provider in Patiala district stated that ‘I think package rates should be more realistic...’ (Private provider, 8). For example, it was very difficult to treat a patient in the ICU for INR 1000(£ 10.1) per day and pay taxes as well. Public providers in Patiala indicated that private hospitals turned away

patients saying that INR 30,000 (£ 302) was not enough for certain treatments, suggesting that patients should claim RSBY benefits from government institutions. The representatives of the medical association agreed that due to low package rates, quality gets diluted. A representative from an NGO was however of the opinion that increase in package rates will not improve the quality of services. However, this would increase the participation of providers for empanelment.

Payment mechanism

The insurance company indicated that it processed and reimbursed claims to the provider within 14 days in most cases. In the contract between the SNA and the insurance company, a time limit of 21 days is indicated for the process to be completed. This, however, becomes 26 days or more for issues relating to claim processing. In Punjab and Haryana, the payment was made by the insurance company (after receiving the final docket from the provider) through a cheque/electronic fund transfer, since the contract between the SNA and the insurance company makes electronic payments mandatory. The interviewee from the insurer insisted that the provider recovers non-covered treatment/investigation costs from the beneficiary. It is stated in the contract document that the beneficiaries have to pay OOP for treatments that are not covered under the scheme.

The Punjab SNA indicated that ASHAs were getting monetary incentives in order to bring up enrolment. They were of the view that incentives should be given for other purposes as well but this was not done because of budget constraints. The district nodal officer confirmed that incentives were being given to field-level workers to encourage them to enrol families under the RSBY scheme. This incentive was raised from INR 2 (£ 0.02) per card to INR 5 (£ 0.05) per card during the course of the scheme. However, the district nodal officer in Patiala stated that incentives to ASHAs were never paid.

Monitoring and supervision

Monitoring and supervision plays a key role in the success of any scheme. However, in the RSBY scheme, monitoring and supervision appeared to be very weak. There were no financial or human resources allocated for these tasks nor was there any strategic framework for monitoring and supervision, specifically in the context of periodicity, accountability, task allocation, and performance indicators. At central

level, a technical cell was engaged in overall monitoring and supervision including data handling and management. The Labour Commissioner from Haryana stated that ‘...government doesn’t have resources for monitoring...’ (Labour Commissioner, 9). Monitoring and supervision was left to the insurance companies, which had their vested interests. The civil surgeon in Yamunanagar indicated that there were by-laws to monitor the expenditure of funds under RSBY. However, a separate management team for RSBY was necessary. ‘...there are internal checks and balances to look for fraudulent billing...’ (SNA, 11). One SNA indicated that there was no budget earmarked for monitoring in RSBY.

In the contract between the SNA and the insurer, it is specified that the insurer will have qualified and experienced medical staff (as a part of its medical investigation services) who will ascertain the nature of ailment and verify the eligibility of the services. However, inadequately qualified staff was being used by the insurance company for monitoring of the scheme for private providers in Haryana. For example, doctors with a degree of Bachelor in Homeopathic Medicine and Surgery (BHMS) were being used instead of MBBS doctors.

Training

According to a Central level policymaker, training at the Central level was primarily learning by doing. He stated ‘Training is a weak point in RSBY. At the national level, the individuals were not trained initially in insurance. They had to learn on the job’ (Central level policymaker, 1). He further added that DGLW also learnt on the job while implementing RSBY. Technical assistance at central level was provided by the World Bank and GIZ. The situation was better at the state level where training was satisfactory and was aimed at specific aspects of RSBY. Inputs from the field proved useful while planning new training workshops ‘...consequent to this effort, we have a series of workshops at villages, at block level...’ (Central level policymaker, 1).

The District informatics officer in Yamunanagar confirmed that state level workshops were organized to train staff regarding implementation of the scheme. The District nodal officer in Patiala stated that district and block level workshops had been conducted where staff of all hospitals had been trained. The district level workshops involved the business process outsourcing, public relations officer, deputy commissioner and sarpanch (village headman), all of whom corroborated that they

had been given training several times. The insurance company in Patiala stated that they had trained both private and public providers regarding scheme implementation and claim reimbursements.

Issues with equipment

The providers reported that there were several issues related to equipment at the health facilities provided by the insurance company for verification of RSBY beneficiaries. Frequent breakdown of the machinery was common and repairs were not immediate. Due to a lack of confidence in the equipment, some providers had a parallel system for record maintenance in the form of record registers. A private provider stated that in his facility, the insurance company did not rectify the faulty machine even after several complaints. Thus, they could not admit patients under RSBY scheme for several months.

Awareness

The state nodal agency of Patiala and Yamunanagar district reported that awareness among the beneficiaries regarding the services available in the scheme was not adequate. There were many instances where the beneficiary did not know how to locate the empanelled hospital. One of the providers also stated that private providers were not aware of the scheme and that is why they were not available for empanelment.

5.6.3 Incentive structures

Incentives for stakeholders are not specifically mentioned in the contract document. However, according to a senior policymaker at the Centre, the scheme had been designed as a business model for a social sector scheme with incentives built-in for each stakeholder. This business model was designed to be conducive to expanding the scheme as well as ensuring long-term sustainability. In fact, the scheme was moving forward because of the in-built incentives. He further added that ‘the scheme is working on autopilot. As each body involved benefits from the scheme, it forces them to keep a check on one another. They give their best as there is a sense of competition involved’. The SNA in Punjab agreed that RSBY, ‘... had to be a sustainable model, a proper business model so incentives are there...’ (SNA, 4).

Various stakeholders and implementers had different levels of incentives in different forms. Monetary incentives varied across stakeholders. For some, the incentives lay in enhanced reputation and recognition.

Central and state governments

A Central level policymaker stated that ‘By a BPL family paying only a maximum yearly sum of INR 750 (£ 7.5) per family, the Government is able to provide access to health care to the poorest of the poor’ (Central level policymaker). The single most important incentive for the Central Government was to design a scheme which would win the goodwill of the informal sector, which comprised a large proportion of the country’s population and hence a large vote bank. The Scheme was also a major step towards UHC to bring equity in health care, which is an important agenda for the Government. As far as the Central Government is concerned, contributing financially towards the payment of premium to provide health insurance for the beneficiaries gives it a say in various aspects of implementation, which would normally fall outside the Central mandate as health is a state subject in the Indian Constitution.

State governments appeared pleased to be able to cover their BPL population (the poorest of the poor) with health insurance at a fraction of the cost. Providing social security to the BPL population in the state was expected to help in building political mileage for the ruling party. It would also help the state in building technical capacity for procurement, monitoring and training with support from the Central Government. Another key incentive for state governments is to tap human and financial resources and good business principles from the private and civil society sector to address service delivery challenges and extend services to the needy, especially in poor neighbourhoods.

Insurance companies

Insurance companies look at RSBY as an opportunity to penetrate a segment of the population which they had not netted before. A new market was created for them through providing health insurance coverage to the weakest section of the population. One Central level policymaker explained it as a ‘fortune lying at the bottom of the pyramid’.

The insurance companies were getting premiums at a single point. They organized insurance camps to which families came for insurance coverage. Such a strategy can also be considered as a cost-saving innovation initiated by the insurance company. Otherwise, the insurance companies would have had to go from house to house to approach each individual and this would not only incur transportation costs but would be time and manpower intensive. 'The insurance companies saw it as a reduction in transaction costs and the cost-saving strategy is a strong incentive for them' (Central level policymaker).

Since the premium is a fixed amount per household, insurance companies would like to enrol a large number of households as the number of persons enrolled in many households could be less than five. This would result in low utilization within a household while the insurers are still paid the fixed amount.

Health-care providers

A central level policy maker stated that the incentive for a health-care provider is to provide treatment to the maximum number of beneficiaries, as payment is made on the basis of the number of beneficiaries treated. This is a great incentive to the provider even at lower package rates, because of the economies of scale. He further stated that both public and private providers were part of the scheme, which result in a healthy competition between the providers, which in turn was expected to improve the functioning of the public health-care providers.

The public providers see it as an opportunity to raise funds that could then be utilized to enhance the services in public hospitals. The private providers see it as an increase in business since the government is paying the premium for a poor section of society.

Even if the number of RSBY patients visiting hospital is very low, still the providers have an incentive to be part of the scheme as this would help in capacity building of the staff member in management of health insurance. It would also help in publicity of the hospital. Moreover, package rates are defined, so there is a margin of profit in every case. From the contract document, it can be assessed that there is no fixed cost to get empanelled under the scheme.

A Central level policymaker was of the view that the private sector was not profit driven but did this with an altruistic motive. The district nodal officer in Patiala and a

private provider also had similar views. However, the SNA representative believed that private providers are business-oriented and public hospitals are charitable because they work for free. He further stated that the primary reason for high private provider engagement was their drive to build a reputation in the market to capture a new patient base.

Beneficiaries

A Central level policymaker was of the view that the scheme has given health-care access to the poorest of the poor. The scheme design provides a great incentive to the beneficiaries and that is the option to choose. It has afforded the poor an opportunity to select the type of provider (public/private) they want for treatment. They can go to a high-quality private provider (if empanelled) without having to pay anything. The scheme has planned a sum of INR 30,000 (£ 302) per year per BPL family for serious health care morbidities that could be life threatening. A representative from the SNA stated that the poorest of the poor can now live in the belief that in dire health situations they can protect themselves from catastrophic health expenditures and save their lives. The scheme is believed to be changing the health-seeking behaviour of the poor. As stated by a Central level policymaker, they are now making an effort to get treated for illness which they would ordinarily have neglected in the past.

5.7 Discussion

5.7.1 Methodological issues

Contracts between the insurance company and TPAs could not be retrieved and hence a complete contract design analysis could not be done. The bidding and the negotiation process could not be evaluated while analysing the contract design because of the limitation in availability of information.

5.7.2 Findings and discussion

RSBY was launched just before the 2009 Lok Sabha elections. It appears that the programme was launched in a rush and was more a political expediency than a well thought out plan for improvement of the health of the poor. The developers of the scheme introduced an innovation through the PPP model. Including private health facilities to augment health services being provided by the public health facilities was

expected to enlarge the number of facilities providing health care as well as generate competition among public and private providers.

As to whether experiences from other schemes had been reviewed during the preparatory phase of the RSBY scheme, it transpired that only schemes from Thailand and the Philippines had been reviewed. These schemes were not similar to the RSBY scheme. The RSBY scheme that was launched did not resemble other schemes and did not completely spell out the implementation process. However, with periodic feedback, ongoing changes have been made in the scheme. One such example is the enrolment criteria, where originally a household headed by a woman (for example a widow) was not enrolled in the scheme. Frequent changes in the programme led to confusion among the programme implementers. Changes specifying the treatment package to be offered have inconvenienced providers. On retrospect it is clear that the RSBY scheme required more careful and thoughtful planning at the initial stage before its launch. This was all the more necessary after the failure of a similar insurance scheme in India, namely, the UHIS.

Weak regulatory framework

In India, the regulatory framework in healthcare sector is still very weak, especially for the private providers. Although it is now compulsory for all private providers to get registered as mandated via the Clinical Establishments (Regulation and Registration) Rules, 2010, still there are gaps in registration. Previously it was not the case and this act was only notified in 2012 and hence as a result, a comprehensive list of all private practitioners or the private service delivery providers was not available. Further, the record of services being provided in these private hospitals is also not available.

RSBY is a scheme that is heavily reliant on the private sector. It is a model that demonstrates a PPP at various levels. The success of the scheme depends on how well these private providers can be identified, enrolled and regulated. Currently, the model is failing at two levels - firstly, as an interviewee stated, the private sector is very reluctant to be part of the scheme as they do not have confidence in the functioning of the government; and secondly, there is no robust mechanism under which these private hospitals can be governed.

Supervision by ministries other than the Health Ministry

The SNA in Punjab is the PHSC, which is supervised by the Department of Health and Family Welfare. In Haryana, the implementing body is the ESIC, which is supervised by the Department of Labour and Employment. Linkages between the Department of Labour and Employment and the Department of Health are negligible. With its level of expertise and experience, it would be easier for the Department of Health to manage the scheme as compared to the Department of Labour. An insurance company representative stated that it was easy to work in Patiala as Punjab had its own health system through which the scheme was being implemented but it was very difficult to work with the ESI in Haryana. Although the Ministry of Labour and Employment was enthusiastic at being involved in providing health care to the poor, the Ministry mostly likely lacked the insight to deliver services to the BPL population as it was not their prime responsibility.

Weak monitoring and supervision

Monitoring and supervision is one of the main pillars of any programme for efficiency and effectiveness. However, it appears that monitoring and supervision under the RSBY scheme is weak. In the initial contract documents for 2008 and 2009 (between the insurance company and TPAs), there was minimal mention of monitoring and supervision of the scheme. No extra budget was allocated for this component. The clauses mentioning monitoring and evaluation were not clear and were overlapping. Clear-cut roles and responsibilities for monitoring and supervision are required to be detailed in the contract agreement.

Monitoring and supervision is chiefly carried out by the insurance companies; however, there is no strategy to monitor the insurance companies. The importance of monitoring and supervision is evident from an examination of other national health programmes. As stated by a senior public health expert in India, the programmes which have a very robust mechanism of monitoring and supervision have flourished and done very well, e.g. the Revised National Tuberculosis Control Programme (RNTCP), whereas schemes such as the Integrated Child Development Services (ICDS) are not able to produce the desired result because of poor monitoring and evaluation.

Poor IEC

Awareness generation and IEC is the responsibility of the insurance companies, both at the time of enrolment and thereafter. It is evident from interviews of the officials that IEC activities are severely lacking, especially in regard to beneficiaries being aware of the contents of the packages and the location of empanelled hospitals. There appears to be a conflict of interest with regard to the insurance companies. They are responsible for IEC activities; however greater awareness could generate more demand for health care, resulting in increase in the number of claims as well as the claim amount. This is not in the interest of the insurance companies as lower numbers of claims and consequently claim amounts would make for higher profits.

The states or the SNAs have to be in the forefront for creating awareness among the people regarding the scheme.

Distribution of Roles and Responsibilities

Most of the roles and responsibilities were lying with the central government and the insurance companies. There were various conflicts of interest in terms of distribution of roles for insurance companies; for example, they were responsible for IEC activities, however poor IEC activity will be an incentive for the insurance companies as it will lead to less utilization.

Enrolment process

As per the policy guidelines, enrolment of the eligible population should occur every year. This is not cost-effective as considerable manpower and time is invested during the process of enrolment. The process of enrolment takes three months to complete. The scheme is thus effectively providing protection to some of the families, who are enrolled in the later part of enrolment process by the insurance companies, for a period less than stipulated (i.e. less than 12 months). The reasons given by the Central Government for yearly enrolment is that this will ensure improvement in the data quality, the people's interest will be sustained regarding the existence of the scheme and also that INR 30 (£ 0.30) gets collected during the process of registration. This, however, defeats the very purpose for which the Scheme was created which was to provide effective health care to BPL beneficiaries.

Modification of Central Government policy by state governments

India is a very diverse and heterogeneous country and therefore one size does not fit all. A single scheme with a standard implementation procedure may not be effective in all states. Hence, the Central Government had the provision for states to modify this scheme according to their requirements before implementing it in their respective states. However, the states under study implemented the scheme as envisaged by the Central Government without any change. The barrier in making modifications and introducing innovations could be that for doing so they have to take the permission of the Central Government.

5.8 Conclusions

This chapter has reviewed the external environment, contract design and its implementation through in-depth interviews of key stakeholders of the RSBY scheme and analysing the key documents. Findings of the in-depth interviews relate to various issues dealing with the political environment, regulatory framework, empanelment, enrolment, monitoring and supervision. It was noted that initially the Scheme was politically motivated and initiated for political gain. Over time, frequent changes have been incorporated in the Scheme and now it is more robust, but there still are gaps that need to be addressed. Examples are the need for monitoring and supervision with specified timelines, clear distribution of roles and responsibilities among the stakeholders, and accountability. The regulatory framework is also very weak, especially for private health facilities. Even the line listing of the private health facilities in the district was not available. Roles and responsibilities of various stakeholders were clearly defined. Majority of the Scheme implementation activities were undertaken by insurance companies. State governments were mainly playing a facilitators' role. For the Scheme to achieve its aim, state governments have to be more accountable for scheme implementation. Formal contract existed between central and state government, state government and insurance company, and insurance company and providers. However, contract between insurance company and TPAs was informal. The contract between the state government and insurance company was the most comprehensive contract of all. For renewal of contracts, the parameters have not been defined nor was there a 'quality of service' criterion. There were issues with

the annual enrolment procedure as it consumes a great deal of manpower and financial resources. Monitoring and supervision is not adequate as there is no strategic framework for monitoring and supervision, specifically in relation to periodicity, accountability, task allocation, and performance indicators.

The scheme has in-built incentives for all stakeholders. The Central Government fulfils its larger objective of improving the health of the people, though the immediate objective at the time of launch had been political, i.e. to win a forthcoming general election. The state government is happy to cover its poor population, which hitherto would only visit public facilities for free health care where they would be treated with scant respect (Tandon, 2013, Clwyd and Hart, 2013). The insurance companies look at it as a profit-making business on the basis of premiums received, more so when there are fewer than five beneficiaries per family. The public provider can retain the extra amounts they receive which is a great augmentation in a resource-starved environment. Private providers can break into a segment of society that hitherto they could not reach. The success of the scheme depends on these incentives and the scheme caters to the interests of different stakeholders. However, incentive structure has not been mentioned in the contract document.

Chapter 6
**ASSESSMENT OF ACCESSIBILITY,
AVAILABILITY AND UTILIZATION PATTERNS
UNDER RSBY**

Chapter 6

ASSESSMENT OF ACCESSIBILITY, AVAILABILITY AND UTILIZATION PATTERNS UNDER RSBY

6.1 Introduction

The second objective of the study is to evaluate the availability of services by mapping the health-care providers, the treatment packages offered by the empanelled health-care providers and analysing utilization patterns. This chapter describes the assessment of accessibility and availability of services under the RSBY scheme which was measured in terms of physical access to services and availability and range of services, i.e. the various departments available in the empanelled hospitals. Assessments of utilization patterns are based on the claims submitted by the empanelled hospitals under the scheme. The results of this chapter are presented under the following headings:

- Access to services under RSBY – evaluating access by assessing the geographical distribution of facilities within the chosen districts;
- Availability of services under RSBY empanelled hospitals – evaluating availability of services under empanelled providers by assessing the medical services offered at the facility;
- Enrolment – assessing the coverage of the scheme beneficiaries;
- Utilization patterns – assessing the utilization pattern of RSBY beneficiaries.

The methodological issues are then discussed and the chapter ends with a discussion on findings and conclusions.

Both primary and secondary data sets were analysed. Secondary data analysis was done to assess the access to services under the RSBY scheme. The secondary data included the database containing BPL census data of population eligible for RSBY and the data on enrolment of households under RSBY sourced from the SNA. Secondary database of empanelled facilities was sourced from the insurance companies and the district medical officers provided the data on the total number of registered medical facilities in the chosen districts. Evaluation of possible clustering

of facilities to ascertain access within the district was undertaken by mapping the empanelled facilities and the non-empanelled facilities within the district. To assess the utilization of the scheme by the RSBY beneficiaries, secondary data on claims was analysed, sourced from the insurance companies through the SNA.

Primary data was collected on availability of services offered from almost all empanelled facilities. As a criterion for availability of services (RSBY scheme), at least one empanelled facility within the district should offer all pre-defined packages to RSBY beneficiaries.

6.2 Access to services under RSBY

RSBY beneficiaries are free to choose their preferred provider among private and public empanelled providers within the region where they live. The cost of care is likely to be a small factor in choosing a provider and factors other than cost may come into prominence. Among factors that determine their choice could be the perceived quality level, technical expertise and spatial location of the provider. In this chapter, the focus has been on evaluating access by assessing the geographical distribution of facilities within the chosen districts.

The contract document between the insurance company and state government clearly states that the insurer shall ensure that the beneficiaries under the scheme are provided with the option of choosing treatment from a list of empanelled providers. The minimum criteria for empanelment of a facility are drawn by the SNA and are included in the contract. It is the responsibility of the insurer to ensure that all the eligible private health-care providers and all government hospitals up to the level of CHCs willing to get enrolled under the scheme are empanelled before the start of the enrolment process (Ministry of Labour and Employment, 2011b).

This research aimed at exploring two issues: the possibility that insurance companies could be empanelling a limited number of facilities out of the available health facilities in the district; and whether or not empanelled facilities are within close proximity to a high density of the BPL population. These questions are linked to the concern raised in the previous chapter that insurance companies have an incentive to

minimise the claims. By not empanelling hospitals in high-density BPL areas, poor people would find difficulty in accessing care.

Evaluation was undertaken by mapping the empanelled facilities and the non-empanelled facilities within the district. Sources of data included the database of empanelled and non-empanelled facilities as well as BPL census data of population enrolled under the RSBY, obtained from the SNA.

Based on the criteria developed by the state governments that were used for empanelment, a methodology was devised to only include facilities in the mapping that would be eligible for enrolment. For public facilities, CHCs, sub-divisional and civil hospitals were included. For private facilities, diagnostic centres included in the list sourced from the Medical Council of India were excluded from mapping because they did not fit in the criteria for empanelment. Since the public facilities in India have clear guidelines for the services to be made available at each functioning level of service delivery, it can be concluded that all public facilities included in the analysis were eligible for empanelment. However, the same cannot be said for all private facilities. It could not be conclusively established that all private facilities included in the analysis were eligible for empanelment, since no personal contact was established to confirm the number of inpatient beds available at each facility. Table 6.1 lists the various types of health facilities in the selected districts.

Table 6.1: Health facilities in the selected districts

Provider	Patiala	Yamunanagar
Private	95	104
Public	20	19
Private empanelled	7	33
Private non-empanelled	88	71
Public empanelled	10	4
Public non empanelled	10	15
Total facilities	115	123

The geographic coordinates of each facility were calculated using Google Earth, as it was the most economical and user-friendly resource available. Three types of maps were generated for both Patiala and Yamunanagar - all possible eligible facilities, empanelled facilities and empanelled vs non-empanelled facilities in the district. In addition, available data on the volume of total BPL population residing at block level

was used to colour code blocks based on BPL density. It was assumed that the density of total BPL population at the sub-district level would be somewhat reflective of the density of the enrolled RSBY BPL population.

6.2.1 Patiala

Table 6.2: Block-wise total BPL population at sub-district level in Patiala

District	Sub-district	Block	Population	
Patiala	Nabha	Nabha	19,857	
		Urban Nabha	23,444	
	Patiala	BhunerHeri	30,734	
		Patiala	8,554	
		Sanour	32,768	
		Urban Banur	1,277	
		Urban Ghaga	3,140	
		Urban Patiala	13,760	
		Urban Sanaur	4,631	
		Rajpura	Ghanaur	29,658
	Rajpura		20,813	
	Urban Ghanaur		2,529	
	Urban Rajpura		4,416	
	Samana	Patran	32,165	
		Samana	15,646	
		Urban Patran	2,878	
		Urban Samana	1,728	
	Total			247,998

As seen from Table 6.2 and Figures 6.1–6.3, the sub-district with the least BPL population in Patiala is Nabha, followed by Samana, Rajpura and Patiala. Public empanelled facilities are more equitably distributed throughout the district as opposed to private facilities, which are geographically clustered around pockets at the sub-district level. A majority of the private facilities are clustered around Patiala sub-district.

Many eligible facilities are not empanelled under the RSBY scheme. A majority of the non-empanelled private facilities are clustered in Patiala sub-district and some in other sub-districts. However, there are several public non-empanelled facilities that are dispersed around the district. The volume of empanelment of facilities seems to be aligned to BPL population density.

Fig. 6.1: Patiala – empanelled facilities – public and private

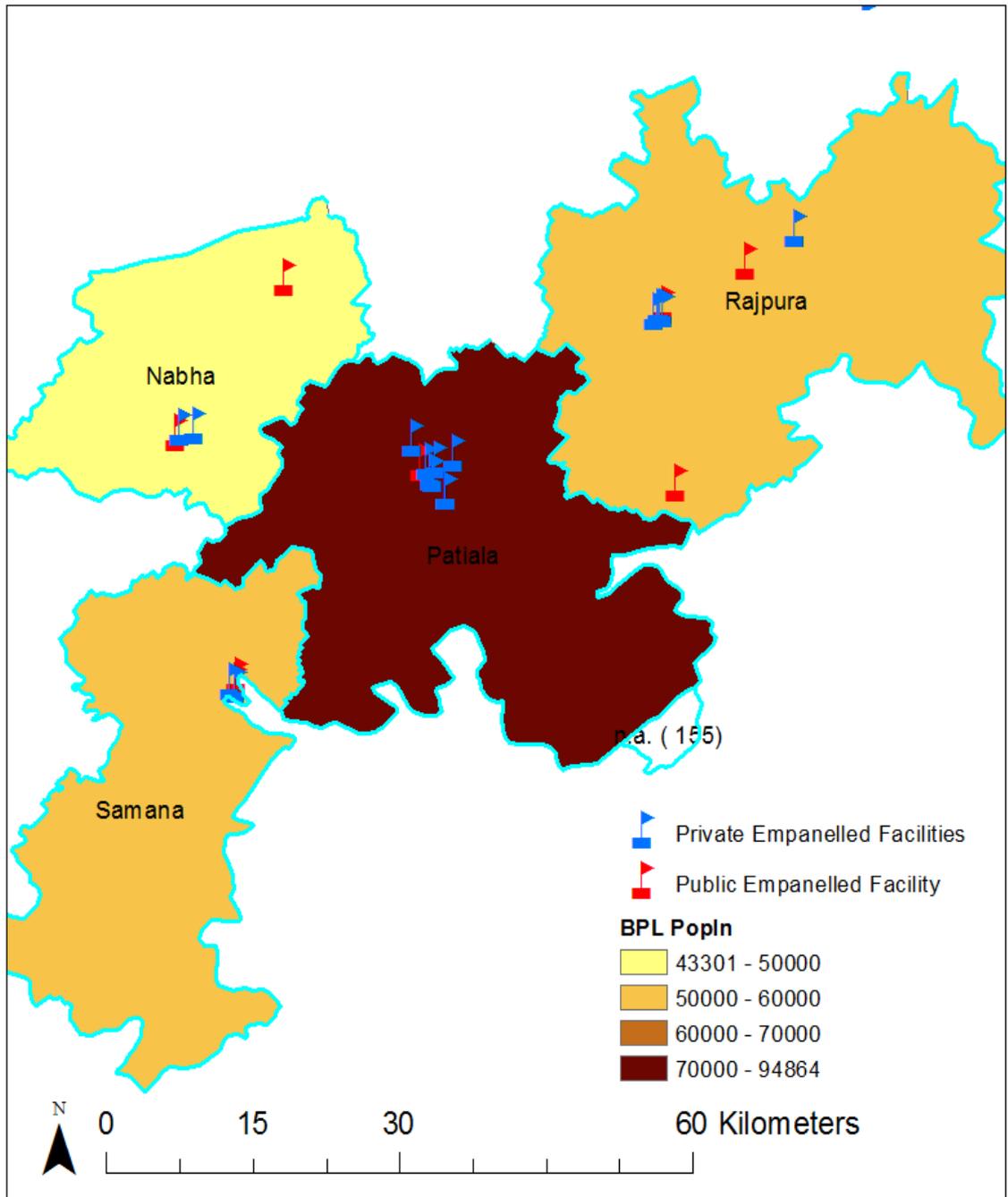


Fig. 6.2: Patiala – empanelled and non-empanelled facilities

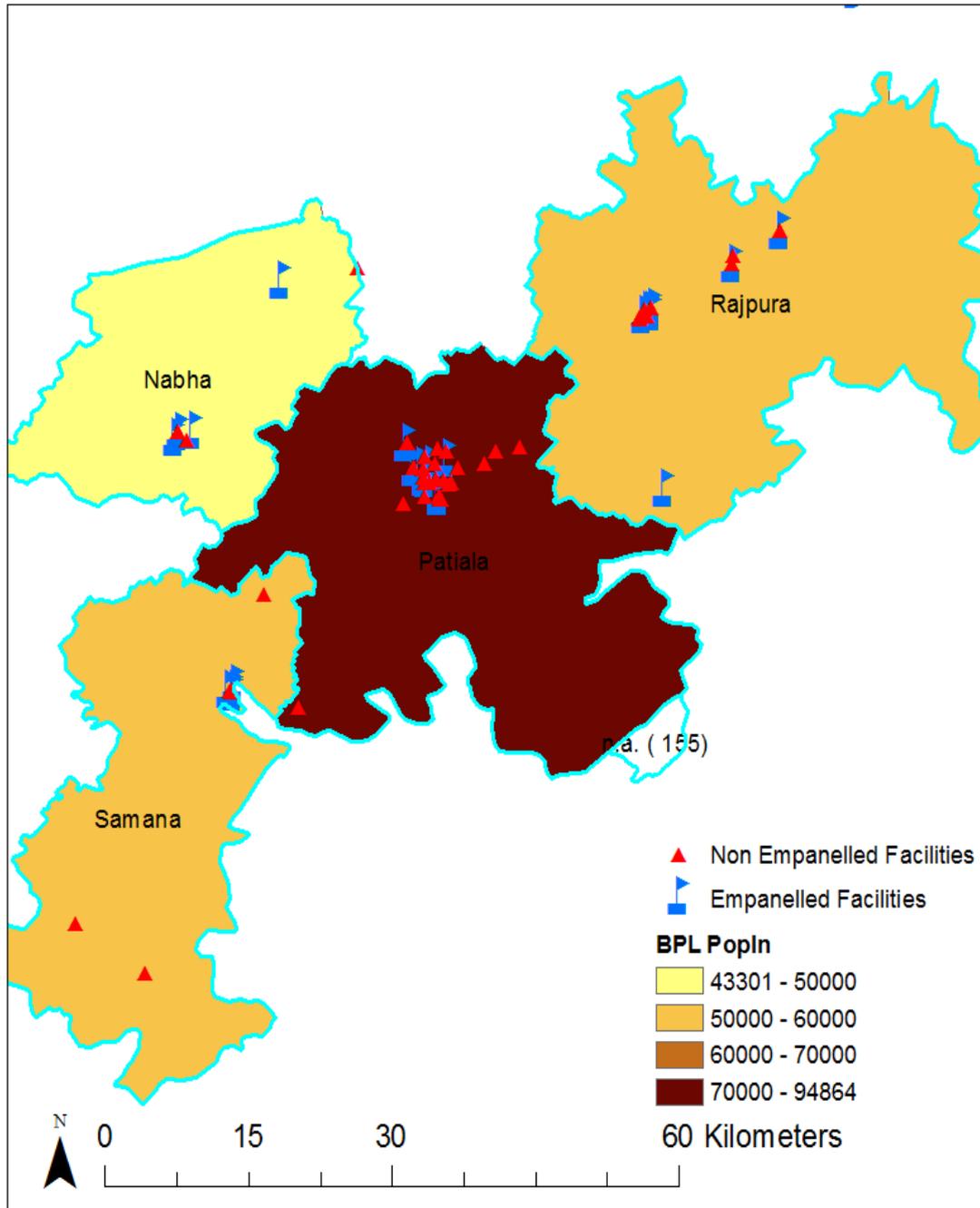
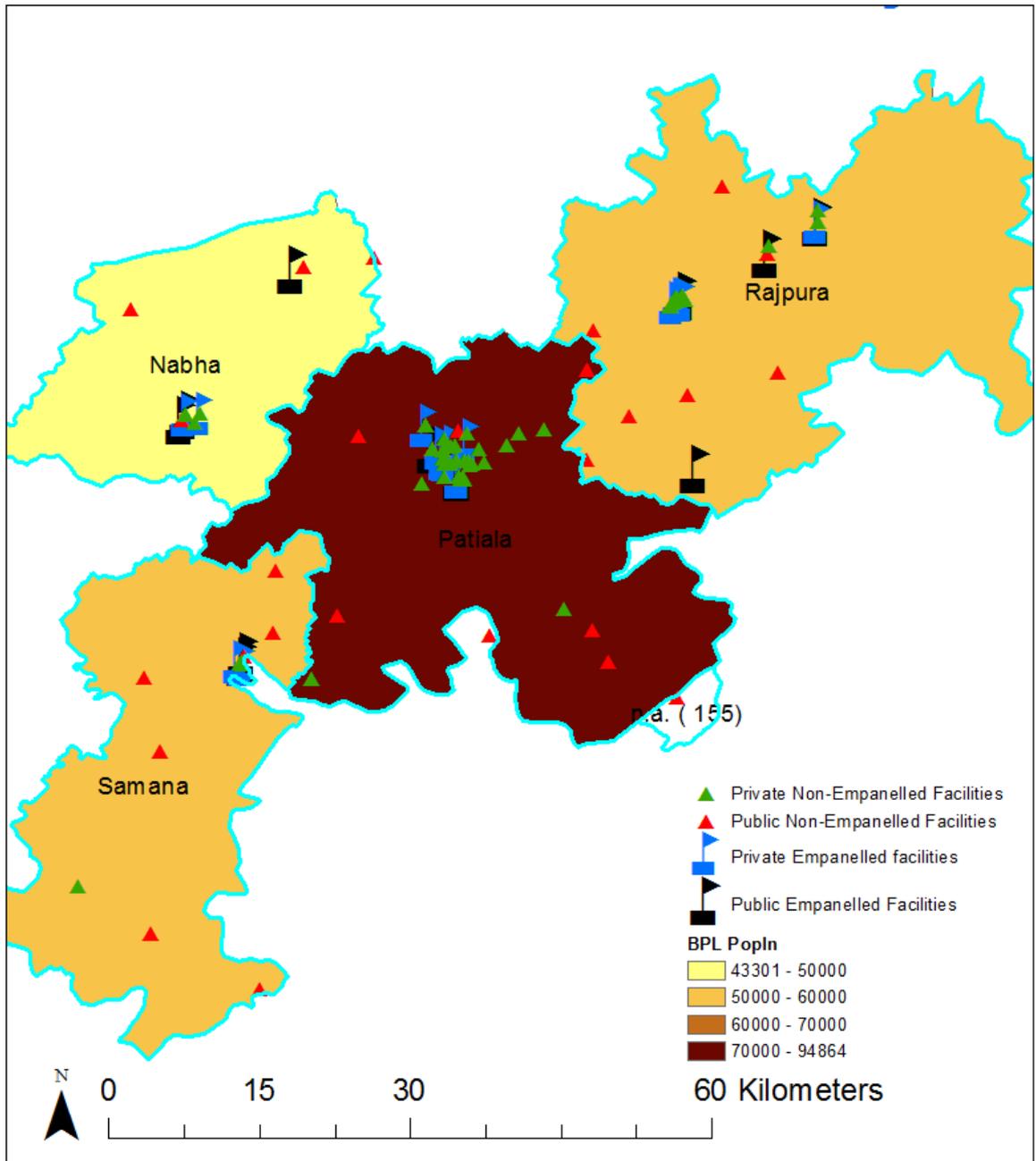


Fig. 6.3 – Patiala: all facilities



6.2.2 Yamunanagar

Table 6.3: Block-wise total BPL population at the sub-district level in Yamunanagar

District	Sub-district	Blocks	Population
Yamunanagar	Bilaspur	Bilaspur	35,314
	Chhachhrauli	Chhachhrauli	70,416
	Jagadhri	Jagadhri	69,540
		MC Jagadhri	66,691
		MC Yamunanagar	88,555
		Mustafabad	23,585
	Radaur	Radaur	25,589
	Sadhaura	Sadhaura	13,614
Total		393,304	

As reflected in Table 6.3 and Figures 6.4–6.6, sub-districts Bilaspur, Radaur and Sadhaura each have a BPL population of less than 50,000. Sub-district Chhachhrauli has a BPL population close to 70,000 but the majority of the BPL population in the district resides in Jagadhri sub-district. As seen from the maps, there are very few public facilities empanelled under the RSBY. Almost all the empanelled facilities in the district are from the private sector and are clustered around Jagadhri sub-district.

There are several eligible facilities that are not empanelled under the RSBY scheme. The map shows that there are several public non-empanelled facilities that are dispersed around the district. The private non-empanelled facilities are again clustered around Jagadhri sub-district. The volume of empanelment of facilities seems to be aligned to population density with the highest BPL population and a majority of the empanelled facilities were in Jagadhri area.

Fig. 6.4: Yamunanagar – empanelled facilities – public and private

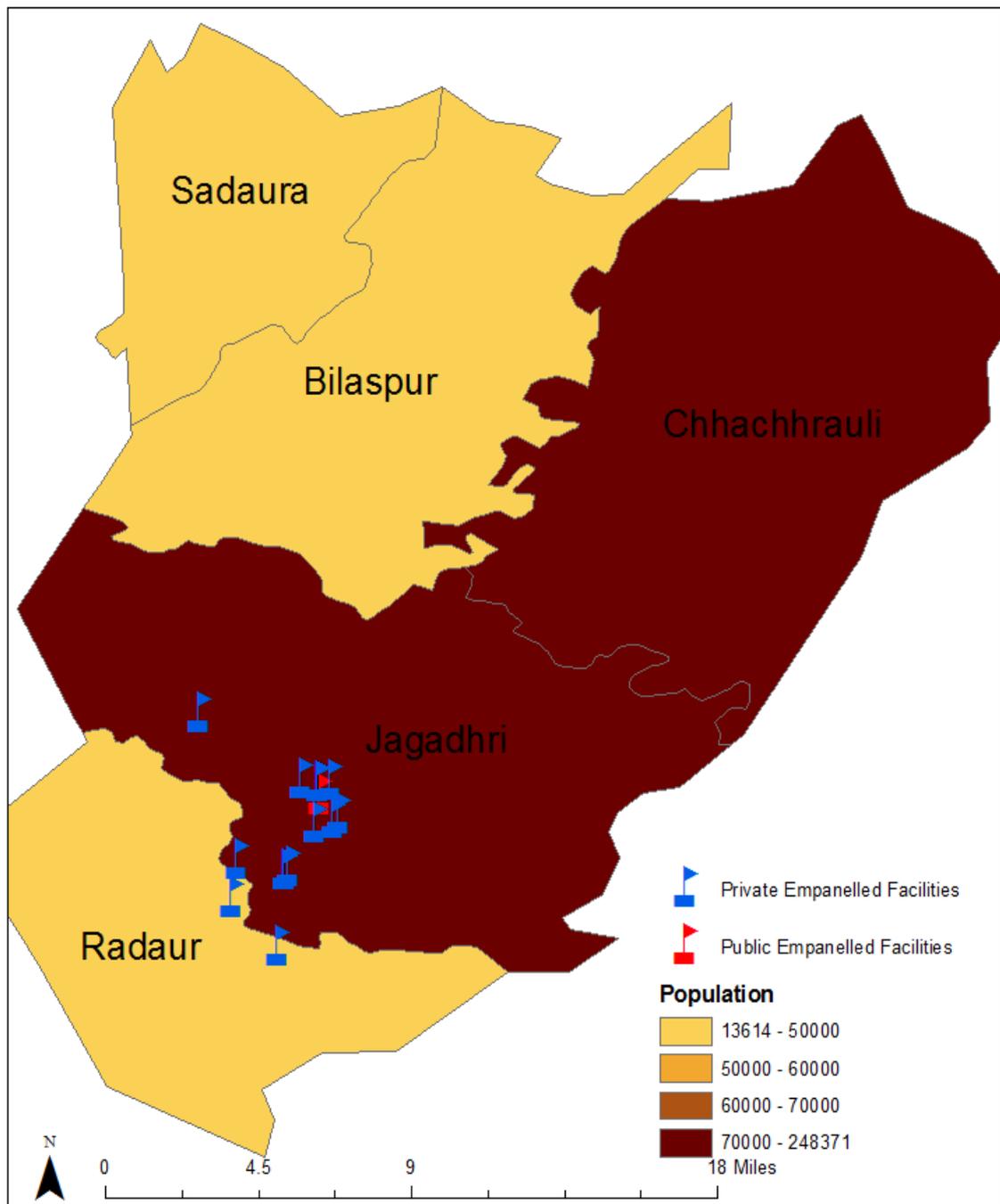


Fig. 6.5 – Yamunanagar: empanelled and non-empanelled facilities

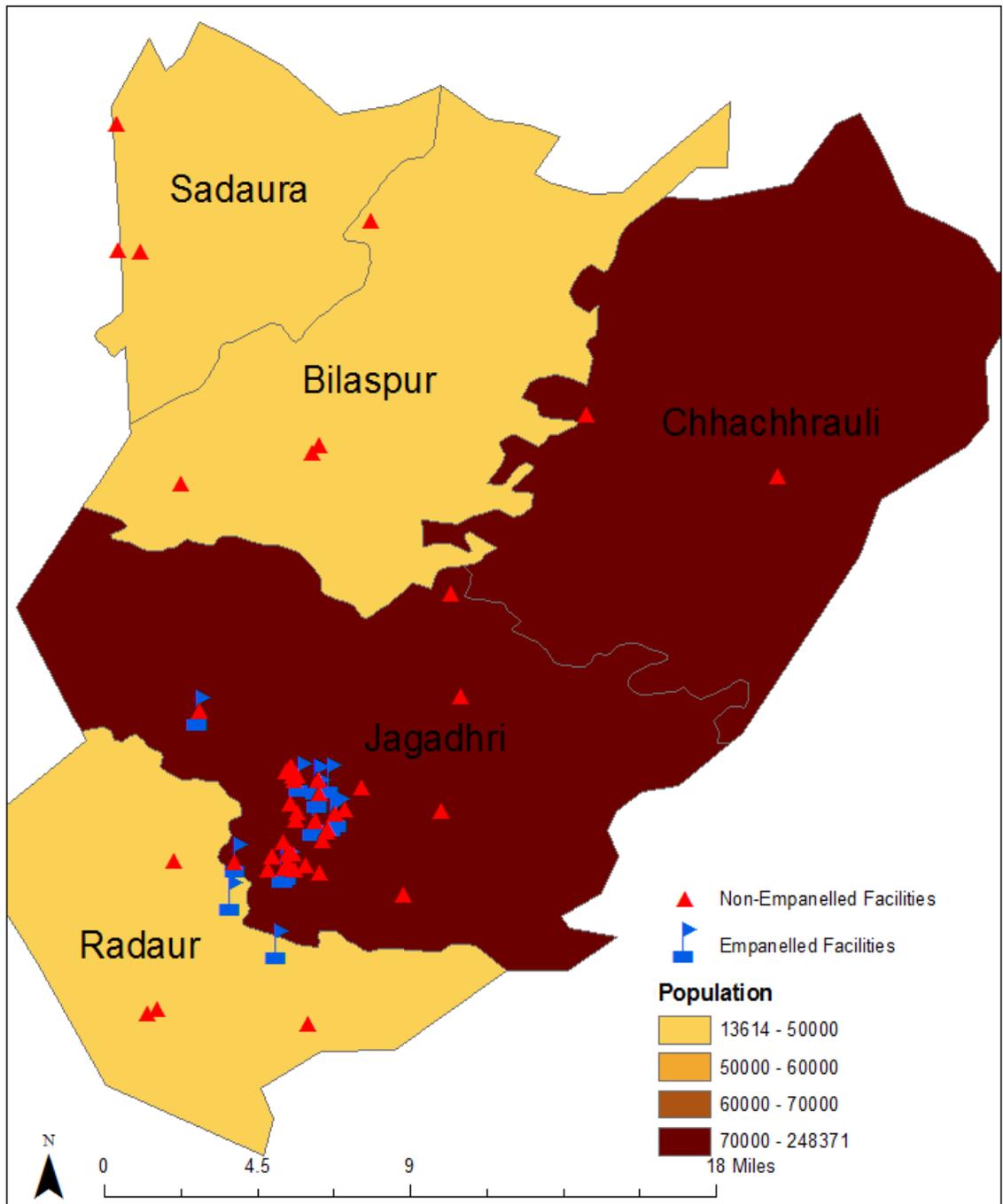
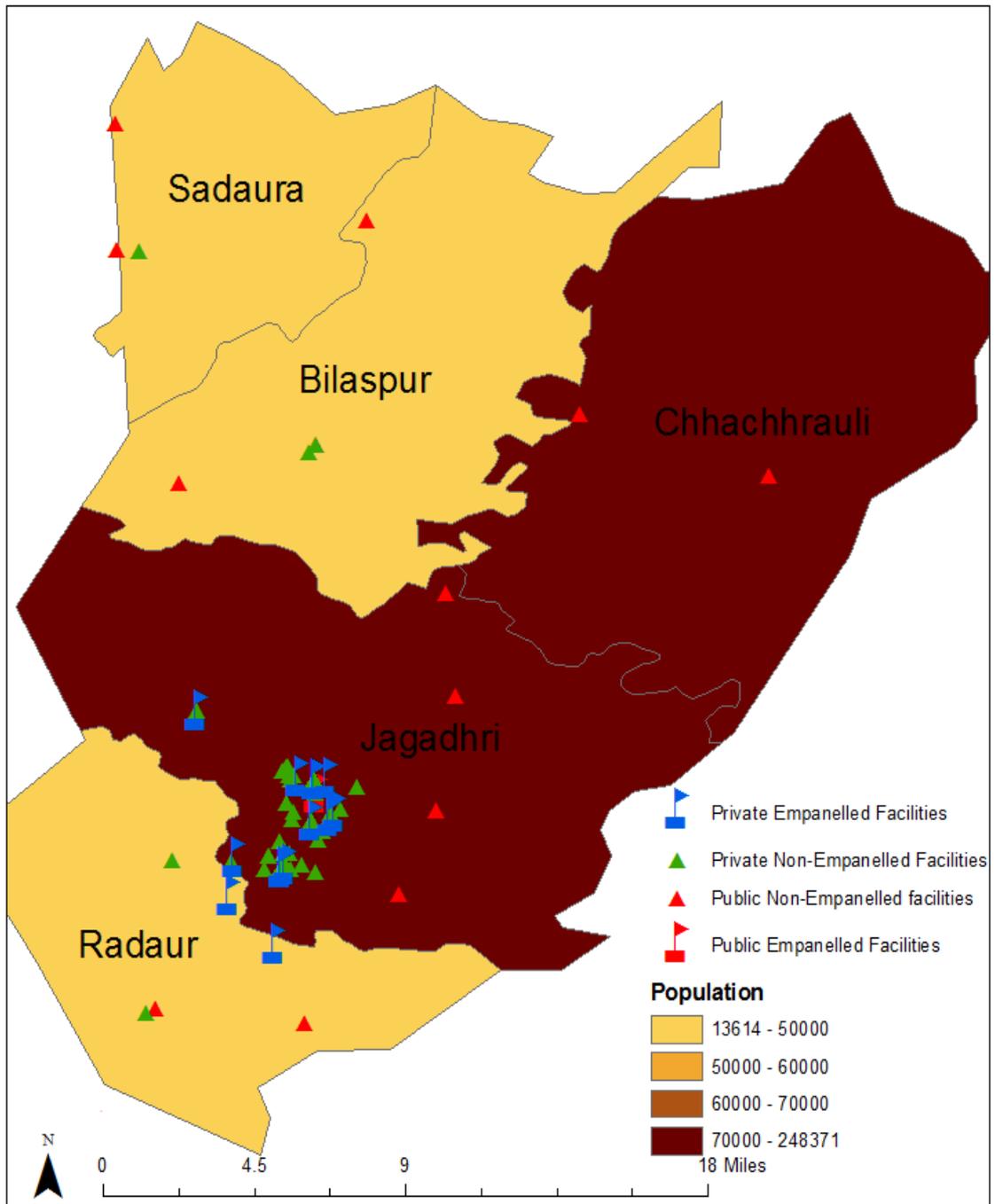


Fig. 6.6 – Yamunanagar: all facilities



The above analysis points to the following findings and points of discussion:

- The clustering of private facilities in the district could point towards Hotelling's Law. This law states that in many markets it is rational for producers to make their products as similar as possible. This is also referred to as the principle of minimum differentiation as well as Hotelling's 'linear city model' (Hotelling, 1929). Application of Hotelling's Law in the current context would assume two private health facilities at opposite corners of the district with an invisible line drawn between them. If patients' behaviour is assumed to be rational with enough demand along the invisible line, it would be plausible to assume that each facility would get half the patients divided along an invisible line equidistant from the facilities. But, each provider would be tempted to relocate his facility slightly towards the other, in order to move the invisible line so that it encompasses more than half of the distance. Thus, a street with two facilities will find both facilities right next to each other at the same halfway point. Each facility will serve half the market; one will draw customers from one direction, the other will draw customers from the other direction.

Hotelling's Law would predict the clustering of private hospitals according to the entire population and not just the BPL population, as private hospitals serve all populations. Thus, whether or not an insurance company fails to empanel a private hospital to induce lower attendance by the insured population cannot really be answered, as there are very few private hospitals outside the densely populated areas. However, it is shown here that reliance on the private sector leads to those in more remote areas being underserved. Hotelling's Law predicts the clustering away from the remote areas; if the poor live in more remote areas then they are more likely to be underserved.

- Besides the lack of sufficient empanelled public facilities in Yamunanagar, they are not widely dispersed across the district. This could create issues around access and increased transportation costs.
- In Yamunanagar, there would most likely be more empanelled hospitals in sparse areas if more public hospitals were empanelled.

6.3 Availability of services under RSBY-empanelled hospitals

Evaluating the availability of services under empanelled providers is done by assessing the medical services offered at the facility. An RSBY beneficiary is entitled to the whole list of pre-defined inpatient treatment packages included in the contract with the insurance company. However, the assumption is that not all empanelled facilities would offer all packages. This section explores the options available to the patient to seek treatment for a particular medical condition.

Primary data was collected regarding the availability of services under all RSBY-empanelled hospitals in the selected districts. Information was collected regarding the number of inpatient beds and the services enlisted under RSBY package rates, available in the hospitals. In Patiala district, out of 17 (seven private and 10 public) empanelled hospitals, only 12 (seven private and five public) hospitals agreed to provide the information while the remaining hospitals refused. In Yamunanagar district, out of 37 (33 private and four public) empanelled hospitals, only 19 (17 private and two public) hospitals agreed to provide the information while the remaining hospitals were not forthcoming.

6.3.1 Health facilities among RSBY-empanelled hospitals

In both the districts, all the RSBY empanelled hospitals were surveyed regarding the availability of services. Table 6.4 shows facility wise total availability of services. It is to be noted that none of the facilities in Patiala provided all (20) services categorized under the RSBY package rates, though there were three private hospitals in Yamunanagar which provided all services. Another important finding is that there was no single public hospital in either Patiala or Yamunanagar district that offered the complete range of specified treatment packages to the beneficiary.

Table 6.4: Facility wise total availability of services

Patiala			Yamunanagar		
	Hospital Type	Total Services available		Hospital Type	Total Services available
Facility 1	Public	13	Facility 1	Public	16
Facility 2	Public	12	Facility 2	Public	15
Facility 3	Public	11	Facility 3	Private	5
Facility 4	Public	8	Facility 4	Private	20
Facility 5	Public	6	Facility 5	Private	20
Facility 6	Private	19	Facility 6	Private	20
Facility 7	Private	18	Facility 7	Private	17
Facility 8	Private	9	Facility 8	Private	17
Facility 9	Private	15	Facility 9	Private	12
Facility 10	Private	7	Facility 10	Private	1
Facility 11	Private	11	Facility 11	Private	14
Facility 12	Private	9	Facility 12	Private	19
			Facility 13	Private	14
			Facility 14	Private	13
			Facility 15	Private	12
			Facility 16	Private	12
			Facility 17	Private	13
			Facility 18	Private	4
			Facility 19	Private	4

Table 6.5 shows the health services available in empanelled hospitals. The services shown in the table are the broad categories of all the packages under the RSBY scheme. Super-specialty services, e.g. cardiology, neurology, neurosurgery and urology were minimal in RSBY-empanelled hospitals in both the districts and were mainly present in private hospitals. Hardly any of the public hospitals had super-specialty services. From the available information, the average number of beds in Patiala was 37 while complete information in this regard was not available for Yamunanagar district. In Patiala district, out of 12 empanelled hospitals studied, only one hospital (private) had neurosurgery services. Medically managed diseases (MMD) general (surgical and non-surgical), obstetrics and gynaecology and paediatrics were the departments present in most of the empanelled hospitals.

Adequate services were not being provided to the RSBY beneficiaries as the empanelled hospitals lacked many required services. This lack of several services

raises a question on the process of empanelment. Further, limited availability of super-specialty hospitals contributed to access issues. If all services are not being provided to the beneficiaries, those who are sick may not find it attractive enrolling into the scheme very attractive.

Table 6.5: Facilities among hospitals empanelled under RSBY scheme and availability of care

Symbol		Patiala			Yamunanagar		
		Public hospitals	Private hospitals	Total	Public hospitals	Private hospitals	Total
A	Number of empanelled hospitals	10	7	17	4	33	37
B	Number of hospitals which participated in the study	5	7	12	2	17	19
C	Total No. of beds available	300	146	446	NA	205 (8)*	NA
D	Mean No. of beds per hospital	60	21	37	NA	25.6	NA
E	Neonatal care	4	6	10	2	15	17
F	Burns	3	3	6	2	6	8
G	Snake bite	3	3	6	2	12	14
H	Oncology	0	3	3	2	4	6
I	Urology	1	6	7	0	9	9
J	Endocrinology	0	2	2	0	13	13
K	Paediatrics	4	6	10	1	9	10
L	Orthopaedics	4	4	8	2	9	11
M	Ophthalmology	4	2	6	2	15	17
N	Neurosurgery	0	1	1	1	8	9
O	Hysteroscopy	0	4	4	0	7	7
P	Endoscopic procedures	0	6	6	1	12	13
Q	Gynaecology	5	6	11	2	13	15
R	General surgery	5	7	12	2	12	14
S	ENT	3	3	6	2	8	10
T	Dental	4	2	6	2	9	11
U	Medical general ward – ICU	0	5	5	2	12	14
V	Medical general ward – nonsurgical	5	7	12	2	14	16
W	Medical general ward – surgical	5	7	12	2	16	18
X	Intensive care unit	0	5	5	2	13	15
Y	Total possible types of care (B x 20)	100	140	240	40	340	380
Z	Actual total care sum E to X	50	88	138	31	216	247
	Percentage of actual care available (Zx100)/Y	50%	63%	58%	78%	64%	65%

*Only eight hospitals reported the number of beds available

The last row of Table 6.4 gives the percentage of actual care (packages) in relation to possible care available in the district. In Patiala there is a shortfall in the total availability of services by 42% (100% – 58%); the shortfall is greater in the public facilities. In Yamunanagar the shortfall is 35% and the public facilities fare better.

However, though there were four empanelled public facilities, data could be obtained from only two of them.

6.4 Analysis of enrolment under RSBY

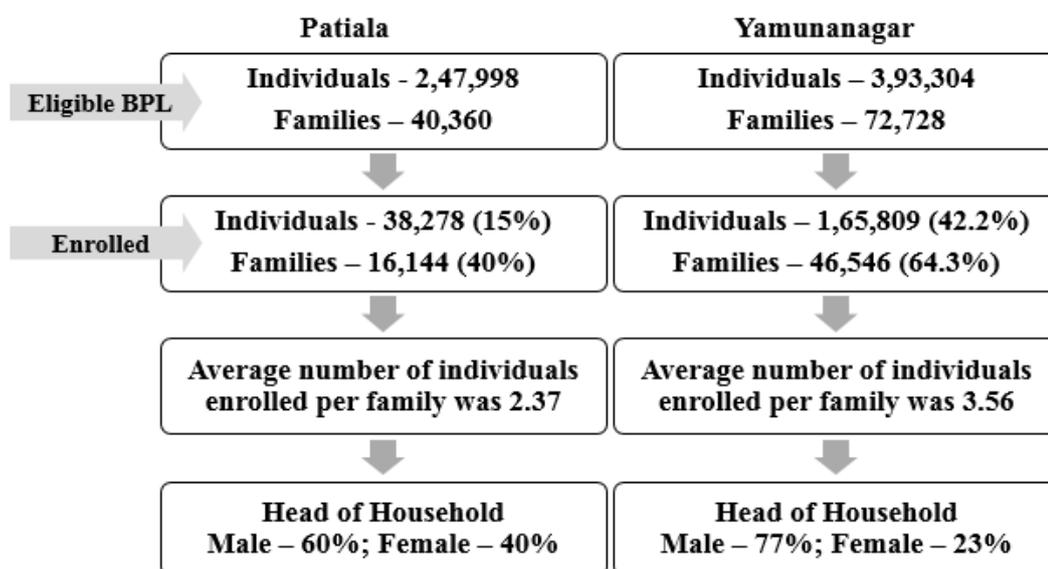
Prior to analysis of utilization of services, enrolment under the RSBY scheme was assessed. Firstly, enrolment in the scheme was analysed as an initial measure of access under the RSBY. The data for the eligible BPL population and enrolled BPL population was retrieved from the SNAs of the respective states for the years 2011 and 2012. For Patiala district, line listing of the eligible and enrolled population with age and gender was provided. However, for Yamunanagar district, the line listing of the eligible population along with their age and sex was available, but was not available for the enrolled population. Secondly, to assess the off-targeting and leakages in the scheme, the data set of the exit interviews from the selected empanelled hospitals was used.

6.4.1 Eligible and enrolled participants

In Patiala district of Punjab, of the 247,998 BPL population eligible for enrolment under the RSBY scheme, 38,278 (15.4%) were enrolled. In terms of families, 16,144 (40.4%) of BPL families were enrolled. The average number of individuals enrolled per family was 2.37. Amongst the enrolled families in Patiala, 40% of them were headed by females (Figure 6.7).

In Yamunanagar district of Haryana, of the 393,304 BPL population eligible for enrolment under the RSBY scheme, 165,809 (42.2%) were actually enrolled. In terms of families, 46,546 (64.3%) of BPL families were enrolled. The average number of individuals enrolled per family was 3.56. Amongst the enrolled families in Yamunanagar, 23% of them were headed by females (Figure 6.7).

Fig. 6.7: Enrolment under RSBY scheme (Patiala and Yamunanagar)



In Patiala district, amongst the total enrolled population, 51% were males and 49% were females. Table 6.6 shows the breakdown by age group and sex. The percentage of under-5 BPL children enrolled under the scheme (out of total under-5 BPL children) was very low. The highest enrolment occurred in the age group of 45 to 64 years followed by the elderly group (>64 years), 25-44 years and 15-24 years. The elderly group was the second highest group in terms of enrolment. Looking at the enrolment rate in various age groups, it can be concluded that there was no adverse selection in Patiala district. While comparing the enrolment rates among males and females, it was seen that enrolment was slightly higher for females in the age groups 25-44 years and 45-64 years. However, enrolment of females was slightly lower in age groups 5-14 years and >64 years. Age and gender-wise enrolment analysis could not be conducted for Yamunanagar as similar database was not present.

Table 6.6: Proportion of enrolled beneficiaries in RSBY Scheme in Patiala district (similar data for Yamunanagar district was not available)

		Under-5	5 to 14 yrs	15 to 24 yrs	25 to 44 yrs	45 to 64 yrs	>64 yrs
Total population	Male	1,101,207	188,359	187,462	299,791	164,773	62,894
	Female	975,969	147,421	161,995	283,727	158,504	58,282
Eligible population (BPL)	Male	9,200	50,013	18,785	26,349	11,787	6,219
	Female	9,400	49,880	18,802	26,420	11,758	6,227
Enrolled population	Male	184	3,601	3,156	6,403	4,102	1,984
	Female	235	2,494	3,140	7,292	4,292	1,395
% enrolled of eligible population	Male	2.0%	7.2%	16.8%	24.3%	34.8%	31.9%
	Female	2.5%	5.0%	16.7%	27.6%	36.5%	22.4%
	All	2.25%	6.10%	16.75%	25.95%	35.65%	27.15%

In understanding the process of enrolment under the scheme, it is important to analyse data to discern any factors that may contribute to higher family coverage. This is done through examination of off-targeting and leakage.

6.4.2 Off-targeting and leakage

Since the coverage of RSBY scheme is still not 100%, there are BPL families that are not enrolled under the scheme. To assess the off-targeting and leakage, the exit interview data set was analysed.

Under the off-target category, only the BPL population was analysed and a comparison was made between the RSBY-enrolled BPL participants and non-RSBY BPL participants. The data was extracted from the exit interviews of 751 participants from both the districts (Patiala and Yamunanagar). A total of 462 BPL participants were analysed in the off-target category (Table 6.7). Amongst the study participants who belonged to the BPL category, 331 were enrolled in the RSBY scheme while the remaining 131 (28%) were not enrolled.

For leakage, only the RSBY-enrolled population was studied and the characteristics of the BPL population enrolled for the RSBY scheme and non-BPL population enrolled for the RSBY scheme were compared. As the RSBY scheme is only for the BPL population, those who are not BPL are not eligible for the scheme. But if they are enrolled under the scheme, it would be considered as 'leakage' from the scheme. The data was extracted from the exit interviews of 751 participants from the selected empanelled facilities in both the districts (Patiala and Yamunanagar). A total of 387

participants enrolled under the RSBY scheme were studied in this section (Table 6.7). Out of 387 RSBY participants, 331 belonged to the BPL category while the remaining 56 were non-BPL; or 14.5% among the enrolled did not meet the eligibility criteria. The percentage for off-target is larger in comparison to that for leakage.

Table 6.7: Off-target and leakage categories

		RSBY			
		Yes	No	Total	
BPL	Yes	331	131	462	Off target (28%)
	No	56	233	289	
Total		387	364	751	
		Leakage (14.5%)			

6.4.3 Determinants of off-targeting

Analysis was done to assess the determinants of off-targeting, i.e. BPL population not getting enrolled in the RSBY scheme. If a BPL person is identified among those enrolled in RSBY, it is referred to as proper targeting. If we examine only the BPL persons, we can determine why an off-targeting may have taken place. Binary logistic regression analysis was done using the relation below for only the BPL people in the sample, since off-targeting can occur only among the BPL populace.

$$\text{Off-target (Yes/No)} = \text{function (caste, education, district, age, gender)}$$

(Only BPL population was studied for determinants of off-targeting)

Binary logistic regression analysis shows that off-targeting was more likely to occur in Yamunanagar, in the SC/ST population, and in the illiterate (or literate up to primary level). However, the latter was statistically non-significant. Off-targeting was also less likely to occur for females. The RSBY scheme was aimed at bringing social equity in the community by giving equal priority in health care to the underprivileged section of society. However, our analysis shows that the underprivileged section (illiterates or literate up to primary level and SC/ST) were still less likely to benefit from enrolment under the scheme (Table 6.8).

Table 6.8: Binary Logistic regression analysis for determinants of off-target population

	Odds ratio	95% C.I.		P value
		Lower	Upper	
District (Yamunanagar)	1.83	1.15	2.92	.010
Gender (Females)	0.54	0.35	0.83	.005
Caste (SC/ST)	1.90	1.23	2.92	.004
Education (Illiterate or literate up to primary level)	1.45	0.87	2.40	.153
Constant	0.43			.024

6.4.4 Determinants of leakage from the scheme

Determinants for the non-BPL population to be enrolled under the RSBY scheme, i.e. leakage were studied. Binary logistic regression analysis was done using the equation below for only those that were enrolled, to examine what factors led to BPL being properly enrolled or otherwise. ‘Yes’ in the equation indicates no leakage.

$$\text{Leakage (Yes/No)} = \text{function (caste, education, district, age, gender)}$$

(Only RSBY population was studied for determinants of leakage)

Binary logistic regression analysis shows that leakage was less likely to occur in Yamunanagar. This implies that leakage, i.e. non-BPL participants getting enrolled in RSBY, was more likely to occur in Patiala district when compared to Yamunanagar district. Amongst the 56 non-BPL population enrolled for RSBY, 48 were residents of Patiala while only 8 were from Yamunanagar district (Table 6.9).

Table 6.9: Binary logistic regression analysis for determinants of leakage

	Odds ratio	95% C.I.		
		Lower	Upper	P Value
District (Yamunanagar)	0.12	0.06	0.27	.00
Gender (Females)	1.19	0.61	2.31	.60
Caste (SC/ST)	1.52	0.83	2.78	.17
Education (Illiterate or literate up to primary level)	0.64	0.32	1.26	.19
Constant	.28			.01

6.5 Utilization patterns

This section primarily deals with analysing the utilization of services under the RSBY scheme by enrolled beneficiaries to explore trends in the utilization patterns. Claims-related data of the selected districts for the period September 2011 to December 2012 were analysed. During this period, a total of 992 claims were made in Patiala and 6,043 in Yamunanagar.

6.5.1 Volume of claims

Claims made in Yamunanagar district were six times more than those made in Patiala district. However, claims per 1000 family enrolled in Yamunanagar were almost two times of Patiala (Table 6.10). The number of claims per 1000 individuals enrolled under the scheme was 25.9 for Patiala district while it was 36.4 for Yamunanagar district (total number of claims x 100/total population enrolled).

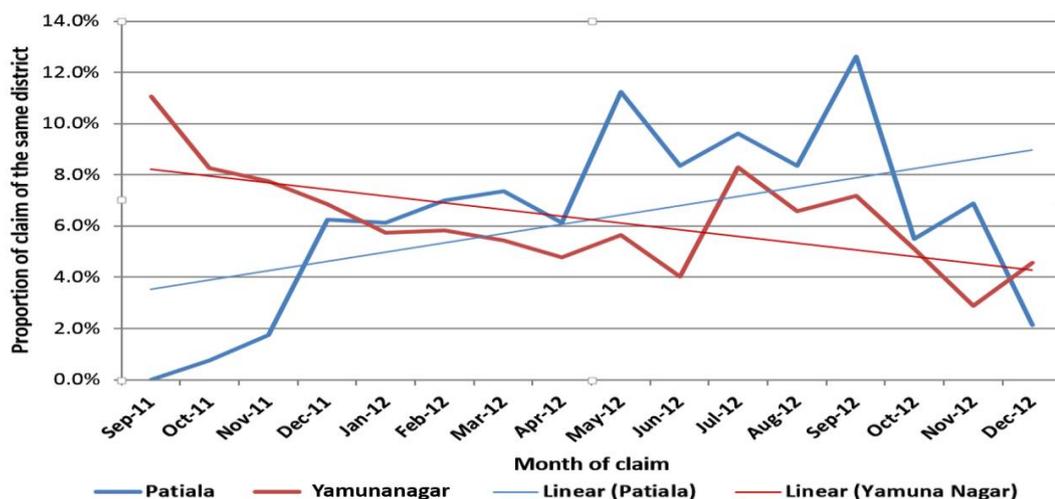
Table 6.10: Utilization Pattern (Patiala Vs Yamunanagar)

	Patiala	Yamunanagar
Claims in 14 months	992	6043
Enrolment population	38278	165809
Enrolled families	16144	46546
Empanelled facilities	17	37
Claims/month	70.9	431.6
Claims/facility/month	4.2	11.7
Claims/1000 family/month	4.4	9.3
Claims/1000 population/month	1.9	2.6

In terms of the trend of number of claims made per month, it was observed that in Patiala district the claims gradually increased from 1% (of the total claims in the district) in October 2011 and peaked to 13% in September 2012, but then declined to

2% in December 2012. In Yamunanagar district, initially the number of claims made per month was as high as 11% of total claims but declined to 4% over the next few months, though a second peak was observed in July 2012. Thereafter, the number of claims also declined in this district to 2.5% in November 2012 (Figure 6.8). Linear trend line showed an increasing trend of claims in Patiala while a declining trend in Yamunanagar.

Fig. 6.8: Trend in number of claims per month made in Patiala and Yamunanagar districts



6.5.2 Number of claims by private and public hospitals

In Patiala district, seven private hospitals and 10 public hospitals were empanelled. In Yamunanagar district, 33 private hospitals and only four public hospitals were empanelled (Table 6.11). More private hospitals were empanelled in Yamunanagar as against more public hospitals in Patiala. In both the districts, more claims per hospital were made in private hospitals. However, this was significantly higher in Yamunanagar district.

Table 6.11: Claims distribution in private and public hospitals

District	Type of hospital	No. of claims (%)	Total No. of empanelled hospitals	Average no. of claims per hospital (Claims/total No. of empanelled hospitals)
Patiala	Private	669 (67.4)	7	95.6
	Public	323 (32.6)	10	32.3
	Total	992 (100)	17	58.4
Yamunanagar	Private	5,658 (93.6)	33	171.5
	Public	385 (6.4)	4	96.3
	Total	6,043 (100)	37	163.3

In both the districts, fluctuating trends were observed, both in public and private hospitals. In Patiala (both public and private hospital), claims started very low and gradually peaked in September 2012, thereafter they declined. In Yamunanagar district, a declining trend was observed in private hospitals. No definite trend was observed for public hospitals (Table 6.12).

Table 6.12: Distribution of claims in public and private hospitals over the year

Month	Patiala		Yamunanagar		Across districts	
	Private (%)	Public (%)	Private (%)	Public (%)	Private (%)	Public (%)
	(N=669)	(N=323)	(N=5,658)	(N=385)	(N=6,327)	(N=708)
Sep 11	0.0	0.0	11.5	4.9	10.2	2.7
Oct 11	0.9	0.0	8.4	6.0	7.6	3.2
Nov 11	2.1	0.0	7.5	11.2	6.9	6.1
Dec 11	7.0	0.9	7.2	1.8	7.2	1.4
Jan 12	5.2	4.3	6.1	0.5	6.0	2.3
Feb 12	7.0	2.8	5.8	6.8	5.9	4.9
Mar 12	6.6	4.6	5.5	4.7	5.6	4.7
Apr 12	5.4	4.0	4.7	6.0	4.8	5.1
May 12	9.4	8.4	5.2	12.7	5.6	10.7
Jun 12	7.6	5.0	4.2	2.1	4.5	3.4
Jul 12	6.4	10.5	8.1	11.4	7.9	11.0
Aug 12	6.9	6.5	6.3	10.4	6.4	8.6
Sep 12	11.1	8.4	7.2	6.0	7.6	7.1
Oct 12	3.9	5.6	5.3	2.9	5.1	4.1
Nov 12	4.9	6.8	3.0	2.1	3.2	4.2
Dec 12	0.1	5.0	4.2	10.6	3.7	8.1

6.5.3 Clustering of claims in selected hospitals

During the claims analysis it was observed that there was a clustering of the number of claims in certain hospitals, i.e. number of claims was much more in some hospitals as compared to other hospitals. Figure 6.9 gives a stacked column diagram where every hospital has one colour and the height of the column is proportional to the number of claims. In both the districts, it can be observed that the height of a few colours covers most of the portion of the stacked column. In Patiala district, clustering was observed in private as well as public hospitals, whereas in Yamunanagar district clustering was more in private hospitals.

Looking at the Herfindahl-Hirschman Index (HHI), it appears that in Patiala district the claims were significantly concentrated in both selected private and public hospitals (when HHI was calculated individually for private and public hospitals). However, in Yamunanagar district, significant concentration of claims was observed in public hospitals only (Table 6.13).

Fig. 6.9: Distribution of claims in different hospitals empanelled in private and public sectors of Yamunanagar and Patiala districts

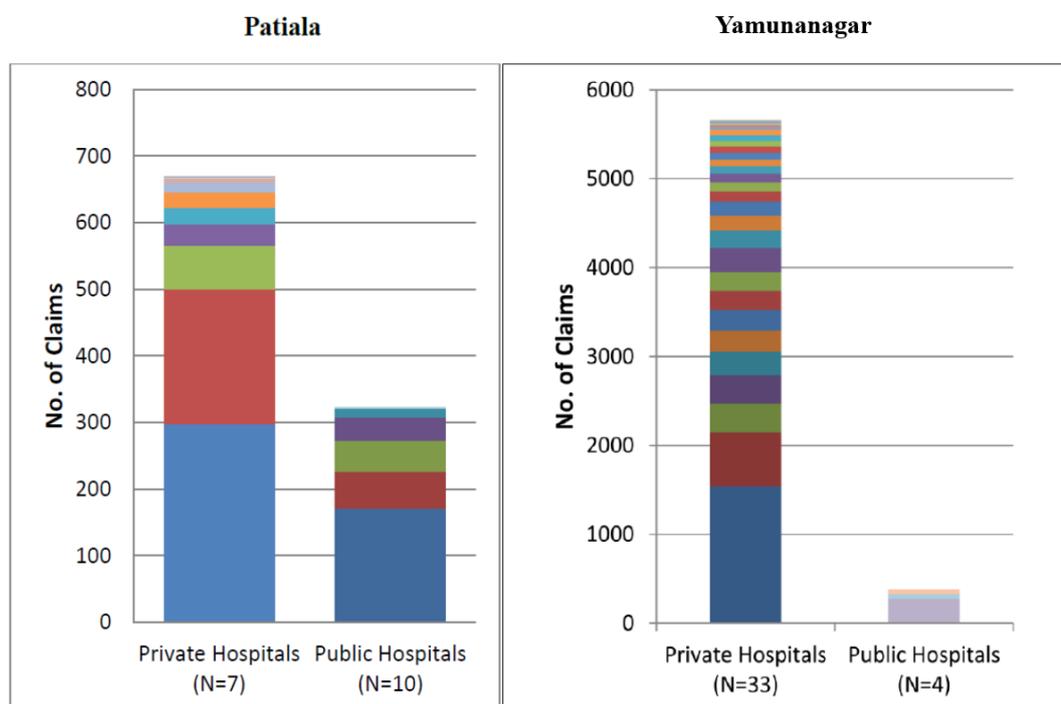


Table 6.13: Herfindahl-Hirschman Index* of hospitals

	Private hospitals	Public hospitals	Total
Patiala	3,058	3,468	1,758
Yamunanagar	1,078	5,222	967

*Interpretation: Below 1500 – un-concentrated; 1500–2500 – moderately concentrated; above 2500 – highly concentrated

In Yamunanagar district, about half of the claims were accounted for by four out of 37 empanelled hospitals. All these four hospitals were private hospitals. In Patiala district, about two thirds of the claims were accounted for by three out of 17 empanelled hospitals, two of which were private hospitals and one a public hospital. Background characteristics of these hospitals are given in Table 6.14. Looking at these, it appears that patients were more likely to visit hospitals that had maximum facilities under one roof or provided services that were in highest demand. For example cataract, which reportedly has a high burden in India (Murthy et al., 2008); and its correction is a low-cost procedure. The RSBY scheme appears to further

facilitate the dynamics. This might be the probable reason for high ophthalmological claims.

Table 6.14: Background characteristics of hospitals where a majority of the claims were reported

SNo.	Name of the hospital	Bed strength	No. of claims	Departments in the hospital
Yamunanagar				
1	Private hospital 1	100	1539	All 20 services available
2	Private hospital 2	11	608	Ophthalmology
3	Private hospital 3	5	324	Ophthalmology
4	Private hospital 4	NA	320	NA
Patiala				
1	Private hospital 1	NA	299	Total services available were 19
2	Private hospital 2	50	202	Total services available were 11
3	Public hospital 3	100	172	Total services available were 12

NA– not available

6.5.4 Age and gender distribution of patients

The number of claims for under-5 children were fewer as compared to other age groups. Probably, this could be because the proportion of under-5 children enrolled under the scheme was small as compared to enrolment in other age groups.

Most of the claims belonged to the age group 25–44 years followed by the 45–64 years age group in both the districts (Table 6.15), which can be attributed to the major chunk of the population enrolled under the scheme belonging to this age group.

While making a comparison between private and public hospitals, it is observed that more males were going to private hospitals (51.2% of total claims in private hospitals) whereas more females were going to public hospitals (53.2% of total claims in public hospitals). This difference is statistically significant (Table 6.16). This could be because women found it easier to visit a facility close to home.

Table 6.15: Age and gender distribution of patients (Patiala vs Yamunanagar) by claims

	Patiala						Yamunanagar					
	Male		Female		Total		Male		Female		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Under-5	2	0.5	9	1.6	11	1.1	7	0.2	8	0.3	15	0.2
5 to 14 yrs	22	5.2	45	8.0	67	6.8	232	7.4	154	5.3	386	6.4
15 to 24 yrs	39	9.2	38	6.7	77	7.8	388	12.3	262	9.0	650	10.8
25 to 44 yrs	135	31.7	260	45.9	395	39.8	1,020	32.4	1,116	38.5	2,136	35.3
45 to 64 yrs	141	33.1	137	24.2	278	28.0	930	29.6	830	28.6	1,760	29.1
> 64 yrs	87	20.4	77	13.6	164	16.5	568	18.1	528	18.2	1,096	18.1
Total	426	100.0	566	100.0	992	100.0	3,145	100.0	2,898	100.0	6,043	100.0

Table 6.16: Age and gender distribution of patients (private vs public facilities) by claims

	Private facilities				Public facilities			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Under-5	8	38.1	13	61.9	1	20.0	4	80.0
5 to 14 yrs	227	55.8	180	44.2	27	58.7	19	41.3
15 to 24 yrs	376	58.9	262	41.1	51	57.3	38	42.7
25 to 44 yrs	1,081	47.2	1,209	52.8	74	30.7	167	69.3
45 to 64 yrs	946	52.1	870	47.9	125	56.3	97	43.7
> 64 yrs	602	52.1	553	47.9	53	50.5	52	49.5
Total	3,240	51.2	3,087	48.8	331	46.8	377	53.2

6.5.5 Relationship of the claimant with the head of the household

In both the districts, the highest number of claims were made by the head of the households followed by the spouse (Table 6.17). While comparing private and public hospitals, opposite trends were observed in Patiala and Yamunanagar district. In Patiala, significant difference was observed in terms of the claimant's relationship to the head of the household except that in Yamunanagar district the heads of the households visited private hospitals more in comparison to public hospitals (Table 6.18). This could be because more private hospitals were enrolled in Yamunanagar.

Table 6.17: Relationship of claimant to the head of the household

Relation to the head of the household	Patiala		Yamunanagar		Total	
	N=993		N=6,042		N=7,035	
Self	501	50.5%	2,826	46.8%	3,327	47.3%
Spouse	195	19.6%	1,747	28.9%	1,942	27.6%
Son	136	13.7%	779	12.9%	915	13.0%
Daughter	111	11.2%	548	9.1%	659	9.4%
Parent	6	0.6%	64	1.1%	70	1.0%
Brother/sister	0	0.0%	18	0.3%	18	0.3%
Grandchildren	3	0.3%	9	0.1%	12	0.2%
Others	40	4.1%	52	0.9%	92	1.3%
Total	992	100%	6,043	100%	7,035	100%

Table 6.18: Relationship of claimant to the head of the household (private vs public)

Relation to the head of the household	Patiala – within district				Yamunanagar – within district				Overall both districts			
	Private		Public		Private		Public		Private		Public	
	N	%	N	%	N	%	N	%	N	%	N	%
Self	333	49.8	168	52.0	2675	47.3	151	39.2	3008	47.5	319	45.1
Spouse	122	18.2	73	22.6	1636	28.9	111	28.8	1758	27.8	184	26.0
Son	96	14.3	40	12.4	712	12.6	67	17.4	808	12.8	107	15.1
Daughter	88	13.	23	7.1	500	8.8	48	12.5	588	9.3	71	10.0
Parent	2	0.3	4	1.2	61	1.1	3	0.8	63	1.0	7	1.0
Brother/sister	0	0.0	0	0.0	17	0.3	1	0.3	17	0.3	1	0.1
Grandchildren	3	0.4	0	0.0	9	0.2	0	0.0	12	0.2	0	0.0
Others	25	3.7	15	4.6	48	0.8	4	1.0	73	1.2	19	2.7
Total	669	100.0	323	100.0	5658	100.0	385	100.0	6327	100.0	708	100.0%

6.5.6 Claimed amount and reimbursed amount

The mean amount reimbursed to hospitals by the insurance company was more in Yamunanagar district as compared to Patiala district (Table 6.19). However, claimed amount was more in Patiala than Yamunanagar. The difference in mean (for both, claimed amount and reimbursed amount) between Patiala and Yamunanagar was statistically significant. It was further observed in Yamunanagar district that the amount reimbursed by the insurance company was almost equal to the amount claimed by the hospitals, whereas in Patiala district the reimbursed amount was much lower than what was lodged by the facilities with the insurance companies, i.e. insurance companies were reducing the amount when paying back to the hospitals. The difference of mean between the claimed amount and reimbursed amount ($\frac{\sum(\text{Claimed amount} - \text{Reimbursed amount})}{\text{Total number of claims}}$)

was INR 4,134 (£ 41.6) in Patiala and only INR 2 (£ 0.02) in Yamunanagar.

The mean reimbursed amount was higher for public hospitals in Patiala district while it was slightly higher for private hospitals in Yamunanagar (Table 6.20). Similar observations were also noted for the mean claimed amount (Table 6.21). During overall comparison of public hospitals and private hospitals, the mean reimbursed amount was more for public hospitals.

In Patiala, the difference of mean between the claimed amount and reimbursed amount was INR 4,451 (£ 44) for private hospitals and INR 3,474 (£ 34) for public hospitals; whereas in Yamunanagar, this difference was only INR 3 (£ 0.03) in private hospitals and nil in public hospitals. (Table 6.20 and 6.21.)

Kernel density estimates shows that the highest density for reimbursed and claimed amount (both, private and public) was around INR 3,000 (£ 30) (Figure 6.10 and 6.13). Findings of Table 6.20 can be seen in kernels plot in Figure 6.11 and 6.12, where the highest density of reimbursed amount is high for public hospitals when compared to private hospitals in Patiala. In Yamunanagar, it was the opposite where the highest density for reimbursed amount was higher for private hospitals when compared to public hospitals. The difference between the density of private and public hospitals was more pronounced for the claimed amount (Figure 6.13) when compared to reimbursed amount (Figure 6.10). Similar to reimbursed amount, findings of claimed amount in Table 6.21 can be seen in kernels plot in Figure 6.14 and 6.15, where the highest density of claimed amount is high for public hospitals when compared to private hospitals in Patiala. However, in Yamunanagar, it was the opposite where the highest density for claimed amount was higher for private hospitals when compared to public hospital. The highest amount was reimbursed under the neurosurgery package followed by endocrine and oncology. Neurosurgery and orthopaedic packages had wide variations in terms of the amount reimbursed (Figure 6.16).

Table 6.19: Mean amount claimed by hospitals and reimbursed by the insurance company (Patiala vs Yamunanagar)

District →	Reimbursed amount		Claimed amount	
	Patiala	Yamunanagar*	Patiala	Yamunanagar*
N	992	5,903	992	5,903
Mean (INR)	4,210	5,138	8,344	5,140
Std. deviation	3,992	4,175	6,520	4,175
P value, $H_0 - \text{mean } 0$	0.001		0.001	

*140 claims were rejected in Yamunanagar district

Table 6.20: Mean amount reimbursed by the insurance company to the hospital (private vs public)

Hospital type —>	Patiala		Yamunanagar		Both districts consolidated	
	Private	Public	Private	Public	Private*	Public**
N	669	323	5,538	365	6,207	688
Mean (INR)	3708	5250	5,140	5,105	4,985	5,173
SD	3793	4193	4,164	4,339	4,150	4,269
Difference	0.001		.005		0.39	

*120 claims from private hospitals were rejected

**20 claims from public hospitals were rejected

Table 6.21: Mean amount claimed from the insurance company by the hospitals (Private vs public)

Hospital type →	Patiala		Yamunanagar		Both districts consolidated	
	Private	Public	Private	Public	Private*	Public**
N	669	323	5,538	365	6,207	688
Mean (INR)	8,159	8,724	5,143	5,105	5,468	6,804
SD	6,532	6,487	4,165	4,339	4,577	5,742
P Value	0.287		0.005		<0.01	

*120 claims from private hospitals were rejected

**20 claims from public hospitals were rejected

Fig. 6.10: Kernel density estimates for reimbursed amount (private vs public hospitals)

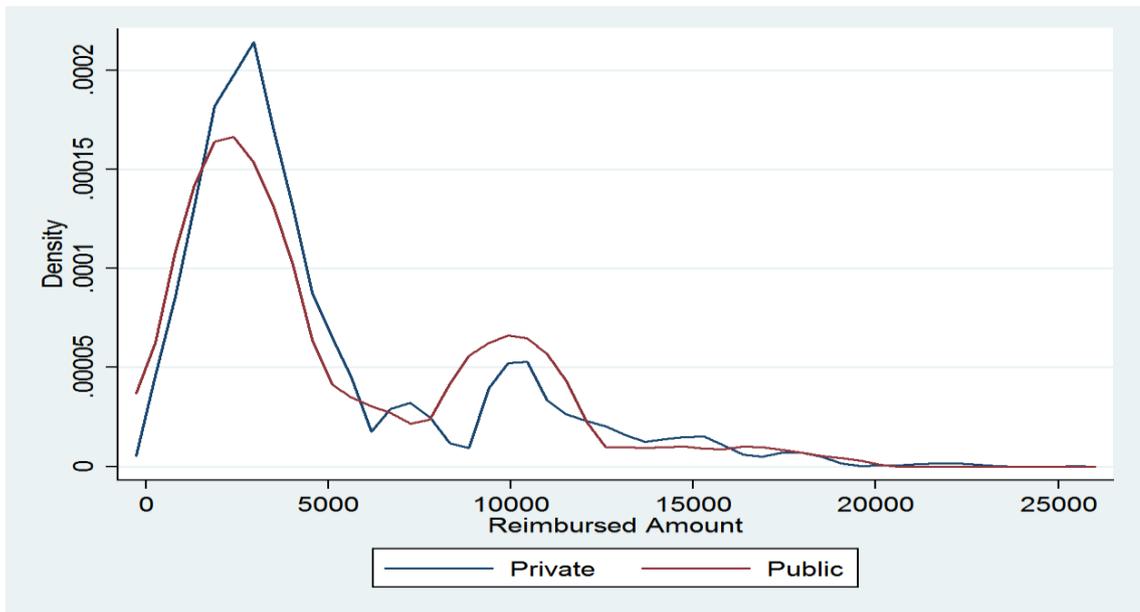


Fig. 6.11: Kernel Density estimates for reimbursed amount in Patiala district (private vs public hospitals)

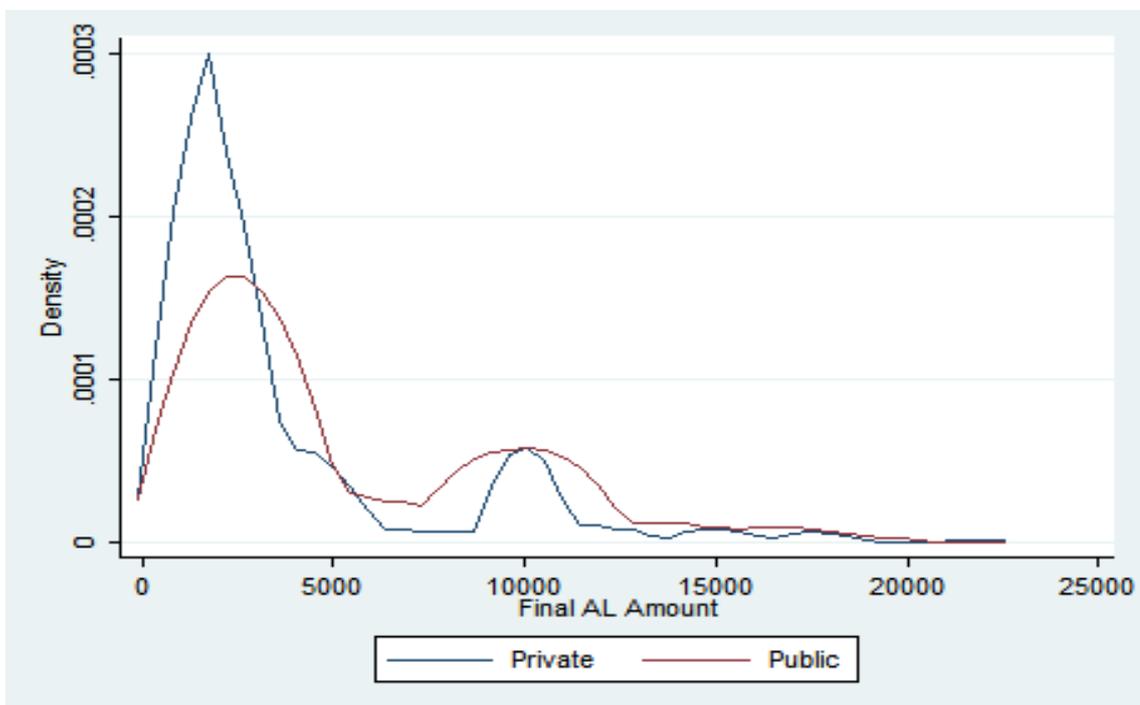


Fig. 6.12: Kernel density estimates for reimbursed amount in Yamunanagar district (private vs public hospitals)

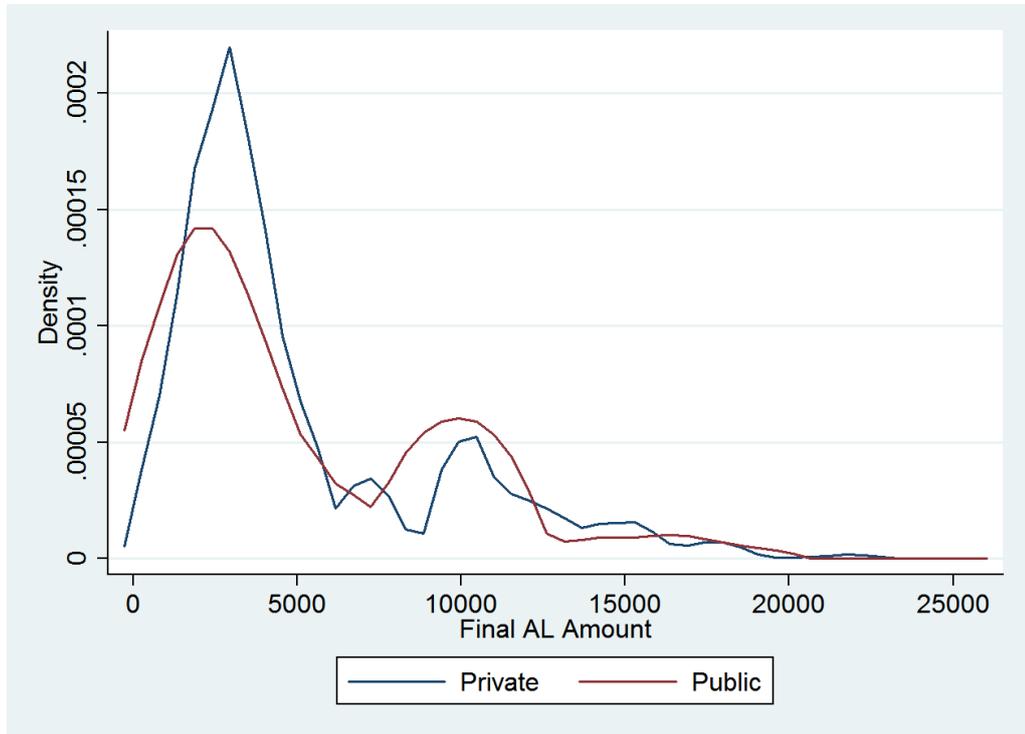


Fig. 6.13: Kernel density estimates for claimed amount (private vs public hospitals)

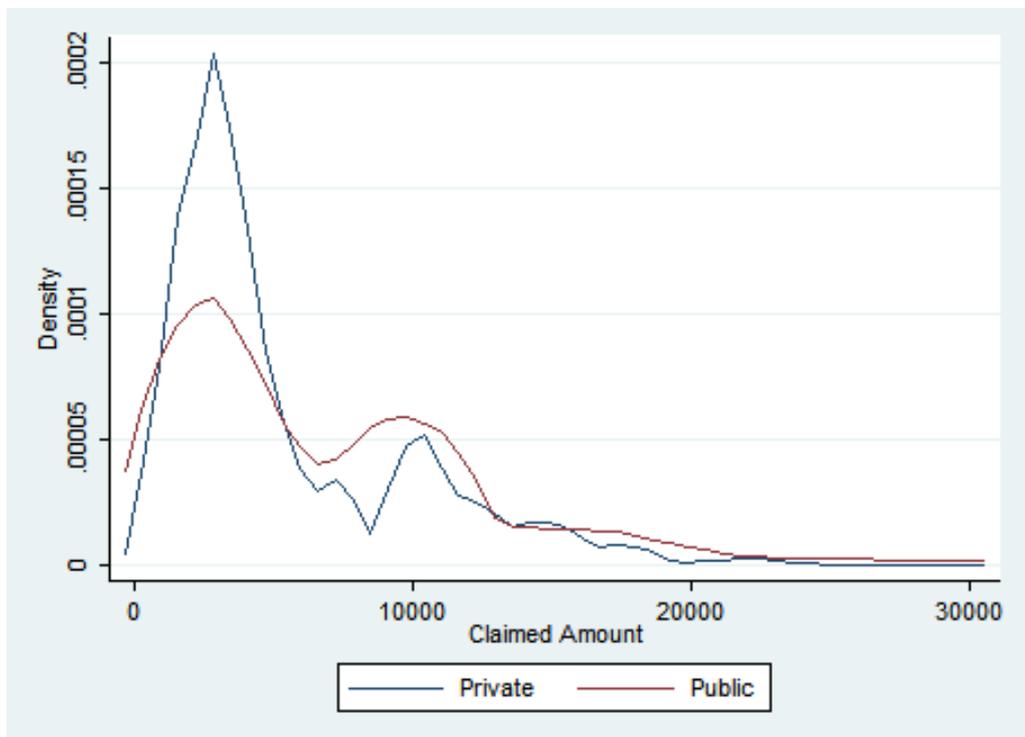


Fig. 6.14: Kernel density estimates for claimed amount in Patiala district (private vs public hospitals)

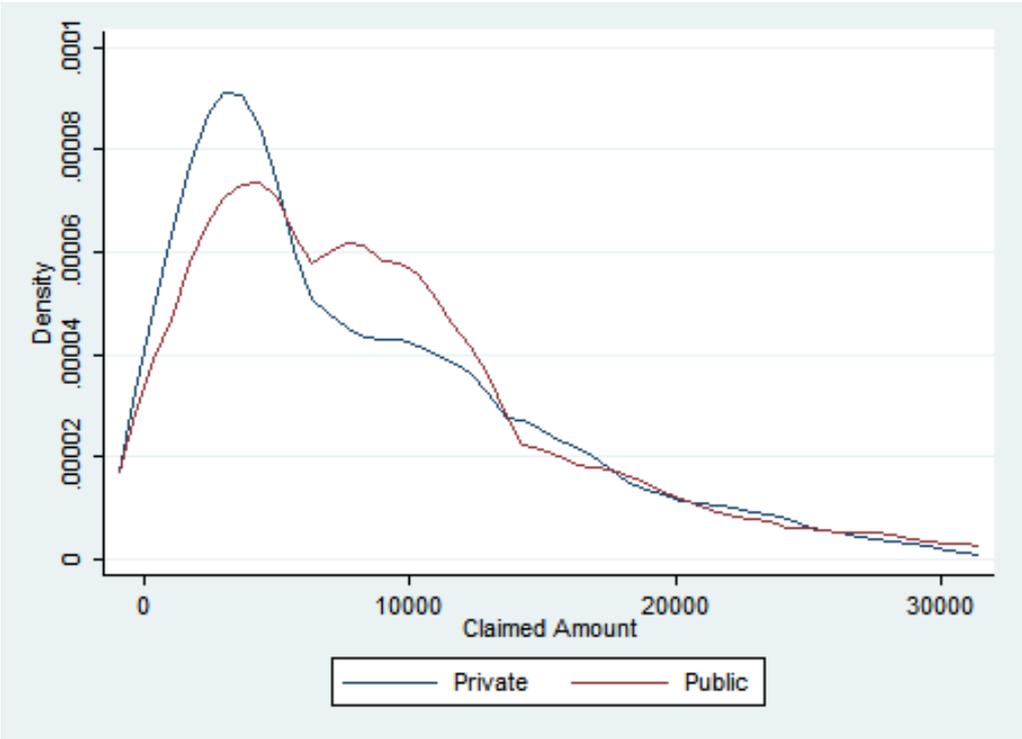


Fig. 6.15: Kernel density estimates for claimed amount in Yamunanagar district (private vs public hospitals)

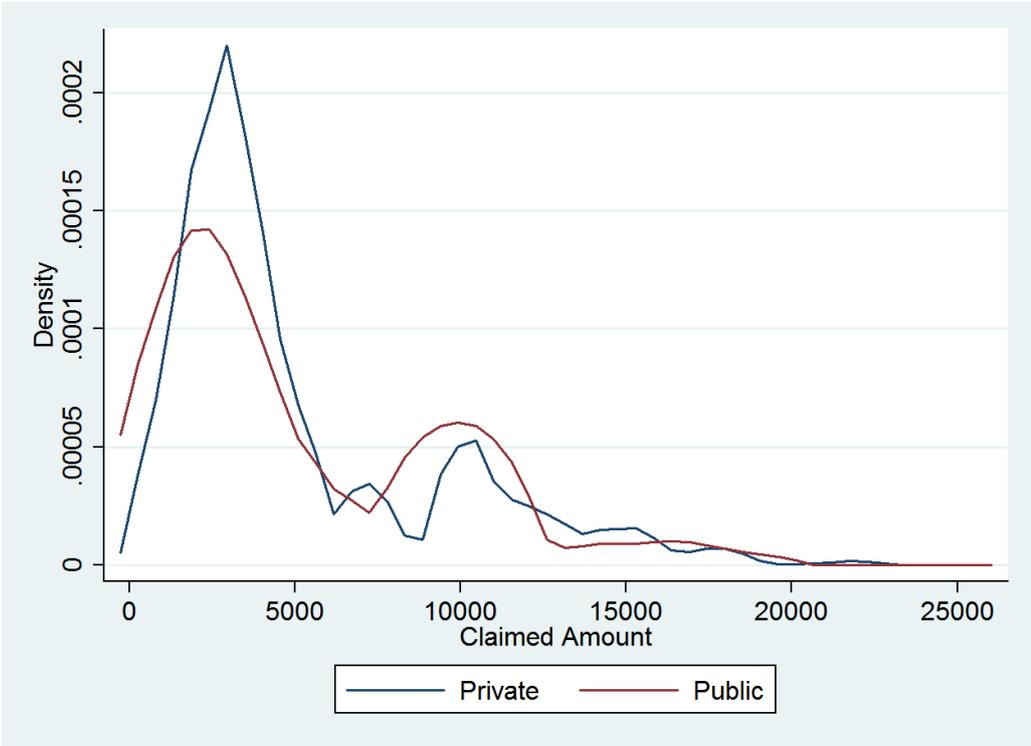
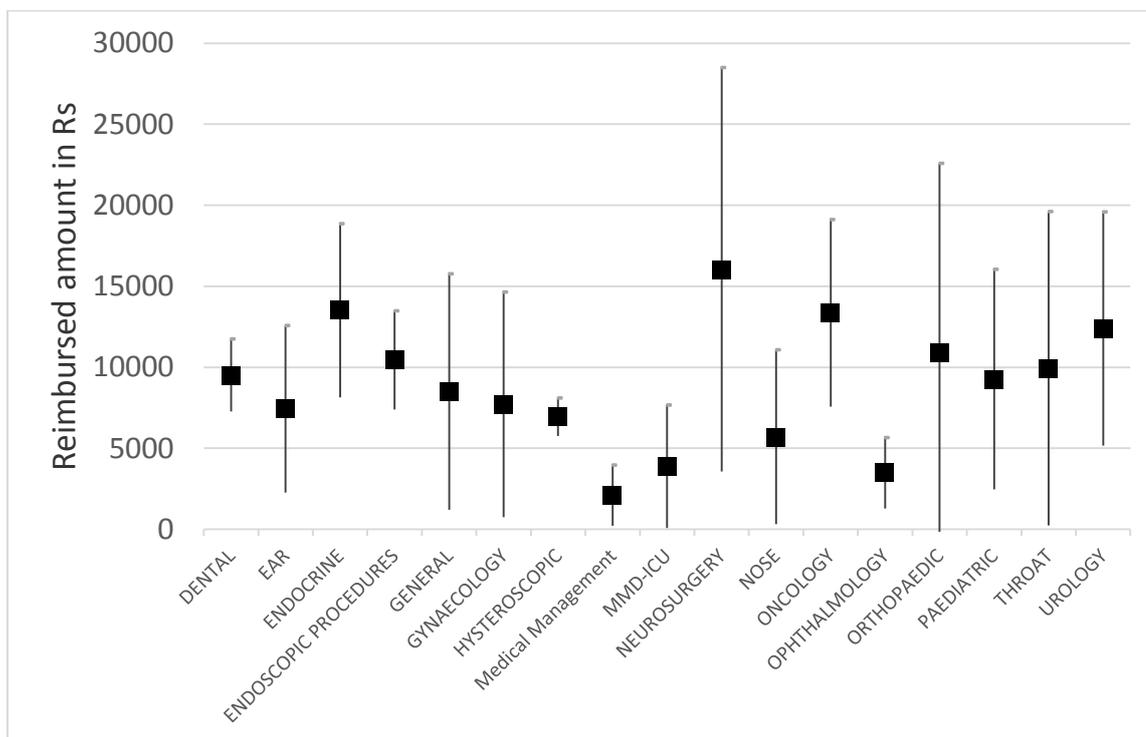


Fig. 6.16: Mean amount reimbursed under various categories with $\pm 2SD$



In Yamunanagar, the amount reimbursed for 5,900 (99.9%) claims was exactly the same as the claimed amount (Table 6.22). Only three claims were reimbursed a lesser amount than what was claimed by the health facilities. In Patiala district, 49% of the claims were reimbursed with a lesser amount than what was claimed by the hospitals (Table 6.22). The reimbursed amount was less than the claimed amount for about 5% of claims in private hospitals and 20% claims in public hospitals (Table 6.23).

Table 6.22: Difference between claimed and reimbursed amount (Patiala vs Yamunanagar)

Difference between claimed and reimbursed amount	Patiala		Yamunanagar		Total	
	No.	%	No.	%	No.	%
No difference	507	51.1	5,900	99.9	6,407	92.9
<INR 1000	15	1.5	1	0.0	16	0.2
INR 1,001 to 5,000	210	21.2	0	0.0	210	3.0
INR 5,001 to 10,000	114	11.5	2	0.1	116	1.7
INR 10001 to 15000	62	6.3	0	0.0	62	0.9
>INR 15,000	84	8.5	0	0.0	84	1.2
Total	992	100.0	5,903	100.0	6,895	100.0

Table 6.23. Difference between claimed and reimbursed amount (private vs public hospitals)

Difference between claimed and reimbursed amount	Patiala				Yamunanagar				Across districts			
	Private hospital		Public hospital		Private hospital		Public hospital		Private hospital		Public hospital	
	N	%	N	%	N	%	N	%	N	%	N	%
No difference	327	48.9	180	55.7	5,535	99.9	365	100	5,862	94.4	545	79.2
<INR 1000	10	1.5	5	1.5	1	0.0	0	0.0	11	0.2	5	0.7
INR 1,001 to 5,000	142	21.2	68	21.1					142	2.3	68	9.9
INR 5,001 to 10,000	79	11.8	35	10.8	2	0.1	0	0.0	81	1.3	35	5.1
INR 10001 to 15000	50	7.5	12	3.7					50	0.8	12	1.7
>INR 15,000	61	9.1	23	7.1					61	1.0	23	3.3
	669	100.	323	100	5,538	100	365	100	6,207	100	688	100

6.5.7 Determinants of reimbursed amount

Multivariate regression analysis was carried out to assess the determinants of reimbursed amount (**Table 6.24**). The equation used for the regression analysis was:

$$\text{Reimbursed amount} = \text{function (Relationship to the head of the household, hospital type, duration of stay, age and gender)}$$

Each of the variables was added step wise. The highest R-square was observed for the model which had all the variables. The reimbursed amount in Yamunanagar district was significantly higher compared to Patiala district. The duration of stay is positively related to higher reimbursed amount. Low R-square is primarily due to binomial independent variable, and the estimations are suggestive.

Table 6.24: Multivariate analysis for determinants of reimbursed amount

	1	2	3	4	5
	Reimbursed Amount	Reimbursed Amount	Reimbursed Amount	Reimbursed Amount	Reimbursed Amount
Age	-7.347** (-2.679)	-6.359* (-2.738)	-6.281* (-2.739)	-7.185** (-2.732)	-3.539 (-2.767)
Female	194.7 (-100.2)	-7.481 (-153.4)	-14.48 (-153.6)	135.1 (-154.4)	141.3 (-158.2)
Relationship with head of household (Other relatives [Except self and son])		276 (-158.6)	282.1 (-158.7)	137.7 (-159.4)	82.51 (-163.4)
Type of hospital (private hospital)			-181.2 (-167.3)	-569.2** (-175.1)	222.7 (-187.9)
District (Yamunanagar)				1,093.7*** (-151)	1,396.9*** (-175.4)
Duration of stay					235.1*** (-13.31)
Constant	5,228.2*** (-136.7)	5,175.4*** (-140)	5,336.2*** (-204.1)	4,772.0*** (-217.7)	2,565.9*** (-267.7)
N	6,895	6,895	6,895	6,895	,6530
R-square	0.002	0.002	0.002	0.01	0.053

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

6.5.8 Premiums and amount reimbursed

In Patiala district, the total amount reimbursed by the insurance company was INR 4,177,006 (£ 42065), i.e. the average amount reimbursed per family enrolled was INR 258.7 (£ 2.6). The premium collected per family by the insurance company in Patiala district was approximately INR 740 (£ 7.4). Thus, a huge gap of INR 482 (£ 4.9) (premium paid to insurance company but amount not utilized) existed in Patiala district (Table 6.25).

In Yamunanagar district, the total amount reimbursed by the insurance company was INR 30,385,202 (£ 305993), i.e. the average amount reimbursed per family enrolled was INR 652.8 (£ 6.8). The premium collected per family by the insurance company in Yamunanagar district was INR 750 (£ 7.6). Thus, a gap of INR 98 (£ 1.0) (premium paid to insurance company but amount not utilized) existed in Yamunanagar district (Table 6.25).

Table 6.25: Difference between premium collected and amount reimbursed

	Patiala	Yamunanagar
Premium Collected	INR 11946450 (£120306)	INR 34909500 (£351555)
Reimbursed	INR 4,177,006 (£ 42,065)	INR 30,385,202 (£ 305994)
Premium-Reimbursed	INR 77,69,554 (£78243)	INR 4524298 (£45,561)
Difference per family enrolled	INR 740 (£ 7.4)	INR 98 (£1)

6.5.9 Frequency of claims by the same household

In Patiala district, 298 beneficiaries used the service only once during the period of eligibility while 104, 67, 15 and 10 beneficiaries used the service twice, 3–4 times, 5–9 times, and more than 9 times, respectively. In Yamunanagar district, 3,167 beneficiaries used the service only once during the period of eligibility while 726, 299, 42 and 11 beneficiaries used the claim twice, 3–4 times, 5–9 times and more than 9 times, respectively (**Table 6.26**).

Table 6.26: Frequency of claims by the same household (Patiala vs Yamunanagar)

Number of times the claim was utilized for the same beneficiary	Yamunanagar	Patiala	Total
Once	3167 (75%)	298 (60%)	3465 (73%)
Twice	726 (17%)	104 (21%)	830 (18%)
3 to 4	299 (7%)	67 (14%)	366 (8%)
5 to 9	42 (1%)	15 (3%)	57 (1%)
>9	11 (0.1%)	10 (2%)	21 (0.1%)
Total	4245 (100%)	494 (100%)	4739 (100%)

6.5.10 Diagnoses for the claims

In both the districts together, most of the claims were made under the medically managed disease (general) package, followed by ophthalmology package and MMD-ICU (Table 6.27). In Patiala district the most common package used was MMD (general) followed by MMD (ICU), general surgery and gynaecology. Whereas in Yamunanagar, the most common package was MMD (general) followed by ophthalmology and MMD (ICU) (Table 6.27). Almost all the claims categorized under ophthalmology and MMD-ICU were from private hospitals. Surprisingly, claims under paediatric ailments were almost negligible in both the districts. This may be because of lower enrolment of children.

In Patiala district, there was only one claim where the diagnosis was not categorized under any package rate, while this figure was 275 in Yamunanagar district. Almost all such instances of non-packaged diagnoses were made by private hospitals (Table 6.27).

Table 6.27: Distribution of claims in both the districts by diagnosis (Patiala vs Yamunanagar)

Disease category	Patiala		Yamunanagar		Total	
	N	%	N	%	N	%
No package opted	1	0.1	275	4.6	276	3.9
Dental	1	0.1	4	0.1	5	0.1
Ear	12	1.2	5	0.1	17	0.2
Endocrine	2	0.2	9	0.1	11	0.2
Endoscopic	9	0.9	133	2.2	142	2.0
General surgery	117	11.8	668	11.1	785	11.2
Gynaecology	114	11.5	379	6.3	493	7.0
Hysteroscopy	1	0.1	13	0.2	14	0.2
MMD-general	445	44.9	1,916	31.7	2,361	33.6
MMD-ICU	191	19.3	843	14.0	1034	14.7
Neurosurgery	0	0.0	7	0.1	7	0.1
Nose	9	0.9	11	0.2	20	0.3
Oncology	1	0.1	2	0.0	3	0.0
Ophthalmology	34	3.4	1,143	18.9	1,177	16.7
Orthopaedic	43	4.3	425	7.0	468	6.7
Paediatric	0	0.0	9	0.1	9	0.1
Throat	0	0.0	6	0.1	6	0.1
Urology	12	1.2	195	3.2	207	2.9
Total	992	100.0	6043	100.0	7035	100.0

Table 6.28: Distribution of claims in both the districts by diagnosis (private vs public)

Disease category	Patiala				Yamunanagar				Both Districts			
	Private		Public		Private		Public		Private		Public	
	N	%	N	%	N	%	N	%	N	%	N	%
No package opted	0	0.0	1	0.3	270	4.8	5	1.3	270	4.3	6	0.8
Dental	0	0.0	1	0.3	4	0.1	0	0.0	4	0.1	1	0.1
Ear	3	0.4	9	2.8	1	0.0	4	1.0	4	0.1	13	1.8
Endocrine	1	0.1	1	0.3	9	0.2	0	0.0	10	0.2	1	0.1
Endoscopic procedures	9	1.3	0	0.0	125	2.2	8	2.1	134	2.1	8	1.1
General surgery	54	8.1	63	19.5	589	10.4	79	20.5	643	10.2	142	20.1
Gynaecology	82	12.3	32	9.9	323	5.7	56	14.5	405	6.4	88	12.4
Hysteroscopy	1	0.1	0	0.0	13	0.2	0	0.0	14	0.2	0	0.0
MMD-general	272	40.7	173	53.6	1,759	31.1	157	40.8	2,031	32.1	330	46.6
MMD-ICU	191	28.6	0	0.0	843	14.9	0	0.0	1,034	16.3	0	0.0
Neurosurgery	0	0.0	0	0.0	7	0.1	0	0.0	7	0.1	0	0.0
Nose	4	0.6	5	1.5	3	0.1	8	2.1	7	0.1	13	1.8
Oncology	1	0.1	0	0.0	2	0.0	0	0.0	3	0.0	0	0.0
Ophthalmology	21	3.1	13	4.0	1,122	19.8	21	5.5	1,143	18.1	34	4.8
Orthopaedic	22	3.3	21	6.5	388	6.9	37	9.6	410	6.5	58	8.2
Paediatric	0	0.0	0	0.0	9	0.2	0	0.0	9	0.1	0	0.0
Throat	0	0.0	0	0.0	5	0.1	1	0.3	5	0.1	1	0.1
Urology	8	1.2	4	1.2	186	3.3	9	2.3	194	3.1	13	1.8
Total	669	100.0	323	100.0	5,658	100.0	385	100.0	6,327	100.0	708	100.0

6.5.11 Length of stay in the hospital

While analysing the length of stay in the hospital (both private and public), outliers were noticed in the data set for Patiala district with lengths of stay as high as 300 days. This could probably have been due to errors in data entry and hence were removed from the analysis. All entries with a length of stay of more than 50 days in hospitals of Patiala district were deleted after discussion, on pragmatic grounds. A total of 162 (2.4%) such entries were noticed in the data set.

The mean length of stay was significantly more in public hospitals compared to private hospitals. There were similar observations for intra-district analysis as well. The difference in stay between private and public hospitals was more in Patiala district when compared to Yamunanagar district (**Table 6.29**).

Table 6.29: Length of stay (public vs private hospitals)

		N	Mean	SD	P Value
Patiala	Private	454	5.47	6.77	0.65
	Public	218	9.39	8.25	
Yamunanagar	Private	5,615	4.21	2.88	0.03
	Public	383	6.51	5.80	
Both districts	Private	6,069	4.31	3.35	0.03
	Public	601	7.55	6.92	

6.5.12 Time taken to settle the claim

As per the contract document, the insurer has to settle all eligible claims and pay the sum to the provider within 21 working days of receipt of the electronic claim bills. To assess this term of the contract, the claims database was analysed in terms of the date of issue of the cheque to the hospital by the insurance company and the date of booking the amount by the hospital. However, this data was available only for Yamunanagar district. About three fourths of the hospitals were not getting the reimbursed amount in time. There were 166 claims from private hospitals and only two claims from public hospitals where the claim settlement took more than six months (Table 6.30).

Table 6.30: Time taken to settle the claim amount by the insurance company (Yamunanagar)

Claim settlement timings	Private hospital		Public hospital		Total	
	N	%	N	%	N	%
Within 21 working days	1,436	26.4%	105	28.8%	1,541	26.5%
Within six months	3,846	70.6%	257	70.6%	4,103	70.6%
More than six months	166	3.0%	2	0.5%	168	2.9%
Total	5,448	100.0%	364	100.0%	5,812	100.0%

6.6 Discussion

6.6.1 Methodological issues

Detailed locational information of the households enrolled under the RSBY scheme for the year 2011–12 could not be obtained and hence mapping of each enrolled household could not be done. Availability of such information could have helped in understanding the dynamics of scheme utilization in terms of access and distance. Mapping of the population was done at sub-district level and not at block level, since details of BPL population at block level were not available for mapping. Block level mapping would have helped in matching population to availability of health facilities.

Many empanelled hospitals, more so the private hospitals, refused to participate in the study or provide information regarding the services available in their hospitals. They probably felt that providing such information might raise questions regarding their empanelment status. Information regarding the services available in non-empanelled hospitals was also not available. This information could have helped in better classifying the hospitals on their eligibility for empanelment under the RSBY scheme and in understanding the process of empanelment by the insurance companies.

Another problem on accessibility to data pertained to availability of the enrolment data set. The line listing of the BPL population was not available for Yamunanagar district and therefore age- and sex-wise coverage of the scheme could not be assessed for Yamunanagar as it was done for Patiala.

There were concerns around the quality of data. Some data were practically not feasible under the scheme, e.g. length of stay in the hospital of more than 300 days. Such data was deleted on pragmatic grounds. Since the data set used was secondary

data, little could be done to assess the quality of the data and improve it. The claims data set received from the insurance company of Patiala and Yamunanagar districts differed in terms of variables available for analysis. The information regarding the dispatch date of the cheque by the insurance companies to reimburse the claimed amount by the hospital was not available for Patiala district. Therefore, timely settlement by the insurance company of the claimed amount could not be assessed for Patiala district.

6.6.2 Summary of findings and discussion

Hospital empanelment

Most of the RSBY beneficiaries (BPL population) are daily wage earners. Hence, having to visit a health facility that is far from their place of residence burdens them with transportation costs and loss of wages. Therefore, one important criterion for selecting hospitals for empanelment under the RSBY scheme is equitable geographical distribution within the district. In the present study, public hospitals were seen to be more equitably distributed throughout the district as compared to private facilities, which are geographically clustered around pockets at the sub-district level. In Patiala district, a majority of the private facilities are clustered around Patiala sub-district; and in Yamunanagar district, almost all the empanelled facilities were from the private sector and were clustered around Jagadhri sub-district. There appeared to be several cases of eligible facilities that were dispersed around the district but were not empanelled under the RSBY scheme. Such an observation raises questions on the selection criteria of the insurance company in terms of empanelment.

Empanelment of more public hospitals in Patiala district and more private hospitals in Yamunanagar district could be due to the different regulatory authorities in the respective states. The regulatory body in Punjab (for Patiala) is the PHSC, which is under the Department of Health, while in Haryana (for Yamunanagar) the regulatory body is the ESIC, which is supervised by the Department of Labour and Employment. Since public hospitals are under the Department of Health, more public hospitals may have been empanelled in Patiala district. However, in Haryana the Department of Labour and Employment is independent of the Department of Health, which may have led to more private hospitals being empanelled in Yamunanagar.

In terms of availability of services, as per the criterion that at least one empanelled facility within the district should offer all pre-defined packages to RSBY beneficiaries, none of the public hospitals had all such facilities. In fact in Patiala district, not even a single empanelled facility provided all the services. In Yamunanagar, there were empanelled private hospitals which were providing all the services.

Enrolment

Enrolment was poor in both districts and more so for Patiala district as compared to Yamunanagar. The average number of family members enrolled in Patiala was also lower as compared to Yamunanagar (Patiala 2.37, Yamunanagar 3.56). Off-targeting was more likely to occur for SC/ST, illiterate or literate up to primary level and Yamunanagar, while it was likely for females. Leakage (non-BPL population getting enrolled in the RSBY scheme) was more likely to occur in Patiala district. However, it has to be noted that for estimation of off-target and leakage, sampled population from health facility was taken which may not be the ideal setting for such estimation. The analysis of the off-target group raised further questions on achieving of social equity by the scheme in relation to access to health services. The population that is 'more deprived among the deprived', i.e. lower classes and illiterate BPL population, are still unlikely to get enrolled under the scheme, which results in social inequality.

The coverage of the scheme was low in Patiala district as compared to Yamunanagar. Only 15% of the eligible population was enrolled in the RSBY scheme in Patiala district compared to 40% in Yamunanagar district. There could be multiple explanations for this. One probable reason for low enrolment in Patiala district could be the overlap of the harvesting season and the enrolment period (September to November). During the harvesting period, entire families go to the fields in the morning hours and return to their homes only in the evening, by which time the process of enrolment by the TPAs in the villages is over. Moreover, in Patiala district there are more public hospitals as compared to Yamunanagar district. Public hospitals provide services that are either free of cost or minimal in cost. Hence the populace may have assumed that the RSBY scheme would not provide any added advantage to them as they already had relatively good access to health services at no/minimal cost. The difference could also be attributed to the different regulatory environment in the

two districts. The MoHFW may not be as efficient as MoLE in identifying and recording the informal sector. Enrolment may also be affected by the fact that in Haryana, the State BPL list was added to the BPL list provided by the Centre, due to which the eligible BPL population got inflated. In Patiala only the BPL population list provided by the Central Government was used. The difference may also be due to the fact that in India, governance issues are very personality-oriented and not system dependent. Hence, a strong leader may provide better results at the ground level.

The coverage of enrolment was more for the age groups above 25 years but was poor for below 15 years. Usually in the case of health insurance, it is assumed that both age groups, i.e. those at higher risk (elderly and under-5 children) and those at lower risk (adult population) would be enrolled. This would contribute to a sustainable and an effective health insurance scheme. More enrolment of the high-risk population would lead to adverse selection while more numbers of adults would lead to greater profit for the insurance companies as a high premium collection would occur against low utilization. Findings of the present study indicate that there was no adverse selection in terms of elderly enrolment in the scheme. Another interesting finding in the enrolment of Patiala was that the number of females getting enrolled under the scheme was comparable to males, in fact in the age group of 25-64 years, they were more than males. The same was reflected in scheme utilization where more females were using the scheme in this age group. However, one reason for higher utilization of the scheme in this age group by females could be that this is the reproductive age group and females were using facilities more for gynaecological services.

The low number of members enrolled per family is likely to be a result of the fact that under the scheme, payment of premiums to insurance firms is based on the total number of households enrolled. Within each household, the attempt by insurance firms is to minimize the number of members and keep it lower than the maximum allowed to lower the probability of use of health care.

Trends in claims

Looking at the population enrolled under the scheme in both the districts, it appears that this difference in claims is largely due to the number of people enrolled in the two districts. The population enrolled in Patiala is less than one third of the population enrolled in Yamunanagar. But when the claims per 100 enrolled population were

calculated for both districts, it was observed that enrolment was still lower for Patiala as compared to Yamunanagar. This indicates that there are other factors that influenced the claims in Patiala district. Accessibility to the health facility could be one of the factors. Other reasons could be the relationship between the insurance company and the private providers or the satisfaction level of the providers for the package rates. Particularly in Patiala, it was observed that the relationship between the insurance company and the private providers was not healthy. The private providers complained that they were not getting the reimbursed amount from the insurance company in time. They also felt that the package rates were not sufficient to generate any profit. Probably, these reasons may push providers to refuse to treat patients under the RSBY scheme. This would also explain the low utilization in Patiala.

Further, in both the districts a declining trend in the number of claims was observed over the period October 2012 to December 2012. This declining trend could be in keeping with the seasonality of diseases in India. The winter season is considered to be a healthier season. There is less patient turnout in the hospital during this season. The patient load in the health facilities decreases during this season, primarily because of the decrease in medical cases (non-surgical). In the present study, a similar pattern was observed, i.e. the decline was present because of the decrease in the claims under the category of medically managed diseases (MMD)-general (non-surgical). Also, the scheme was extended beyond September, though several facilities and beneficiaries were not aware that the scheme had been extended.

Another observation in the claim analysis was that more claims were made by females in Patiala, though the opposite was observed in Yamunanagar, where more males were making claims. This can be correlated to the head of the household. Females, as head of the household, were more in Patiala when compared to Yamunanagar. It appears that the decision maker in a family plays a significant role in availing the services.

Private hospital preferences

A higher proportion of beneficiaries were visiting private facilities as compared to public facilities in both the districts. This high level of utilization probably reflects the general notion in India that the private sector offers better care. Lack of funds to access care had created a pent-up demand for private care which can now be met

through RSBY enrolment. Earlier, the only option available to the BPL population was public hospitals, but with the introduction of the scheme, they have access to private hospitals as well.

Availing benefits

Children and the elderly population are at a higher risk of developing diseases and therefore are more likely to require admission in hospitals. A similar situation was observed for the paediatric age group, where services availed by children was almost negligible. The services were mostly utilized by the 25–60 years age group who are the bread-earners of the family and also comprise a major chunk of the population. Most of the claims were for the head of the household. The lower claims observed in the paediatric age group is an issue of both enrolment and utilization. Probably, the limitation of INR 30,000 (£ 302) as a maximum benefit under the scheme prioritizes the use of the insured amount for the important and productive members of the family.

Further, the lower number of claims in the paediatric age group could be due to the mother's ID being used for sick infants and neonates. This was reported by one of the SNA interviewees. Such an observation questions the enrolment process by the insurance companies, which leave out small children from being enrolled in the scheme despite the fact that the number of enrolled persons per family is not achieved.

Clustering of patients in selected hospitals

The clustering effect, i.e. beneficiaries going to only a few selected hospitals in the district was observed in both the districts. Certain hospitals may develop a reputation over time because of the quality of services that they deliver. The scheme has enabled the poor to choose the hospital based on their preference and hence it could be that a majority of the beneficiaries visit the most reputed hospital of the district. Also, clustering is observed in the hospitals that have all facilities available under one roof. The health-care system in India is designed so that the patients are referred from primary centres to secondary centres and from secondary centres to tertiary centres. The burden of the patient is highest at tertiary centres, followed by secondary and primary centres, primarily because of a poor referral system.

Facilities available in the hospital may enhance the confidence of the patient in that hospital. The availability of larger number of treatments provided by a single facility would also reduce the transportation cost and inconvenience to the patients if they require advice from other specialists. In the present study, clustering was observed in big hospitals (more than 50 beds) that had almost all the specialized facilities.

It was observed that enrolled men were more likely to visit private hospitals rather than public hospitals. In both districts, public hospitals were scattered throughout the district and hence easily accessible even in peripheral areas. However, private hospitals were concentrated in certain sub-districts, hence population from peripheral areas would have to travel a longer distance to reach these hospitals. It is comparatively easier for men to access the facilities that are far off from their residence as compared to women. This is because of the independence of males in terms of transportation. They may own their own transport when compared to females who have to depend on public transport, which may be infrequent and erratic.

Claim amount by health facilities

In Patiala, the amount claimed by public hospitals was more than what was claimed by private hospitals, whereas in Yamunanagar, the amount claimed by the private hospitals was more than public hospital. The reason for this could be the greater length of stay in public hospitals as compared to private hospitals.

As can be observed from Table 6.22, once the duration of stay is taken into account in the regression model, the coefficient for private care changes sign from reducing claims to increasing claims. However, this sign change is accompanied by the coefficient becoming insignificant. The sign for duration of stay is positive in Table 6.22 and is significant.

In Patiala, the difference between the claimed and reimbursed amount was higher as compared to Yamunanagar. Further, this difference was higher for private hospitals compared to public hospitals in Patiala. The average number of claims per hospital was lower in Patiala because of lower level of enrolment which was accompanied by lower utilization rate. Such circumstances may push the providers to inflate the claim amount to achieve the desired level of profit from the limited number of cases reimbursable through RSBY. In Yamunanagar, the average number of cases per

hospital was high; therefore, meeting a profit target from the volume of the claims was easier, thus making any inflation of costs unnecessary.

6.7 Conclusions

This chapter has provided an assessment of accessibility, availability and utilization patterns of health-care services under the RSBY scheme. Primary data was collected for accessibility and availability assessment, while secondary data was analysed for utilization patterns.

Mapping of the health facilities showed that access to health facilities should be a concern for the beneficiaries as the number of empanelled hospitals were relatively few. Moreover, the geographical distribution of private facilities was clustered around selected sub-districts.

The empanelment of health facilities was not adequate as most of the empanelled hospitals were providing limited services to the beneficiaries. In both the districts there were only three hospitals (all private hospitals in Yamunanagar), which were providing all service packages.

Enrolment of beneficiaries is one of the most important pillars contributing to the goal of the scheme. However, in the present study it was found that both the coverage of the enrolment and the process of enrolment were inadequate, and that beneficiary enrolment within enrolled households was poor. Also, signs of inequity were seen with the presence of off-targeting for certain under privileged deprived group.

Utilization patterns showed that most of the claims were from private hospitals and were clustered in a few selected hospitals. Further, few claims were made by the most vulnerable groups (children and elderly population). Analysis of the claims data set also pointed towards breach in contract by the insurance companies as they were not settling the claim amount of the providers in time. Moreover, in one district, overall income from premiums collected by the insurance company exceeded the total value of claims paid by a significantly large amount.

Chapter 7
**HEALTH CARE ACROSS PUBLIC AND
PRIVATE PROVIDERS**

Chapter 7

HEALTH CARE ACROSS PUBLIC AND PRIVATE PROVIDERS

7.1 Introduction

This chapter deals with evaluating the delivery of services across both public and private empanelled facilities for RSBY and non-RSBY beneficiaries. The questions asked here are: Has the pluralization of access at near-zero cost led to satisfaction with the care received? Did the cashless system actually provide near-free care through the use of private providers? Was the RSBY implementation framework in accordance with the contract design? Which type of facility provided better services to RSBY beneficiaries?

Considering that RSBY uses contractual arrangements with a variety of stakeholders to facilitate implementation, it is imperative to understand the outcome of these arrangements by evaluating the services being provided to beneficiaries. Moreover, due to asymmetry of information between the health provider and BPL beneficiary, it is important to assess structural, process and quality aspects of care to understand the experience of the beneficiary while availing services in both public and private facilities and the implication of this for contract design. Additionally, non-RSBY participants were included in the sample to serve as controls.

This chapter primarily deals with evaluating the provision of care as adapted from the Donabedian Framework (Donabedian, 2005, Donabedian, 1988). The aim is to assess various aspects of service delivery, focusing specifically on the policy guidelines and implementation of the contractual arrangements.

The methodology has been discussed in detail in Chapter 4. A total of 12 facilities were selected, with three public and three private facilities in each of the two chosen districts (Patiala and Yamunanagar). Evaluation was undertaken of structural aspects of care, process of care and user satisfaction/perceived quality. Technical quality of care was excluded due to resource constraints and difficulty in accessing patient records, especially at private facility.

Data were collected from an Observational and Facility Record Checklist, Health Provider Checklist (self-assessment) and exit interviews with patients. A total of 751 exit interviews were conducted. The break-up by various parameters was - 399 participants interviewed from Patiala district and 352 from Yamunanagar district. Taking the two districts together, 387 were RSBY participants and 364 non-RSBY participants and 398 exit interviews were from private hospitals and 353 from public hospitals. The low number of cases in Yamunanagar was because the number of patients coming to hospitals, both public and private, was less than expected during that period of time.

7.2 Descriptive information of exit interview participants

In analysing the social and demographic characteristics of the participants included in the study, it was observed that in both the districts the majority of study participants were in the age group 25–44 years (Table 7.1). The mean age of the study participants utilizing facilities in private hospitals was 39.8 years while it was 42.7 years for public hospitals. The age difference between participants utilizing private and public hospitals was statistically significant (on Student's t-test, with age as a continuous variable), and younger ones were more likely to go to private hospitals while the older ones went to public hospitals (Table 7.2). It was noted that the mean age of RSBY participants was 43.5 years when compared to non-RSBY participants where the mean age was 38.7 years (Table 7.3). On Kernel Density diagram as well, the highest density for age was greater RSBY participants when compared to non-RSBY participants (Figure 7.1).

Table 7.1: Socio-demographic characteristics (Patiala vs Yamunanagar)

		Patiala (N=399)		Yamunanagar (N=352)		P value
		N	Percentage	N	Percentage	
Age category[#]	<15 yrs	17	4.3	19	5.4	0.08
	15–24 yrs	45	11.4	62	17.6	
	25–44 yrs	146	37.1	138	39.2	
	45–64 yrs	126	32.0	88	25.0	
	65–69 yrs	26	6.6	18	5.1	
	>70 yrs	34	8.6	27	7.7	
	N	394	100	352	100	
Sex	Male	147	36.8	169	48.0	<0.01
	Female	252	63.2	183	52.0	
Religion	Hinduism	155	38.8	305	86.6	<0.01
	Islam	16	4.0	29	8.2	
	Sikhism	223	55.9	11	3.1	
	Others	5	1.3	7	2.0	
Social class	General	116	29.1	45	12.8	<0.01
	OBC	90	22.6	126	35.8	
	SC	176	44.1	167	47.4	
	ST	17	4.3	14	4.0	
Education	Up to Primary	204	51.1	111	31.5	<0.01
	>Primary	195	48.9	241	68.5	

* P value was calculated using Student's t-Test. Age was used as a continuous variable

[#]Age was not known to five participants from Patiala district

Table 7.2: Socio-demographic characteristics (private vs public)

		Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		Private (N=203)		Public (N=196)			Private (N=195)		Public (N=157)			Private (N=398)		Public (N=353)		
		N	%	N	%		N	%	N	%		N	%	N	%	
Age category [#]	<15 yrs	9	4.5	8	4.1	0.50*	12	6.2	7	4.5	0.02*	21	5.3	15	4.3	0.03*
	15–24 yrs	21	10.6	24	12.3		36	18.5	26	16.6		57	14.5	50	14.2	
	25–44 yrs	76	38.2	70	35.9		82	42.1	56	35.7		158	40.1	126	35.8	
	45–64 yrs	65	32.7	61	31.3		44	22.6	44	28.0		109	27.7	105	29.8	
	65–69 yrs	13	6.5	13	6.7		11	5.6	7	4.5		24	6.1	20	5.7	
	>70 yrs	15	7.5	19	9.7		10	5.1	17	10.8		25	6.3	36	10.2	
	Total	199	100	195	100		195	100	157	100		394	100	352	100	
Sex	Male	75	36.9	72	36.7	0.97	83	42.6	86	54.8	0.02	158	39.7	158	44.8	0.16
	Female	128	63.1	124	63.3		112	57.4	71	45.2		240	60.3	195	55.2	
Religion	Hinduism	61	30.0	94	48.0	<0.01	171	87.7	134	85.4	0.45	232	58.3	228	64.6	0.02
	Islam	6	3.0	10	5.1		13	6.7	16	10.2		19	4.8	26	7.4	
	Sikhism & others	136	67.0	92	46.9		11	5.6	7	4.5		147	36.9	99	28.0	
Social class	General	86	42.4	30	15.3	<0.01	28	14.4	17	10.8	0.05	114	28.6	47	13.3	<0.01
	OBC	51	25.1	39	19.9		75	38.5	51	32.5		126	31.7	90	25.5	
	SC and ST	66	32.5	127	64.8		92	47.1	89	56.7		158	39.7	216	61.2	
Education	Up to Primary	90	44.3	114	58.2	<0.01	56	28.7	55	35.0	0.20	146	36.7	169	47.9	0.02
	>Primary	113	55.7	82	41.8		139	71.3	102	65.0		252	63.3	184	52.1	

* P value was calculated using Student’s t-Test. Age was used as a continuous variable

#Age was not known to five participants from Patiala district; Mean age – Participants from private facility (39.8 years), public facility (42.7 years)

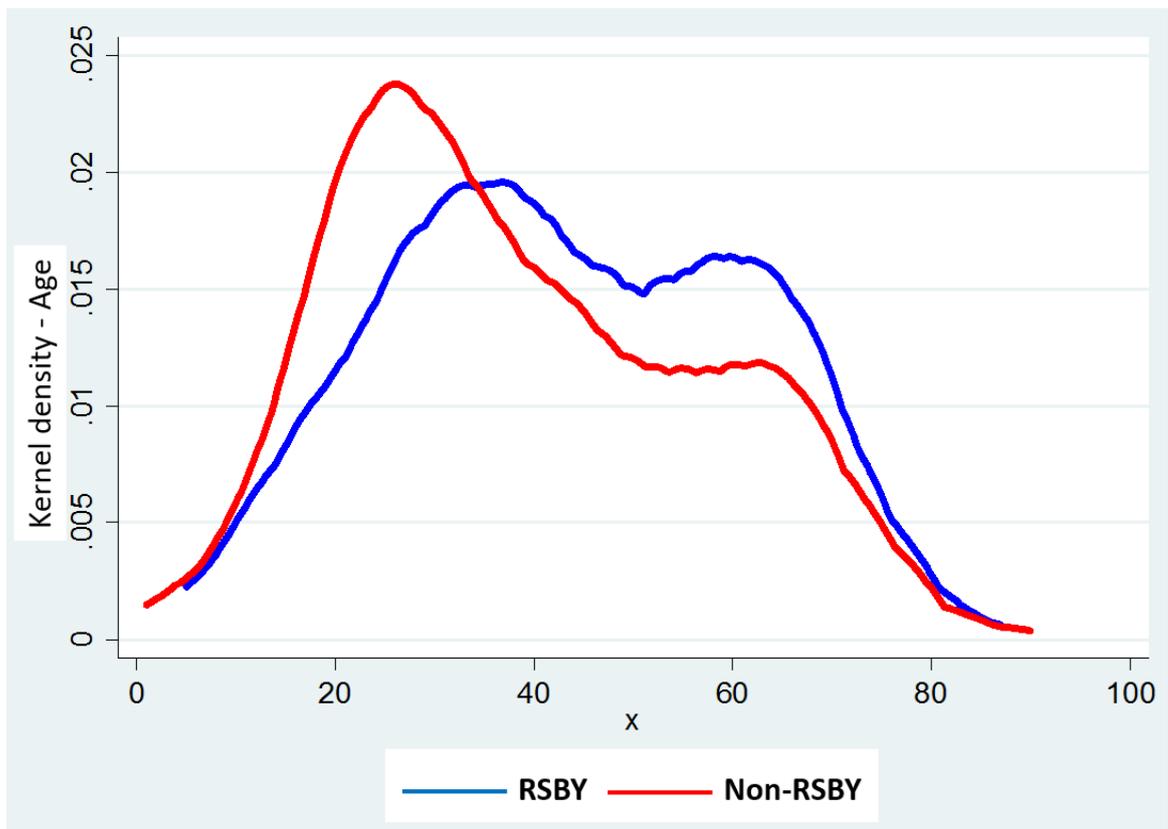
Table 7.3: Socio-demographic characteristics (RSBY vs non-RSBY)

		Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		RSBY N=196		Non-RSBY N=203			RSBY N=191		Non-RSBY N=161			RSBY N=387		Non-RSBY N=364		
		N	%	N	%		N	%	N	%		N	%	N	%	
Age category [#]	<15 yrs	6	3.1	11	5.5	0.01*	11	5.8	8	5.0	0.18*	17	4.4	19	5.3	<0.01*
	15–24 yrs	16	8.2	29	14.5		24	12.6	38	23.6		40	10.4	67	18.6	
	25–44 yrs	63	32.5	83	41.5		78	40.8	60	37.3		141	36.6	143	39.6	
	45–64 yrs	74	38.1	52	26.0		52	27.2	36	22.4		126	32.7	88	24.4	
	65–69 yrs	16	8.2	10	5.0		12	6.3	6	3.7		28	7.3	16	4.4	
	>70 yrs	19	9.8	15	7.5		14	7.3	13	8.1		33	8.6	28	7.8	
	N	194	100	200	100		191	100	161	100		385	100	361	100	
Sex	Male	70	35.7	77	37.9	0.64	79	41.4	90	55.9	<0.01	149	38.5	167	45.9	0.04
	Female	126	64.3	126	62.1		112	58.6	71	44.1		238	61.5	197	54.1	
Religion	Hinduism	68	34.7	87	42.9	0.17	163	85.3	142	88.2	0.72	231	59.7	229	62.9	0.42
	Islam	10	5.1	6	3.0		17	8.9	12	7.5		27	7.0	18	4.9	
	Sikhism Other	118	60.2	110	54.2		11	5.7	7	4.3		129	33.3	117	32.1	
Social Class	General	64	32.7	52	25.6	0.45	21	11.0	24	14.9	0.04	85	22.0	76	20.9	0.16
	OBC	43	21.9	47	23.2		73	38.2	53	32.9		116	30.0	100	27.5	
	SC	89	45.4	104	51.2		97	50.8	84	52.1		186	48.0	188	51.6	
Education	Up to Primary	110	56.1	94	46.3	0.05	69	36.1	42	26.1	0.04	179	46.3	136	37.4	0.14
	>Primary	86	43.9	109	53.7		122	63.9	119	73.9		208	53.7	228	62.6	

* P value was calculated using Student’s t-Test. Age was used as a continuous variable

Age was not known to five participants from Patiala district; Mean age – RSBY Participants (43.5 years), Non-RSBY participants (38.7.7 years)

Fig. 7.1: Kernel density diagram for RSBY and non-RSBY participants for age



By gender, more females were enrolled in the study (exit interview) compared to males in both districts. Female participants were also more in both RSBY and non-RSBY groups.

Muslims constitute a minority in the selected districts. It was observed that a higher percentage of Muslims were availing facilities in public hospitals. In terms of social class, a majority of study participants belonging to the general and Other Backward Class (OBC) were utilizing private hospitals, whilst Scheduled Caste (SC) and Scheduled Tribe (ST) participants made up a higher share of those using public hospitals. More literate people (literacy more than primary level) were going to private hospitals.

7.3 Structural aspects of care across public and private providers for RSBY beneficiaries in selected districts

This section covers the structural aspects of the 12 selected empanelled hospitals in the two chosen districts. Structural aspect analysis was conducted with the help of the following tools: (i) Health Provider Checklist (self-assessment); and (ii) Observation

Facility Record Checklist. Observation and Facility Record Checklists were administered by trained data collectors with a degree in medicine while the Health Provider Checklist (self-assessment) was done by the hospital staff themselves.

The Health Provider self-assessment tool and observational checklist had the following categories for assessment:

- Access and facilities – whether facility could be easily reached taking into account distance, condition of roads, signboards, etc. and the condition of the facility.
- Availability of staff – staff strength (doctors, nurses, on call specialists and other paramedics)
- Hospital waste management – is biomedical waste disposed of in accordance with guidelines? Does the health facility have a valid license from the Pollution Control Board?
- Operating department – adequacy of lighting, air conditioning, ventilation, sterilization and availability of OT instruments
- Labour room – availability of instruments and proper sterilization
- Evaluation and care of inpatients – whether patient was examined, written consent was taken, frequency of evaluation, prescriptions, etc.

The Facility records had the following categories:

- Mopping records (including toilet sanitation)
- Records of carbolisation of OT and Labour Room after every procedure
- Records of autoclaving of instruments and linen
- Grievance redressal mechanism (presence of documented grievance redressal mechanism which is practiced)
- List of available procedures during informed patient consent, pre-operative assessment and post-operative care
- Records of laboratory services (system for registration of patients exists)
- Records of radiology services (availability of records of protection of staff conforming to the BARC guidelines, information on request forms and fee charged)

- Records of evaluation and care of inpatient services (physical examination and its frequency, consent, availability of prescription summary)
- Blood bank records (blood bank meets the licensing requirement of the Drugs and Cosmetic Act and Supreme Court rules, labelling on blood products, record of procurement, transfusion of blood, cross-matching, etc.).

The observations were recorded in accordance with the Likert scale. Later, the scale was converted to scores. A score of one meant ‘strongly agree’ while a score of five meant ‘strongly disagree’. Mann-Whitney U test was used to assess the statistical difference between the scores of public and private hospitals as the data was non parametric and the outcome was taken as continuous variable. However, this statistical test was not applied for intra-district comparison since the sample size of hospitals was very small (only three hospitals in each category). A detailed analysis of checklists has been done in chapter 4.

From the Health Provider Checklist assessment (self-assessment), private hospitals self-reported a better score than public hospitals under all categories of structural-aspect evaluation in both districts. Private hospitals were significantly better under the access and facilities category, i.e. private hospitals had adequate logistics and equipment required for treatment (Table 7.4). In the inter-district comparison, in Patiala district private hospitals were again reported to be better in all structural aspects whereas in Yamunanagar district, public hospitals had a better score for labour room and care of inpatients.

From the Observation and Facility Record Checklist, private hospitals scored better than public hospitals in all aspects of structural evaluation (overall). As in the provider self-assessment evaluation, the observation checklist also indicated a significantly better access to facilities in private hospitals (Table 7.5). In terms of availability of records, private hospitals had better records available than public hospitals (overall). No difference was observed in the mean score for private and public facilities under the categories ‘blood bank records’ ‘laboratory services’ and ‘available procedures’ (Table 7.6). In Yamunanagar district, Observational and Facility Record Checklist reported almost similar structural aspect for private and public hospitals.

On triangulation of various results from the Observation and Facility Record Checklist, and Health Provider Checklist, it emerged that private hospitals had better structural aspects compared to public hospitals both in Patiala district and when looked at in totality. However, in Yamunanagar district, public and private hospitals were comparable. However, this should be cautiously interpreted as almost none of these comparisons were statistically significant.

In conclusion, private hospitals were found to be better than public hospitals in totality and in Patiala district specifically. However, private hospitals were quite similar to public hospitals in Yamunanagar district.

Table 7.4: Health provider checklist (self-assessment)

	Patiala				Yamunanagar				Total				P value
	Private (N=3)		Public (N=3)		Private (N=3)		Public (N=3)		Private (N=6)		Public (N=6)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Access and facilities	1.11	0.10	1.61	0.79	1.11	0.19	2.00	- _a	1.11	0.14	1.81	0.54	0.03
Availability of staff	1.06	0.10	1.22	0.25	1.17	0.29	1.50	- _a	1.11	0.20	1.36	0.22	0.07
Hospital waste management	1.00	- _a	1.33	0.58	1.00	- _a	1.00	- _a	1.00	- _a	1.17	0.41	0.32
Operating department	1.21	0.24	1.51	0.57	1.14	0.08	1.15	0.13	1.17	0.16	1.33	0.42	0.57
Labour room	1.00	- _a	1.33	0.58	1.11	0.19	1.00	- _a	1.06	0.14	1.17	0.41	0.90
Evaluation and care of inpatient	1.00	- _a	1.38	0.41	1.10	0.16	1.00	- _a	1.05	0.12	1.19	0.33	0.29
Averaged over the categories	1.06	- _a	1.40	- _a	1.10	- _a	1.28	- _a	1.08	0.10	1.34	0.34	0.04

-_a Standard deviation could not be calculated as individual score for all facilities were same

Table 7.5: Observation checklist by the interviewers

	Patiala				Yamunanagar				Across districts				P Value
	Private (N=3)		Public (N=3)		Private (N=3)		Public (N=3)		Private (N=6)		Public (N=6)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Access & physical facilities	1.06	0.04	1.58	0.86	1.06	0.09	1.5	- _a	1.06	0.06	1.54	0.55	0.02
Patient rights	2.08	0.14	2.17	0.28	1.08	0.14	1.0	- _a	1.58	0.56	1.58	0.66	0.87
Health & safety	1.61	0.38	2.06	0.38	1.0	0.09	1.0	- _a	1.28	0.44	1.53	0.62	0.49
Operating department	1.17	0.14	1.42	0.28	1.25	0.43	1.0	- _a	1.21	0.29	1.21	0.29	0.99
Radiology services	1.5	- _a	1.67	0.28	1.83	0.76	2.5	0.85	1.67	0.51	2.08	0.49	0.17
Labour room	1.0	- _a	1.33	0.58	1.0	- _a	1.0	- _a	1.0	- _a	1.17	0.41	0.32
Averaged over the categories	1.4	0.07	1.73	0.45	1.19	0.17	1.33	- _a	1.29	0.16	1.51	1.51	0.10

-_a Standard deviation could not be calculated as the individual score for all facility was the same

Table 7.6: Availability of records

	Patiala				Yamunanagar				Total				P Value
	Private (N=3)		Public (N=3)		Private (N=3)		Public (N=3)		Private (N=6)		Public (N=6)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Mopping of all areas	1.00	- _a	1.33	0.58	1.00	- _a	1.00	- _a	1.00	- _a	1.17	0.41	0.32
Carbolisation of the OT, Labour room	2.00	- _a	2.00	- _a	1.00	- _a	1.00	- _a	1.50	0.55	1.50	0.55	1.00
Mechanisms to ensure toilet sanitation	1.67	0.58	2.00	- _a	1.00	- _a	1.00	- _a	1.33	0.52	1.50	0.55	0.58
Autoclaving of instruments & linen	1.00	- _a	1.33	0.58	1.00	- _a	1.00	- _a	1.00	- _a	1.17	0.41	0.32
Grievance redressal mechanism	1.67	0.58	2.00	- _a	1.00	- _a	1.00	- _a	1.33	0.52	1.75	0.50	0.06
Available procedures	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	-
Laboratory services	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	-
Radiology services	1.53	0.69	1.76	0.50	1.13	0.33	1.13	- _a	1.33	0.53	1.44	0.47	0.49
Evaluation & care of inpatients	1.14	0.14	1.43	0.50	1.14	0.25	1.00	- _a	1.14	0.18	1.21	0.39	0.93
Blood bank	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	1.00	- _a	- _a

-_a standard deviation could not be calculated as individual score for all facilities were same

7.4 Process of service delivery for RSBY participants by public and private providers

This section deals with the process of delivery of care to RSBY participants, focusing on the features specifically included in the policy guidelines contract document and in official statements issued by the Central Government. In addition, certain key aspects relevant to delivery have also been evaluated. The aim was to assess differences in delivery of care between private and public facilities and between the two selected districts for RSBY beneficiaries.

What the participants experienced and reported was compared against prescribed actions/standards. In the first part of this section, the exit interviews of only RSBY-enrolled participants were analysed to assess the provision of services under the contractual arrangement, since they specifically dealt with scheme-related questions. A total of 387 RSBY participants were interviewed, 196 from Patiala district and 191 from Yamunanagar district. The distribution to private and public hospitals was 193 interviewed in public hospitals and 194 in private hospitals. One participant from Patiala (private hospital) did not respond to the questions and hence was removed from the denominator while calculating the proportions, thus, making the total number 195 (N=195 for Patiala and 193 for private hospitals).

In the second part of the analysis, the entire data set of exit interviews collected (both RSBY and non-RSBY) was analysed. A total of 751 participants were interviewed, which included 387 RSBY participants and 364 non-RSBY participants.

7.4.1 Amount paid for registration under the scheme

As per the guidelines of the RSBY scheme, every family has to pay INR 30 (£ 0.3) to get registered in the RSBY scheme. The tender document states that ‘the insurer or its representative(s) shall collect the registration fee of INR 30 (£ 0.3) from each RSBY Beneficiary Family Unit, at the time of enrolment and on delivery of the Smart Card’ (Ministry of Labour and Employment, 2008).

In both the districts, all participants were registered with the scheme by paying INR 30 (£ 0.3) as registration amount.

7.4.2 RSBY help desk and signage in hospitals

As per the guidelines of the RSBY health insurance scheme and as stated in the draft tender document in Appendix 5 Article 3 (which relates to the MoU between the providers and the insurance company), it is clearly stated that ‘for the ease of the beneficiary, the hospital shall display the recognition and promotional material, network status and procedures for admission supplied by the insurer at prominent locations, preferably including but not limited to outside the hospital, at the reception and admission counter and casualty/emergency departments. The format for signage outside the hospital and at the reception counter will be provided by the insurance company.’ In addition, the tender document also states that ‘the hospital will set up a help desk for RSBY beneficiaries. The RSBY help desk shall be easily accessible and will have all the necessary hardware and software required to identify the patients.’ The equipments required for this were fingerprint scanner, smart card reader, computer and printer.

Based on the responses of the patients during the exit interviews, it appears that RSBY help desk (separate RSBY help desk or common hospital help desk) was in place in all selected empanelled facilities. When patient’s response to the presence of separate RSBY help desk was analysed for each facility independently, it was observed that the majority of participants from the two selected empaneled facilities reported presence of separate RSBY help desk (Table 7.7). Therefore, it can be concluded that a *separate* RSBY help desk for RSBY beneficiaries as stipulated in the contract tender document was present in only two of the 12 selected facilities (one private hospital and one public hospital in Patiala). The instruments required (computer, printer, smart card reader and finger print scanner) for RSBY patient verification and registration were present at the help desk in all the hospitals, either at separate RSBY help desk or the common help desk.

About three fourths of RSBY participants in Yamunanagar reported that they were guided to the RSBY help desk (hospital helpdesk or separate RSBY helpdesk) by the signage in the hospital; whereas in Patiala district, about two-thirds of RSBY participants were guided to the RSBY help desk by the hospital staff (Table 7.7).

Almost all the hospitals were found to be satisfactory in terms of the presence of a help desk, the required instruments at the RSBY help desk and behaviour of staff at

the RSBY help desk. The absence of a separate RSBY help desk was an issue in both the districts, particularly in Yamunanagar. Staff at RSBY help desk was reported to be helpful and polite by almost all the participants. While comparing private and public hospitals in terms of RSBY help desk and signage, not much difference was observed (Table 7.8).

Table 7.7: RSBY help desk in hospitals (Patiala vs Yamunanagar)

		Patiala [#] (N=195)		Yamunanagar (N=191)		P value
		N	%	N	%	
Was an RSBY help desk present?* – Yes		184	94.4	191	100.0	-
Was it a separate RSBY help desk?*** – Yes		82	42.1	4	2.1	<0.01
How did the study participant find out about the RSBY help desk?	Signboards	57	31.0	141	73.8	<0.01
	Hospital staff	113	61.4	12	6.3	
	By themselves	14	7.6	38	19.9	
Staff at RSBY help desk was helpful and polite – Yes		186	95.4	186	97.4	0.29

*10 participants from Patiala did not know about the presence of a RSBY help desk

***36 participants in Patiala and 2 in Yamunanagar did not know whether it was a separate RSBY help desk or otherwise

Table 7.8: RSBY help desk in private and public hospitals

		Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Across districts				
		Private		Public			Private		Public			Private		Public		P value
		N (97)	%	N (98)	%		N (96)	%	N (95)	%		N (193)	%	N (193)	%	
Was an RSBY help desk present?* – Yes		94	96.9	90	91.8		96	100	95	100		190	98.4	185	95.9	-
** Was it a separate RSBY help desk?*** – Yes		53	54.6	29	29.6	<0.01	2	2.1	2	2.1		55	28.5	31	16.1	<0.01
How RSBY help desk was found by participants	Signboards	31	33.0	26	28.9	0.73	69	71.9	72	75.8	0.78	100	52.6	98	53.0	0.99
	Hospital staff	57	60.6	56	62.2		7	7.3	5	5.3		64	33.7	61	33.0	
	By themselves	6	6.4	8	8.9		20	20.8	18	18.9		26	13.7	26	14.0	
Staff at RSBY help desk was helpful and polite – Yes		93	95.9	93	94.9	0.99	92	95.8	94	98.9	0.36	185	95.9	187	96.9	0.58

*10 participants from Patiala did not know about the presence of RSBY help desk

***36 participants in Patiala and two in Yamunanagar did not know whether there was a separate RSBY help desk or not

7.4.3 Waiting period for patients in the hospitals

The usual movement of patients in the RSBY-empanelled hospitals was from RSBY counter to the consultation in the outpatient department and then back to the RSBY counter. After registration at the RSBY help desk, the patient is attended by the hospital staff at the inpatient department. In the present analysis, a waiting period of more than 15 minutes was considered to be delayed as less than 15 minute interaction between doctor and patient is considered to be a risk factor for appropriate prescription and management (Dugdale et al., 1999). Table 7.9 shows the time that RSBY participants had to wait in Patiala and Yamunanagar districts. About 71% of the participants in Patiala reported that they waited less than 15 minutes before getting attended, while 85% of the participants reported the same in Yamunanagar.

Comparing private and public hospitals, private hospitals attended to the patients quicker as compared to public hospitals, and this difference was statistically significant (Table 7.10).

Table 7.9: Waiting period for RSBY participants (Patiala vs Yamunanagar)

	Patiala N (195)		Yamunanagar N (191)		P value
	N	%	N	%	
<5 minutes	63	32.3	61	31.9	<0.01
5–15 minutes	76	39.0	102	53.4	
>15 minutes	56	28.7	28	14.7	

Table 7.10: Waiting period for RSBY participants (private vs public hospitals)

	Patiala N=195					Yamunanagar N=191					Across districts					P
	Private N=97		Public N=98		P	Private N=96		Public N=95		P	Private N=193		Public N=193		P	
	N	%	N	%		N	%	N	%		N	%	N	%		
<5 mins	33	34.0	30	30.6	0.17	26	27.1	35	36.8	0.15	59	30.6	65	33.7	0.05	
5–15 mins	42	43.3	34	34.7		58	60.4	44	46.3		100	51.8	78	40.4		
>15 mins	22	22.7	34	34.7		12	12.5	16	16.8		34	17.6	50	25.9		

7.4.4 Process of patient registration in hospital

As stated in the tender document, ‘service provided by the insurer subject to responsibilities of the insurer as detailed in clause 12 is collectively referred to as the Cashless Access Service. Each empanelled hospital shall install the requisite machines and software to authenticate and validate the smart card, the beneficiary and the insurance cover. The services have to be provided to the beneficiary based on smart card and fingerprint authentication only with the minimum of delay for pre-authorization (if necessary)’ (Ministry of Labour and Employment, 2011c). Additionally, the tender document also states that ‘in case the patient is not in a position to give a fingerprint, any other member of the family who is enrolled under the scheme can verify the patient’s identity by giving his/her fingerprint’ (Ministry of Labour and Employment, 2011c). The patient’s fingerprint needs to be scanned each time before admission to the hospital for verification and registration.

A total of 10 patients were registered in the hospitals under the RSBY scheme without fingerprint scan of the patient or their relatives, five each in Patiala and Yamunanagar (Table 7.11). In Patiala, patients’ fingerprint was taken in 96% of the cases while in Yamunanagar it was 77%. The major reason for not taking patients’ fingerprint was that that patient was not in a condition to give fingerprints (Table 7.11). In both, public and private hospitals, 97.4% of the participants reported that fingerprints were taken at the time of registration (Table 7.12)

Table 7.11: Registration through fingerprint scan of RSBY participants (Patiala vs Yamunanagar)

		Patiala N=195		Yamunanagar N=191		P value
		N	%	N	%	
Fingerprint scanner used for fingerprint verification of patient or his/her relative		190	97.4	186	97.4	0.97
Whose fingerprint was taken at the time of admission?	Patient	183/190	96.3	143/186	76.9	<0.01
	Other family member	7/190	3.7	43/186	23.1	
Reasons for not scanning the patient's fingerprint and scanning the relative's fingerprint instead	Patient was not in a condition to give fingerprint	6/7	85.7	42/43	97.7	-
	Patient's thumb was injured	0/7	0.0	0/43	0.0	
	Other reasons	1/7	14.3	1/43	2.3	

Table 7.12: Registration through fingerprint scan of RSBY participants (private vs public)

		Patiala(N=195)					Yamunanagar (N=191)					Across districts				
		Private		Public		P	Private		Public		P	Private		Public		P
		N (97)	%	N (98)	%		N (96)	%	N (95)	%		N (193)	%	N (193)	%	
Fingerprint scanner used for fingerprint verification of patient or his/her relative		96	99.0	94	95.9	0.18	92	95.8	94	98.9	0.18	188	97.4	188	97.4	0.99
Whose fingerprint was taken at the time of admission?	Patient	90/96	93.7	93/94	98.9	0.15	69/92	75.0	74/94	78.7	0.52	159/188	84.6	167/188	88.2	0.18
	Relative	6/96	6.3	1/94	1.1		23/92	25.0	20/94	21.3		29/188	15.4	21/188	11.8	
Reasons for not scanning the patient's fingerprint	Patient was not in a condition to give fingerprint	5/6	83.3	1/1	100.0	-	22/23	95.6	20/20	100	-	27/29	93.1	21/21	100	-
	Patient's thumb was injured	0/6	0.0	0/1	0.0		0/23	0	0/20	0.0		0/29	0.0	0/21	0.0	
	Other reasons	1/6	16.7	0/1	0.0		1/23	4.4	0/20	0.0		2/29	6.9	0/21	0.0	

7.4.5 Informing enrollee of treatment costs

The contract document between the insurance company and the empanelled hospital states 'both public and private empanelled hospitals should agree the cost of packages for each identified medical/surgical intervention/procedure as approved under the scheme. These package rates will include expenses incurred for consultation, diagnostic tests and medicines from one day before the admission of the patient and cost of diagnostic tests and medicine up to five days after the discharge from the hospital for the same ailment/surgery' (Ministry of Labour and Employment, 2011b). This information needs to be conveyed to the beneficiary along with the information on the cost of the package for which the patient is to be booked in the hospital. The beneficiary also needs to be informed about the amount remaining in the card at the RSBY help desk. Also, if sufficient amount is not available the beneficiary needs to be informed in advance that the extra cost incurred would have to be paid by the family.

Information dissemination (cost of package, money left in the card and the sufficiency of the amount) to the participants was poor in both the districts, and particularly very poor in Yamunanagar (Table 7.13). In Patiala district, information dissemination was better in public hospitals compared to private hospitals. Further, in Patiala district, about half the participants from private hospitals did not have sufficient balance left in their card for the present treatment, i.e. they had exhausted the limit of INR 30,000 (£ 302) (Table 7.14). Slightly more participants from public hospitals were informed about cost involved in treatment and amount left in the card, whereas slightly more participants in private hospitals were informed amount insufficient amount in the card. In private hospitals of Patiala, among those who had exhausted their limit, about one-fifth had received this information beforehand whereas the remaining had to pay OOP for the treatment without any prior information.

Table 7.13: Information received from RSBY help desk regarding cost of treatment (Patiala vs Yamunanagar)

	Patiala N=195		Yamunana gar N=191		P value
	N	%	N	%	
Information about the cost involved for the treatment was given to the patient	94	48.2	16	8.4	<0.01
Patient was informed about the money left in the smart card	80	41.0	20	10.5	<0.01
Money left in the smart card was sufficient for the treatment	130	66.7	185	96.9	<0.01
If money left in the smart card was not sufficient, was the beneficiary informed by the hospital staff –Yes	13/65	20.0	0/6	0.0	0.23

Table 7.14: Information received from RSBY help desk across districts regarding cost of treatment (private vs public)

	Patiala					Yamunanagar					Across districts				
	Private N=97		Public N=98		P	Private N=96		Public N=95		P	Private N=193		Public N=193		P
	N	%	N	%		N	%	N	%		N	%	N	%	
Information about the cost involved for the treatment was given to the patient	37	38.1	57	58.2	<0.01	11	11.5	5	5.3	0.12	48	24.9	62	32.1	0.11
Patient was informed about the money left in the smart card	34	35.1	46	46.9	0.09	9	9.4	11	11.6	0.62	43	22.3	57	29.5	0.10
Money left in the smart card was sufficient for the treatment	52	53.6	78	79.6	<0.01	95	99.0	90	94.7	0.09	147	76.2	168	87.0	<0.01
If money left in the smart card was not sufficient, was the beneficiary informed by the hospital staff – Yes	10/45	22.2	3/20	15.0	0.50	0/1	0.0	0/5	0.0	--	10/46	21.7	3/25	12.0	0.31

7.4.6 Diagnostics and medicines from outside the hospital

As stated in the contract, both public and private empanelled hospitals need to agree on the cost of packages for each identified medical/surgical intervention/procedure as approved under the scheme. These package rates would include:

- bed charges (general ward)
- nursing and boarding charges
- fees of surgeons, anesthetists, medical practitioners and consultants
- anesthesia, blood, oxygen, operation theatre charges, cost of surgical appliances
- medicines and drugs
- cost of prosthetic devices, implants
- X-ray and other diagnostic tests
- food to patient
- expenses incurred for consultation, diagnostic tests and medicines from one day before the admission of the patient and cost of diagnostic tests and medicines up to five days of discharge from the hospital for the same ailment/surgery
- transportation charge of INR 100 (£ 1) payable to the beneficiary at the time of discharge.

Thus, the package should cover the entire cost of treatment of the patient from the date of reporting up to discharge from the hospital and five days thereafter, including any complication while in hospital, making the transaction truly cashless to the patient (Ministry of Labour and Employment, 2011b).

In both the districts together, 46 (12%) of RSBY participants were paying OOP for medicines and 68 (17%) of RSBY participants were paying for diagnostic tests, despite the stipulation of cashless transaction in the contract (Table 7.15). More participants from Yamunanagar were asked to get medicines and diagnostics from outside. Further, in Yamunanagar, all (100%) of the participants who were getting medicines and diagnostic tests from outside had to pay for it (Table 7.15).

Within the districts and across the districts, more participants from private hospitals were asked to get medicines and diagnostics from outside the hospitals (Table 7.16).

Table 7.15: Diagnostics and medicines from outside the hospital (Patiala and Yamunanagar)

	Patiala		Yamunanagar		P value	Total	
	N(195)	%	N (191)	%		N (196)	%
Patient was asked to get the diagnostic test done from outside the hospital	27	13.8	41	21.5	0.05	68	17.0
Family paid for the diagnostic test done outside the hospital	18/27	66.7	41/41	100.0	<0.01	59/68	86.8
Patient asked to get the medicines from outside the hospital	15	7.7	31	16.2	0.01	46	11.9
Family paid for the medicines brought from outside the hospital	11/15	73.3	31/31	100.0	<0.01	42/46	91.3

Table 7.16: Diagnostics and medicines from outside the hospital (private vs public)

	Patiala					Yamunanagar					Across districts				
	Private		Public		P	Private		Public		P	Private		Public		P
	N (97)	%	N (98)	%		N (96)	%	N (95)	%		N (193)	%	N (193)	%	
Patient was asked to get the diagnostic done from outside the hospital	16	16.5	11	11.2	0.29	26	27.1	15	15.8	0.06	42	21.8	26	13.5	0.03
Family paid for the diagnostic test done from outside the hospital	11/16	68.8	7/11	63.6	0.78	26/26	100.0	15/15	100.0	--	37/42	88.1	22/26	84.6	0.68
Patient asked to get the medicines from outside the hospital	10	10.3	5	5.1	0.17	20	20.8	11	11.6	0.08	30	15.5	16	8.3	0.03
Patient's family paid for the medicines brought from outside the hospital	7/10	70.0	4/5	80.0	0.68	20/20	100.0	11/11	100.0	--	27/30	90.0	15/16	93.8	0.67

7.4.7 Food and its quality

As stated in the contract document ‘the empanelled hospital has to provide food to the patients during the period of admission in the hospital and the cost borne is part of the package’ (Ministry of Labour and Employment, 2011b).

In both the districts together, about one-fourth of RSBY participants got food in the hospital (Table 7.17). When patient’s response to the provision of food was analysed for each facility independently, it was observed that a majority of the patients from the three selected empaneled facilities (out of 12) reported that they were provided food during their hospital stay. Therefore we can conclude that of the selected empanelled facilities, food was not provided to the RSBY beneficiaries in nine out of 12 facilities. Amongst these three hospitals providing food services, one was in Patiala (private) and two were in Yamunanagar (one private and one public). The most common cause for not serving food in the hospital was that ‘food services were not present in the hospital’. The food quality was rated as very good or good by a majority of the participants from one private hospital in Patiala whereas it was rated average by a majority of the participants of both the hospitals (one private and one public) in Yamunanagar. It appears that the insurance company was not ensuring that the facility to be empanelled had a provision for supply of food to the patients (Table 7.18).

Table 7.17: Provision of food to RSBY participants during hospital stay (Patiala vs Yamunanagar)

		Patiala N=195		Yamunanagar N=191		P value
		N	%	N	%	
Whether patient provided with food during hospital stay		40	20.5	69	36.1	<0.01
Reason for not providing food to patients in hospitals*	Hospital staff said it was not a part of the RSBY scheme	2/143	1.4	0/122	0.0	-
	Hospital did not have food-serving facility	115/143	80.4	121/122	99.2	
	Hospital paid cash to patient to buy food	2/143	1.4	1/122	0.8	
	Others	24/143	16.8	0/122	0.0	
Quality of food**	Very good	9/34	26.5	0/68	0.0	-
	Good	19/34	55.9	12/68	17.6	
	Average	6/34	17.6	55/68	80.9	
	Poor	0/34	0.0	1/68	1.5	

*12 participants from Patiala did not respond to the question

**Six participants from Patiala and one from Yamunanagar did not respond to the question

Table 7.18: Provision of food to RSBY participants during hospital stay (private vs public)

		Patiala N=195					Yamunanagar N=191					Across districts N=386				
		Private		Public		P	Private		Public		P	Private		Public		P
		N (97)	%	N (98)	%		N (96)	%	N (95)	%		N (193)	%	N (193)	%	
Patients provided with food during hospital stay		35	36.1	5	5.1	<0.01	32	33.3	37	38.9	0.41	67	34.7	42	21.8	<0.01
Reason for not providing food to patient in hospitals*	Hospital staff said it was not a part of the RSBY scheme	1/52	1.9	1/91	1.1	-	0/64	0.0	0/58	0.0	-	1/116	0.9	1/149	0.7	-
	Hospital did not have facilities for providing food	46/52	88.5	69/91	75.8		63/64	98.4	58/58	100.0		109/116	94.0	127/149	85.2	
	Hospital paid cash to patient to buy food	0/52	0.0	2/91	2.2		1/64	1.6	0/58	0.0		1/116	0.9	2/149	1.3	
	Others	5/52	9.6	19/91	20.9		0/64	0.0	0/58	0.0		5/116	4.3	19/149	12.8	
Quality of food**	Very good	9/33	27.3	0/1	0.0	-	0/31	0.0	0/37	0.0	-	9/64	14.1	0/38	0.0	-
	Good	19/33	57.6	0/1	0.0		8/31	25.8	4/37	10.8		27/64	42.2	4/38	10.5	
	Average	5/33	15.2	1/1	100.0		22/31	71.0	33/37	89.2		27/64	42.2	34/38	89.5	
	Poor	0/33	0.0	0/1	0.0		1/31	3.2	0/37	0.0		1/64	1.6	0/38	0.0	
	Very bad	0/33	0.0	0/1	0.0		0/31	0.0	0/37	0.0		0/64	0.0	0/38	0.0	

*12 participants from Patiala did not respond to the question (10 from private and 2 from public)

** Six participants from Patiala and one from Yamunanagar did not respond to the question

7.4.8 Process followed during discharge of the RSBY beneficiary from hospital

At the time of discharge of the beneficiary from the hospital, the following activities need to be monitored by the hospital staff (Ministry of Labour and Employment, 2011b):

- Original discharge summary, counterfoil generated at the time of discharge, original investigation reports, all original prescriptions and pharmacy receipts, etc. must not be given to the patient. These are to be forwarded to the billing department who will compile and keep them in the hospital.
- The discharge card/summary must mention the duration of ailment, duration of other disorders like hypertension or diabetes and operative notes in case of surgeries.
- Signature or thumb impression of the patient/beneficiary on the final hospital bill must be obtained.
- Claim form of the insurer must be presented to the beneficiary for signing, and identification of the patient/beneficiary is to be confirmed again.

A fingerprint verification of the patient is again done at the help desk so that the task is registered as complete. Only then can the health facility file a claim with the insurance company. The smart card is returned to the patient along with the information of the balance amount left in the card.

Ideally, all patients must get a discharge slip at the time of discharge. Few of the RSBY participants (16%) in Patiala district did not receive the discharge slips (Table 7.19), whereas all received discharge slips in Yamunanagar.

Fingerprint verification was not done for a few participants from private (3%) and public (5%) hospitals at the time of discharge. In such conditions, as per the contract, the amount is claimed by the provider using manual mode, but to do so prior permission is required from the insurance company.

Fingerprints of the family members (instead of patients) were taken in 28% cases in Yamunanagar district (not much difference was observed between private and public hospitals) (Table 7.20) as the patients were not in a condition to give their fingerprints.

The smart card was held back in more cases by public hospitals (13%) than private hospitals (5%). This may be because of breakdown in the equipment required for completion of the transaction process. In terms of information regarding the balance left in the card, public hospitals in Patiala were disseminating information slightly better as compared to private hospitals. In Yamunanagar, the overall (both private and public) dissemination of information was very low (Table 7.20). Information dissemination was almost the same in public and private hospitals with only one third of the participants in each group receiving information regarding the amount left in the card at the time of discharge.

Table 7.19: Process followed during discharge of RSBY beneficiary from the hospital (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N (195)	%	N (191)	%	
Discharge summary given to patient at the time of discharge		164	84.1	191	100.0	-
Fingerprint verification was done at time of discharge		184	94.4	187	97.9	0.71
Whose fingerprint was taken?	Patient	176/184	95.7	135/187	72.2	<0.01
	Relative*	8/184	4.3	52/187	27.8	
Card was given back at the time of discharge		177	90.8	175	91.6	0.76
Reason for not returning the card at the time of discharge**	Staff wanted money	1/17	5.9	0/16	0.0	-
	Keep the card till insurance money claimed	4/17	23.5	2/16	12.5	
	Staff said it will remain deposited	7/17	41.2	0/16	0.0	
	Others	5/17	29.4	14/16	87.5	
Patient was informed about the balance amount in the card at the time of discharge		92	47.7	39	20.4	<0.01

* Regarding reasons for not taking patient's fingerprint and rather using relative's fingerprint for verification, only five participants responded to the question while the rest did not answer

** One beneficiary from Patiala did not respond to the question

Table 7.20: Process during discharge of RSBY beneficiary from the hospital (private vs public)

	Patiala [#]					Yamunanagar					Across districts					
	Private		Public		P	Private		Public		P	Private		Public		P	
	N (97)	%	N (98)	%		N (96)	%	N (95)	%		N (193)	%	N(193)	%		
Discharge summary given at the time of discharge	77	79.4	87	88.8	0.07	96	100.0	95	100.0	---	173	89.6	182	94.3	0.09	
Fingerprint verification was done at time of discharge	91	93.8	93	94.9	0.74	96	100.0	91	95.8	0.04	187	96.9	184	95.3	0.43	
Whose fingerprint was taken?	Patient	86/91	94.5	90/93	96.8	0.45	68/96	70.8	67/91	73.6	0.67	154/187	82.4	157/184	85.3	0.43
	Relative*	5/91	5.5	3/93	3.2		28/96	29.2	24/91	26.4		33/187	17.6	27/184	14.7	
Card was given back at the time of discharge	89	91.8	88	89.8	0.64	95	99.0	80	84.2	<0.01	184	95.3	168	87.0	<0.01	
Reason for not returning the card at the time of discharge**	Staff wanted money	1/8	12.5	0/9	0.0	0.73	0/1	0.0	0/15	0.0	-	1/9	11.1	0/24	0.0	0.05
	Keep the card till insurance money claimed	2/8	25.0	2/9	22.2		1/1	100.0	1/15	6.7		3/9	33.3	3/24	12.5	
	Staff said it will remain deposited	3/8	37.5	4/9	44.4		0/1	0.0	0/15	0.0		3/9	33.3	4/24	16.7	
	Others	2/8	25.0	3/9	33.3		0/1	0.0	14/15	93.3		2/9	22.2	17/24	70.8	
Patient was informed about the balance amount in the card at the time of discharge	43	44.8	49	50.50	0.43	22	22.9	17	17.9	0.39	65	33.9	66	34.4	0.91	

* Regarding reasons for not taking patient's fingerprint and using relative's fingerprint instead for verification – only five participants responded to the question while remaining participants did not answer

** One beneficiary from Patiala did not respond to the question

7.4.9 Reimbursement of transportation cost to the RSBY beneficiary

Under the RSBY scheme, all patients should be reimbursed with an amount of INR100 (£ 1) at the time of discharge from the hospital.

In Yamunanagar district, none of the beneficiaries received any reimbursement for transportation. However, in Patiala district about half of the participants received the transportation amount (Table 7.21). More participants from public hospitals were reimbursed the transportation amount as compared to private hospitals, where about 82% of the participants were not reimbursed (Table 7.22). The median amount of reimbursement was INR 100 (£ 1). Lack of information among the participants was the most common reason reported for the amount not being reimbursed in Patiala; whereas in Yamunanagar the reason reported for not reimbursing the transportation cost was that that the beneficiaries did not ask for it (Table 7.21).

Those hospitals that did not pay the patient this amount could claim that they did more within the procedure. However, it can also be assumed that the amount was taken as profit. Profit seeking has remained one of the pitfalls in PPP framework (Alexandersson and Hultén, 2007).

Table 7.21: Reimbursement of transportation cost to the RSBY beneficiary (Patiala vs Yamunanagar)

		Patiala (N=195)		Yamunanagar (N=191)	
		N	%	N	%
Hospital did not reimburse the cost of transportation		107	54.9	191	100
Reason for not reimbursing the cost of transportation*	Hospital refused to reimburse	3/99	3.0	3/187	1.6
	Beneficiary did not know that there was such a provision	23/99	23.2	184/187	98.4
	Beneficiary was informed that hospital will give later	1/99	1.0	0/187	0.0
	Beneficiary did not ask for it	70/99	70.7	0/187	0.0
	Others	2/99	2.0	0/187	0.0

*Eight participants from Patiala and four from Yamunanagar did not respond to the question

Note: P value was not calculated as value in one of the cell was zero

Table 7.22: Reimbursement of transportation cost to RSBY beneficiaries (private vs public)

		Patiala – intra-district				Yamunanagar – intra-district				Both districts			
		Private (N=97)		Public (N=98)		Private (N=96)		Public (N=95)		Private (N=193)		Public (N=193)	
		N	%	N	%	N	%	N	%	N	%	N	%
Hospital did not reimburse the cost of transportation		62	63.9	45	45.9	96	100.0	95	100.0	158	81.9	140	72.5
Reason for not reimbursing the cost of transportation*	Hospital refused to reimburse	3/58	5.2	0/41	0.0	3/95	3.2	0/92	0.0	6/153	3.9	0/133	0.0
	Beneficiary did not know that there was such a provision	16/58	27.6	7/41	17.1	92/95	96.8	92/92	100.0	108/153	70.6	99/133	74.4
	Beneficiary was informed that the hospital will give later	0/58	0.0	1/41	2.4	-	-	-	-	0/153	0.0	1/133	0.8
	Beneficiary did not ask for it	38/58	65.5	32/41	78.0	-	-	-	-	38/153	24.8	32/133	24.1
	Others	1/58	1.7	1/41	2.4	-	-	-	-	1/153	0.7	1/133	0.8

*Eight participants from Patiala and four from Yamunanagar did not respond to the question

7.4.10 Knowledge about post-hospitalization expenses and provision of medicines and diagnostics

Under the RSBY scheme, expenses incurred for consultation, diagnostic tests and medicines from one day before the admission of the patient, and cost of diagnostic tests and medicines up to five days after discharge from the hospital for the same ailment/surgery, are covered.

Information provided to the participants regarding five-day post-hospitalization expenses by the hospital was not adequate in both the districts and was poorer in Yamunanagar (Table 7.23).

Post-hospitalization services were almost similar in public and private hospitals, except that slightly more were getting medicines and diagnostics from public hospitals (Table 7.24).

Table 7.23: Knowledge of post-hospitalization expenses and provision of medicines and diagnostics (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N (195)	%	N (191)	%	
Knew about 5-day post-hospitalization expenses		59	30.3	13	6.8	<0.01
Medicines were prescribed at the time of discharge		176	90.3	180	94.2	0.14
Medicines were provided by the hospital		153	86.9	180	100.0	-
Reasons cited for not providing medicine from the hospital*	Family did not ask	3/22	13.6	0	0.0	-
	No reason provided by hospital	15/22	68.2	0	0.0	
	It is not part of RSBY	3/22	13.6	0	0.0	
	Others	1/22	4.5	0	0.0	
Prescribed test after discharge		12	6.2	2	1.0	-
Diagnostic test was done free of cost**		1/9	11.1	0/2	0.0	-

*One participant from Patiala did not respond to the question

**Three participants from Patiala did not respond to the question

Table 7.24: Knowledge of post-hospitalization expenses and provision of medicines and diagnostics (private vs public hospitals)

		Patiala – intra-district				P valu e	Yamunanagar – intra-district				P value	Both districts				P value
		Private (N=97)		Public (N=98)			Private (N=96)		Public (N=95)			Private (N=193)		Public (N=193)		
		N	%	N	%		N	%	N	%		N	%	N	%	
Knew about 5-day post-hospitalization expenses		32	33.0	27	27.6	0.41	5	5.2	8	8.4	0.37	37	19.2	35	18.1	0.79
Medicines were prescribed at the time of discharge		85	87.6	91	92.9	0.21	85	88.5	95	100.0	-	170	88.1	186	96.4	0.05
Medicines were provided by the hospital		67/85	78.8	86/91	94.5	-	85/85	100.0	95/95	100.0	-	152/170	89.4	181/186	97.3	-
Reasons cited for not providing medicines from the hospital*	Family did not ask	2/17	11.8	1/5	20.0	-	-	-	-	-	-	2/17	11.8	1/5	20.0	-
	No reason provided by hospital	11/17	64.7	4/5	80.0		-	-	-	-		11/17	64.7	4/5	80.0	
	It is not part of RSBY	3/17	17.6	0/5	0.0		-	-	-	-		3/17	17.6	0/5	0.0	
	Others	1/17	5.9	0/5	0.0		-	-	-	-		1/17	5.9	0/5	0.0	
Prescribed test after discharge – Yes		5	5.2	7	7.1	-	0	0.0	2	2.1	-	5	2.6	9	4.7	-
Diagnostic test was done free of cost** – Yes		0/2	0.0	1/7	14.3	-	-	-	0/2	0	-	0/2	0.0	1/9	11.1	-

*One participant from Patiala did not respond to the question

**Three participants from Patiala did not respond to the question

7.5 Comparison of RSBY and non-RSBY participants on choice of hospital, transport and diagnosis

For this section, information was also collected from non-RSBY patients from the exit interviews. Hence, the total sample size was 751. Amongst them, 387 were RSBY participants and 364 were non-RSBY participants. A comparison was made between the participants of public and private hospitals, and also between RSBY and non-RSBY participants.

7.5.1 Reasons for choosing a health facility for treatment

The prime reason given by the participants for choosing a hospital for treatment was proximity to their home, in the case of public hospitals (this could be due to transportation costs); and reputation, in the case of private hospitals (Table 7.26). It was observed during the intra-district analysis that in Yamunanagar district, public hospitals were primarily chosen because of suggestions from relatives and friends, whereas private hospitals were chosen because of their reputation (Table 7.26).

The most common reason for selecting the hospital for RSBY participants was suggested by relatives/friends followed by preferred hospital (i.e. always go to the same hospital) and reputation. Whereas, the non-RSBY participants selected the hospital based on reputation followed by relative/friend suggestion and proximity (Table 7.27).

Table 7.25: Reasons for choosing a health facility for treatment (Patiala vs Yamunanagar)

Reasons for choosing the health facility	Patiala		Yamunanagar	
	N=399	%	N=352	%
Near to the patient's home	152	38.1	21	6.0
Good reputation of the facility	136	34.1	88	25.0
On relative/friend's suggestion	49	12.3	137	38.9
Referred by a doctor	12	3.0	21	6.0
Always go to this hospital	45	11.3	82	23.3
No other RSBY-empanelled hospitals nearby	2	0.5	1	0.3
Other reasons	3	0.8	2	0.6

Table 7.26: Reasons for choosing a health facility for treatment (private vs public hospitals)

	Patiala – intra-district				Yamunanagar–intra-district				Both districts			
	Private (N=203)		Public (N=196)		Private (N=195)		Public (N=157)		Private (N=398)		Public (N=353)	
	N	%	N	%	N	%	N	%	N	%	N	%
Near to patient’s home	63	31.0	89	45.4	4	2.1	17	10.8	67	16.8	106	30.0
Good reputation	98	48.3	38	19.4	80	41.0	8	5.1	178	44.7	46	13.0
Relative/friend’s suggestion	28	13.8	21	10.7	68	34.9	69	43.9	96	24.1	90	25.5
Referred by a doctor	6	3.0	6	3.1	11	5.6	10	6.4	17	4.3	16	4.5
Always go to this hospital	7	3.4	38	19.4	32	16.4	50	31.8	39	9.8	88	24.9
No other RSBY-empanelled hospitals nearby	0	0.0	2	1.0	0	0.0	1	0.6	0	0.0	3	0.8
Other reasons	1	0.5	2	1.0	0	0.0	2	1.3	1	0.3	4	1.1

Table 7.27: Reasons for choosing the present health facility for treatment (RSBY vs non-RSBY patients)

	Patiala – intra-district				Yamunanagar–intra-district				Both districts			
	RSBY (N=196)		Non-RSBY (N=203)		RSBY (N=191)		Non-RSBY (N=161)		RSBY (N=387)		Non-RSBY (N=364)	
	N	%	N	%	N	%	N	%	N	%	N	%
Near patient's home	73	37.2	79	38.9	13	6.8	8	5.0	86	22.2	87	23.9
Good reputation	56	28.6	80	39.4	35	18.3	53	32.9	91	23.5	133	36.5
Relative/friend's suggestion	23	11.7	26	12.8	74	38.7	63	39.1	97	25.1	89	24.5
Referred by a doctor	4	2.0	8	3.9	11	5.8	10	6.2	15	3.9	18	4.9
Always go to this hospital	36	18.4	9	4.4	57	29.8	25	15.5	93	24.0	34	9.3
No other RSBY-empanelled hospitals nearby	2	1.0	0	0.0	1	0.5	0	0.0	3	0.8	0	0.0
Other reasons	2	1.0	1	0.5	0	0.0	2	1.2	2	0.5	3	0.8

7.5.2 Referrals – health facility contacted previously

In Patiala district, a majority of the participants had not contacted any health facility before coming to the present one; whereas in Yamunanagar, a high percentage of the participants had first contacted a health facility, many of them were individual private practitioners (Table 7.28). Data on previous contact with a health facility across both districts separately for public and private facilities is given in Table 7.29. While comparing usage across RSBY and non-RSBY participants, it was observed in Patiala that slightly more than half of the participants in both groups had not contacted a health facility prior to being admitted to the current one. However, in Yamunanagar, while close to half of the non-RSBY participants had not previously contacted a health facility, a very large percentage of RSBY participants had in fact previously done so (Table 7.30).

A direct visit to an empanelled public health-care facility at the secondary level of care without contacting any facility at primary level could be indicative of a weak referral system in the district of Patiala. Ideally, those seeking health care in public health facilities should first visit primary care facilities closer to their homes, which would refer them to secondary care hospitals, rather than directly approaching empanelled hospitals at the secondary level.

Table 7.28: Health facility contacted previously by the patient (Patiala vs Yamunanagar)

	Patiala		Yamunanagar	
	N=399	%	N=352	%
Did not contact any health facility before coming to the current hospital	220	55.1	98	27.8
Contacted another public facility	59	14.8	28	8.0
Contacted another private facility	73	18.3	72	20.5
Contacted an individual practitioner	29	7.3	142	40.3
Contacted a drug seller	15	3.8	8	2.3
Contacted a traditional healer/others	3	0.8	4	1.2

Table 7.29: Health facility contacted previously by the patient (private vs public hospitals)

	Patiala – intra-district				Yamunanagar – intra-district				Both the districts			
	Private (N=203)		Public (N=196)		Private (N=195)		Public (N=157)		Private (N=398)		Public (N=353)	
	N	%	N	%	N	%	N	%	N	%	N	%
Did not contact any health facility before coming to the current hospital	88	43.3	132	67.3	60	30.8	38	24.2	148	37.2	170	48.2
Contacted another public facility	18	8.9	41	20.9	21	10.8	7	4.5	39	9.8	48	13.6
Contacted another private facility	64	31.5	9	4.6	39	20.0	33	21.0	103	25.9	42	11.9
Contacted an individual practitioner	23	11.3	6	3.1	69	35.4	73	46.5	92	23.1	79	22.4
Contacted a drug seller	7	3.4	8	4.1	4	2.1	4	2.5	11	2.8	12	3.4
Contacted a traditional healer/others	3	1.5	0	0.0	2	1.0	2	1.2	5	1.3	2	0.6

Table 7.30: Health facility previously contacted by the patient (RSBY vs non-RSBY patients)

	Patiala – intra-district				Yamunanagar – intra-district				Both districts			
	RSBY (N=196)		Non-RSBY (N=203)		RSBY (N=191)		Non-RSBY (N=161)		RSBY (N=387)		Non-RSBY (N=364)	
	N	%	N	%	N	%	N	%	N	%	N	%
Did not contact any health facility before coming to the current hospital	102	52.0	118	58.1	28	14.7	70	43.5	130	33.6	188	51.6
Contacted another public facility	31	15.8	28	13.8	11	5.8	17	10.6	42	10.9	45	12.4
Contacted another private facility	31	15.8	42	20.7	53	27.7	19	11.8	84	21.7	61	16.8
Contacted an individual practitioner	15	7.7	14	6.9	93	48.7	49	30.4	108	27.9	63	17.3
Contacted a drug seller	14	7.1	1	0.5	3	1.6	5	3.1	17	4.4	6	1.6
Contacted a traditional healer/others	3	1.5	0	0.0	3	1.6	1	0.6	6	1.6	1	0.3

7.5.3 Mode of transportation to hospital

The largest share of the study participants in both the districts used three-wheelers to reach the hospital (Table 7.31). A bus was used more by the participants of public hospital when compared to private, both within the district and across the district (Table 7.32). A car was used more commonly by the Non-RSBY participants (Table 7.33).

Table 7.31: Mode of transportation to hospital (Patiala vs Yamunanagar)

	Patiala		Yamunanagar	
	N=397	%	N=350	%
Bus	93	23.4	77	22.0
Metro	2	0.5	5	1.4
Rickshaw	43	10.8	7	2.0
Two-wheeler	28	7.1	69	19.7
Three-wheeler	154	38.8	157	44.9
Car	38	9.6	27	7.7
Other	39	9.8	8	2.3

Note: Two participants from Patiala and two from Yamunanagar did not respond to the question

Table 7.32: Mode of transportation to hospital (private vs public hospitals)

	Patiala – intra-district				Yamunanagar – intra-district				Both the districts			
	Private (N=202)		Public (N=195)		Private (N=195)		Public (N=155)		Private (N=397)		Public (N=350)	
	N	%	N	%	N	%	N	%	N	%	N	%
Bus	40	19.8	53	27.2	38	19.5	39	25.2	78	19.6	92	26.3
Metro	1	0.5	1	0.5	5	2.6	0	0.0	6	1.5	1	0.3
Rickshaw	22	10.9	21	10.8	5	2.6	2	1.3	27	6.8	23	6.6
Two-wheeler	11	5.4	17	8.7	40	20.5	29	18.7	51	12.8	46	13.1
Three-wheeler	96	47.5	58	29.7	84	43.1	73	47.1	180	45.3	131	37.4
Car	16	7.9	22	11.3	20	10.3	7	4.5	36	9.1	29	8.3
Other	16	7.9	23	11.8	3	1.5	5	3.2	19	4.8	28	8.0

Note: Two participants from Patiala and two from Yamunanagar did not respond to the question

Table 7.33: Mode of transportation to hospital (RSBY vs non-RSBY patients)

	Patiala – intra-district				Yamunanagar – intra-district				Both the districts			
	RSBY (N=195)		Non RSBY (N=202)		RSBY (N=189)		Non RSBY (N=161)		RSBY (N=384)		Non RSBY (N=363)	
	N	%	N	%	N	%	N	%	N	%	N	%
Bus	51	26.2	42	20.8	43	22.8	34	21.1	94	24.5	76	20.9
Metro	0	0.0	2	1.0	5	2.6	0	0.0	5	1.3	2	0.6
Rickshaw	17	8.7	26	12.9	3	1.6	4	2.5	20	5.2	30	8.3
Two-wheeler	12	6.2	16	7.9	37	19.6	32	19.9	49	12.8	48	13.2
Three-wheeler	82	42.1	72	35.6	88	46.6	69	42.9	170	44.3	141	38.8
Car	10	5.1	28	13.9	11	5.8	16	9.9	21	5.5	44	12.1
Other	23	11.8	16	7.9	2	1.1	6	3.7	25	6.5	22	6.1

Note: Two participants from Patiala and two from Yamunanagar did not respond to the question

7.5.4 Diagnosis of disease

This section focuses on the diagnosis of the disease for which the participants sought hospital admission. The diagnosis was classified based on the 20 categories of packages under the RSBY scheme.

Overall medically managed disease (general) was the most commonly used package followed by general surgery and gynaecology. While comparing the diagnosis of the participants in private and public hospitals, an almost similar pattern of diagnosis was observed, except for slightly more cases of orthopaedics in public hospitals and slightly more cases of urology in private hospitals (Table 7.34). Similarly, the diagnosis pattern of RSBY and non-RSBY participants was also almost the same except for slightly more cases of orthopaedics in non-RSBY and general surgery in RSBY (Table 7.35).

Table 7.34: Diagnosis of study participants (private vs public hospitals)

	Patiala				Yamunanagar				Both districts			
	Private		Public		Private		Public		Private		Public	
	N =203	%	N=196	%	N=195	%	N=157	%	N=398	%	N=353	%
Oncology	3	1.5	5	2.6	4	2.1	1	0.6	7	1.8	6	1.7
Urology	10	4.9	2	1.0	15	7.7	2	1.3	25	6.3	4	1.1
Endocrinology	4	2.0	6	3.1	4	2.1	1	0.6	8	2.0	7	2.0
Orthopaedics	6	3.0	37	18.9	31	15.9	17	10.8	37	9.3	54	15.3
Ophthalmology	1	0.5	8	4.1	1	0.5	2	1.3	2	0.5	10	2.8
Gynaecology	48	23.6	39	19.9	15	7.7	26	16.6	63	15.8	65	18.4
General surgery	45	22.2	42	21.4	42	21.5	24	15.3	87	21.9	66	18.7
Ear	1	0.5	3	1.5	0	0.0	0	0.0	1	0.3	3	0.8
Nose	0	0.0	1	0.5	0	0.0	0	0.0	0	0.0	1	0.3
Throat	0	0.0	1	0.5	0	0.0	0	0.0	0	0.0	1	0.3
MMD- ICU	1	0.5	2	1.0	4	2.1	0	0.0	5	1.3	2	0.6
MMD general	84	41.4	50	25.5	79	40.5	84	53.5	163	41.0	134	38.0

Table 7.35: Diagnosis of study participants (RSBY vs non-RSBY patients)

	Patiala				Yamunanagar				Both districts			
	RSBY		Non-RSBY		RSBY		Non-RSBY		RSBY		Non-RSBY	
	N=196	%	N=203	%	N=191	%	N=161	%	N=387	%	N=364	%
Oncology	5	2.6	3	1.5	3	1.6	2	1.2	8	2.1	5	1.4
Urology	4	2.0	8	3.9	11	5.8	6	3.7	15	3.9	14	3.8
Endocrinology	6	3.1	4	2.0	1	0.5	4	2.5	7	1.8	8	2.2
Orthopaedics	13	6.6	30	14.8	25	13.	23	14.3	38	9.8	53	14.6
Ophthalmology	5	2.6	4	2.0	2	1.0	1	0.6	7	1.8	5	1.4
Gynaecology	39	19.9	48	23.6	23	12.0	18	11.2	62	16.0	66	18.1
General surgery	48	24.5	39	19.20	43	22.5	23	14.3	91	23.5	62	17.0
Ear	4	2.0	0	0.0	0	0.0	0	0.0	4	1.0	0	0.0
Nose	1	0.5	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Throat	0	0.0	1	0.5	0	0.0	0	0.0	0	0.0	1	0.3
MMD – ICU	1	0.5	2	1.0	1	0.5	3	1.9	2	0.5	5	1.4
MMD- general	70	35.7	64	31.5	82	42.9	81	50.3	152	39.3	145	39.8

7.6 User satisfaction in private and public facilities – RSBY and non-RSBY patients

This section primarily relates to user satisfaction with health-care facilities, both private and public, as well as for RSBY and non-RSBY patients in the two selected districts. The information collected was analysed under the following categories:

- experiences during admission
- care from nurses
- care from doctors
- hospital environment
- experiences in the hospital
- experiences at the time of discharge
- overall rating of the hospital.

Experiences of 399 participants in Patiala and 352 in Yamunanagar were analysed. One participant from Yamunanagar did not respond to any question on the user satisfaction, thus the total number (N) was 351 in Yamunanagar.

7.6.1 Experiences during admission

Questions asked to assess the experiences of the participants at the time of admission were on the availability of bed at the time of admission, availability of a wheelchair (for those who required it) and the time taken by the nurses and doctors to attend to the patient.

In both the districts, beds were made available to almost all patients at the time of admission to the hospital. Also, almost all patients who required a wheelchair or stretcher were provided with it (Table 7.36). In Patiala, a wheel chair was pushed by hospital staff in 88% cases while it was 65% in Yamunanagar. Taking the cut-off of 15 minutes for delay (as discussed in section 7.4.3), nursing staff was taking less time in Yamunanagar when compared to Patiala, as 59% of participants were attended by nursing staff in <15 minutes compared to 48% in Patiala (Table 7.36). Doctors were taking almost similar time in both the districts. Overall, the hospital experience was almost similar in Patiala and Yamunanagar with Patiala was better in a wheelchair being pushed by staff and Yamunanagar was better in time taken by nursing staff to attend to the patients.

When comparing provision of care during admission across public and private hospitals, nurses and doctors were taking a longer time to attend to the admitted patients in public hospitals as compared to private hospitals, both within and across the districts (Table 7.37).

In Patiala district, doctors were quicker to attend to the RSBY patients in comparison to non-RSBY patients, whereas in Yamunanagar district, doctors were taking longer to attend to the RSBY patients. However, overall, RSBY patients were attended slightly earlier than non-RSBY (Table 7.38).

Table 7.36: Beneficiaries' experiences during hospital admission (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N	%	N	%	
	N	399	100	351	100	
Was the bed made available as soon as the patient was advised admission?	Yes	392	98.2	344	98.0	0.80
	Told to wait for a few hours/come back another day	7	1.8	7	2.0	
Condition of the patient at the time of admission	N	399	100	351	100	<0.001
	Able to walk	245	61.4	79	22.5	
	Able to walk with support	61	15.3	218	62.1	
	Needed stretcher/wheelchair	93	23.3	54	15.4	
Availability of stretcher/wheelchair	N	93	100	54	100	--
	Yes	90	96.8	54	100.0	
	No	3	3.2	0	0.0	
Who pushed the stretcher/wheelchair?	N	93	100	54	100	0.001
	Hospital staff	82	88.2	35	64.8	
	Relatives/others	11	11.8	19	35.2	
How long did the nursing staff take to come and check the patient?	N	399	100	351	100	<0.001
	Less than 15 minutes	192	48.1	206	58.7	
	15 to 30 minutes	116	29.1	133	37.9	
	More than 30 minutes	91	22.8	12	3.4	
How long did the doctors take to come and check the patient?	N	399	100	351	100	<0.001
	Less than 15 minutes	136	34.1	111	31.6	
	15 to 30 minutes	138	34.6	182	51.9	
	More than 30 minutes	125	31.3	58	16.5	

Table 7.37: Beneficiaries' experiences with hospital admission (private vs public hospitals)

	N	Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		Private		Public			Private		Public			Private		Public		
		N	%	N	%		N	%	N	%		N	%	N	%	
		203	100	196	100		194	100	157	100		397	100	353	100	
Was the bed made available as soon as the patient was advised admission?	Yes	197	97.0	195	99.5	0.122	188	96.9	156	99.4	0.136	385	97.0	351	99.4	0.013
	Told to wait for few hrs/ come back another day	6	3.0	1	0.5		6	3.1	1	0.6		12	3.0	2	0.6	
Condition of the patient at the time of admission	N	203	100	196	100		194	100	157	100		397	100	353	100	
	Able to walk	117	57.6	128	65.3	0.277	35	18.0	44	28.0	0.076	152	38.3	172	48.7	0.016
	Able to walk with support	35	17.2	26	13.3		126	64.9	92	58.6		161	40.6	118	33.4	
	Needed stretcher/wheelchair	51	25.1	42	21.4		33	17.0	21	13.4		84	21.2	63	17.8	
Availability of stretcher/wheelchair	N	51	100	42	100		33	100	21	100		84	100	63	100	
	Yes	50	98.0	40	95.2	0.59	33	100	21	100	-	83	98.8	61	96.8	0.58
	No	1	2.0	2	4.8		0	0.0	0	0.0		1	1.2	2	3.2	
Who pushed the stretcher/wheelchair?	N	51	100	42	100		33	100	21	100		84	100	63	100	
	Hospital staff	46	90.2	36	85.7	0.54	23	69.7	12	57.1	0.39	69	82.1	48	76.2	0.41
	Relatives/others	5	9.8	6	14.3		10	30.3	9	42.9		15	17.9	15	23.8	
How long did the nursing staff take to come and check the patient?	N	203	100	196	100		194	100	157	100		397	100	353	100	
	<15 minutes	103	50.7	89	45.4	0.02	125	64.5	81	51.6	0.01	228	57.4	170	48.2	0.001
	15–30 minutes	65	32.0	51	26.0		66	34.0	67	42.7		131	33.0	118	33.4	
	>30 minutes	35	17.2	56	28.6		3	1.5	9	5.7		38	9.6	65	18.4	
How long did the doctors take to come and check the patient?	N	203	100	196	100		194	100	157	100		397	100	353	100	
	<15 minutes	74	36.5	62	31.6	0.01	73	37.6	38	24.2	0.03	147	37.0	100	28.3	0.005
	15–30 minutes	79	38.9	59	30.1		91	46.9	91	58.0		170	42.8	150	42.5	
	>30 minutes	50	24.6	75	38.3		30	15.5	28	17.8		80	20.2	103	29.2	

Table 7.38: Beneficiaries' experiences with hospital admission (RSBY vs non-RSBY patients)

		Patiala – intra-district					Yamunanagar – intra-district					Both districts				
		RSBY		Non RSBY		P value	RSBY		Non RSBY		P value	RSBY		Non RSBY		P value
		N	%	N	%		N	%	N	%		N	%	N	%	
Was the bed made available as soon as the patient was advised admission?	N	196	100	203	100		190	100	161	100		386	100	364	100	
	Yes	193	98.5	199	98.0	1.00	189	99.5	155	96.3	0.05	382	99.0	354	97.3	0.11
	Told to wait for few hrs/come back another day	3	1.5	4	2.0		1	0.5	6	3.7		4	1.0	10	2.7	
Condition of the patient at the time of admission	N	196	100	203	100		190	100	161	100		386	100	364	100	
	Able to walk	136	69.4	109	53.7	<0.01	45	23.7	34	21.1	<0.01	181	46.9	143	39.3	<0.01
	Able to walk with support	34	17.3	27	13.3		128	67.4	90	55.9		162	42.0	117	32.1	
	Needed a stretcher/wheelchair	26	13.3	67	33.0		17	8.9	37	23.0		43	11.1	104	28.6	
Availability of stretcher/wheelchair	N	26	100	67	100		17	100	37	100		43	100	104	100	
	Yes	26	100	64	95.5	-	17	100.0	37	100.0	-	43	100.0	101	97.1	0.56
	No	0	0.0	3	4.5		0	0.0	0	0.0		0	0.0	3	2.9	
Who pushed the stretcher/wheelchair?	N	26	100	67	100		17	100	37	100		43	100	104	100	
	Hospital staff	22	84.6	60	89.6	0.49	14	82.4	21	56.8	0.12	36	83.7	81	77.9	0.50
	Relatives/ Others	4	15.4	7	10.4		3	17.6	16	43.2		7	16.3	23	22.1	
How long did the nursing staff take to come and check the patient?	N	196	100	203	100		190	100	161	100		386	100	364	100	
	<15 minutes	104	53.1	88	43.3	0.12	106	55.8	100	62.1	0.40	210	54.4	188	51.6	0.33
	15 to 30 minute	54	27.6	62	30.5		76	40.0	57	35.4		130	33.7	119	32.7	
	More than 30 minutes	38	19.4	53	26.1		8	4.2	4	2.5		46	11.9	57	15.7	
How long did the doctors take to come and check the patient?	N	196	100	203	100		190	100	161	100		386	100	364	100	
	<15 minutes	80	40.8	56	27.6	0.01	53	27.9	58	36.0	0.01	133	34.5	114	31.3	0.22
	15–30 minutes	57	29.1	81	39.9		112	58.9	70	43.5		169	43.8	151	41.5	
	>30 minutes	59	30.1	66	32.5		25	13.2	33	20.5		84	21.8	99	27.2	

7.6.2 Care from nurses

To assess the quality of nursing care, RSBY and non-RSBY participants were questioned regarding the courtesy and care shown to them by nurses, whether the nurses listened to them, whether nurses explained things in a way that they could understand and whether they received help from nurses when it was required.

Care from nurses appeared to be better in Patiala district when compared to Yamunanagar district (Table 7.39). When comparing private with public hospitals, in Patiala district, nursing care was slightly better in private hospitals compared to public hospitals, whereas in Yamunanagar, the quality of nursing care was significantly better in all aspects in private hospitals compared to public hospitals (Table 7.40).

When comparing RSBY with non-RSBY participants, nursing care was better for RSBY participants in Patiala district with regard to courtesy shown to patients and for listening more carefully to the patients. In Yamunanagar district, not much difference was seen except with regard to getting help as soon as it was required, where non-RSBY participants fared better in comparison with RSBY patients (Table 7.41).

Conclusively, nursing care was better in Patiala when compared to Yamunanagar. Private hospitals provided better nursing care than public hospitals. Slightly better nursing care was given to RSBY patients in comparison with non-RSBY participants.

Table 7.39: Care from nurses (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N (399)	%	N (351)	%	
How often did nurses treat patients with courtesy and respect?	Never/ sometimes	59	14.8	69	19.7	0.07
	Usually/Always	340	85.2	282	80.3	
How often did nurses listen carefully to the patients?	Never/ sometimes	50	12.5	59	16.8	0.10
	Usually/ always	349	87.5	292	83.2	
How often did nurses explain things in a way that patients could understand?	Never/ sometimes	55	13.8	86	24.5	<0.01
	Usually/ always	344	86.2	265	75.5	
How often did a patient get help as soon as he/she wanted it?*	Never/ sometimes	64	16.4	126	45.2	<0.01
	Usually/ always	327	83.6	153	54.8	

*For Patiala N=391 and for Yamunanagar N=279, as only these many patients required help

Table 7.40: Care from nurses (private vs public hospitals)

		Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		Private		Public			Private		Public			Private		Public		
		N(203)	%	N(196)	%		N(194)	%	N(157)	%		N(397)	%	N(353)	%	
How often did nurses treat patients with courtesy and respect?	Never/ sometimes	27	13.3	32	16.3	0.40	26	13.4	43	27.4	<0.01	53	13.4	75	21.2	<0.01
	Usually/ always	176	86.7	164	83.7		168	86.6	114	72.6		344	86.6	278	78.8	
How often did nurses listen carefully to the patients?	Never/ sometimes	21	10.3	29	14.8	0.18	20	10.3	39	24.8	<0.01	41	10.3	68	19.3	<0.01
	Usually/ always	182	89.7	167	85.2		174	89.7	118	75.2		356	89.7	285	80.7	
How often did nurses explain things in a way that patients could understand?	Never/ sometimes	19	9.4	36	18.4	<0.01	37	19.1	49	31.2	<0.01	56	14.1	85	24.1	<0.01
	Usually/ always	184	90.6	160	81.6		157	80.9	108	68.8		341	85.9	268	75.9	
How often did a patient get help as soon as he/she wanted it?*	Never/ sometimes	29	14.4	35	18.4	0.29	60	37.3	66	55.9	<0.01	89	24.6	101	32.8	0.02
	Usually/ always	172	85.6	155	81.6		101	62.7	52	44.1		273	75.4	207	67.2	

*For Patiala N=391 and for Yamunanagar N=279, as only these many patients required help

Table 7.41: Care from nurses (RSBY vs non-RSBY)

		Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		RSBY		Non RSBY			RSBY		Non RSBY			RSBY		Non RSBY		
		N(196)	%	N(203)	%		N(190)	%	N(161)	%		N(386)	%	N(364)	%	
How often did nurses treat patients with courtesy and respect?	Never/ sometimes	20	10.2	39	19.2	0.01	32	16.8	37	23.0	0.15	52	13.5	76	20.9	<0.01
	Usually/ always	176	89.8	164	80.8		158	83.2	124	77.0		334	86.5	288	79.1	
How often did nurses listen carefully to the patients?	Never/ sometimes	17	8.7	33	16.3	0.02	31	16.3	28	17.4	0.79	48	12.4	61	16.8	0.09
	Usually/ always	179	91.3	170	83.7		159	83.7	133	82.6		338	87.6	303	83.2	
How often did nurses explain things in a way that patients could understand?	Never/ sometimes	23	11.7	32	15.8	0.24	47	24.7	39	24.2	0.91	70	18.1	71	19.5	0.70
	Usually/ always	173	88.3	171	84.2		143	75.3	122	75.8		316	81.9	293	80.5	
How often did a patient get help as soon as he/she wanted it?*	Never/ sometimes	33	17.5	31	15.3	0.57	74	51.7	52	38.2	0.02	107	32.2	83	24.6	0.02
	Usually/ always	156	82.5	171	84.7		69	48.3	84	61.8		225	67.8	255	75.4	

*For Patiala N=391 and for Yamunanagar N=279 as only these many patients required help

7.6.3 Care from doctors

The quality of doctors' care for patients was assessed in terms of courtesy and respect given to patients by the doctors, listening carefully to the patients and responding to their concerns.

Care from doctors was reported to be better from participants of Patiala district compared to Yamunanagar district (Table 7.42). Doctors from private hospitals showed significantly better care in terms of courtesy and respect, listening carefully to patients, and explaining things carefully compared to doctors of public hospitals (Table 7.43).

While comparing doctors' care across RSBY and non-RSBY participants, in both the districts, doctors' care was reported to be slightly better for RSBY participants in comparison to non-RSBY participants but this difference was statistically non-significant (Table 7.44).

Table 7.42: Care from doctors (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N (399)	%	N (351)	%	
How often did doctors treat the patients with courtesy and respect?	Never/ sometimes	55	13.8	46	13.1	0.79
	Usually/ always	344	86.2	305	86.9	
How often did doctors listen carefully to the patients?	Never/ sometimes	50	12.5	63	17.9	0.04
	Usually/ always	349	87.5	288	82.1	
How often did doctors explain things in a way that the patient could understand easily?	Never/ sometimes	58	14.5	95	27.1	<0.01
	Usually/ always	341	85.5	256	72.9	

Table 7.43: Care from doctors (private vs public hospitals)

		Patiala – intra-district					Yamunanagar – intra-district					Both districts				
		Private		Public		P value	Private		Public		P value	Private		Public		P value
		N(203)	%	N(196)	%		N(194)	%	N(157)	%		N(397)	%	N(353)	%	
How often did doctors treat patients with courtesy and respect?	Never/sometimes	21	10.3	34	17.3	0.04	16	8.2	30	19.1	<0.01	37	9.3	64	18.1	<0.01
	Usually/always	182	89.7	162	82.7		178	91.8	127	80.9		360	90.7	289	81.9	
How often did doctors listen carefully to patients?	Never/sometimes	15	7.4	35	17.9	<0.01	22	11.3	41	26.1	<0.01	37	9.3	76	21.5	<0.01
	Usually/always	188	92.6	161	82.1		172	88.7	116	73.9		360	90.7	277	78.5	
How often did doctors explain things in a way that patients could understand easily?	Never/sometimes	21	10.3	37	18.9	0.02	39	20.1	56	35.7	<0.01	60	15.1	93	26.3	<0.01
	Usually/always	182	89.7	159	81.1		155	79.9	101	64.3		337	84.9	260	73.7	

Table 7.44: Care from doctors (RSBY vs non-RSBY patients)

		Patiala – within district					Yamunanagar – intra-district					Both districts				
		RSBY		Non-RSBY		P value	RSBY		Non-RSBY		P value	RSBY		Non-RSBY		P value
		N (196)	%	N (203)	%		N (190)	%	N (161)	%		N (386)	%	N (364)	%	
How often did doctors treat the patients with courtesy and respect?	Never/sometimes	22	11.2	33	16.3	0.14	24	12.6	22	13.7	0.78	46	11.9	55	15.1	0.20
	Usually/always	174	88.8	170	83.7		166	87.4	139	86.3		340	88.1	309	84.9	
How often did doctors listen carefully to the patients?	Never/sometimes	20	10.2	30	14.8	0.17	35	18.4	28	17.4	0.80	55	14.2	58	15.9	0.52
	Usually/always	176	89.8	173	85.2		155	81.6	133	82.6		331	85.8	306	84.1	
How often did doctors explain things in a way that the patient could understand easily?	Never/sometimes	25	12.8	33	16.3	0.32	51	26.8	44	27.3	0.92	76	19.7	77	21.2	0.62
	Usually/always	171	87.2	170	83.7		139	73.2	117	72.7		310	80.3	287	78.8	

7.6.4 Hospital environment

Hospital environment was assessed in terms of cleanliness of the surroundings as well as the bathrooms, and the noise level near patients' beds at night.

Hospitals in Yamunanagar district were found to be quieter during the night and cleaner when compared to hospitals in Patiala district (Table 7.45). Hospital environment was significantly better in private hospitals in comparison to public hospitals. Similar results were observed during the intra-district comparison of private and public hospitals (Table 7.46).

Overall, hospital environment was perceived slightly better by RSBY participants when compared to non-RSBY participants. However, the difference was statistically non-significant (Table 7.47).

Conclusively, private hospitals demonstrated a better hospital environment in both the districts. Hospital environment was slightly better for RSBY participants when compared to non-RSBY participants.

Table 7.45: Hospital environment (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N(399)	%	N(351)	%	
How often was patients' surroundings and bathroom area kept clean?	Never/sometimes	77	19.3	52	14.8	0.11
	Usually/always	322	80.7	299	85.2	
How often the area around patients' beds was found quiet at night?	Never/sometimes	87	21.8	48	13.7	<0.01
	Usually/always	312	78.2	303	86.3	

Table 7.46: Hospital environment (private vs public hospitals)

		Patiala – intra-district					Yamunanagar – intra-district					Both districts				
		Private		Public		P value	Private		Public		P value	Private		Public		P value
		N (203)	%	N (196)	%		N (194)	%	N (157)	%		N (397)	%	N (353)	%	
How often were patients' surroundings & bathroom areas kept clean?	Never/sometimes	17	8.4	60	30.6	<0.01	12	6.2	40	25.5	<0.01	29	7.3	100	28.3	<0.01
	Usually/always	186	91.6	136	69.4		182	93.8	117	74.5		368	92.7	253	71.7	
How often the area around patients' beds was found quiet at night?	Never/sometimes	23	11.3	64	32.7	<0.01	15	7.7	33	21.0	<0.01	38	9.6	97	27.5	<0.01
	Usually/always	180	88.7	132	67.3		179	92.3	124	79.0		359	90.4	256	72.5	

Table 7.47: Hospital environment (RSBY vs non-RSBY patients)

		Patiala – intra-district					Yamunanagar – intra-district					Both districts				
		RSBY		Non RSBY		P value	RSBY		Non RSBY		P value	RSBY		Non RSBY		P value
		N (196)	%	N (203)	%		N (190)	%	N (161)	%		N (386)	%	N (364)	%	
How often were patients' surroundings & bathroom area kept clean?	Never/sometimes	39	19.9	38	18.7	0.76	19	10.0	33	20.5	<0.01	58	15.0	71	19.5	0.10
	Usually/always	157	80.1	165	81.3		171	90.0	128	79.5		328	85.0	293	80.5	
How often the area around patients' beds was found quiet at night?	Never/sometimes	42	21.4	45	22.2	0.86	23	12.2	25	15.5	0.35	65	16.8	70	19.2	0.39
	Usually/always	154	78.6	158	77.8		167	87.9	136	84.5		321	83.2	294	80.8	

7.6.5 Experiences in the hospital

Experiences during the hospital stay were assessed by asking questions in relation to help received from nurses to go to the bathroom or use a bedpan, assisting with pain relief and providing information to the patients about the drugs administered and their side-effects.

Almost similar experiences were reported by participants from Patiala and Yamunanagar, except for explaining medicine and its side effects, which was significantly better in Patiala. When comparing public and private hospitals in the two districts, participants from private hospitals in Patiala district reported a better experience compared to public hospitals.

Intra-district comparison of experiences during hospital stay did not show much difference between the RSBY and non-RSBY participants in Patiala district. In Yamunanagar district, RSBY patients had better experiences than non-RSBY patients (Table 7.49).

Table 7.48: Experiences in the hospital (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N	%	N	%	
Did the patient need help from nurses or other hospital staff to go to the bathroom or use a bedpan?	N	399		351		<0.01
	Yes	273	68.4	116	33.0	
	No	126	31.6	235	67.0	
How often did the patient get help to go to the bathroom or use a bedpan as soon as the patient required?	N	273		116		0.71
	Never/ sometimes	75	27.5	34	29.3	
	Usually/ always	198	72.5	82	70.7	
During the hospital stay, did the patient need medicine for pain?	N	399		351		<0.01
	Yes	374	93.7	298	84.9	
	No	25	6.3	53	15.1	
During the hospital stay, how often was patient's pain well controlled?	N	374		298		0.01
	Never/ sometimes	50	13.4	22	7.4	
	Usually/ always	324	86.6	276	92.6	
How often did the hospital staff do everything they could to help the patient with his pain?	N	373		298		0.86
	Never/ sometimes	39	10.5	30	10.1	
	Usually/ always	334	89.5	268	89.9	
Before giving patient any new medicine, how often did hospital staff inform the patient what the medicine was for?	N	399		351		<0.01
	Never/ sometimes	92	23.1	244	69.5	
	Usually/ always	307	76.9	107	30.5	
Before giving the patient any new medicine, how often did hospital staff describe possible side effects in a way that the patient could understand?	N	399		351		<0.01
	Never/ sometimes	112	28.1	266	75.8	
	Usually/ always	287	71.9	85	24.2	

Table 7.49: Experiences in the hospital (private vs public hospitals)

	N	Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		Private		Public			Private		Public			Private		Public		
		N	%	N	%		N	%	N	%		N	%	N	%	
		203		196			194		157			397		353		
Did the patient require help from the hospital staff to go to the bathroom?	Yes	147	72.4	126	64.3	0.08	77	39.7	39	24.8	0.03	224	56.4	165	46.7	<0.01
	No	56	27.6	70	35.7		117	60.3	118	75.2		173	43.6	188	53.3	
How often did the patient get help to go to the bathroom or use a bedpan as soon as required?	N	147		126			77		39			224		165		
	Never/ sometimes	31	21.1	44	34.9	0.01	17	22.1	17	43.6	0.16	48	21.4	61	37.0	<0.01
	Usually/ always	116	78.9	82	65.1		60	77.9	22	56.4		176	78.6	104	63.0	
Did the patient need medicine for pain?	N	203		196			194		157			397		353		
	Yes	197	97.0	177	90.3	<0.01	168	86.6	130	82.8	0.32	365	91.9	307	87.0	0.02
	No	6	3.0	19	9.7		26	13.4	27	17.2		32	8.1	46	13.0	
During the hospital stay, how often was patient's pain well controlled?	N	197		177			168		130			365		307		
	Never/ sometimes	11	5.6	39	22.0	<0.01	4	2.4	18	13.8	<0.01	15	4.1	57	18.6	<0.01
	Usually/ always	186	94.4	138	78.0		164	97.6	112	86.2		350	95.9	250	81.4	
How often did the hospital staff provide help to reduce the patient's pain?	N	197		176			168		130							
	Never/ sometimes	11	5.6	28	15.9	<0.01	15	8.9	15	11.5	0.49	26	7.1	43	14.1	<0.01
	Usually/ always	186	94.4	148	84.1		153	91.1	115	88.5		339	92.9	263	85.9	
Before giving the patient any new medicine, how often did hospital staff explain about the medicine and its side effects?	N	203		196			194		157			397		353		
	Never/ sometimes	26	12.8	66	33.7	<0.01	124	63.9	120	76.4	0.01	150	37.8	186	52.7	<0.01
	Usually/ always	177	87.2	130	66.3		70	36.1	37	23.6		247	62.2	167	47.3	

Table 7.50: Experiences in the hospital (RSBY vs non-RSBY patients)

	N	Patiala – within district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		RSBY		Non-RSBY			RSBY		Non-RSBY			RSBY		Non-RSBY		
		N	%	N	%		N	%	N	%		N	%	N	%	
		196		203			190		161			386		364		
Did the patient require help from the hospital staff to go to the bathroom?	Yes	125	63.8	148	72.9	0.05	66	34.7	50	31.1	0.47	191	49.5	198	54.4	0.17
	No	71	36.2	55	27.1		124	65.3	111	68.9		195	50.5	166	45.6	
How often did the patient get help to go to the bathroom or use a bedpan as soon as required?	N	125		148			66		50			191		198		
	Never/ sometimes	34	27.2	41	27.7	0.93	18	27.3	16	32.0	0.58	52	27.2	57	28.8	0.73
	Usually/ always	91	72.8	107	72.3		48	72.7	34	68.0		139	72.8	141	71.2	
Did the patient require medicine for pain?	N	196		203			190		161			386		364		
	Yes	179	91.3	195	96.1	0.05	153	80.5	145	90.1	0.01	332	86.0	340	93.4	<0.01
	No	17	8.7	8	3.9		37	19.5	16	9.9		54	14.0	24	6.6	
During the hospital stay, how often was the patient’s pain well controlled?	N	179		195			153		145			332		340		
	Never/ sometimes	18	10.1	32	16.4	0.07	6	3.9	16	11.0	0.02	24	7.2	48	14.1	<0.01
	Usually/ always	161	89.9	163	83.6		147	96.1	129	89.0		308	92.8	292	85.9	
How often did the hospital staff help to reduce the patient’s pain?	N	178		195			153		145			331		340		
	Never/ sometimes	17	9.6	22	11.3	0.58	12	7.8	18	12.4	0.19	29	8.8	40	11.8	0.20
	Usually/ always	161	90.4	173	88.7		141	92.2	127	87.6		302	91.2	300	88.2	
Before giving the patient any new medicine, how often did hospital staff explain about the medicine and its side effects?	N	196		203			190		161			386		364		
	Never/ sometimes	50	25.5	42	20.7	0.25	122	64.2	122	75.8	0.02	172	44.6	164	45.1	0.89
	Usually/ always	146	74.5	161	79.3		68	35.8	39	24.2		214	55.4	200	54.9	

7.6.6 Experiences at the time of discharge

Care at the time of discharge was assessed in terms of the place the patient would go to after discharge, help during discharge, health status at the time of discharge and follow-up suggestions given by the hospital staff.

Overall, the discharge experiences were found to be satisfactory in all groups. In Patiala district, experience at the time of discharge was slightly better than Yamunanagar district (Table 7.51). While making an intra-district and inter-district comparison of private and public hospitals, private hospitals were slightly better than public hospitals (Table 7.52). Also, in RSBY and non-RSBY comparison, RSBY participants reported a slightly better experience at the time of discharge (Table 7.53). However, most of these differences were statistically non significant

Table 7.51: Experiences at the time of discharge (Patiala vs Yamunanagar)

		Patiala		Yamunanagar		P value
		N (399)	%	N (351)	%	
Was the patient advised where to go after leaving the hospital?	Own home	397	99.5	347	98.9	0.43
	Someone else's home/another health facility	2	0.5	4	1.1	
Did doctors, nurses or other hospital staff enquire from the patient if any help was required by him/her at the time of discharge?	Yes	396	99.2	338	96.3	<0.01
	No	3	0.8	13	3.7	
Upon discharge, was the present health status of the patient recorded/noted?	Improved completely/partially	383	96.0	333	94.9	0.46
	No improvement/ passed away	16	4.0	18	5.1	
Was there a suggestion for any follow-up?	Yes	394	98.7	327	93.2	<0.01
	No	5	1.3	24	6.8	

Table 7.52: Experiences at the time of discharge interviews (private vs public hospitals)

		Patiala – intra-district					Yamunanagar – intra-district					Both districts				
		Private		Public		P value	Private		Public		P value	Private		Public		P value
		N	%	N	%		N	%	N	%		N	%	N	%	
203		196		194		157		397		353						
Was the patient advised where to go after leaving the hospital?	Own home	203	100	194	99.0	0.24	194	100.0	153	97.5	0.04	397	100	347	98.3	0.01
	Someone else’s home/ another health facility	0	0.0	2	1.0		0	0.0	4	2.5		0	0.0	6	1.7	
Did doctors, nurses or other hospital staff enquire from the patient if any help was required by him/her at the time of discharge?	Yes	202	99.5	194	99.0	0.62	192	99.0	146	93.0	<0.01	394	99.2	340	96.3	<0.01
	No	1	0.5	2	1.0		2	1.0	11	7.0		3	0.8	13	3.7	
Upon discharge whether the present health status of patient was recorded/noted?	Improved completely/ partially	193	95.1	190	96.9	0.34	189	97.4	144	91.7	0.02	382	96.2	334	94.6	0.29
	No improvement/passed away	10	4.9	6	3.1		5	2.6	13	8.3		15	3.8	19	5.4	
Was there a suggestion for any follow-up?	Yes	201	99.0	193	98.5	0.68	185	95.4	142	90.4	0.09	386	97.2	335	94.9	0.13
	No	2	1.0	3	1.5		9	4.6	15	9.6		11	2.8	18	5.1	

Table 7.53: Experiences at the time of discharge interviews (RSBY vs non-RSBY patients)

		Patiala – intra-district				P value	Yamunanagar – intra-district				P value	Both districts				P value
		RSBY		Non-RSBY			RSBY		Non-RSBY			RSBY		Non-RSBY		
		N (196)	%	N (203)	%		N (190)	%	N (161)	%		N (386)	%	N (364)	%	
Was the patient advised where to go after leaving the hospital?	Own home	196	100	201	99.0	0.50	189	99.5	158	98.1	0.34	385	99.7	359	98.6	0.11
	Someone else's home/ another health facility	0	0.0	2	1.0		1	0.5	3	1.9		1	0.3	5	1.4	
Did doctors, nurses or other hospital staff enquire from the patient if any help was required by him/her at the time of discharge?	Yes	194	99.0	202	99.5	0.61	186	97.9	152	94.4	0.10	380	98.4	354	97.3	0.32
	No	2	1.0	1	0.5		4	2.1	9	5.6		6	1.6	10	2.7	
Upon discharge whether the present health status of patient was recorded/noted?	Improved completely/ partially	186	94.9	197	97.0	0.28	180	94.7	153	95.0	0.90	366	94.8	350	96.2	0.38
	No improvement/ passed away	10	5.1	6	3.0		10	5.3	8	5.0		20	5.2	14	3.8	
Was there a suggestion for any follow-up?	Yes	193	98.5	201	99.0	0.68	183	96.3	144	89.4	0.02	376	97.4	345	94.8	0.09
	No	3	1.5	2	1.0		7	3.7	17	10.6		10	2.6	19	5.2	

7.6.7 Overall rating of the hospitals

Study participants across various groups were asked for overall rating of the hospital with a score ranging between 0 and 10, 0 being the lowest (poorest) and 10 being the highest (best) score.

Intra-district comparison of private and public hospitals showed a better rating for public hospitals in Patiala whereas in Yamunanagar private hospitals were rated better (Table 7.54). Overall (public and private together), RSBY participants gave a lower rating when compared to non-RSBY participants. Almost all the participants across all the groups reported that they would recommend the hospital to others in future (Tables 7.55, 7.56 and 7.57).

Table 7.54: Overall rating of the hospitals

		N	Mean	SD	P value
Patiala		399	7.9	1.36	<0.01
Yamunanagar		351	5.5	1.53	
Patiala	Private	203	7.7	1.42	<0.01
	Public	196	8.1	1.27	
Yamunanagar	Private	194	6.1	1.40	<0.01
	Public	157	4.8	1.36	
Both districts	Private	397	6.9	1.60	0.05
	Public	353	6.7	2.11	
Patiala	RSBY	196	7.8	1.50	0.10
	Non-RSBY	203	8.0	1.22	
Yamunanagar	RSBY	190	5.2	1.32	<0.01
	Non-RSBY	165	5.9	1.66	
Both districts	RSBY	386	6.5	1.91	<0.01
	Non-RSBY	364	7.1	1.76	

Table 7.55: Recommend hospital to friends and family (Patiala vs Yamunanagar)

	Patiala		Yamunanagar		P value
	N(399)	%	N(351)	%	
No	5	1.3	7	2.0	0.42
Yes	394	98.7	344	98.0	

Table 7.56: Recommend hospital to friends and family (private vs public hospitals)

	Patiala – intra-district					Yamunanagar – intra-district					Both districts				
	Private		Public		P value	Private		Public		P value	Private		Public		P value
	N (203)	%	N (196)	%		N (194)	%	N (157)	%		N (397)	%	N (353)	%	
No	3	1.5	2	1.0	0.99	2	1.0	5	3.2	0.25	5	1.3	7	2.0	0.56
Yes	200	98.5	194	99.0		192	99.0	152	96.8		392	98.7	346	98.0	

Table 7.57: Recommend hospital to friends and family (RSBY vs non-RSBY patients)

	Patiala – intra-district					Yamunanagar – intra-district					Both districts				
	RSBY		Non-RSBY		P value	RSBY		Non-RSBY		P value	RSBY		Non-RSBY		P value
	N (196)	%	N (203)	%		N (190)	%	N (161)	%		N (386)	%	N (364)	%	
No	2	1.0	3	1.5	0.99	1	0.5	6	3.7	0.05	3	0.8	9	2.5	0.08
Yes	194	99.0	200	98.5		189	99.5	155	96.3		383	99.2	355	97.5	

7.6.8 Aggregated analysis of user satisfaction

Aggregated analysis was done by converting the ordinal responses of the questions in the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) section of exit interviews to scores. The categories covered were—experience during admission, care from nurses, care from doctors, hospital environment, experience during stay, experience during discharge and overall rating of the hospital. Details of the scoring pattern have been elaborated under the data analysis plan in Chapter 4. The higher the score, the better was the hospital. Scores obtained under different heads were compared between private and public hospitals, RSBY and non-RSBY participants and between districts. Mean score was reported for each category. Student's t-Test was applied to assess statistical differences across the groups.

User satisfaction was better in private hospitals when compared to public hospitals. A higher score for private hospitals was observed in all aspects of quality of care. Further, the difference between the scores of private and public hospitals was also statistically significant for all categories of care except for experience during discharge and overall rating. Comparing RSBY and non-RSBY participants, the care to RSBY participants was judged to be slightly better compared to non-RSBY participants. A better score was obtained for RSBY participants in all aspects, except for overall rating (Table 7.58).

Table 7.58: Aggregated analysis of user satisfaction

	Private (392)		Public (364)		P value	RSBY (392)		Non-RSBY (364)		P value	Patiala (399)		Yamunanagar (357)		P value
	Mean	SD	Mean	SD		Mean	SD	Mean	SD		Mean	SD	Mean	SD	
During admission	4.23	0.75	4.06	0.81	<0.01	4.18	0.76	4.11	0.82	0.20	4.08	0.85	4.22	0.70	0.02
Care from nurses	3.76	0.94	3.46	1.07	<0.01	3.67	1.00	3.56	1.03	0.13	3.54	0.90	3.71	1.13	0.02
Care from doctors	3.84	0.98	3.50	1.17	<0.01	3.75	1.08	3.59	1.09	0.04	3.49	0.90	3.88	1.25	<0.01
Hospital environment	3.96	0.96	3.28	1.11	<0.01	3.73	1.06	3.52	1.10	0.01	3.30	0.98	4.00	1.08	<0.01
Experience during stay	3.26	0.83	2.83	0.93	<0.01	3.13	0.94	2.97	0.86	0.02	3.22	0.79	2.87	0.99	<0.01
Experience during discharge	4.76	0.38	4.72	0.57	0.17	4.78	0.41	4.70	0.55	0.03	4.84	0.39	4.63	0.54	<0.01
Overall rating of the hospital	4.12	0.56	4.01	0.79	0.29	4.03	0.61	4.11	0.75	0.11	4.40	0.51	3.69	0.66	<0.01
Total	27.9	3.52	25.7	4.38	<0.01	27.2	3.90	26.6	4.26	0.02	26.9	3.61	26.9	4.59	0.81

7.7 Financial burden

This section brings together information on OOP expenditures collected during the exit interviews. The information on expenditures consists of any expenditure in the facility and also expenditure made elsewhere for the present illness.

Not much difference was observed in terms of OOP expenditure between the districts. Expenditure in private hospitals was almost double that in public hospitals, both within the district and across the districts. It was expected that OOP expenditures of RSBY participants would be significantly less than non-RSBY participants. This was indeed the case in Patiala; and overall, however, in Yamunanagar the difference was less pronounced (Table 7.59).

Table 7.59: Total out-of-pocket expenditure (mean) by participants

		N	Mean	SD	P value
Patiala		397	7559.9	14626.9	0.23
Yamunanagar		349	8747.5	12642.5	
Patiala	Private	201	9909.4	16209.6	<0.01
	Public	196	5150.5	12388.1	
Yamunanagar	Private	192	11927.1	15810.6	<0.01
	Public	157	4859.0	4778.2	
Both districts	Private	393	10895.1	16027.3	<0.01
	Public	353	5020.9	9754.8	
Patiala	RSBY	196	3760.1	11280.5	<0.01
	Non-RSBY	201	11265.2	16480.3	
Yamunanagar	RSBY	191	7788.2	5788.3	0.12
	Non-RSBY	158	9907.0	17642.6	
Both districts	RSBY	387	5748.1	9211.0	<0.01
	Non-RSBY	359	10667.5	16990.9	

7.7.1 Determinants of out-of-pocket expenditure

Along with the test for quality of care for those enrolled in RSBY, it is important to question the extent to which insurance serves to reduce the financial burden of care. Due to time and cost constraints, a large survey was not conducted to study the determinants of OOP expenditure. However, some conclusions can be derived from Table 7.60. As the survey was not done at the household level, any selection

equations would be difficult to construct without detailed household information. The suggestive results show the following:

Households spent more on the aged and females, although neither of these factors was significant. It is likely that BPL status is correlated with RSBY status; thus this variable was taken out in Equation 2. Enrolment in RSBY helped reduce expenditure; since the variable is dichotomous the coefficient was large. For the sample of only BPL patients, the contribution RSBY makes towards reducing OOP expenditure falls while still being significant. RSBY was not statistically significant in reducing the expenditure in Yamunanagar, while it was so in Patiala. Even when considering only RSBY participants (who were insured), and restricting the sample to only BPL cases, availing care from public sector facilities resulted in significant reduction in OOP expenditure, except in the case of BPL participants from Patiala district. The result for Patiala when including only BPL patients may be due to a smaller sample, as the adjusted R-square falls dramatically from the overall sample. Although the adjusted R-Square is small, much of it is due to running an ordinary least square against dichotomous variables.

The main conclusion drawn is that the use of public sector contributes to reduction in OOP expenditure, while enrolling in RSBY has some limitations in reducing OOP expenditure. The data shows that the non-RSBY BPL participants use the public sector twice as much as the private sector, while the RSBY BPL participants seem to use public and private sector at the same rate. For the general sample, the odds ratio of 1.23 for RSBY use of private sector is significant at $p < 0.05$; the odds ratio is statistically significant and higher for Yamunanagar (1.53). For Patiala, the odds ratio for use of private sector for those in RSBY is 1.05 and is not significant.

Table 7.60: Determinants of OOP expenditure

	All Total exp (Eq. 1)	BPL not included All Total exp (Eq. 2)	Only BPL Total exp (Eq. 3)	All/Patiala Total exp (Eq. 4)	Only BPL Patiala Total exp (Eq. 5)	All Yamunanagar Total exp (Eq. 6)	Only BPL Yamunanagar Total exp (Eq. 7)
Gender (Male)	-870.4 (-0.87)	-881.3 (-0.88)	-1239.9 (-1.02)	415.2 (0.28)	408.1 (0.21)	-1840.7 (-1.38)	-1973.8 (-1.25)
Facility (Public)	-5599.7*** (-5.58)	-5699.4*** (-5.81)	-5101.4*** (-4.25)	-4889.4*** (-3.48)	-1551.1 (-0.85)	-6599.5*** (-4.94)	-7279.9*** (-4.60)
Age	47.86 (1.75)	47.44 (1.74)	15.42 (0.46)	114.8** (2.88)	73.77 (1.42)	-14.38 (-0.40)	-18.16 (-0.42)
District (Patiala)	-1482.0 (-1.40)	-1299.2 (-1.32)	-3190.8** (-2.61)				
RSBY (Yes)	-4704.1*** (-4.07)	-4988.2*** (-5.04)	-2906.1* (-2.16)	-8303.1*** (-5.79)	-4446.7* (-1.94)	-1655.8 (-1.24)	-2493.4 (-1.50)
BPL (Yes)	-606.9 (-0.48)						
_cons	12810.4*** (8.25)	12554.6*** (8.62)	12860.3*** (6.75)	9179.0*** (4.64)	5723.0 (1.84)	14081.7*** (7.63)	15492.0*** (6.47)
N	741	741	459	392	184	349	275
Adj. R-squared	0.0736	0.0746	0.0515	0.1036	0.0091	0.756	0.0757
t statistics in parentheses							
="* p<0.05	** p<0.01	*** p<0.001"	RSBY= 387	RSBY (Patiala) = 184	RSBY (Y. Nagar) = 275		
			Not RSBY = 359	Non-RSBY (Patiala) = 208	Non-RSBY (Yamunanagar) = 184		
Exp: Expenditure; Eq: Equation							

7.8 Discussion

7.8.1 Methodological issues

Due to logistical constraints of the study, a purposive sampling was used to select the RSBY empanelled hospitals in both the districts. The result of the study should hence be cautiously interpreted and generalized. Regarding the exit interview dataset, the number of exit interviews conducted was slightly less than what was planned during the protocol development stage. This happened because the number of non-RSBY patients visiting the selected empanelled hospitals in Yamunanagar was fewer than what had been assumed at the protocol development stage. Another issue with the methodology of the present chapter is that the tool used for assessing the care given in hospitals was a modified version of HCAHPS. Since the tool was developed in USA and was not validated for Indian settings, it was modified to suit the local environment, though the modified version was not validated in the local setting.

As RSBY and non-RSBY participants belong to different strata of society, perception of the quality of care by them may differ and this could be another limitation of the study. Murray and Chen reported that poor people tend to express greater satisfaction with health care when they get it and also that poor people say they are sick less often (Murray and Lincoln, 1992, Sen, 2002). Based on this, we can assume that RSBY beneficiaries might have given a better report for user satisfaction when compared to non-RSBY participants for the same type of facility.

7.8.2 Summary of findings

This chapter dealt with the third objective of the study, which relates to the evaluation of the delivery of services across both public and private empanelled facilities for RSBY and non-RSBY beneficiaries.

Socio-demographic profile

The socio-demographic profile of the study participants (exit interviews) suggests that it was likely that more young patients were going to private hospitals and old ones to public hospitals; and more women were utilizing private facilities. In terms of social class, general and OBC population were mainly using private hospitals, while a majority of the SCs and STs were utilizing the public sector. More of Muslims and illiterate (or literate up to primary level) were using public hospitals. The mean age of the RSBY participants was higher when compared to non-RSBY participants.

Structural aspects

From the Health Provider Checklist Assessment (self-assessment), private hospitals self-reported a better score than public hospitals under all categories of structural-aspect evaluation in both districts. From the Observation and Facility Record Checklist, private hospitals scored better than public hospitals in all aspects. In terms of availability of records, private hospitals were almost similar to public hospitals, except for six categories (out of ten categories) where private hospitals were slightly better than public hospitals. Overall, structural evaluation was found to be better for private, however, it should be cautiously interpreted as none of these differences were statistically significant.

Service delivery

Patiala vs Yamunanagar: In terms of presence of separate RSBY help desk, there were two hospitals (both in Patiala) which were having separate RSBY help desk. Waiting period was less in Yamunanagar when compared to Patiala. Not much difference was observed across both the districts in terms of process of registration. With regard to information provided to the participants from the RSBY help desk, Patiala was significantly better than Yamunanagar. Also, Patiala fared better than Yamunanagar in terms of diagnostics and medicines from outside since a lesser number of participants from Patiala were asked to get diagnostic and medicines from outside. Yamunanagar was better with regard to providing food to the RSBY beneficiaries, as there were two hospitals in Yamunanagar which were providing food as compared to one hospital in Patiala. Patiala district was again significantly better in terms of informing patients regarding the balance amount in the card. Half of the participants were receiving the transportation cost in Patiala as compared to none in Yamunanagar. In terms of post hospitalization knowledge, Patiala was better in providing information regarding 5 day post hospitalization services, however, Yamunanagar was better in terms of providing medicines from hospital. Conclusively, it can be interpreted that a mixed response was observed for various service delivery categories studied, however, overall Patiala was found to be better in most of these categories.

Private vs Public: In terms of presence of a separate RSBY help desk, only one private and one public hospital (both in Patiala) had a separate RSBY help desk. In

both the hospitals (public and private), staffs were helpful and polite to almost all the participants. Participants had to wait less in private hospitals for being attended by the hospital staff. Private hospitals fared better with regard to the process of registration as a fingerprint scanner was used in 97% of participants in comparison to 74% in Public hospitals. With regard to information dissemination from RSBY help desk, a mixed response was observed with public hospitals fairing better in terms of providing information regarding treatment cost and amount left in the card, whereas private hospitals were better in terms of providing information regarding insufficient amount in the smart card. More of private hospitals were asking for diagnostics and medicines from outside the hospital when compared to public hospitals. Two of the private hospitals were providing food as compared to one public hospital. Almost similar observations were noted for public and private hospitals with regard to the process followed during discharge, however, in terms of discharge slip, public hospitals were slightly better. More participants from public hospitals were reimbursed with transportation cost when compared to private hospitals. In terms of post hospitalization knowledge and expenses, public hospitals were slightly better for medicines provided by the hospital. Conclusively, a mixed observation was noted between public and private hospitals in terms of service delivery with public hospitals being better in some aspects and private hospitals being better in others.

Comparison of choice of hospital, transport and diagnosis

Patiala vs Yamunanagar: In Patiala, hospitals were primarily chosen by the participants because of proximity whereas in Yamunanagar they were chosen on relatives and friends advice. In Patiala, majority of the participants had not contacted any health facility before coming to the present one; whereas in Yamunanagar, a high percentage of the participants had first contacted a health facility, many of which were individual private practitioners. Both in Patiala and Yamunanagar, the most common mode of transport was three wheelers.

Private vs Public: Private hospitals were chosen primarily because of the reputation of the hospital whereas public hospitals were chosen because of proximity. About one third participants from private hospitals and half of the participants from public hospitals did not contact any health facility before coming to the current facility. For mode of transportation, a bus was used more commonly by the participants of public

hospitals when compared to private hospitals, both within the district and across the district. Almost similar pattern of diagnosis was observed in private and public hospitals, except for slightly more cases of orthopaedics in public hospitals and slightly more cases of urology in private hospitals.

RSBY vs non-RSBY: The most common reason for selecting a hospital for RSBY participants was relative/friend suggestions followed by preferred hospital (always go to the same hospital) and reputation. Whereas non-RSBY participants selected the hospital based on reputation followed by relative/friend suggestion and proximity. About one third RSBY participants and half of non-RSBY participants did not contact any health facility before coming to the current facility. Bus and three wheelers were used more by the RSBY participants while car was used more by non-RSBY participants. The diagnosis pattern of RSBY and non-RSBY participants was almost the same, except for slightly more cases of orthopaedics in non-RSBY and general surgery in RSBY.

User satisfaction

Patiala vs Yamunanagar: Out of the five aspects used to assess experiences during the hospital admission (availability of bed, availability of wheel chair, hospital staff pushing wheel chair, time taken by nursing staff and doctor), Yamunanagar was better in terms of taking less time to attend to the patient whereas Patiala was better in terms of wheel chair being pushed by hospital staff. In the remaining aspect of experiences during admission, Patiala and Yamunanagar were almost similar. Patiala was found to be better in almost all the aspects of care from nurses and doctors. Yamunanagar fared better in terms of hospital environment. With regard to experiences during hospital stay, almost similar experiences were reported by participants from Patiala and Yamunanagar, except for one aspect (explaining medicine and its side effects) which was significantly better in Patiala. Overall, the discharge experiences were found to be better in all groups. In Patiala district, experience at the time of discharge was slightly better than Yamunanagar district. Overall ratings provided to the hospitals were better in Patiala when compared to Yamunanagar.

Private vs Public: Out of the five aspects used to assess experiences during the hospital admission (availability of bed, availability of wheel chair, hospital staff pushing wheel chair, time taken by nursing staff and doctor), private hospitals were

found to be significantly better in terms of time taken by doctors and nurses to attend to the patient, including wheel chair being pushed by hospital staff. Whereas, for the remaining two aspects, private and public hospitals were almost similar. Private hospitals provided better nursing care than public hospitals. Doctors from private hospitals showed significantly better care in terms of courtesy and respect, listening carefully to patients, and explaining things carefully when compared to doctors of public hospitals. The hospital environment was significantly better in private hospitals in comparison to public hospitals. Participants from private hospitals in Patiala district reported better experience during stay when compared to public hospitals. While making an intra-district and inter-district comparison of private and public hospitals with regard to experience at the time of discharge, private hospitals were slightly better than public hospitals. Intra-district comparison of private and public hospitals showed a better rating for public hospitals in Patiala whereas in Yamunanagar private hospitals were rated better. Overall, almost similar ratings were given to public and private hospitals.

RSBY vs Non-RSBY participants: In Patiala district, doctors were quicker to attend to the RSBY patients in comparison with non-RSBY patients, whereas in Yamunanagar district, doctors were taking longer to attend to the RSBY patients. However, overall, RSBY patients were attended slightly earlier than non-RSBY. The rest of the aspects of experiences during hospital admission was almost similar for RSBY and non-RSBY participants. Nursing care was better for RSBY participants in Patiala district with regard to courtesy shown to patients and for listening more carefully to the patients. In Yamunanagar district, not much difference was seen except with regard to getting help as soon as it was required, where non-RSBY participants fared better in comparison with RSBY patients. Overall, slightly better nursing care was given to RSBY participants in comparison with non-RSBY participants. In both the districts and across the districts, doctors' care was reported to be slightly better for RSBY participants in comparison to non-RSBY participants. Hospital environment was perceived slightly better by RSBY participants when compared to non-RSBY participants. Not much difference was observed in terms of experiences during hospital stay between RSBY and non-RSBY participants. RSBY participants reported a slightly better experience at the time of discharge when compared to non-RSBY participants. RSBY participants gave a lower rating to the hospitals when compared to non-RSBY participants.

Financial Burden

Expenditure in private hospitals was almost double the expenditure in public hospitals. Not much difference was observed in OOP expenditure of RSBY beneficiaries and non-RSBY beneficiaries in Yamunanagar, whereas in Patiala district OOP expenditure of a RSBY beneficiary was significantly less when compared to a non-RSBY beneficiary. In terms of determinants of OOP, use of public sector contributes to reduction in OOP expenditure, while enrolling in RSBY has some limitations in reducing OOP expenditure.

7.8.3 Discussion of findings

Characteristics of the study participants

Children and the geriatric population, the two extremes of age, are expected to be more vulnerable to diseases and hence more likely to be admitted to hospital as compared to the adult population. Therefore, the elderly and children were expected to comprise a majority of study participants in the exit interviews, but it was observed that most of the study participants belonged to the adult age group. It is to be kept in mind that as per census 2011 report (Registrar General of India, 2013), under 15 and elderly, together comprise 38% of the total population. However, the referenced population (under 15 and elderly) in the exit interviews was only 20%. If we assume equal risk for all age groups and equal utilization by all age groups, the proportion of under 15 and elderly should be around 38%. However, in the study, it was almost half of this. Also to be noted is that the enrolment of the elderly population under the scheme is comparable to the productive population. This suggests that the scheme could be primarily used by the productive age groups who are considered to be important members of the family as they are the bread winners. Further, when this pattern of scheme utilization by under 15 and elderly was compared to non-RSBY group, no difference was observed. This could lead to the view that this usage pattern reflects societal factors regarding geriatric population. Regarding paediatric and maternal care and maternal care, it is possible that schemes under NRHM may have affected the enrolment of children in RSBY. Under NRHM, there are specific schemes for children and pregnant mothers (Janani Suraksha Yojana and Janani Shishu Suraksha Karyakaram) that provide free care to them and do not have any upper cap.

People of the working age group are more likely to go to private hospitals as compared to those of older age groups, who were more likely to go to public hospitals. The working age group, being the earning members in the family, have greater command of family resources and are more aware that RSBY provides access to private care at near-free costs. This preference for RSBY scheme shows that care provided by this scheme is perceived to be better (as shown in the survey). RSBY scheme enables them to use private services that they could not have afforded without the scheme. People generally avail services that are better unless there are certain perceived barriers. Access and transportation are the major determining factors in selecting the type of facility and this is more so for the elderly because they are likely to have more limited transportation facilities available to them in comparison with the young.

Amongst the study participants, more females were using the scheme in comparison to males. A few justifications can be assumed. It is clear that the scheme has enabled women, who are likely to be excluded from receiving care when care is costly (see Table 7.3), to utilize health-care services. The assumption is that the higher number of females may be utilizing care because of two reasons. First, women do not have access to health-care services in the initial phases of the disease (probably because it is not affordable to them within the weak public health system where insurance generally does not cover outpatient and primary care services) and therefore more women reach advanced stages of the disease which leads to higher utilization of RSBY scheme by women as it covers inpatient services. Therefore, women are getting access to health-care services when the disease has spread and requires inpatient treatment. Using South African data, Irving and Kingdon reported a significant pro-female bias among prime age persons (ages 16–40), i.e. their health expenditure was high but they received care later (Irving and Kingdon, 2008). A second probable reason for high usage of the scheme by women could be the fact that most of the selected empanelled health facilities had gynaecology services. In terms of social class, among the majority groups, a significant number of the general and OBC participants were utilizing the private hospitals, while a majority of the SC and ST participants were availing services from public sector facilities.

Such a pattern of scheme utilization where the objective of the scheme is empowering the poor to access private facilities, but still Muslims, SC/ST and illiterate or literate

up to primary level are using more of public hospitals than private hospitals may point towards social inequity under the scheme (indeed if private hospitals are considered to be better than public hospital).

Process of service delivery

Information to participants regarding cost of treatment and facilities available under the scheme was poor in both the districts and it was poorer in Yamunanagar district. In the present study, it appears that the implementers have simply failed to comply with the contract clause that specifically requires such information to be provided to the participants at the time of admission.

In the present study, very few hospitals provided food to the RSBY participants and only a few study participants received transportation reimbursement. As perceived by the participants, the main reason was that the hospitals did not have the facilities to prepare food. At the time of empanelment, information regarding availability of such services was not ascertained, as this was not part of the selection criteria for empanelling hospitals. Moreover, accounting procedures do not require reporting of provision for food or transport although these costs are included in the capitation costs for treatment. Monitoring of the quality of food and reimbursement of costs incurred would require a strong monitoring and supervision mechanism. Non-existence of such a mechanism has been questioned in the present study.

Facilities were selected by the participants on the basis of access and not on the basis of the type of care provided. Access played an important role that superseded the kind of care given to the beneficiaries, as the beneficiaries had limited availability of transportation. Proximity to the facility is an important consideration for the beneficiaries due to the opportunity cost of being away from work, since most of the beneficiaries are daily wage earners for whom a visit to the hospital may result a loss of daily wages.

While making inter district comparison, Patiala was found to be doing better than Yamunanagar with regard to most of the aspects of service delivery. This may be more likely due to the difference in organizational structure of RSBY scheme in both the districts. SNA in Punjab is led by PHSC, whereas SNA of Haryana is led by ESIC. Moreover in Haryana, the scheme is implemented through hired consultants of the RSBY society. Since, it is the department of health in Punjab which is

implementing the scheme; it enables them to better manage the scheme when compared to Yamunanagar where management is basically contracted out to the Department of Labour and Employment. During Private and Public comparison, it was observed that public and private hospitals did not differ much in terms of service delivery which is a contradiction to the general perception of private being better.

User satisfaction

Participants from Patiala, private hospitals and RSBY reported a better user satisfaction. Probably, as the assessment of quality of hospital care was self-reported, RSBY beneficiaries who are generally deprived of care are grateful for whatever facilities are provided to them. This segment of the population is unaware of the dynamics of insurance schemes. Therefore, in terms of user satisfaction, a perception bias may exist for RSBY participants. This is reflected in the present study as the RSBY beneficiaries reported greater satisfaction for aspects that would have been the same as for non-RSBY participants (e.g. cleanliness, as all the patients would have access to the same areas in the hospitals).

Financial protection

Despite having enrolled into a cashless insurance scheme, RSBY beneficiaries incurred OOP expenditure. This was pronounced in Yamunanagar but not so in Patiala. The evidence of increased OOP is consistent with findings from other countries with regard to health insurance schemes for the poor (Acharya et al., 2012). The RSBY insurance scheme, an example of a PPP, was designed to take advantage of provider pluralisms; but it is important that the private sector does not induce higher costs in comparison with the public sector.

7.9 Conclusions

Socio-demographic characteristics of the participants indicate that there could be certain aspects of inequity in the scheme with the Muslim population, illiterates and SC/STs using more of public hospitals when compared to private hospitals. Private hospitals were better in terms of structural aspects; however the results were statistically non-significant. In terms of service delivery, Patiala was found to be slightly better when compared to Yamunanagar. Public and private hospital

comparison showed that both the hospitals were almost similar in terms of service delivery. For user satisfaction, participants from Patiala, and private hospitals were more satisfied in terms of services offered. User satisfaction was also reported to be slightly better for RSBY participants when compared to non-RSBY participants. Finally, it was observed that in spite of the scheme being a cashless scheme, RSBY beneficiaries incurred OOP expenditure, though this expenditure was less than non-RSBY participants. Moreover, OOP expenditure was relatively high in private hospitals when compared to public hospitals.

Chapter 8
OVERVIEW OF FINDINGS

Chapter 8

OVERVIEW OF FINDINGS

This study focused on studying the availability, provision and use of health services in the implementation of RSBY and the factors that might influence it, in order to inform policy for improvement in scheme design. Specifically, the research focused on analysing the external environment (regulatory and political), institutional capacity and contract design of the scheme to understand its strengths and weaknesses and the incentive structures created by division of roles, responsibilities and relationships within the contracts. In addition, the research evaluated the availability and accessibility of services and analysed the utilization patterns. Lastly, the research compared the provision of health care *across* both public and private providers for RSBY beneficiaries and *between* RSBY and non-RSBY beneficiaries for a specific type of provider. The findings of the study from key stakeholder's interviews, exit interviews, checklists and secondary data analysis are presented in this chapter. These findings are presented in accordance with the three objectives of the study.

8.1 Objective 1

To analyse the external environment (political, regulatory), institutional framework and contract design of the RSBY scheme, in order to understand the strengths and weaknesses of the RSBY scheme design and incentive structures created by roles, responsibilities and relationships within the contracts.

8.1.1 External environment

Political scenario: The findings of the study indicate that the launch of RSBY scheme was politically driven, introduced by the then ruling party in a rush for quick political gains before the General Elections in India in 2009. Consequently, the scheme was poorly planned and may have lacked the careful attention to detail needed to sustain the programme and make it highly successful. The design of RSBY also requires political commitment at the state level, since the state government has a key role as a facilitator in the implementation of the scheme with a variety of players from the public and private sectors.

A comprehensive evaluation of existing schemes scattered across the states was not carried out. Lessons from a similar scheme, the failed UHIS, do not seem to have been incorporated. Some similar schemes implemented in various other countries such as Vietnam, Thailand and Philippines were reviewed; however, the lessons of these reviews do not seem to have served as guides in defining this scheme.

In the chosen States of Punjab and Haryana that this thesis examines, for the period from the latter part of 2011 to the beginning of 2013, Haryana had a Congress-led government while the ruling party in Punjab was the Akali Dal which frequently sees itself as a party strongly in opposition to the Congress. It was observed in the present study that having the same or different ruling parties at the Central and State level did not affect the implementation of the scheme.

Though changes have been introduced over time to make RSBY more functional, gaps still exist which need to be addressed. Interviews with key stakeholders indicate lapses in contract design, conflict of interest, lack of monitoring and supervision and accountability.

Regulatory framework: The regulatory framework is very weak, particularly for private health facilities. There is minimal regulation of private practitioners, nursing homes and hospitals. Even that minimal regulation, as seen in Chapter 5, is not followed. Despite a substantial presence of private institutional providers in the country, information regarding their number, structure, functioning, type and quality of care remains grossly inadequate. Neither a listing of private health facilities nor a record of services being provided by them is available. On the other hand, the public health sector, being subject to public audit, is obliged to comply with some minimum requirements. For regulation of the insurance companies and the TPAs, IRDA was the regulating body. Guidelines for insurance companies and TPAs were mandatory, without which they would not get the license to provide health insurance in the country. A License was also necessary for an insurance company to participate in the bidding process of the scheme.

8.1.2. Institutional Framework

The study shows that no formal organizational structure supporting RSBY was put in place. The existing structure of the Directorate General Labour Welfare was used to roll out the scheme with existing government functionaries being assigned additional

responsibilities. This again was more a matter of expediency. The MoHFW was hesitant to take up the responsibility of implementing yet another health insurance scheme after the earlier failure of the UHIS. Thereafter, RSBY was initially located in the Ministry of Finance, and then moved to the MoLE, which lacked the experience to implement a health scheme of such complexity.

The agencies responsible for RSBY in the two states under study are supervised by different government departments. In Punjab the PSHC has responsibility for the scheme, which is supervised by the Department of Health and Family Welfare, while in Haryana it is the ESIC, which is supervised by the Department of Labour and Employment. The Department of Health will always remain an important stakeholder of the scheme, as it primarily deals with health. The scheme becomes challenging in states like Haryana, where the implementing authority is other than the Department of Health. Very few human resources from the government have been provided for RSBY in either of the states; the existing staffs of the relevant departments have been assigned additional responsibilities for RSBY.

8.1.3. Policy and Guidelines

Designing the scheme, standardizing processes and preparing policy guidelines is the responsibility of the Central Government. Though state governments had the flexibility to amend these and introduce innovations, this was rarely done, as it needed the prior approval of the central government. Since RSBY has been an evolving model, some of the policy guidelines have been formulated after its launch in April 2008. Depending on the feedback from the state level implementers, additional policy guidelines or changes to previous guidelines have also been introduced in subsequent years. One such example is the enrolment criteria where a household headed by a woman was originally not eligible to be included in the scheme. State level implementers confirmed that policy guidelines were updated with each subsequent insurance cycle.

8.1.4. Roles and Responsibilities

At the Central level, the Central Government has various responsibilities such as oversight of the scheme, financing the scheme, setting up parameters (benefits package, empanelment criteria, BPL criteria), hardware specifications (systems and smart card), financing management/training, setting rate schedules for

services/reimbursement rates, developing clinical information, developing systems for monitoring/evaluation, monitoring state level use, other patient information and monitoring national RSBY information and training.

The state government, along with the Central Government, also looks at the financing of the scheme and the setting up of parameters like the benefits package, empanelment criteria and BPL criteria. Additionally, the state government has the responsibility of setting up the SNA, which has the overall responsibility of implementing the scheme. The specific role of SNAs are—contract management with the insurer, enrolment, training outreach and marketing to beneficiaries, financial planning and management, setting rate schedules for services and reimbursement, developing clinical information systems for monitoring/evaluation, monitoring state level use and other patient information and training. Some of these functions are done in conjunction with the Central Government (Table 8.1).

The roles and responsibilities of the insurance companies and TPAs relates to accreditation/empanelment of providers, collecting registration fees, enrolment, actuarial analysis, claims processing and payment, outreach/marketing to beneficiaries, monitoring at provider level and other patient information, customer service and training of hospital staff (Table 8.1).

While enrolling the participants, the insurance company is assisted by the FKO's such as ASHAs and ANMs. Other activities of the insurance company include customer services and monitoring (Table 8.1). TPAs primarily support the insurance companies during the process of enrolment, empanelment and claim settlement.

It is evident that most of the roles and responsibilities are with the central government and the insurance companies; while the state government plays a facilitators role.

Table 8.1: Roles and responsibilities of Central and State government, insurance companies and TPAs.

	Central	State	Insurer/ TPA
Oversight of scheme	X	X	
Financing	X	X	
Setting parameters (benefits package, empanelment criteria, etc.)	X		
Hardware specifications (IT Systems, Smart Card, etc.)	X		
Accreditation/Empanelment of providers			X
Collecting Registration Fees			X
Enrollment		X	X
Setting rate schedules for services/reimbursement rates	X		
Claims processing and payment			X
IEC, Outreach, Marketing to beneficiaries			X
Monitoring and Evaluation	X	X	X
Training	X	X	X

The contracts between the state governments and insurance companies do not mention the role of the TPAs. However, insurance companies in both states hired TPAs to facilitate enrolment and also to help with disputes arising from the management of the enrolment process. Notably, the TPAs did not play a role in the processing of claims. This could be because ICICI Lombard is a large insurance company with a high annual turnover of revenues and adequate human resources and could therefore process claims in-house. It was, however, seen in other states where there were public insurance companies that the role of the TPAs was significant in claim management as well as enrolment.

Conclusively, RSBY is independent of the usual governance bodies that seek to address health and poverty issues. As most of the responsibilities were contracted to the insurance companies, SNAs became weak, which led to RSBY being considered to be more of a hospital-centric and insurer-centric scheme rather than a beneficiary-oriented scheme.

8.1.5 Contract Design analysis

Formal or informal contracts exist between the six stakeholders namely, Central Government and state government; state government and the insurance company;

insurance company and public and private providers; insurance company and TPAs. Contracts under RSBY were standardized and states used the same contract. Although there is room for innovation and additions in the existing framework of RSBY in the agreement of the Central Government, the states under study had not exercised that flexibility.

Contract design analysis was done at three levels of implementation: (i) between the centre and state; (ii) between the state and insurance company; and (iii) between the insurance company and service provider. These were part of the formal contract which existed in the scheme. However, an informal contract also existed between the insurance company and TPAs.

The contractual agreement between the Central Government and the states was identical for Haryana and Punjab. The contract was not specific regarding which state authority would be signing the contract agreement and allowed flexibility to the states to assign a state implementing agency. The purpose of the contract was clearly outlined - to provide social security to the BPL workers and their families in the unorganized sector. The period of contractual agreement is not mentioned in the contract document. The contract clearly defines the roles and responsibilities of both parties involved, the Central Government and the SNA. Monitoring mechanism and monitoring parameters by the central government has not been stated in the contract document. Also, there was no mention of the empanelment criterion of the health care providers in the contract document. Also there was no mention of the incentive structure under the scheme (Table 8.2).

The contractual agreement between the state government and the insurance company for the chosen districts was almost identical. Coincidentally, the insurance company for the selected year of study in the chosen districts was ICICI Lombard General Insurance Company for both states. The contract between the state government and the insurance company was the most comprehensive contract in RSBY with details of contract commencement, duration and termination clearly specified, unlike the contract of the Central and State Governments where the period of the contractual agreement was not specified. This is due to the large share of responsibility that the insurance company undertakes in the implementation of the scheme. There are 32 articles listed in the contract document, supplemented by 16 annexures. The

empanellement criterion for the health care providers has been clearly stated in the contract document. One major gap in the contract design was – the monitoring strategy which was loosely stated in the contract document wherein the monitoring mechanism and parameters were not defined. There was no mention of the resources required for monitoring and supervision at district level and the incentive structure for the insurance companies under the scheme.

Contract between the insurance company and the health provider: Two contracts were analysed (between the insurance company and the health provider), one for Patiala district in Punjab state and the other for Yamunanagar district in Haryana state. Roles and responsibilities of both the parties and specifications of sanctions were clearly defined. However, the monitoring and supervision strategy was missing, also there was no mention of the incentive structure for the insurance company and the providers in the contract document (Table 8.2).

The contract agreement between the insurance companies and the TPAs was finalised without undergoing any bidding process. The TPAs were selected based on their reputation and previous experience with the insurance company. No parameters were defined for *renewal of contract*.

Table 8.2: Contract design analysis

	Central & state government	State & insurance company	Insurance company & provider
Ownership	√	√	√
Objective	√	√	√
Length of the contract	X	√	√
Payment mechanism	√	√	√
Roles & Responsibilities	√	√	√
Empanelment Criterion	X	√	NA
Monitoring mechanisms	X	X	X
Specification of Sanctions	X	√	√
Incentive Structure	X	X	X

Contract Implementation

Human resources: Human resources were not sufficient for implementation of the scheme at the state and district levels. At the district level, the nodal officer is the only dedicated RSBY staff from the state government for scheme implementation. At hospitals, round the clock availability of support staff was necessary for RSBY work, which was lacking. Even the insurance companies lacked manpower, with just one officer at district level looking after 2-3 districts at a time, in addition to responsibility for other schemes.

Insurance companies and market competition: A total of 27 health insurance companies were present in the market, offering health insurance coverage to the population. Of these, 21 were from the private sector and six belonged to the public sector. Some degree of market competition was present for the insurance companies in Patiala district and this competition, in terms of numbers, varied over the years. Though there were less public sector health insurance companies present in the market, their involvement in the bidding was comparable to the private sector in terms of number of bids made. Also, public sector insurance companies were more consistent in terms of their participation.

Financial resources: Premiums were paid by the Central and state governments in the ratio of 3:1. The premiums varied from state to state, depending on the insurance company. The premium collected by the insurance company from each family was INR 30 (₹ 0.3). A declining trend of premiums was observed at the national level and state level.

Enrolment: The entire responsibility of *enrolment* of beneficiaries was outsourced by the state government to the insurer. The contract between the state and insurance company is for one year and hence enrolment of the beneficiaries needs to be done every year. Yearly enrolment of the beneficiaries requires additional human and financial resources. This process is considered flawed by all stakeholders for several reasons, the primary one being that BPL listings do not change yearly. Even in 2011, the 2001 census list, which was the most recent year of census, was used for enrolment since an updated list of BPL families was not available. Secondly, due to the time consuming process of re-enrolment, which results in delays, a family is often short on enrolment cycles and loose access even though they pay for whole year.

Empanelment of health facilities: Empanelment of public and private facilities was done by the insurance company in consultation with the state nodal officers. Several issues were raised by various stakeholders regarding the process of enrolment. It appeared that the insurance firms did not start with a list of hospitals available for empanelment; indeed, such a list may not even have been available. Quality of care that a potential empanelled hospital was required to provide was not among the selection criteria.

Fixed package rates: Under RSBY, there is a fixed capitation for every treatment in a package of care. The rates within the package (package rates) are predetermined by the Central Government. The state government has the authority to revise the rate at the state level after approval from the Central Government. However, such amendments were rarely practised. Private providers, especially from Patiala, were not satisfied with the package rates. The private providers felt strongly that package rates were not realistic and were set far too low. They also suggested that it was unviable to have the same package rates across the entire country and that these should be based on the local situation in each state. The programme managers were of the view that the process for deciding the package rates was well thought out and that the package rates of services provided under the scheme by the health facilities were at the appropriate level. On the other hand, service providers, especially private providers, were of the view that package rates were meagre and good quality services could not be provided at such rates. Package rates may have serious implications for the scheme. On one hand this may affect the premium, making it too expensive for the government; on the other, it may affect the level of incentive for the providers, which can further affect the quality of services.

Monitoring and supervision: Monitoring and supervision was a weak component under the scheme. There were no separate financial or human resources allocated for these tasks nor was there any strategic framework for monitoring and supervision, specifically in the context of periodicity, accountability, task allocation, and performance indicators. The contract between the state government and the insurance company did not lay down a reporting schedule or a format. Monitoring and supervision was mainly carried out by the insurance companies (where there is likely to be a conflict of interest) while there was no strategy to monitor the insurance

company. Proper oversight was a glaring gap. At the central level, a technical cell was engaged in overall monitoring and supervision including data handling and management.

Training: Training at the Central level was weak and the staff was mainly trained on the job. State level workshops were organized to train staff regarding implementation of the scheme. District and block level workshops were conducted where staff of all hospitals had been trained. The district level workshops involved the business process outsourcing, public relations officer, deputy commissioner and sarpanch (village headman), all of who confirmed that they had been given training several times. The insurance company in Patiala stated that they had trained both private and public providers regarding scheme implementation and claim reimbursements.

Issues with equipment: The providers reported that there were several issues related to registration equipment at the health facilities provided by the insurance company. Break down were reported and repairs were not immediate.

Awareness: The beneficiaries were not fully aware of the services available in the scheme or at various health facilities. The Beneficiaries did not know how to locate the empanelled hospitals. A different kind of absence of information was apparent when a provider stated that private providers were not aware of the scheme; that is why they were not available for empanelment.

RSBY was meant to be a cashless scheme so that beneficiaries did not have to make any payment if they were admitted to a health facility as an RSBY beneficiary. Even the cost incurred before and after the admission (for a certain period) is to be covered under the scheme. However, the study shows that OOP expenditures of the participants were high. The families of beneficiaries were paying for medicines, diagnostics, food and transportation, items that are provisioned in the contract to be paid for by the caregiver.

The scheme is not entirely a paperless scheme, since a parallel system of hard copies along with electronic copies exists (Chapter 5). Hard copies are more susceptible to changes by health service providers and they also run the risk of being replaced. Being paperless can be an advantage, as records once entered and updated in the electronic version cannot be altered later, thus preventing service providers from

indulging in fraudulent activities. On the other hand, in case of an electronic machine breakdown, insurance companies would gain by not getting the equipment repaired, which would lead to a drop in claims, since the providers would be unable to admit a patient under RSBY in the absence of an electronic check of the patient's biometrics. Paperless schemes, if strictly implemented, can increase transparency.

8.2 Objective 2

To evaluate the availability of services through mapping the health-care providers including the packages offered by the empanelled health-care providers, and analysing the utilization patterns.

8.2.1. Access to services under RSBY

It is to be kept in mind that beneficiaries of the scheme are BPL families. Generally, these families survive on daily wages. Therefore, geographical accessibility of services is a priority for beneficiaries, as availing the RSBY services from a far-flung location would entail long travel time and affect their daily wages.

In Patiala, the public empanelled facilities seem to be more equitably distributed throughout the district as opposed to private facilities, which seem to be geographically clustered around pockets at the sub-district level, mainly around Patiala sub-district. Seven private hospitals and 10 public hospitals were empanelled in Patiala district.

A majority of the private facilities are clustered around Patiala sub-district. Non-empanelled private facilities are clustered in Patiala sub-district and some in other sub-districts. However, there are several public non-empanelled facilities that are dispersed around the district. The volume of empanelment of facilities seems to be aligned to BPL population density.

In Yamunanagar, very few public facilities were empanelled under RSBY. Almost all the empanelled facilities in the district are from the private sector and were clustered around the Jagadhri sub-district.

There are several public non-empanelled facilities that are dispersed around the district. The private non-empanelled facilities are again clustered around Jagadhri sub-district. The volume of empanelment of facilities seems to be aligned to

population density with the highest BPL population. Therefore a majority of the empanelled facilities were in Jagadhri area.

The current process of empanelment has resulted in the majority of hospitals being empanelled from urban areas. This is primarily because of a fewer number of hospitals in rural areas, and even these rarely meet the eligibility criteria. Health facilities providing only primary care were not empanelled under the scheme. The rural population therefore had to travel long distances to avail health services.

Even in urban areas, distributions of the empanelled hospitals in the two districts were found to be clustered in one or two sub-districts, thereby aggravating the accessibility issue. Moreover, the number of hospitals empanelled under RSBY was very few. Due to this gap, accessibility is likely to be a major challenge for the rural population.

8.2.2. Availability of services

Empanelled hospitals lacked many required departments. Super-speciality departments were negligible in public hospitals. None of the public hospitals in either of the districts provided all the packages of the RSBY scheme. A few private hospitals in Yamunanagar provided all facilities but none of the private hospitals in Patiala provided all facilities. Medically managed diseases (MMD) general (surgical and non-surgical), obstetrics and gynaecology, and paediatrics were the departments available in most of the empanelled hospitals.

8.2.3. Enrolment under RSBY Scheme

In the present study, those enrolled under the RSBY scheme amounted to, respectively, 15% and 40% of the total BPL population in Patiala district and in Yamunanagar district. Issues such as non-availability of an accurate list of eligible candidates and the process of re-enrolment by the insurance companies aggravated the situation. The maximum number of individuals that can be enrolled per family under the scheme is five. The average number of individuals enrolled per family in the present study was slightly more than half of this. This confirms that adequate enrolment per family is not being done. Either the insurance company is deliberately not enrolling all the family members, or the family is hesitant to enrol all its members. It was found during the course of the research (as reflected in Chapter 6) that the population enrolled under the scheme mainly belong to the economically productive

age group. In Patiala district, the highest enrolment rate was for the age group 25–64 years (62% of the population of this age group), while the enrolment for the elderly age group (>64 years of age) was only 27%. Similar data was not available for Yamunanagar.

Off-targeting was more likely for SC/ST, illiterate or literate up to primary level and Yamunanagar, while it was likely for females. Leakage (non-BPL population getting enrolled in the RSBY scheme) was more likely in Patiala district. However, it is to be noted that for estimation of off-target and leakage, the sampled population from health facility was taken (exit interview) which may not be the ideal setting for such estimation. In Patiala district, the enrolment rate for the age group 25–64 years, and elderly was comparable and hence there were no signs of adverse selection. Also, the proportion of children enrolled under the scheme was very low. Similar data was not available for Yamunanagar district. Enrolment of females under the scheme was almost similar to the enrolment of males across all the age groups, though, it was slightly more than males for the age group 25 to 64 years.

8.2.4 Scheme Utilization

The major findings of scheme utilization are summarized in Table 8.3. A comparison of scheme utilization was made between the districts of study (Patiala and Yamunanagar) and between the providers in those districts (private vs public hospitals). The number of claims in Yamunanagar was almost six times the number of claims in Patiala district. The number of claims per 100 population enrolled was also twice in Yamunanagar as compared to Patiala. Higher claims in Yamunanagar may be attributed to better accessibility in the district because of higher number of empanelled hospitals. Other factors contributing to the low service utilization in Patiala could be the relationship between the insurance company and the private providers and the satisfaction level of the providers with the package rates. It was noted in Chapter 5 that in Patiala district, the relationship between the insurance company and the private providers was not healthy. Their resentment stemmed from the feeling that the package rates were not sufficient.

In order to assess the effectiveness of state-level implementation, consistency across public and private hospitals was checked. The findings for public and private hospitals varied across the parameters studied in the present study. In terms of service

delivery, Yamunanagar was more consistent with the presence of a RSBY helpdesk, information received from the RSBY helpdesk, provision of food and transportation reimbursement. Patiala was more consistent in diagnostics and medicines organized from outside the hospital, the process of discharge, OOP expenditures and overall rating of the hospital. The high discrepancy observed in the difference of claimed amount and reimbursed amount in Patiala (particularly in private hospitals) is a matter of concern. It is noteworthy that the numbers of claims in Patiala district were low; however, the claimed amounts were high. Such a situation raises the possibility of providers trying to compensate losses due to low service utilization with higher claim amounts.

Table 8.3: Scheme utilization comparison between districts and type of facilities

	Patiala vs Yamunanagar	Private vs public hospitals
Claims	<p>Claims made in Yamunanagar district were six times more than those made in Patiala district. However, claims per 1000 family enrolled in Yamunanagar were almost two times of Patiala. The number of claims per 1000 individuals enrolled under the scheme was 25.9 for Patiala district while it was 36.4 for Yamunanagar district. Most of the claims belonged to the age group 25–44 years, followed by the age group 45–64 years in both the districts. In Patiala, more females have used the services while in Yamunanagar, more males have used the services.</p> <p>Services availed the paediatric age group was very less.</p> <p>Most of the claims were made for the head of the households or their immediate relatives—spouse, son or daughter.</p>	<p>In both the districts, more claims were made in private hospitals. This was significantly very high in Yamunanagar district. More males were going to private hospitals whereas more females were going to public hospitals. In terms of trend of claims over the month, a fluctuating trend was observed.</p>
Clustering of claims	<p>In Yamunanagar district, about half of the claims were from four hospitals (out of 37 empanelled hospitals), all private. In Patiala district, about two thirds of the claims were from 3 hospitals (out of 17 empanelled hospitals) – 2 private, 1 public.</p>	
Reimbursed amount by insurance companies to providers	<p>The mean amount per case reimbursed to hospitals by the insurance company was more in Yamunanagar district as compared to Patiala district.</p> <p>In Yamunanagar district, reimbursed amount by the insurance company was almost equal to the amount claimed by the hospitals; whereas in Patiala district, the reimbursed amount was much less than what was lodged by the facilities with the insurance companies</p> <p>In Yamunanagar, about three fourths of the hospitals were not getting the reimbursed amount in time. Data was not available for Patiala.</p>	<p>The reimbursed amount was higher for public than private hospitals in Patiala district while it was marginally higher for private hospitals in Yamunanagar. Difference in claim amount and reimbursed amount was primarily observed in public hospitals.</p>
Difference between premium and claim	<p>The difference between the premium collected and claims disbursed was higher for Patiala as compared to Yamunanagar</p>	Not relevant
Diagnosis	<p>In Patiala district the most common package used was MMD (general) followed by MMD (ICU), general surgery and gynaecology. Whereas in Yamunanagar, the most common package was MMD (general) followed by ophthalmology and MMD (ICU).</p>	<p>In private hospitals, the most common package was MMD (general) followed by ophthalmology and MMD (ICU). In public hospitals the most common package used was MMD (general) followed by general surgery and gynaecology.</p>
Length of stay	<p>Mean length of stay of the beneficiaries in the hospitals was higher for Patiala district as compared to Yamunanagar district.</p>	<p>The mean length of stay was significantly more in public hospitals when compared to private hospitals. The difference in stay between private and public hospitals was more in Patiala district as compared to Yamunanagar district.</p>

8.3 Objective 3

To compare the provision of health care across both public and private providers for RSBY beneficiaries and between RSBY and non-RSBY beneficiaries for a specific type of provider.

8.3.1 Socio-demographic characteristics

Most of the study participants were in the age group of 25 to 44 years. It appears that younger patients tend to go to private hospitals and older ones to public hospitals. More females were utilizing facilities as compared to males in both public and private hospitals. Muslims, SC/ST, and illiterate or literate up to primary level were using more of the public facilities as compared to the private.

8.3.2. Structural aspects

From the self-assessment tool - Health Provider Checklist, private hospitals reported a better score than public hospitals under all categories of structural-aspect evaluation in both districts. These were confirmed by the Observation and Facility Record Checklist. For availability of records, private hospitals were almost similar to public hospitals, except for six categories (mopping, toilet sanitation, autoclaving, grievance redressal, radiology services and in-patient evaluation) where private hospitals were better than public hospitals. Overall, structural evaluation was found to be better for private hospitals. However, this should be cautiously interpreted as none of these differences were statistically significant.

8.3.3. Service delivery

The major findings of service delivery are summarized in Table 8.4, with a comparison between the districts (Patiala vs Yamunanagar) and between the providers (private vs public). A mixed response was observed for various service delivery categories studied, though, Patiala seemed to fare better in most of these categories (Table 8.4). Between public and private hospitals, service delivery in public hospitals was better in some aspects and private hospitals in other aspects. Registration fees were paid by all participants; however, the use of this registration fee was unclear. Insurance companies considered the registration fees to be a part of their first instalment, while the policymakers considered it to be for administrative charges. As all the participants had paid registration fees, it could be possible that insurance

companies ignored those eligible people who could not pay this amount. In the present study, most of the hospitals were not providing food to the RSBY participants, despite this being clearly stipulated in the contract document. Since the cost of the food is included in the package rate, the providers could be retaining that amount, or using it for cost-offsetting purposes. It was also observed that where food was not provided, hospitals did not have facilities to prepare food. Such a situation is indicative of a flaw in the empanelment process, since availability of catering services should have been a factor in the empanelment process or identified during monitoring and supervision.

Reimbursement of transportation cost is another service that is included in the package rate but was not given to any participant in Yamunanagar, while only half of the participants in Patiala received it. This is another lacuna which works to the advantage of providers, and adds to their profit.

Access to facilities played an important role in the selection of a service provider, and superseded the kind of care given to the beneficiaries. Proximity to the facility was an important consideration for the beneficiaries due to the opportunity cost of being away from work, since most of the beneficiaries are daily wage earners for whom a visit to the hospital could result in a loss of that day's wages.

Table 8.4: Service delivery across district and private vs public

		Patiala	Yamunanagar	Private	Public
RSBY Help desk	Separate RSBY help desk	42.1	2.1	28.5	16.1
	Staff at RSBY help desk was helpful and polite	95.4	97.4	95.9	96.9
Waiting Period (<15 Min)		71.3	85.3	82.4	74.1
Process of Registration	Fingerprint scanner used for fingerprint verification	97.4	97.4	97.4	97.4
Information received from RSBY help desk	Information about treatment cost given to the patient	48.2	8.4	24.9	32.1
	Patient was informed about the money left in the smart card	41.0	10.5	22.3	29.5
	Patient was informed about insufficient money in the card	20.0	0.0	21.7	12.0
Diagnostics and medicines (OOP)	Patient asked to get diagnostic test from outside the hospital	13.8	21.5	21.8	13.5
	Patient asked to get the medicines from outside the hospital	7.7	16.2	15.5	8.3
Food provided to patients during hospital stay		20.5	36.1	34.7	21.8
Process followed during discharge	Discharge summary given to patient at the time of discharge	84.1	100.0	89.6	94.3
	Fingerprint verification at time of discharge	94.4	97.9	96.9	95.3
	Patient informed about balance amount in card at discharge	47.7	20.4	33.9	34.4
Transportation cost reimbursed by hospital		45.1	0	18.1	27.5
Post-hospitalization knowledge & expenses	Knew about 5-day post-hospitalization expenses	30.3	6.8	19.2	18.1
	Medicines were provided by the hospital	86.9	100.0	89.4	97.3
	Diagnostic test was done free of cost	11.1	0	0.0	11.1

8.3.4. Comparison for choice of hospital, transport and diagnosis

A comparison was made between the district, across private and public hospitals and RSBY and non-RSBY participants. Table 8.5 details the comparison including the reason for choosing the hospital, previous facility contacted, transportation and diagnosis of the participants. In Patiala district, a majority of the participants did not contact any health facility before coming to the present one, whereas in Yamunanagar a high percentage of the participants had contacted a health facility before getting admitted to the present one. A direct visit to an empanelled public health-care facility at the secondary level of care without contacting any facility at the primary level could be indicative of a weak referral system in the district of Patiala, or it could be

due to lack of information. Ideally, those seeking health care in public health facilities should first visit primary care facilities closer to their homes, which would refer them to secondary care hospitals as needed.

Table 8.5: Comparison for choice of hospital, transport and diagnosis

	Patiala Vs Yamunanagar	Private vs Public	RSBY vs Non-RSBY
Reason for choosing hospital	In Patiala, hospitals were primarily chosen by the participants because of proximity whereas in Yamunanagar they were chosen on relatives and friends advice.	Private hospitals were chosen primarily because of the reputation of the hospital whereas public hospitals were chosen because of the proximity.	Most common reason for selecting the hospital for RSBY participants were relative/friend suggestions followed by preferred hospital (always go to the same hospital) and reputation. Whereas non-RSBY participants selected the hospital based on reputation followed by relative/friend suggestion and proximity.
Previous facility contacted	In Patiala district, majority of the participants had not contacted any health facility before coming to the present one; whereas in Yamunanagar, a high percentage of the participants had first contacted a health facility, many of them were individual private practitioners.	About one third participants from private hospital and half of the participants from public hospital did not contact any health facility before coming to the current facility.	About one third RSBY participants and half of non-RSBY participants did not contacted any health facility before coming to the current facility.
Transport	Both in Patiala and Yamunanagar, most common mode of transport was three wheelers.	In terms of mode of transportation, bus was used more commonly used by the participants of public hospital when compared to private hospitals, both within the district and across the district.	Bus and three wheelers were used more by the RSBY participants while car was used more by non-RSBY participants.
Diagnosis		Almost similar pattern of diagnosis was observed in private and public hospitals, except for slightly more cases of orthopaedics in public hospitals and slightly more cases of urology in private hospitals.	The diagnosis pattern of RSBY and non-RSBY participants was also almost the same, except for slightly more cases of orthopaedics in non-RSBY and general surgery in RSBY.

8.3.5 User Satisfaction

User satisfaction relating to experience during admission, hospital stay and discharge including availability of wheelchair and care from nurses and doctors, was better among the participants of Patiala district when compared to Yamunanagar. User satisfaction seemed to be significantly better among the participants from private

facilities when compared to participants from public facilities. When comparing user satisfaction of RSBY participants with non-RSBY participants, the former was slightly better. Table 8.6 makes a comparison of user satisfaction across various groups studied.

Table 8.6: User satisfaction

	Process	Patiala	Yamunanagar	Private	Public	RSBY	Non RSBY
Experiences during admission	Bed made available at time of admission	98.2	98.0	97.0	99.4	99.0	97.3
	Availability of Wheel chair	96.8	100	98.8	96.8	100	97.1
	Hospital Staff Pushed wheelchair	88.2	64.8	82.1	76.2	83.7	77.9
	Time taken by nursing staff (Less than 30 min)	77.2	96.6	90.4	81.6	88.1	84.3
	Time taken by doctors	68.7	83.5	79.8	70.8	78.2	72.8
Care from nurses	Nurses treat patients with courtesy and respect	85.2	80.3	86.6	78.8	86.5	79.1
	Nurses listen carefully to the patients	87.5	83.2	89.7	80.7	87.6	83.2
	Nurses explain things nicely	86.2	75.5	85.9	75.9	81.9	80.5
	Patients get help as soon as he/she wanted it	83.6	54.8	75.4	67.2	67.8	75.4
Care from doctors	Doctors treat the patients with courtesy and respect	86.2	86.9	90.7	81.9	88.1	84.9
	Doctors listen carefully to the patients	87.5	82.1	90.7	78.5	85.8	84.1
	Doctors explain things nicely	85.5	72.9	84.9	73.7	80.3	78.8
Hospital environment	Patients' surroundings & bathroom clean	80.7	85.2	92.7	71.7	85.0	80.5
	Patients' beds found quiet at night	78.2	86.3	90.4	72.5	83.2	80.8
Experiences in Hospital	Patients' get help to go to the bathroom or for bedpan	72.5	70.7	78.6	63.0	72.8	71.2
	Hospital staff help to reduce the patient's pain	89.5	89.9	92.9	85.9	91.2	88.2
	Hospital staff explain about the medicine & SE	71.9	24.2	62.2	47.3	55.4	54.9
Discharge Experience	Staff enquire from the patient if any help required	99.2	96.3	99.2	96.3	98.4	97.3
	Suggestion for any follow-up	98.7	93.2	97.2	94.9	97.4	94.8
Hospital Rating (out of 10)		7.9	5.5	6.9	6.7	6.5	7.1
Recommend Hospital to Friends		98.7	98.0	98.7	98.0	99.2	97.5

8.3.6. Out-of-pocket expenditures

OOP expenditure incurred in private hospitals was almost double that of public hospitals. It was expected that OOP expenditure of RSBY beneficiaries would be

significantly less than non-RSBY beneficiaries. However, not much difference was observed in the OOP expenditure of RSBY beneficiaries and non-RSBY beneficiaries in Yamunanagar district, whereas in Patiala district, OOP expenditure of a RSBY beneficiary was significantly less when compared to a non-RSBY beneficiary. Use of the public sector facilities contributed to reduction in OOP expenditure. Data showed that non-RSBY BPL persons used the public sector at a rate twice that of the use of private sector, while the RSBY BPL populations seemed to use public and private sector at the same rate. A more detailed examination, than is possible here, would be required to yield a more nuanced illustration of whether the use of the public sector would lead to a greater reduction in OOP expenditure than being enrolled in RSBY.

The present study points out certain gaps in the design of the scheme. Roles and responsibilities of various stakeholders were not judiciously assigned in the contract document. The insurance companies were responsible for empanelment of health facility and IEC activities which is questionable as it has a direct relationship with the revenue generation. The onus of scheme implementation is on the insurance company, and the state government played more of a facilitating role. The Contract design also lacked a robust 'monitoring and supervision' framework. There are in-built incentives for various stakeholders under the scheme. Regulation for private providers in India is very weak which leads to variation in quality of care, in some case with little to no oversight. RSBY at the time of empanelment has attempted to introduce an inspection mechanism. However, follow up and monitoring post inspection is poor. Gaps were also noticed in implementation as there was shortage of designated manpower, package rates were debatable, accessibility to health facility was poor, and coverage of the scheme was inadequate.

8.4. Study Limitations

Results of the study need to be cautiously interpreted as there were certain limitations associated with the study. These limitations can be divided into two types. Firstly, limitations associated with the data and secondly limitations associated with the study design.

Data limitations: Complete contract analysis could not be undertaken because the contract document between the insurance company and TPAs could not be retrieved.

Information regarding the bidding and the negotiation process was also not available. The line listing of the BPL population was not available for Yamunanagar district and therefore age- and sex-wise coverage of the scheme could not be assessed for Yamunanagar as it was done for Patiala. About 43% of the empanelled hospitals (Patiala 5, Yamunanagar 18) did not provide any data on the services available in their hospitals. This information would have helped in understanding their eligibility and the process of empanelment. The beneficiaries were mapped at sub-district level and not below that because of the limitation of availability of GIS data at block level, which was a further limitation. Market analysis could not be done for Yamunanagar district as the insurance bidding information, over the years, was missing for Yamunanagar district.

Secondary data analysis was carried out for the second objective; however, the quality of the data available for the secondary data analysis could not be verified in the present study. There was no separate source available to cross-check the data. In India, private hospitals range from small nursing homes to big super-speciality centres with varying degrees of quality of services (Thamba et al., 2012). One of the limitations associated with the study was in the context of data analysis. While making a public vs private comparison, data from all private facilities was managed irrespective of the type of private facility with regard to quality, bed strength, availability of services, etc.

Study design limitations: In relation to the design of the study, the RSBY beneficiaries were identified from selected hospitals, though ideally both RSBY and non-RSBY beneficiaries should have been identified through household surveys. Moreover, the views of the beneficiaries regarding the scheme design were not collected in the present study. Feedback information from the beneficiaries would have taken us closer to the gaps. Qualitative methods (focus group discussions or in-depth interviews) to obtain in-depth perceptions of the beneficiaries would have better reflected the gaps in the scheme. Due to logistical constraints of the study, a purposive sampling was used to select the RSBY empaneled hospitals in both the districts. The result of the study should hence be cautiously interpreted and generalized.

Another limitation relates to the study area, since the study was conducted only in two states. Moreover, the insurance company (ICICI Lombard) was the same in both the

selected districts and hence a comparison of the impact of the insurance company on scheme implementation could not be studied. Majority of the RSBY participants belong to the BPL population while non-RSBY participants may or may not. The RSBY participants avail services without paying, while non-RSBY participants need to pay for the same services. For these reasons, perceptions of the quality of care by them may differ. It is likely that RSBY beneficiaries may be more favourable in their judgement of the quality of care compared to non-RSBY participants, for the same facility.

Chapter 9
DISCUSSION, CONCLUSIONS AND
RECOMMENDATIONS

Chapter 9

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The findings of the study in accordance with the three objectives have been enumerated in the previous chapter. This chapter takes the discussion further on government failure including New Public Management and PPPs, and market failure and PPPs (9.1), response of RSBY to equity concerns (9.2), examining the gaps in RSBY as a PPP model (9.3), influence of contractual arrangements in meeting RSBY's aims (9.4) and concluding with recommendations for policy (9.5).

9.1 Government Failure

By 2000, several sources suggested that the public delivery of health services in India was in crisis (Hammer et al., 2007). High absenteeism, low quality of clinical care, low satisfaction level, corruption, high out-of-pocket expenditures, poorly maintained, understaffed and ill equipped buildings, long waiting hours and indifferent attitude of the health workforce in public facilities resulted in inefficiency, ineffectiveness, and underutilization of services. As the public health delivery system failed, a private sector emerged which could meet the demands for those better off. The inefficiencies of the public sector affected particularly the poor.

This section broadly highlights four important aspects where the role of the public sector was less than satisfactory which RSBY helped address through adopting several different strategies. These strategies were: engaging heavily with the private sector and thus bringing in market forces, providing subsidized health insurance for the BPL population of India, and attempts to improve quality of services for the poor through introduction of competition. The intention was to curtail catastrophic out of pocket expenditure for health care through cashless provision of services and to increase accessibility to care which the public sector had become unable to ensure.

New Public Management and PPPs

The need for reforms in India's health sector has been widely discussed and addressed by successive plan documents, the national health policy and by several national and international experts and agencies. Reform proposals would include greater decentralization and autonomy for the providers of health care, with the government providing an enabling environment through planning, financing and regulating health services and involving the private or non-state sector in provision of services. This new approach, as discussed below, reflects New Public Management (NPM) elements, elaborated in the Chapter 2 literature review, which advocates inter alia competition (Walsh, 1995), efficiency through contracting the private sector (Heard et al., 2011) minimal government, de-bureaucratization, decentralization and privatization (Kalimullah et al., 2012). Some of these elements of New Public Management were implemented in RSBY which includes the private sector in health care delivery in an innovative way through a public private partnership model.

Partnership with the private sector has emerged as a favored approach to reforms, in part due to this "new managerialism" and also because of resource constraints in the public sector across the world (Michell-Weaver and Manning, 1992). There is a growing realization that public and private sectors in health can potentially gain from one another (Bloom et al., 2000, Raman and Björkman, 2008, Agha et al., 2003). Involvement of the private sector is, in part, linked to the wider belief that public sector bureaucracies are inefficient and unresponsive and that market mechanisms will promote efficiency and ensure cost effective, good quality services (Diarra, 2001). RSBY reduces public sector engagement through a PPP model, harnessing the private sectors' energy and creating competition for the public sector.

Polidano rightly reports that many developing countries have taken up elements of the NPM agenda, but have not adopted anything remotely near the entire package (Polidano, 1999). There are arguments that the new public management (NPM) is not appropriate to developing countries on account of problems such as corruption and low administrative and regulative capacity (Polidano, 1999). The outcome of individual initiatives depends on localized contingency factors rather than any general

national characteristics (Kumar, 2013). Though RSBY is modelled on a Public-Private Partnership, which is reminiscent of NPM, the design of the scheme has not completely adopted the NPM principles.

Hood (1994) has outlined seven principles of new public management for the public sector, which are: professional management of public organizations; private-sector styles of management practice; greater competition; explicit standards and measures of performance; greater emphasis on output controls; greater discipline and economy in public sector resource use and a shift to disaggregation of units in the public sector (Hood, 1994). NPM envisages hands-on professional management of a public organization where managers at the top level have clear assigned responsibilities while limiting or eliminating vague diffusion of power. Such an arrangement can lead to processes where those assigned responsibilities can be made accountable. However, the present study on RSBY shows that managers ostensibly held responsible for implementation (head of the state nodal agencies) did not have complete authority. For any change in the scheme, permission of the central government had to be taken. This diffusion of power led to erosion of accountability. Accountability was also compromised due to an absence of fixing clear roles and responsibilities of various stakeholders. The state governments had outsourced most of their responsibilities to the insurance firms and had thus reduced their own role.

RSBY was launched without putting in place any formal organizational structure. A key element of NPM, disaggregation of the public sector into corporatized units of activity, with devolved budgets, was not seen. Though the RSBY design allowed a separate entity/structure for scheme implementation, this flexibility was left to the states. Certain states adopted an independent trust to manage the scheme. But in the two states of the present study, Punjab and Haryana, there was no separate institutional structure established for implementation of the scheme. The existing structure at the central level (the Directorate General Labour Welfare) and state levels was used to roll out the scheme. This added extra work to the existing responsibilities of the public servants, with no shifting of existing responsibilities or creation of additional posts. The Nodal officer was the only dedicated RSBY staff at the district level for implementation. This resulted in overloading the staff with new

responsibilities, for which no extra remuneration or any other incentive was given to them. This was done more as a matter of expediency.

An important principle of NPM is performance management (Kalimullah et al., 2012). However, RSBY does not have explicit standards and measures of performance. Defined and measurable goals and targets are missing in the scheme. No monitoring indicators have been included rendering it difficult to measure performance in a quantitative or qualitative manner. In fact, quality of care was not taken into consideration at any stage of the contractual engagement nor was it envisaged as an outcome, although one of the objectives of the scheme was to provide quality care to the poor. Monitoring of the scheme with regard to out-of-pocket expenditures, quality of care and accessibility to services was missing. There was no mention of incentive structures, based on performance, for any of the stakeholders (public or private) in the contract document. The emphasis was more on implementation aspects such as enrolment, empanelment of hospitals, IEC, service utilization, etc.

A model of bureaucracy is offered within public choice theory, resting on the belief that public sector bureaucrats have little or no incentive to promote technical efficiency (Bennett et al., 1997). They are seen as self-seeking, motivated only by such factors as 'salary, prerequisites of the office, public reputation, power, and patronage' (Niskanen, 1973). Public system actors, the property rights theorists argue, lack ownership, as within the public system there is weakening of property rights. There is lack of any obvious threat to the employment of the staff, resulting in a lack of incentive for efficient performance. It is to be noted that the public cadre in India is based on fixed salary, where employment is permanent. The property rights is further weakened also in the state governments' contracting most of the activities to the insurance company with themselves primarily playing a facilitators' role.

However, a shift to greater competition in the public sector, a key aspect of NPM, was built in the scheme. Competition was introduced in the market within the private providers and also with the public providers. There was a move towards term contracts, public tendering procedures and introduction of market disciplines in the public sector. This aspect of NPM brings in competition which is seen as a key strategy to lower costs and provide better standards. Partnerships were based on

contractual arrangements. Some of them were fixed term. The bidding process for contracting an insurance company was also based on public tendering.

In the states the study found that market competition, although weak, was present. There were four public sector insurance companies who bid for the scheme continuously for four years. The participation of the private sector varied and there was only one private company which participated in the bidding process for all the five years. As far as the providers were concerned, especially private providers, most of them were concentrated in certain areas.

There was some degree of attention to private-sector styles of management in the scheme as advocated by NPM. RSBY applied private sector management tools to a publicly financed scheme. The scheme was designed so as to allow the private insurance companies and TPAs (Third Party Administrators) to manage the process of enrolment, empanelment and IEC. The insurance company had flexibility for contracting the TPAs. The scheme, in reality, was managed by private insurance companies and TPAs. The private providers managed the medical cases as per their own protocols.

Stress on greater discipline and achieving economy in public sector resource use was partially visible in the scheme. Payments to the providers were standardized. Based on the package rates, a fixed payment was reimbursed to the providers for the services provided by them to the beneficiaries of the scheme.

Package rates under the scheme were extensively discussed with various stakeholders during the course of the study (chapter 5). Package rates are like a double edged sword – high package rates would mean more profit for the providers, but higher premiums from the government to insurance companies would adversely affect the affordability of the scheme. On the other hand, low package rates would be a poor incentive to provide adequate services to the poor by the private providers. Incorrect fixing of package rates is a risk factor which can adversely affect the scheme. A balance is, therefore, essential so that the providers are satisfied and the burden of premium on government is sustainable. However, in the present study, it was apparent that the two states have not yet found the best balance.

RSBY has thus adopted some of the elements of the NPM but where adopted, this has been done only to some extent. Certain key elements of NPM were missing, as reflected in diffusion of power with no clear lines of authority for managers; unclear roles and responsibilities and lack of complete authority; lack of corporatized units of activity with devolved budgets; no explicit standards and measure of performance, and lack of monitoring. If these were present, it could have enhanced implementation performance.

Financial protection for the poor

Even though health outcomes in India have improved over time, distribution of health achievements continue to be strongly patterned along such dimensions as gender, caste, wealth, education, and geography (Joe et al., 2009, Balarajan and Villamor, 2009, Sen et al., 2002). Amongst these, difference in health care services between rich and poor has been a major concern for the government. In India, many among the poor experience bad health, not infrequently as result of the low-level of income and social marginalization (Deogankar, 2004).

It has been widely recognized that health insurance is one way of providing protection to poor households against the risk of health spending leading to poverty. The poor are usually unable or unwilling to take up un-subsidized health insurance because of its cost, or lack of perceived benefits (RSBY, 2014b). Organizing and administering health insurance, especially in rural areas, is also difficult. RSBY was introduced to fill this gap and provide security from such risks to the poor. The scheme has made provisions to take care of the health needs of a much neglected section of the population which had limited access to care. BPL beneficiaries now have a choice to obtain services with a fixed amount of subsidy from a private or public facility. The exit interviews of the participants show satisfaction with the care and attention meted out to them in health facilities (Chapter 7). It is noteworthy that it is not the poor who have to reach out to the insurance company; but it is the insurance company which reaches out to the poor, although somewhat imperfectly as we noted. RSBY has therefore helped to address the deficiencies of the public sector with respect to helping the poor to access care.

Quality of care

Quantity rather than quality of health services has been the focus historically in developing countries. Ample evidence suggests that quality of care (or the lack of it) must be at the center of every discussion about better health (Peabody et al., 2006). In India, nearly 30% of families are below the poverty line. Hence they can only access government hospitals due to the free treatment provided. But Government hospitals are known for their lack of sanitation and basic infrastructure like beds, qualified doctors, sufficient medicines, inadequate quantity and quality of staff, underpaid and unhappy staff, etc (Ramya, 2012). The attitude of employees is also not up to standard in some hospitals. Timely services and presence of staff is one of the major concerns in these hospitals. Infrastructure and the 3M (Material, Manpower & Money supply) in Government hospitals is also a big concern. Although the government provides free medicines, improper storage in unhygienic conditions is commonly seen (Ramya, 2012). Quantitative improvements in service provision have been achieved in a majority of the states; but quality of care still needs improvement. A disproportionate increase in quantity without a proportionate increase in human resources and adherence to acceptable standards has led to a compromise in quality (Sharma, 2012).

RSBY provided an opportunity for healthcare in the private sector to serve the poor. The strength of the scheme lies in the fact that it is a social welfare scheme in the PPP mode with inbuilt incentives for various stakeholders to motivate them to provide quality services to the poor. The scheme has enabled the beneficiaries to use private facilities, which are perceived to provide more services and better quality care, at no extra cost. However, it is to be kept in mind that there are variations in levels of cost, pricing, transactional conveniences and quality of services among private health facilities. The scheme is so designed, that the beneficiary has the option to choose the facility based on the quality of services, although there may be some practical barriers to exercise such a choice. This study has shown that RSBY, according to beneficiaries' perception, has provided acceptable quality of health care, especially in private facilities.

Out-of-pocket expenditures

Many low-income countries in all regions spend much less on health care than higher-income countries and depend much more on private expenditures, mostly directly out of pocket. The basic pattern of low health spending, heavy reliance on out-of-pocket financing, and limited domestic resource mobilization holds for India as well (Gottret and Schieber, 2006).

Several studies of Indian villages to determine why households descend into poverty (Krishna et al., 2005, Krishna, 2006) have found that in a majority of cases of decline into poverty, three principal factors are at work: health expenses, high-interest private debt, and social and customary expenses. Despite a government owned free health care delivery chain, 64% of the poorest populations in India are in debt every year to pay for the medical care they need (Basu, 2011). During the period of the launch of the scheme, national health accounts data revealed that the government sector (centre, state and local) together accounted for only 20% of all health expenditures and 78% were out-of-pocket payments – one of the highest percentages in the world (Ministry of Health and Family Welfare, 2006).

Health Insurance is one way of providing protection to poor households by reducing OOPs and improving access to health care. One of the objectives of RSBY was to provide financial protection to BPL families against catastrophic health costs by reducing out of pocket expenditures for hospitalization. The scheme was meant to be cashless so that beneficiaries did not have to make payments while admitted. However, families of beneficiaries were paying for medicines, diagnostics, food and transportation items that are provisioned in the contract to be paid by the care giver. Thus RSBY did not fully meet its financial protection aim.

9.2 Equity Concerns in Health Insurance

Access to health care in an unregulated market depends on ability and willingness to pay which leads to distributional inequity (Wolfe, 1993). The vulnerable and the disadvantaged would suffer on the basis of age, disability, and gender. The egalitarians argue that it is inappropriate that health care should be determined by ability to pay. A strong profit making motive can create supplier induced demand

which can involve paying for a great deal of unneeded care. Given that the poor are already stretched, the impact of a profit making health sector can be devastating.

Bennett et al. and Rosenthal identified unethical practices among private organization to maximize profit, and lack of concerns regarding public health goals (Bennett et al., 1994, Rosenthal, 2000). In the private sector, the basic motivation of the stakeholders is profit, resulting theoretically in a strong thrust on the efficient use of resources (Bennett et al., 1997). While private insurance companies can, at times, be overly motivated by profit and therefore be subject to legitimate criticism, it is also necessary to objectively look at the capacities of government agencies for enforcement of any norm under political pressure (RSBY Committee, 2014). As a general rule, the private sector is less interested in the poor who are not able to pay the full cost of services and focus their attention on the wealthy. Although this should not be a concern when the government forms a partnership with the private sector through purchase of services, there remains a concern that the private sector may attempt to maximize its profits by providing lesser quality services to the poor (Mitchell, 2000)

Generally when markets fail to achieve efficiency economists note such occurrences as market failure. Due to asymmetric information health insurance markets may fail to materialize, requiring second best solutions either initiated by the government or some other institutions. In the context of health insurance, there are several types of problem relevant to equity: accessibility specially failure to reach remote places; equality - poorest population excluded from private health insurance and ineffectiveness - cream skinning by the insurance companies where those ill may go untreated.

Failure to reach remote places: Rural residents often experience barriers to healthcare that limit their ability to get the care they need. Governments at various levels have not been very successful in providing appropriate infrastructure in the rural areas which sustain 70% of the Indian population. There are also other social and environmental factors such as inadequate sanitation, unsafe water, unhealthy environment, illiteracy etc., which result in poor health outcomes. Moreover, ineffectiveness of the primary health care system which should serve as an entry point in the rural areas results in a breach in the referral system (Singh and Badaya, 2014). Utilization of services has been shown to be educational level and residence

dependent, with 70% of illiterates receiving no ANC care; and 43% of rural women less likely to receive ANC services when compared with their urban counterparts (Singh and Badaya, 2014).

In addition to having an inadequate supply of healthcare services in the community, lack of health insurance or availability of quality free care further reduces access to healthcare services. According to a 2008 report on health disparities, there are a larger percentage of rural residents who do not have health insurance compared to urban residents (Bennett et al., 2008). Rural uninsured are more likely to delay or forgo medical care because of the cost of care compared to those with insurance (Rural Health Information Hub, 2014). RSBY, by providing health insurance to the BPL population, has increased access to healthcare services for the rural poor. However, findings of the study show that, even though it was hoped that the new market of entitled BPL beneficiaries available in the rural areas would incentivize the private providers to open shop in remote areas that has not yet been the case. Most of the private providers are clustered around urban areas.

Private Health Insurance and the poor

The private health sector in India has grown in an unregulated fashion, as there has been virtually no effective guidance on the location, scope of practice, and effective standards for quality of care or public disclosure on practices and pricing (Desai, 2011). Development of health insurance should result in an improvement in the services provided by the private sector. As part of the liberalisation of the economy in the early 1990s, the Indian government opened insurance (including health insurance) to the private sector. With the advent of Private Health Insurance, the possibility to access quality care from private tertiary care facilities opened for the higher income groups. This provided financial risk protection to a relatively small segment of the society. However, on the flip side, private health insurance resulted in cost escalation, inequity in health financing patterns and raised questions on the cost-effectiveness of healthcare. This is likely to be the case in a country that depends heavily on fee-for-service and a large and unregulated private sector (Reddy et al., 2011b). Private insurance also leaves out the low-income individuals, who may not be able to afford the premium (Ahuja, 2004). The poor population had not been part of private health insurance schemes, especially in developing countries, for a long time (Sekhri and

Savedoff, 2004). Providing health insurance to the poor, who are considered to be at high risk of disease, at a low premium, would mean a loss to the private insurance companies. Such gaps can only be filled by social security schemes of the government, such as RSBY. The strength of the RSBY lies in the fact that it is a social welfare scheme, which offers financial protection while at the same time using the profit made by the various stakeholders acts as a catalyst (Swaroop, 2012). It is a scheme in which private partners have as much a stake as the government.

Cream Skimming and Provider Induced Payment

Adequate risk pooling is necessary for market sustenance of health insurance. Two forms of cream skimming can be seen in health insurance. One is cream skimming by the insurance company, where the insurance company would enroll the healthier population (Acharya et al., 2012). In such situations there needs to be the second best solution of mandated risk-pooling through compulsory enrolment of all in a population pool. Another form of cream skimming occurs when medical professionals, under capitation payment systems, favor easier caseloads over more complicated cases (Levaggi and Montefiori, 2003).

The poor rarely can afford to pay for insurance; and further the likelihood of becoming ill may be greater among the poor. Thus, RSBY sought to rectify the inherent cream skimming that leads to non-existence of insurance markets for the poor. Elderly, children, females and lower caste population are at higher risk of health ailments and can under RSBY use the scheme. In the present study, cream skimming by the insurer was partially evident as the enrolment of children and lower caste was relatively lower when compared to their share of the population. However, enrolment of elderly and females were comparable to other age groups and males respectively. The enrolment of these high risk groups is discussed in detail in later part of this section. Das and Leino have also showed little evidence of “cream-skimming” by the insurer in RSBY (Das and Leino, 2011).

In this study there was some suggestive evidence that private providers were focusing on some conditions with higher profit margins. For example it was clearly evident that private hospitals were treating more ophthalmology cases, particularly in Patiala. The cost involved in ophthalmological interventions (which primarily consists of cataract

surgery) is low with a high profit margin (Shiva, 2010). Another high profit margin intervention was ICU care, which again was high for the private sector in the present study. Both of the above findings indicate providers might have induced services that are unlikely to be needed. This may point towards possible horizontal cream skimming, i.e. treating only patients with specific diseases. Further, there is evidence in the present study that the regulations for the private sector were weak and providers (private) were not happy with the fixed package rates. Thus, they had an incentive for choosing easier caseloads and recommending unneeded services where little work would be undertaken. This could point towards vertical cream skimming, i.e. opting for specific patient types within the same ailment group. However, this study was not able to examine vertical cream skimming.

9.3 Gaps in RSBY as a PPP model

This section covers scheme inception including external environment (political and regulatory) and the institutional structure. It also examines the gaps in scheme design and implementation.

Scheme Inception: External Environment and Institutional Structure

The external environment that has an implication on the effective implementation of RSBY primarily constitutes the political environment and regulatory framework. India is a federal parliamentary democratic republic, wherein the President is the head of the state and Prime Minister is the executive head of the government. India follows a federal system, which consists of a strong government at the centre, and state governments at the secondary level. The political environment plays a significant role in the outcome of any scheme. The RSBY Committee report of 2014 mentions political interference as one of the most important reasons why the social welfare schemes flounder and lose track (RSBY Committee, 2014). Key stakeholder interviewers in the study stated that since RSBY was one of the flagship initiatives of the then political party in power, the Congress-led United Progressive Alliance (UPA), there was a significant push to launch the scheme before the General Elections in 2009 to garner votes. A similar conclusion was drawn by a study in Maharashtra, which surmised that such schemes are usually announced during the election time for

political gains (Thakur, 2015). This research also confirms that since the scheme was launched in a great rush due to political pressure, adequate attention was not given to efficient design of the scheme. Best practices from around the world were not adequately reviewed. The design of RSBY requires political commitment at the state level, since the state government has a key role as a facilitator in the implementation of the scheme with a variety of players from the public and private sectors. Rai (2012) from the Asian Development Bank reported that one of the strengths of RSBY was that it was implemented by states with different political parties at the helm of affairs. Another study by Rai and Rai observed that even though the scheme was politically motivated (as the hurried roll-out of the scheme suggests), it had not been inhibited by political ideologies (Rai and Rai, 2010). In the present study, during the period from the latter part of 2011 to the beginning of 2013, Haryana had a Congress-led government while the ruling party in Punjab was the Akali Dal, which strongly opposed the ruling party at the Centre, the Congress. However, it was extremely clear during key stakeholder interviews that the political differences in ruling parties at the Central and state level did not affect the implementation of the scheme.

The RSBY Committee report points out that there is enormous pressure on politicians from their constituencies asking for favours, because of which governments are increasingly looking for external private agencies to act as a buffer against such pressures. The Committee pointed out that several state governments have initiated health insurance schemes through private insurance companies, which act as the interface with the public at large. While private insurance companies can, at times, be overly motivated by profit and therefore be subject to legitimate criticism, it is also necessary to objectively look at the capacities of government agencies for enforcement of any norm under political pressure (RSBY Committee, 2014).

Strong regulation is crucial for good governance. The literature review stated that PPPs do not necessarily decrease the work of government, but on the contrary, they may well increase the workload since they entail a greater need for regulation (Regional Training Institute, 2014). Regulation often entails a mechanism of checks and balances in order to create the right incentives and penalties to ensure successful implementation of a scheme. At its most basic level, regulation seeks to manage behaviour in order to produce desired outcomes (Coglianese, 2012). In the present

study, it was observed that even though a complex regulatory framework exists in India, with an extensive set of legal instruments such as the Indian Penal Code, the Indian Contract Act and the Law of Torts, effective enforcement and implementation remains problematic (Gupta and Rani, 2004, Peters and Muraleedharan, 2008). The regulatory framework for the Insurance companies and TPAs under IRDA is robust; however, the regulation of private providers and nursing homes remains challenging, both politically and practically. A weak regulatory framework of health providers has a serious impact on RSBY implementation, which was evident in the findings of the present study. Firstly, the voluntary nature of registration of the private health facilities under the state registering authority limits the pool of health facilities that can be empanelled under the scheme, as there are many hospitals that do not get themselves registered. This results in low-level empanelment, which in turn exacerbates accessibility to health care by the beneficiaries. Secondly, a weak regulatory framework can also result in a poor monitoring and supervision structure that leads to inaction against the erring health facilities. This affects successful implementation, as is evident in the present study. Although there were several incidences of breach in contract, there was still no evidence of any action being taken against the errant stakeholder.

The impact of the institutional framework in scheme implementation is enormous and can be seen in the present study. RSBY was launched without putting in place any formal organizational structure, and the existing structure of the Directorate General Labour Welfare at the central level was used to roll out the scheme. Again, this was more a matter of expediency. The agencies responsible for RSBY in the two states under study are supervised by different government departments. In Punjab, the PSHC has responsibility for the scheme, which is supervised by the Department of Health and Family Welfare, while in Haryana it is the ESIC, which is supervised by the Department of Labour and Employment. The effect of the difference in organizational structure in the two states can be perceived in scheme implementation. Since the Department of Health engages closely with hospitals and health issues, it is likely to be better placed to deliver health care services than the Department of Labour. However, the Department of Labour is better equipped to enrol the poor for deeper penetration of the scheme as it deals more closely with the functioning of the informal sector. The need for engagement across Ministries for more efficient scheme

implementation is shown by a study in the state of Gujarat where an interdepartmental task force consisting of Labour, Health and Rural Development Ministries has been set up (Seshadri et al., 2011). The results from the present study show that the Department of Health in Punjab was better in terms of service delivery, transportation reimbursement, higher empanelment of public facilities and over all user satisfaction (Table 7.61). In addition, overall user satisfaction by the participants for the hospital in Patiala was 7.9 (out of 10), while it was 5.5 in Yamunanagar. However, the Department of Labour and Employment in Haryana was better at enrolment, empanelment and number of claims. Key stakeholders interviewed felt that it was easier to work with the Health Department (Punjab) rather than the Labour Department (Haryana).

Interestingly, on 1st April 2015 the Central Government has transferred RSBY from the MoLE to the MoHFW. This could have been done pursuant to the Government's decision to make RSBY a part of the National Health Assurance Mission (Press Trust of India, 2015), which falls under the mandate of the MoHFW. The Government believes that the provision of health services is the core competence of the MoHFW and the issuance of insurance cards has to be separated from service delivery to capitalize on expertise of different ministries.

Scheme Design and Implementation

The first major challenge with the scheme is the design of the scheme itself. There are certain glaring gaps in the design which were apparent after review of key documents in addition to key stakeholder and exit interviews. As pointed out previously, immense political pressure to launch the scheme on a hurried timeline is the possible reason for these gaps. Major gaps that exist primarily relate to the allocation of roles and responsibilities, enrollment of beneficiaries, empanelment of hospitals and monitoring and evaluation. We have already discussed the challenges that presented due to the institutional frameworks or lack thereof. In retrospect, this institutional flexibility afforded to states, on where to house the scheme, could be viewed as a double edged sword. On the one hand, it afforded easier buy-in from the states to absorb the scheme within existing structures thus increasing adoption of the scheme pan India and promoting a more integrative approach. On the other hand, the weak capacity of the states to handle such a sophisticated scheme was never addressed from

the start by providing supporting institutional frameworks with associated budgets and training.

Allocation of roles and responsibilities was done loosely for the various stakeholders involved and compromised accountability. The understanding of contracting model and the responsibilities associated with it was lacking on the part of the regulators at the state and the district level especially relating to the transaction costs. Various literature has reported that contracting out services increases transaction costs, e.g. costs involved in negotiating and monitoring contracts and servicing of contractual commitments (Saltman and Otter, 1992, Robinson, 1990). In the present study, it was found that the transaction costs were not considered in depth in terms of planning and implementation. It is worth noting that the scheme was designed by the central government and was presented to the state governments for implementation with the responsibility to make changes as per the needs of the differing states. But the state governments rarely practised any such authorization, primarily because of the transaction costs involved and the lack of capacity at state level to introduce changes. One glaring example of this concerned the revision of package rates. During key stakeholder interviews with the private providers it was evident that the private providers were extremely dissatisfied with the package rates and insisted that annual cost of inflation and variation in cost of care between states and within rural and urban areas be considered in determining package rates. However, probably due to the high transaction costs involved, the state governments did not actively engage in revision of package rates at the state level and adopted the centrally determined package rates.

In terms of scheme design vis-à-vis enrolment, there are two aspects that need to be considered. First is the frequency of enrolment i.e. annual enrolment and the problems associated with it and second is the coverage of enrolment relating to adoption of the scheme. Findings of the present study validate the conclusions of Das, who believes that a major factor that affects regular access to health care is the yearly renewal of the contracts of insurance companies (Kannan and Varinder, 2012). The contract between the state and insurance company is for one year and hence enrolment of the beneficiaries needs to be done every year. Key Stakeholders when interviewed clearly stated that yearly enrolment of the beneficiaries requires immense human and

financial resources and is considered burdensome and redundant because BPL listings do not change yearly. In addition, the enrolment cycle is interrupted annually because it takes three months to reissue the insurance smart cards and this process becomes more challenging when the insurance contract is given to different companies in successive years. Das supports this finding and states that in Orissa considerable time was wasted in implementing the insurance contract for a new company (Kannan and Varinder, 2012). Moreover, the entire enrolment process has to be repeated when a different company is given a contract for the second year and results in the beneficiaries being deprived of coverage during that time. It is likely that awarding longer-term contracts with insurance firms with proven track records and moving away from contracting annually would reduce a large amount of transaction costs. As pointed out by Das (Kannan and Varinder, 2012), this arrangement will also provide coverage to those patients whose card expires while they are in the hospital.

Coverage of RSBY in terms of enrolment of the beneficiaries is the primary responsibility of the insurance company. The low state wide enrolment rate of 60% and 28% in the states of Haryana and Punjab, respectively, reported by Kannan and Varinder (2012) is similar to the findings of the present study which only looks at one district in each state and confirms an enrolment under the scheme at 42% in Yamunanagar (Haryana) and 15% in Patiala (Punjab). Even though the scheme had been operational in the selected districts for several years, the enrolment stood at less than half in both districts. Evidence from other studies show that awareness of public programmes and trust in them, distance to health-care facilities and institutional rigidities within the health-care system can play a major role in limiting insurance enrolment (Basinga et al., 2010, Wagstaff, 2007). Review of literature on the assessment of IEC activities points to other studies, that show that there was ineffective IEC under the RSBY scheme (Trivedi and Saxena, 2013, Mahadevia, 2012). In the present study, interviews with the stakeholders also confirm that possible reasons behind this poor enrolment could be poor IEC activity by the insurance company or non-engagement of the local bodies such as Panchayats or self-help groups. Other literature supports this finding and points out that the enrolment could be better if some of the activities were delegated to the Panchayats such as provision of suitable place for registration, crowd management, standby arrangement

in case of power failure, late delivery of smart cards, etc. (Kunhikannan and Aravindan, 2012).

In terms of scheme design vis-à-vis empanelment of facilities, the main issues concern the lack of sufficient empanelment of hospitals, geographical clustering of facilities in the district and availability of few services at the empaneled hospitals.

In studying the empanelment under the scheme, poor access to health facilities due to low empanelment, is noticeable in both districts. Literature shows that non-availability of RSBY empaneled hospitals in the vicinity has reduced the scheme's acceptance in some areas (Health Inc Consortium, 2014). In the present study the data shows that in Patiala, out of the total number of 115 facilities only 17 were empanelled and in Yamunanagar, out of 123 facilities only 37 got empanelled. Of the empanelled hospitals, the 37 empanelled hospitals in Yamunanagar district were to provide services to a population of 165,809 enrolled under RSBY and in Patiala, only 17 hospitals were empaneled to serve a population of 38,278 enrolled under the scheme. Similar findings have also been reported from other states such as Karnataka (Rajasekhar et al., 2011). There could be several reasons for the low number of empaneled hospitals observed under the scheme. Misalignment of incentives might be a plausible reason where insurance companies are empaneling fewer hospitals in order to reduce accessibility and thus hope to minimize claims in order to increase their profit. Review of other studies show that insurance companies try to suspend or de-empanel hospitals for small infractions, and even for unintentional mistakes (Khurana and Dave, 2016). Another reason for low number of empaneled hospitals could be the poor understanding of empanelment guidelines by the doctors or administrative heads as was the case in Chhattisgarh in a study done by the Council of Tribal and Rural Development (Council of Tribal and Rural Development, 2013).

Moreover, the current process of empanelment has resulted in the majority of hospitals being empaneled from urban areas. This is primarily because the number of hospitals in rural areas is small, and these hospitals rarely meet the eligibility criteria of empanelment under the scheme. This raises concerns around the strong possibility of the rural population having to travel long distances to reach urban areas in order to avail health services under the scheme. It would also be prudent to keep in mind that

beneficiaries of the scheme are BPL families who generally survive on daily wages. Therefore, geographical accessibility of services is a priority for the beneficiaries as commuting from a far flung location would entail longer travel time and affect their daily wages. Other studies confirm that reduced accessibility due to unequal geographic distribution of hospitals and quality health care facilities is a strong reason for reduced claim and utilization rates of the scheme (Mayberry et al., 2006). However, it is also important to keep in mind that in enhancing people's geographical access to hospital care, one also needs to balance the need to empanel hospitals that provide quality care and are properly managed (Devadasan et al., 2013).

Turning to capacity of empanelled facilities, we find empaneled hospitals lacked many required departments. Super-specialty departments were negligible in public hospitals. None of the public hospitals in either of the districts provided all the packages of the RSBY scheme. A few private hospitals (only 3) in Yamunanagar provided facilities for all the care provisions within RSBY, but none of the private hospitals in Patiala provided all required services. Similar findings have also been reported by a study by Sethi et al. (2011)

In studying empanelment relating to accessibility and availability, attention is drawn to another finding of the study, which deals with clustering of claims in a few selected hospitals. In Yamunanagar district, about half (2,791) of the claims were reported by four (all private) out of 37 empaneled hospitals, whereas in Patiala district, about two thirds (673) of the claims were reported by three out of 17 empaneled hospitals. This clustering of claims in a few selected hospitals may also be indicative of poor availability and accessibility to healthcare services under the RSBY. However, there could be several other reasons for such clustering, such as preference for private hospitals, preference for treatment from bigger hospitals, etc.

Monitoring and supervision is one of the pillars of effective implementation of a public private partnership through contracting. Williamson (1985) clearly points out that weak monitoring and supervision will certainly hamper the implementation of any kind of social scheme by the government (Williamson, 1985). Examination of the contract documents under the present study clearly shows that the contract lacked a comprehensive plan for monitoring and supervision at the design stage, both at the

state and district level. The process for monitoring and supervision was not clearly articulated and there was no mention of the periodicity of monitoring or accountability of the stakeholders. There were no dedicated human resources for monitoring and neither was there any earmarked budget for it. Effective oversight from the state governments is crucial to implementation of the scheme, but results from the study show that it was conspicuously lacking, especially during the process of enrolment of beneficiaries, empanelment of health facilities, awareness building and facilitating implementation. Most of the activities were undertaken primarily by the insurance company, where the incentives might have been misaligned or even in conflict. Additionally the importance of monitoring is further heightened in the contractual arrangements, where the contracts are of short duration and trust is an issue between the stakeholders (Ojo, 2014). Inputs from key informants clearly point to the fact that trust was still developing between the stakeholders and was in nascent stages, given these new public private partnerships that came into play. Yet, it is possible if there is to be renewal of contracts they are honored more strictly.

Results of the study show that weak monitoring was apparent in several instances where there was a clear breach of contract, for example, delayed reimbursement of the claimed amount by the insurance company, non-payment of transportation cost to the beneficiaries, no provision of food to the beneficiaries in the hospitals, and lack of information dissemination to the beneficiaries in the hospitals. The cashless system somehow further managed to induce high OOP expenditure for the beneficiaries. In addition, a separate RSBY helpdesk was observed in only 2 of the 12 selected hospitals which were in direct breach of the contractual document. Also, signage for RSBY at the facility level could be improved. The present study also shows that providers, both public and private, are not sharing information regarding the cost of treatment, money remaining on the smart card during admission and discharge, in addition to pre and post hospitalizations benefits etc. Further, exit interview analysis clearly shows that some 'leakages' were happening in the scheme, i.e. 15% of the participants enrolled under the scheme were non-BPL.

Extensive literature review points towards the importance of relational contracting which views contracts as relations rather than transactional (MacNeil, 1974). Such contracts are "based on a relationship of trust between the parties. The explicit terms

of the contract are an outline as there are implicit terms and understandings which determine the behavior of the parties”. In the present study, the contracts lean towards relational contracting as part of the PPP framework. They adopt an approach of harmonizing conflict and preserving relationships between the insurance companies and the SNA’s and TPAs. Even though there were several instances of breach of contract - this did not lead to sanctions. This is in concordance with what MacNeil had stated regarding relational contracts that “...the primary need is of harmonizing conflict and preserving the relationship (MacNeil, 1974, MacNeil, 1978). To take recourse to legal proceedings for failings of stakeholders is perceived to be very harmful to long-term relations between the stakeholders (Deakin and Wilkinson, 1995, Arrighetti et al., 1996, Williamson, 1985). In the present study, central level policy makers were keenly aware of the need to nurture and build trust amongst stakeholders for the long term success of the scheme. But the downside of this was that contract observance was not well monitored or regulated, and monitoring and supervision was very weak. A critical point is that the implementation of contracts in India is very different from where the institutional and regulatory environment is much stronger. Monitoring and supervision systems are likely to be more critical, the weaker is the institutional and regulatory environment.

Finally, we need to consider effective risk pooling in the interest of long term sustainability of the scheme. Risk pooling in a voluntary social health insurance scheme such as RSBY can prove to be a challenge because it involves both the poor and the less educated. Individuals from the low income strata may opt out of the scheme as they have to pay a registration fee, even though it may be a small amount. There is evidence that shows that even getting photographs can be a substantial financial burden for poor families, as in the case of Indonesia (Sparrow, 2008). It is also likely that the beneficiaries of the scheme, because of their poor educational status, may not fully appreciate the full entitlement that the scheme offers and hence may not get enrolled. There is evidence that shows that families headed by the more educated households are the ones that are more likely to participate in insurance schemes (Chankova et al., 2008, Giné et al., 2008). However, there can also be adverse selection into the insurance with higher risk individuals making up the most of the enrollees.

Results around effective risk pooling under RSBY are mixed. In the present study, out of 247,998 and 393,304 eligible BPL population in Patiala and Yamunanagar (respectively), only 38,278 in Patiala (15%) and 165,809 in Yamunanagar (42%) were enrolled under the scheme.

According to this study in Patiala, enrollment pools of individuals under RSBY were made up of the elderly population (> 64 years) which was 27.2% of the eligible population in that age group. Those enrolled aged 25 – 44 years and 45 – 64 years were 25.95% and 35.65% of the eligible population in that age group. Enrolment of females was comparable to that of males (Chapter 6). These numbers by themselves are of concern; the enrolment rate is low for all age groups. However, the utilization rates for the enrolled elderly population i.e. > 64 years (chapter 8) was less when compared to other groups aged 25 – 44 years and 45 – 64 years. In addition, taking scheme utilization into context, out of 38,278 and 165,809 individuals enrolled in Patiala and Yamunanagar (respectively), 494 (1%) individuals in Patiala and 4252 (3%) individuals in Yamunanagar filed claims under RSBY. At least in terms of claims, we do not find adverse selection. Further, it was observed in the present study that there seems to be financial viability to the insurance company after all claims have been paid.

9.4 RSBY – influence of contractual arrangements in meeting its aims

This section summarizes to what extent contractual arrangements help RSBY to meet the aims it might have been expected to achieve. This is considered under the headings of equity, efficiency and incentives.

Equity

A report published by DFID in 2004 (England, 2004) mentions equity can be effectively addressed with three strategies (1) establishing contractual arrangements that specifically encourage providers to serve the poor and underserved; (2) contracting with private providers in areas that are predominantly poor (geographic

targeting); and (3) contracting out services that are of most benefit to the poor and underserved.

RSBY addresses the first issue through contractual arrangements with providers to address the health needs of the poor. RSBY, as we show below, through its contracting mechanism has improved equity; yet, much more can be done. The scheme does enroll the most vulnerable sections of society though it leaves out the non BPL population. Some states, however, like Kerala and Himachal Pradesh are providing services to non BPL families which primarily include migrants, who are vulnerable to a fall below the poverty line in case of catastrophic expenditures (Das, 2012).

Taking into account the goal of universal health coverage and a robust private sector providing a majority of services in India, the scheme is playing a vital role in shifting a proportion of burden of the public hospitals to the private hospitals mostly likely without reducing the former's allocations from the government. This controlled burden, along with the funds generated through the scheme, may further help in enhancing the quality of services in public hospitals, thereby addressing the equity dimension in service delivery for those not qualifying for RSBY.

However, there are certain gaps in scheme implementation such as low enrolment, low package rates, low claim rate, poor quality and range of services, some charging of services, and OOP expenditures which could affect the equity factor.

The scheme showed poor enrolment with illiterates and SC/ST population less likely to get enrolled.

Private providers are incentivized to make profits and lack of motivation regarding patient well-being might lead them to turn away patients under the scheme.

The minority groups (SC/STs and Muslims) were using public facilities more when compared to private facilities, even though the scheme makes it possible for beneficiaries to use private facilities, which are perceived to provide a greater range of services and better quality care. So the most vulnerable group among the BPL population continues to use facilities which are perceived not to be of very high standards, raising questions regarding equity under the scheme. Similar findings were

also reported by Thakur (2015) where through qualitative means, the author observed that the scheme did not reach the intended beneficiaries in some areas, mainly, illiterates, and excluded groups such as SC/ST and minorities, for example, the Muslim population (Thakur, 2015).

In addition, due to many empanelled facilities not having the complete set of required services, the poor may have had to turn to non-empanelled private facilities and incur out-of-pocket expenditure.

With regard to contracting private providers in predominantly poor areas, RSBY did not perform well which led to poor accessibility. The hospitals present in the rural areas primarily consist of small private hospitals or primary health centres. The empanelment criterion under RSBY is such that the hospitals present in the rural area or in the hard to reach areas are not eligible to get enrolled, as it is very unlikely for such hospitals to have laboratory facilities or in-patient facilities. As a result, hospitals are clustered around the urban and sub-urban areas. Also, the exit interview data suggests that about one-fourth of the participants would choose a health facility based on distance from their homes, so access may have discouraged enrolment and use (Itoli, 2013).

With regard to contracting out services that are of most beneficial to the poor as propounded by DFID (three strategies stated above), RSBY contracted for in-patient care only. Out-patient care was completely omitted from the contract. Literature shows that most out-of-pocket expenditures are incurred for out-patient care, particularly from purchasing drugs (Saksena et al., 2010). Though the scheme has succeeded, to some extent, in providing quality services to the vulnerable groups, clearly more needs to be done.

Efficiency in service delivery

Contracts in RSBY helped ensure efficiency by contracting private providers at a fixed price and enabled rapid scaling up of health care services and user satisfaction.

Package rates were defined in the contract document between the insurance company and the provider. Thus, enabling the provision of private services at a fixed price. Since, the providers have to give services within the same package rates, variation in

quality of services was observed. Rigorous monitoring and supervision could have ensured greater standardization of quality of services under the scheme.

The RSBY insurance scheme, as a PPP arrangement, was designed to take advantage of provider pluralism; but in involving the private sector, care has to be taken that this does not induce higher costs to beneficiaries when compared with the public sector. The study findings show that RSBY beneficiaries did incur OOP expenditure; though it was less than incurred by the non-RSBY beneficiaries most of whom were non BPL. This is consistent with findings from the literature review in Chapter 2, where there is mixed evidence of OOP expenditures from other countries with regard to health insurance schemes for the poor (Acharya et al., 2012).

Within the country, findings from this study are consistent with what was reported by Selvaraj et al. in a study conducted in Andhra Pradesh and Tamil Nadu for RSBY and Rajiv Aarogyasri Scheme. It can be surmised that RSBY and other state government based insurance schemes have failed to provide adequate financial risk protection (Selvaraj and Karan, 2012). Reasons for incurring OOP could be that providers sought payments that they were not supposed to, not many procedures are covered and, further that, many of the expenditures that families incur during hospitalization of a family member such as staying nearby the ill person are not covered.

The private health sector is growing rapidly across the developing world. People increasingly rely on private health care organizations to address their health needs (International Finance Group, 2011), making it important for the public sector to engage with the private sector in order to rapidly scale up services. It was observed in the present study that the private hospitals outnumbered the public hospitals. Thus contracting with the private facilities under the scheme had rapidly enhanced access to services. However, this was only up to a certain extent, as it was observed - particularly in Patiala - that the number of hospitals contracted under the scheme was few.

For user satisfaction, RSBY participants reported slightly better satisfaction when compared to non-RSBY participants. There could be two reasons for better user satisfaction expressed by RSBY participants. Firstly, as the assessment of quality of hospital care was self-reported, RSBY beneficiaries who are generally deprived of

care may be grateful for whatever facilities are provided to them. This is reflected in the present study as the RSBY beneficiaries reported greater satisfaction for aspects that would have been the same for non-RSBY participants (e.g. cleanliness, as all the patients would have access to the same areas in the hospitals). The second reason could be in conformity with what was stated by Devadasan et al. that the insurance scheme might have negotiated for better quality of care for its members and so the insured would have received better quality of care and thereby would be more satisfied (Devadasan et al., 2011).

Incentives

RSBY extensively relied on incentives within its various contracts to ensure desired outcomes. However, the study shows that at times there was absence of proper incentives within the contractual arrangement, and in some instances, there were disincentives with respect to assignment of roles and responsibilities built into the design.

According to the centre - state contract in RSBY, the states were responsible for paying 25% of premium. This could deter some poorer states from participation. Most of the responsibilities for implementing the scheme lay with insurance companies, while the state government played merely a facilitation role, with limited accountability. This also acted as an incentive for the state governments to adopt the scheme. The insurance companies were also clearly incentivized to capture a large segment of the previously untapped market. In addition, the premiums were collected per family regardless of the number of family members enrolled. The incentive for the service providers was clearly monetary by being presented with an additional revenue stream. The additional revenue, coming from patients who did not generate revenue before, has helped public providers in supplementing their under-resourced budgets, thus maintaining their equipment or meeting day to day expenditures in running the facility. The private providers have captured a new segment of the market, resulting in increased volume of patients and in turn higher profits. This is said to have resulted in smaller hospitals adding rooms and new hospitals being established due to increased demand (Swaroop, 2012).

In the contracts of RSBY, there were omissions of certain types of incentives for the stakeholders. These posed challenges. RSBY responsibilities were additional responsibilities for state and district officials without any incentive for this increased workload. This directly affected scheme implementation. Absence of sanctions for poor implementation and similarly lack of incentives for effective scheme implementation led to poor monitoring and supervision of the scheme.

Price was the only contractual arrangement with providers; rarely was any quantity target associated either with enrolment or with claims filed vis-à-vis premium collected in the contract document. A standard approach in principal agent theory is to offer a schedule of price and quantity (or even quality) to which the agent responds (Biglaiser and Ma, 1995). This approach was clearly missing when incentivizing the agent in many of the principal-agent interactions.

Enrolment of beneficiaries and issuance of smart cards was the responsibility of the insurance company. However, insurance companies were disincentivized to enroll up to a maximum of five members in a beneficiary family, as allowed under the scheme design, because the premium is determined per family and not on an individual basis. An increase in enrolled individuals could lead to higher number of claims thus reducing the profits of the insurance companies. This has also been documented in a study by Sethi (2015).

There are also disincentives for adequate IEC by the insurance companies, which is one of their primary responsibilities according to the contract document. Better awareness of the scheme among the community could increase claims, which would lead to a higher reimbursed amount. There was alarming evidence of poor understanding of empaneled hospitals by the beneficiaries, knowledge of services covered under the scheme and the facilities therein, which calls for an examination of the strategies adopted by the enrolling agencies in the states with respect to RSBY (Health Inc Consortium, 2014).

9.5 Conclusions and Recommendations

RSBY has provided heavily subsidized health insurance to more than 110 million people (almost 10% of India's population) (Ministry of Labour and Employment, 2014) and has become one of the world's largest health insurance schemes (Ministry of Labour and Employment, 2012b). The scheme is based on a Public-Private Partnerships model governed through a series of contracts which enables the poor to access private health services, which otherwise were unaffordable for them. The strength of the scheme lies in the fact that it is a social welfare scheme with inbuilt incentives for various stakeholders to motivate them to provide quality services to the poor. Another feature of the scheme is that there is no age limit for beneficiaries of the scheme. The fact that private service providers are interested in participating in RSBY indicates that it is also a successful business model. RSBY today is also seen as a successful PPP model in the context of its outreach and sustainability.

The present study identified certain gaps in scheme design, its implementation relating to enrolment of beneficiaries, empanelment of health facilities, role of insurance companies, contracting and regulation which affect the implementation of the scheme. It also needs to be borne in mind that though the interviews were conducted at national and state levels, the empirical data comes from just two districts and the recommendations are on the basis of those findings.

RSBY is based on a PPP model and all the stakeholders, public and private, are equally important for successful implementation of the scheme. Health care is an important concern of the people of the country and is enshrined in the Constitution of India (Articles 38, 39 and 47) and listed in the Directive Principles of State Policy (Jacob, 2012). Provision of universal health care should be the mandate of the government and not just of a ruling party. There has to be political unanimity for health-care provision. Welfare of the beneficiaries has to be a top priority rather than a means of political opportunism.

The MoHFW appears to be the most appropriate department for implementation of the scheme, since RSBY is primarily concerned with providing good quality of health-care services to the poor. MoLE is more oriented towards the identification of the informal sector; enrolment of the beneficiaries by them could complement

MoHFW. An interdepartmental task force could be set up to enhance this coordination.

State governments rarely make modifications to the contract design provided to them by the Central Government. It has to be realized by the state governments that one size does not fit all. The contract needs to be modified at the state level and if possible, even at the district level in order to meet the requirements of local conditions, which might vary from one setting to another. For this to occur, the states need to commit additional manpower at a high level of administration; perhaps capacity development may also be needed for pricing, monitoring and improving contract specifications.

The functioning of RSBY should be more transparent. Important documents, including contract documents, must be available in the public domain and there should be an opportunity for the public to comment on the contract design. The role of civil society has not been noted in most studies. Citizen health system monitoring capacity may be an important missing element.

Fixing of roles and responsibilities of various stakeholders is an absolute necessity. The state governments have outsourced most of their responsibilities to the insurance firms and have thus reduced their own role. They presently only identify the insurance companies on the basis of competitive bidding and provide them with a list of BPL households. More active participation is required from the state governments, especially during the process of enrolment, empanelment and awareness building. Engaging Panchayat members (PRIs) and NGOs in the scheme could enhance accountability (Whinney and Madiath, 2011) and boost the process of community mobilization. Here, citizen monitoring may play an important role.

Since the process of enrolment consumes considerable time and manpower, yearly enrolment of the same beneficiaries should be abandoned; instead, a provision for addition or subtraction of a family member's name from the smart card can be initiated. Further, enrolment coverage should be strictly monitored so that there is an increase in persons being covered under the scheme.

There should be a thorough appraisal and periodic revision of the BPL list by the Government, although this issue goes beyond RSBY. The BPL database should be

centrally available. This would eliminate discrepancies in the BPL lists that are provided to insurance companies at the time of enrolment and would enable better identification of households. India's rollout of the unique identification number (UID) can also help in the process of enrollment. Since UID contains biometric identification, it could speed up the process of enrolment and would also strengthen the accuracy of the information. Additionally, it can supplement the centrally available BPL records.

A provision for inclusion of individuals just above the poverty line should be formally incorporated in the scheme. This section of the population cannot be neglected as they are at high risk of slipping below the poverty line due to catastrophic medical illness. The state governments can extend the coverage to the APL population by using their own resources for providing cover over and above the RSBY cap. Perhaps there can be some graduated premium payment from the users near the poverty line; such schemes always need to be balanced by weighing implementation costs and costs recovery.

Empanelled hospitals are few in number and are clustered in urban areas. There needs to be a larger review as to whether this is a general problem or an issue in the studied districts. In the case of rural areas, the eligibility criteria are such that many hospitals cannot be empanelled under the scheme. A conscious effort needs to be made to empanel more hospitals under the scheme without affecting the quality of services. Inclusion of primary health-care facilities under the scheme could be helpful for access and cost cutting. Rural facilities, mostly public, need to be strengthened to secondary level facilities, so that they can be empanelled. Such a policy could be cost-prohibitive and it may not be possible to include in the current health budget.

An awareness drive regarding the scheme, which highlights the benefits of the business model, is warranted. It has to be ensured that coverage of the packages, that is the services offered as part of the insurance package, are more comprehensive. This can be done by empanelling more multi-specialty hospitals that have a track record of good quality service. Care should be taken that the empanelled hospitals are spread throughout the district rather than being clustered together in a sub-district.

Providers, especially private providers, expressed dissatisfaction with the package rates, which calls for a revision. Annual cost inflation needs to be factored in while estimating the package rates. It is also suggested that it may not be necessary to have a uniform pan-India package rate. Package rates may vary from place to place depending on the local settings. Uniform pricing can be a deterrent for providers to participate in metropolitan areas where operating costs are likely to be higher.

To encourage improvements in quality, package rates could be linked to the evaluation of the empanelled hospitals. One of the important components of this evaluation could be the quality of service provided by the provider. By doing so, package rates can be linked to the quality of services provided, i.e. higher rates for higher quality of services. This will also enable and motivate multi-specialty private hospitals with the highest quality of services to seek empanelment under the scheme. One should caution that quality indicators are difficult to enumerate as well as being difficult to observe.

The process of claim settlement should be streamlined so that private partners can develop trust in the government process and are motivated to participate. The gap between the date of claim application and reimbursement date should be strictly monitored. Insurance companies should be penalized for failing to reimburse the claimed amount to providers within the stipulated time period. There needs to be transparency with respect to the amounts reimbursed to the providers. The reasons for not reimbursing the claimed amounts must be provided as this would help in reviewing the facilities of the provider.

The public hospitals have access to the reimbursed funds under RSBY. However, there are no clear cut guidelines for the use of these funds. Hence, guidelines should be established for the public hospitals to use the reimbursed amount in the interest of improving the quality of services provided at these hospitals.

In order to provide adequate access to health care along with good quality of services at different levels of health care, complementary approaches and inter linkages are needed. An appropriate referral mechanism can be considered. These linkages and referrals could also help to reduce the clustering of utilization in specific higher-level facilities. There is an important lesson here from Thailand's Universal Coverage

Scheme (UCS). If a beneficiary does not respect the referral system s/he loses the right to free services. Use of a referral system should be encouraged and incentivized.

In the implementation cycle, defining, designing and planning of the programme holds the key to successful implementation for achieving desired outcomes. A strong monitoring and evaluation framework and plan needs to be incorporated in the contract design with a separate financial budget and dedicated human resources. Third party monitoring would be helpful and can bring significant quality improvements. Provision for action against the erring companies/individuals should be included as part of the monitoring and supervision plan. This could entail blacklisting of erring companies for certain periods of time and termination of contracts, if found guilty. Key indicators should be developed for regular monitoring. These indicators could be based on the inputs, processes and outputs of the scheme. MIS data generated by the providers must be regularly monitored. Regular internal and external audits of insurance companies as well as the health service providers would add value. Regular external evaluation of the scheme should become a part of the contract design.

For regulation of private sector hospitals stricter enforcement is required. Moreover, clear guidelines are needed to register and monitor the quality of services being provided by the health facilities. Hospitals can be graded in different categories depending on the quality of services provided by them. This categorization will not only be helpful at different levels of scheme implementation of RSBY, but will also be helpful to the beneficiaries in selecting health-care facilities. It is recommended that regular medical and social audits of the providers be conducted and sanctions be imposed on the providers who do not follow the norms. A transparent public bidding of contracts would be prudent. Contracts need to be signed after the bidding process, which would include contracting of TPAs. The evaluation of quality of services being offered by the providers (care from doctors and staff, hospital environment, admission and discharge facility, and information dissemination) must be an important factor in the process of contracting. This would ensure better quality of services from private stakeholders. Given the problems with monitoring in health care, it would be better to work with trusted insurance companies for a longer duration rather than signing a new contract with a new company every year. There is a strong case for moving away from an annual contract system to a longer term contract with insurance companies

who have a proven track record of good services. Penalties for failure to meet contract requirements should be a part of these contracts. In case of breach of contract by the stakeholders, appropriate penalties in the form of refund of premium or other such fines can be imposed. Such penalties can be levied and welfare enhancing only if there are clear monitoring indicators which actually reflect performance. It was observed in the present study that mostly the monitoring indicators were not clear and when clear, enforcement was difficult.

Capacity building of the lower level staff, who are in direct contact with the beneficiaries, is highly recommended. Better training of lower health functionaries can reduce barriers for the poor visiting a private facility. Capacity building of various other staff, such as staff of SNAs, nodal officers, FKO's and others on different aspects of the process of RSBY would be helpful.

IEC activities must be strengthened. Awareness about the benefits of social health insurance and what constitutes good quality of health care should be imparted to the entire community by means of an effective communication campaign. Capacity building for those delivering IEC can be strengthened through enhancement of IEC communication material, as this is crucial for spreading awareness among the marginalized sections of the population. Socio-cultural issues need to be kept in mind. For example, banners and posters will not benefit a population that is illiterate. Therefore, a move away from the traditional methods of IEC to innovative strategies – one that takes into account alternate media channels for targeting the poor and other vulnerable groups, is recommended. Awareness among beneficiaries would also improve the quality of services rendered by health service providers as the informed beneficiary will demand better service.

RSBY is a scheme that promises cashless transaction for the beneficiaries. However, this remains an unfulfilled goal, considering the high OOP expenditures incurred by beneficiaries. Strict monitoring and supervision of providers would play a significant role in cutting down the OOP expenditures of RSBY beneficiaries.

Increasing the reimbursement cap to more than INR 30,000 (₹ 302) may play a significant role in providing adequate social security and also increase the enrolment rate. This may well be possible given the government spending on health is among the

lowest level of public spending in the world at less than 2% of GDP. Further, the present cap under RSBY appears quite low when compared to other schemes such as Rajiv Aarogyasri, which offers benefits to the extent of over five times that of RSBY. However, these state level schemes are more focused on providing tertiary care while completely omitting primary and secondary levels of care. Increasing of the cap above INR 30,000 (£ 302) and incorporation of outpatient care can be tried on a pilot basis. If the pilot is financially viable, it can be scaled up.

In terms of facilities under the scheme, the inclusion of outpatient care could significantly increase the financial protection of households. Most of the OOP expenditure is incurred on outpatient care, and particularly on medicines (Saksena et al., 2010). If it is not feasible to take care of the entire outpatient care, then it is desirable to cover at least the cost of medicines under the scheme. This is because empirical evidence suggests that almost 60% of outpatient care costs are on drugs (Saksena et al., 2010).

A well-functioning health system has a need of a balanced mix of both public and private health care delivery facilities. This increases people's choices. The World Development Report 1991 argued that "competitive markets are the best way yet found for efficiently organizing the production of goods and services" (World Bank, 1991). However it goes on to say that the State must step in where markets prove inadequate or fail altogether. The equity issue can remain unaddressed by markets. Public goods can get ignored. The preventive and promotive aspects of health care can be neglected.

Realities of development make it relevant to explore effective PPP models that introduce market principles in public services to provide effective healthcare for the poor. RSBY was initiated by Government of India as one such model which explores a new partnership paradigm between markets and government to provide quality health care. While it has had marked successes, the recommendations here would further improve it.

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ANNEXURES

ANNEXURE 1: LIST OF PACKAGES COVERED UNDER RSBY

Serial No.	Code No.	ICD 10 Code	RSBY Category	RSBY LOS	Final Rate Proposed
1 DENTAL					
1	FP00100001	K05	Fistulectomy	1	10,000
2	FP00100002	S02	Fixation of fracture of jaw	2	10,000
3	FP00100003	K10	Sequestrectomy	1	10,000
4	FP00100004	D16	Tumour excision	2	7,500
2 EAR					
5	FP00200001	H74	Aural polypectomy	1	10,000
6	FP00200002	H81	Decompression sac	2	13,500
7	FP00200003	H80	Fenestration	2	7,000
8	FP00200004	H81	Labyrinthectomy	2	10,500
9	FP00200005	H 65	Mastoidectomy	2	6,000
10	FP00200006	H70	Mastoidectomy cortical module radical	3	10,500
11	FP00200007	H 65	Mastoidectomy With Myringoplasty	2	9,000
12	FP00200008	H 65	Mastoidectomy with tympanoplasty	2	9,000
13	FP00200009	H72	Myringoplasty	2	6,000
14	FP00200010	H72	Myringoplasty with Ossiculoplasty	2	9,000
15	FP00200011	H72	Myringotomy - Bilateral	2	4,500
16	FP00200012	H72	Myringotomy - Unilateral	2	2,500
17	FP00200013	H72	Myringotomy with Grommet - One ear	2	5,000
18	FP00200014	H72	Myringotomy with Grommet - Both ear	2	6,500
19	FP00200015	H74	Ossiculoplasty	2	7,500
20	FP00200016	C44	Partial amputation - Pinna	1	2,500
21	FP00200017	Q17	Preauricular sinus	2	6,000
22	FP00200018	H80	Stapedectomy	2	8,125
23	FP00200019	H72	Tympanoplasty	5	7,000
24	FP00200020	J30	Vidian neurectomy - Micro	3	7,000
3 NOSE					
25	FP00300001	R04	Ant. Ethmoidal artery ligation	3	12,000
26	FP00300002	J32	Antrostomy - Bilateral	3	6,000
27	FP00300003	J32	Antrostomy - Unilateral	3	4,000
28	FP00300004	J32	Caldwell - luc - Bilateral	2	7,500
29	FP00300005	J32	Caldwell - luc- Unilateral	2	4,500
30	FP00300006	C30	Cryosurgery	2	7,000
31	FP00300007	J00	Rhinorrhoea - Repair	1	5,000

32	FP00300008	H04	Dacryocystorhinostomy (DCR)	1	9,000
33	FP00300009	J32	Septoplasty + FESS	2	5,500
34	FP00300010	J32	Ethmoidectomy - External	2	9,000
	FP00300011		Fracture reduction nose with septal correction		
35		S02		1	6,500
36	FP00300012	S02	Fracture - setting maxilla	2	8,500
37	FP00300013	S02	Fracture - setting nasal bone	1	4,000
38	FP00300014	J01	Functional Endoscopic Sinus (FESS)	1	9,000
39	FP00300015	J01	Intra Nasal Ethmoidectomy	2	12,250
40	FP00300016	D14	Rhinotomy - Lateral	2	10,625
41	FP00300017	J33	Nasal polypectomy - Bilateral	1	7,500
42	FP00300018	J33	Nasal polypectomy - Unilateral	1	5,250
43	FP00300019	J34	Turbineotomy Partial - Bilateral	3	7,000
44	FP00300020	J34	Turbineotomy Partial - Unilateral	3	4,500
45	FP00300021	C31	Radical fronto ethmo sphenoidectomy	5	15,000
46	FP00300022	J34	Rhinoplasty	3	12,000
47	FP00300023	J34	Septoplasty	2	5,500
48	FP00300024	J33	Sinus Antroscopy	1	4,500
49	FP00300025	J34	Submucos resection	1	5,000
50	FP00300026	J01	Trans Antral Ethmoidectomy	2	10,500
51	FP00300027	J31	Youngs operation	2	5,500

4 THROAT

52	FP00400001	J35	Adeno Tonsillectomy	1	6,000
53	FP00400002	J35	Adenoidectomy	1	4,000
54	FP00400003	C32	Arytenoidectomy	2	15,000
55	FP00400004	Q30	Choanal atresia	2	10,000
56	FP00400005	J03	Tonsillectomy + Myringotomy	3	10,000
57	FP00400006	Q38	Pharyngeal diverticulum's - Excision	2	12,000
58	FP00400007	C32	Laryngectomy	2	15,750
59	FP00400008	C41	Maxilla - Excision	2	10,000
60	FP00400009	K03	Oro Antral fistula	2	10,000
61	FP00400010	J39	Parapharyngeal - Exploration	2	10,000
62	FP00400011	J39	Parapharyngeal Abscess - Drainage	2	15,000
63	FP00400012	D10	Parapharyngeal -Tumour excision	3	26,250
64	FP00400013	Q38	Pharyngoplasty	2	12,000
65	FP00400014	Q38	Release of Tongue tie	1	3,000
66	FP00400015	J39	Retro pharyngeal abscess - Drainage	D	4,000
67	FP00400016	D11	Styloidectomy - Both side	3	10,000
68	FP00400017	D11	Styloidectomy - One side	3	8,000
69	FP00400018	J03	Tonsillectomy + Styloidectomy	2	12,500
70	FP00400019	Q89	Thyroglossal Cyst - Excision	2	10,000
71	FP00400020	Q89	Thyroglossal Fistula - Excision	3	10,000
72	FP00400021	J03	Tonsillectomy - Bilateral	1	7,000
73	FP00400022	J03	Tonsillectomy - Unilateral	1	5,500
74	FP00400023	C07	Total Parotidectomy	2	15,000
75	FP00400024	C05	Uvulopharyngo Plasty	2	12,500

5 GENERAL SURGERY

76	FP00500001	C20	Abdomino Perineal Resection	3	17,500
77	FP00500002	M70	Adventitious Burse - Excision	3	8,750
78	FP00500003	C20	Anterior Resection for CA	5	10,000
79	FP00500004	K35	Appendicectomy	2	6,000
80	FP00500005	K35	Appendicular Abscess - Drainage	2	7,000
			Arteriovenous (AV) Malformation of Soft Tissue Tumour - Excision		
81	FP00500006	D18		3	17,000
82	FP00500007		Axillary Lymphnode - Excision	1	3,125
83	FP00500008	M71	Bakers Cyst - Excision	3	5,000
84	FP00500009	D36	Bilateral Inguinal block dissection	3	13,000
85	FP00500010	K25	Bleeding Ulcer - Gastrectomy & vagotomy	5	17,000
86	FP00500011	K25	Bleeding Ulcer - Partial gastrectomy	5	15,000
87	FP00500012	C77	Block dissection Cervical Nodes	3	15,750

88	FP00500013	Q18	Branchial Fistula	3	13,000
89	FP00500014	C50	Breast - Excision	3	12,250
90	FP00500015	D25	Breast Lump - Left - Excision	2	5,000
91	FP00500016	D25	Breast Lump - Right - Excision	2	5,000
92	FP00500017	D25	Breast Mass - Excision	2	6,250
93	FP00500018	J98	Bronchial Cyst	3	5,000
94	FP00500019	M06	Bursa - Excision	3	7,000
95	FP00500020		Bypass - Inoprablaca of Pancreas	5	13,000
96	FP00500021	K56	Caecopexy	3	13,000
97	FP00500022	L02	Carbuncle back	1	3,500
98	FP00500023	B44	Cavernostomy	5	13,000
99	FP00500024	C96	Cervial Lymphnodes - Excision	2	2,500
100	FP00500025	K83	Cholecystostomy	5	10,000
101	FP00500026	K80	Cholecystectomy & exploration	3	13,250
102	FP00500027	C67	Colocystoplasty	5	15,000
103	FP00500028	K57	Colostomy	5	12,500
104	FP00500029	C14	Commando Operation	5	15,000
105	FP00500030	L84	Corn - Large - Excision	D	500
106	FP00500031	N49	Cyst over Scrotum - Excision	1	4,000
107	FP00500032	Q61	Cystic Mass - Excision	1	2,000
108	FP00500033	L72	Dermoid Cyst - Large - Excision	D	2,500
109	FP00500034	L72	Dermoid Cyst - Small - Excision	D	1,500
110	FP00500035	K86	Distal Pancrectectomy with Pancreatico Jejunostomy	7	17,000
111	FP00500036	K57	Diverticulectomy	3	15,000
112	FP00500037	N47	Dorsal Slit and Reduction of Paraphimosis	D	1,500
113	FP00500038	K61	Drainage of Ischio Rectal Abscess	1	4,000
114	FP00500039		Drainage of large Abscess	D	2,000
115	FP00500040	K92	Drainage of Peripherally Gastric Abscess	3	8,000
116	FP00500041	L02	Drainage of Psoas Abscess	2	3,750
117	FP00500042	K92	Drainage of Subdiaphragmatic Abscess	3	8,000
118	FP00500043	I31	Drainage Pericardial Effusion	7	11,000
119	FP00500044	K57	Duodenal Diverticulum	5	15,000
120	FP00500045	K31	Duodenal Jejunostomy	5	15,000
121	FP00500046	D13	Duodenectomy	7	20,000
122	FP00500047		Dupcrytren's (duputryen's contracture ?)	7	13,000
123	FP00500048	Q43	Duplication of Intestine	8	17,000
124	FP00500049	N43	Hydrocelectomy + Orchidectomy	2	7,000
125	FP00500050	N45	Epidedectomy	3	8,000
126	FP00500051	N45	Epididymal Swelling -Excision	2	5,500
127	FP00500052	N50	Epidymal Cyst	D	3,000
128	FP00500053	N50	Evacuation of Scrotal Hematoma	2	5,000
129	FP00500054	D13	Excision Benign Tumor -Small intestine	5	15,000
130	FP00500055	A15	Excision Bronchial Sinus	D	8,000
131	FP00500056	K75	Excision of liver Abscess	3	13,000
132	FP00500057	N43	Excision Filarial Scrotum	3	8,750
133	FP00500058	N61	Excision Mammary Fistula	2	5,500
134	FP00500059	Q43	Excision Meckel's Diverticulum	3	15,000
135	FP00500060	L05	Excision Pilonidal Sinus	2	8,250
136	FP00500061	K31	Excision Small Intestinal Fistulla	5	12,000
137	FP00500062	K11	Excision Submandibular Gland	5	10,000
138	FP00500063	C01	Excision of Large Growth from Tongue	3	5,000
139	FP00500064	C01	Excision of Small Growth from Tongue	D	1,500
140	FP00500065	L02	Excision of Swelling in Right Cervial Region	1	4,000
141	FP00500066	L02	Excision of Large Swelling in Hand	D	2,500
142	FP00500067	L02	Excision of Small Swelling in Hand	D	1,500
143	FP00500068	D33	Excision of Neurofibroma	3	7,000
144	FP00500069	L05	Excision of Siniuds and Curetage	2	7,000
145	FP00500070	G51	Facial Decompression Fibro Lipoma of Right Sided Spermatic with Lord Excision	5	15,000
146	FP00500071			1	2,500
147	FP00500072	D24	Fibroadenoma - Bilateral	2	6,250
148	FP00500073	D24	Fibrodenoma - Unilateral	2	7,000
149	FP00500074		Fibroma - Excision	2	7,000

150	FP00500075	K60	Fissurectomy	2	7,000
151	FP00500076	I84	Fissurectomy and Haemorrhoidectomy	2	11,250
152	FP00500077	K60	Fissurectomy with Eversion of Sac - Bilateral	2	8,750
153	FP00500078	K60	Fissurectomy with Sphincterotomy	2	9,000
154	FP00500079	K60	Fistula Repair	2	5,000
155	FP00500080	K60	Fistulectomy	2	7,500
156	FP00500081		Foreign Body Removal in Deep Region	2	5,000
157	FP00500082		Fulguration	2	5,000
158	FP00500083	K21	Fundoplication	3	15,750
159	FP00500084	K25	G J Vagotomy	5	15,000
160	FP00500085	K25	Vagotomy	3	12,000
161	FP00500086	M67	Ganglion - large - Excision	1	3,000
162	FP00500087	M67	Ganglion (Dorsum of Both Wrist) - Excision	1	4,000
163	FP00500088	M67	Ganglion - Small - Excision	D	1,000
164	FP00500089	K28	Gastro jejunal ulcer	5	10,000
165	FP00500090	K63	Gastro jejuno Colic Fistula	5	12,500
166	FP00500091	C17	Gastrojejunostomy	5	15,000
167	FP00500092	K25	Gastrotomy	7	15,000
168	FP00500093		Graham's Operation	5	12,500
169	FP00500094	A58	Granuloma - Excision	1	4,000
170	FP00500095		Growth - Excision	D	1,800
171	FP00500096	D18	Haemangioma - Excision	3	7,000
172	FP00500097	D13	Haemorrhage of Small Intestine	3	15,000
173	FP00500098	C01	Hemi Glossectomy	3	10,000
174	FP00500099	D16	Hemi Mandibulectomy	3	15,000
175	FP00500100	C18	Hemicolectomy	5	16,000
176	FP00500101	J38	Hemithyroidectomy	3	12,000
177	FP00500102	C34	Hepatic Resection (lobectomy)	7	15,000
178	FP00500103	K43	Hernia - Epigastric	3	10,000
179	FP00500104	K43	Hernia - Incisional	3	12,250
180	FP00500105	K40	Hernia - Repair & release of obstruction	3	10,000
181	FP00500106	K42	Hernia - Umbilical	3	8,450
182	FP00500107	K43	Hernia - Ventral - Lipectomy/Incisional	3	10,500
183	FP00500108	K41	Hernia - Femoral	3	7,000
184	FP00500109	K40	Hernioplasty	3	7,000
185	FP00500110		Herniorraphy and Hydrocelectomy Sac Excision	3	10,500
186	FP00500111	K44	Hernia - Hiatus	3	12,250
187	FP00500112	B67	Hydatid Cyst of Liver	3	10,000
188	FP00500113		Nodular Cyst	D	3,000
189	FP00500114	N43	Hydrocelectomy - Excision	2	4,000
190	FP00500115		Hydrocelectomy+Hernioplasty - Excision	3	7,000
191	FP00500116	N43	Hydrocele - Excision - Unilateral	2	3,750
192	FP00500117	N43	Hydrocele - Excision - Bilateral	2	5,000
193	FP00500118	C18	Ilieo Sigmoidostomy	5	13,000
194	FP00500119	M20	Infected Bunion Foot - Excision	1	4,000
195	FP00500120		Inguinal Node (bulk dissection) axial	2	10,000
196	FP00500121	K57	Intestinal perforation	6	9,000
197	FP00500122	K56	Intestinal Obstruction	6	9,000
198	FP00500123	K56	Intussusception	7	12,500
199	FP00500124	C16	Jejunostomy	6	10,000
200	FP00500125	K56	Closure of Perforation	5	9,000
201	FP00500126	C67	Cysto Reductive Surgery	3	7,000

202	FP00500127	K63	Gastric Perforation	6	12,500
203	FP00500128	K56	Intestinal Perforation (Resection Anastomosis)	5	11,250
204	FP00500129	K35	Appendicular Perforation	5	10,500
205	FP00500130		Burst Abdomen Obstruction	7	11,000
206	FP00500131	K56	Closure of Hollow Viscus Perforation	5	13,500
207	FP00500132		Laryngectomy & Pharyngeal Diverticulum (Throat)	3	10,000
208	FP00500133	Q42	Anorectoplasty	2	14,000
209	FP00500134	C32	Laryngectomy with Block Dissection (Throat)	3	12,000
210	FP00500135	C32	Laryngo Fissure (Throat)	3	12,500
211	FP00500136	C13	Laryngopharyngectomy (Throat)	3	12,000
212	FP00500137	K51	Ileostomy	7	17,500
213	FP00500138	D17	Lipoma	D	2,000
214	FP00500139	K56	Loop Colostomy Sigmoid	5	12,000
215	FP00500140	I84	Lords Procedure (haemorrhoids)	2	5,000
216	FP00500141	D24	Lumpectomy - Excision	2	7,000
217	FP00500142	C50	Mastectomy	2	9,000
218	FP00500143	K66	Mesenteric Cyst - Excision	3	9,000
219	FP00500144	K76	Mesenteric Caval Anastomosis	5	10,000
220	FP00500145	D14	Micro-laryngoscopic Surgery [micro-laryngoscopy ?]	3	12,500
221	FP00500146	T18	Oesophagoscopy for foreign body removal	D	6,000
222	FP00500147	D13	Oesophagectomy	5	14,000
223	FP00500148	I85	Oesophagus Portal Hypertension	5	18,000
224	FP00500149	N73	Pelvic Abscess - Open Drainage	5	8,000
225	FP00500150	C61	Orchidectomy	2	5,500
226	FP00500151	C61	Orchidectomy + Herniorrhaphy	3	7,000
227	FP00500152	Q53	Orchidopexy	5	6,000
228	FP00500153	Q53	Orchidopexy with Circumcision	5	9,750
229	FP00500154	Q53	Orchidopexy With Eversion of Sac	5	8,750
230	FP00500155		Orchidopexy with Herniotomy	5	14,875
231	FP00500156	N45	Orchitis	2	6,000
232	FP00500157	K86	Pancreatico Deodeneotomy	6	13,750
233	FP00500158	D12	Papilloma Rectum - Excision	2	3,500
234	FP00500159	I84	Haemorroidectomy+ Fistulectomy	2	7,000
235	FP00500160		Phyomatous Growth in the Scalp - Excision	1	3,125
236	FP00500161	K76	Porto Caval Anastomosis	5	12,000
237	FP00500162	K25	Pyeloplasty	5	11,000
238	FP00500163	C50	Radical Mastectomy	2	9,000
239	FP00500164	C49	Radical Neck Dissection - Excision	6	18,750
240	FP00500165	K43	Hernia - Spigelian	3	12,250
241	FP00500166	K62	Rectal Dilatation	1	4,500
242	FP00500167	K62	Prolapse of Rectal Mass - Excision	2	8,000
243	FP00500168	K62	Rectal polyp	1	3,000
244	FP00500169	K62	Rectopexy	3	10,000
245	FP00500170	K83	Repair of Common Bile Duct	3	12,500
246	FP00500171	C18	Resection Anastomosis (Large Intestine)	8	15,000
247	FP00500172	C17	Resection Anastomosis (Small Intestine)	8	15,000
248	FP00500173	D20	Retroperitoneal Tumor - Excision	5	15,750
249	FP00500174	I84	Haemorroidectomy	2	5,000
250	FP00500175	K11	Salivary Gland - Excision	3	7,000
251	FP00500176	L72	Sebaceous Cyst - Excision	D	1,200
252	FP00500177	N63	Segmental Resection of Breast	2	10,000
253	FP00500178		Scrotal Swelling (Multiple) - Excision	2	5,500
254	FP00500179	K57	Sigmoid Diverticulum	7	15,000
255	FP00500180	K25	Simple closure - Peptic perforation	6	11,000
256	FP00500181	L05	Sinus - Excision	2	5,000
257	FP00500182	D17	Soft Tissue Tumor - Excision	3	4,000
258	FP00500183	C80	Spindle Cell Tumor - Excision	3	7,000
259	FP00500184	D58	Splenectomy	10	23,000
260	FP00500185		Submandibular Lymphs - Excision	2	4,500
			Submandibular Mass Excision +		

261	FP00500186	K11	Reconstruction	5	15,000
262	FP00500187	K11	Submandibular Salivary Gland -Removal	5	9,500
263	FP00500188	D11	Superficial Parodectomy	5	10,000
264	FP00500189	R22	Swelling in Rt and Lt Foot - Excision	1	2,400
265	FP00500190	R22	Swelling Over Scapular Region	1	4,000
266	FP00500191	K57	Terminal Colostomy	5	12,000
267	FP00500192	J38	Thyroplasty	5	11,000
268	FP00500193	C18	Coloectomy - Total	6	15,000
269	FP00500194	C67	Cystectomy - Total	6	10,000
270	FP00500195	C01	Glossectomy - Total (Throat)	7	15,000
271	FP00500196	C33	Pharyngectomy & Reconstruction - Total Tracheal Stenosis (End to end Anastamosis)	6	13,000
272	FP00500197	Q32	(Throat) Tracheoplasty	6	15,000
273	FP00500198	Q32	(Throat)	6	15,000
274	FP00500199	K56	Tranverse Colostomy	5	12,500
275	FP00500200	Q43	Umbilical Sinus - Excision	2	5,000
276	FP00500201	K25	Vagotomy & Drainage	5	15,000
277	FP00500202	K25	Vagotomy & Pyloroplasty	6	15,000
278	FP00500203	I84	Varicose Veins - Excision and Ligation	3	7,000
279	FP00500204		Vasco Vasostomy	3	11,000
280	FP00500205	K56	Volvlous of Large Bowel	4	15,000
281	FP00500206	K76	Warren's Shunt	6	15,000

6 GYNAECOLOGY

282	FP00600001		Abdomonal open for stress incision	5	11,250
283	FP00600002	N75	Bartholin abscess I & D	D	1,875
284	FP00600003	N75	Bartholin cyst removal	D	1,875
285	FP00600004	N84	Cervical Polypectomy	1	3,000
286	FP00600005	N84	Cyst - Labial	D	1,750
287	FP00600006	D28	Cyst -Vaginal Enucleation	D	1,875
288	FP00600007	N83	Ovarian Cystectomy	1	7,000
289	FP00600008	N81	Cystocele - Anterior repair	2	10,000
290	FP00600009	N96	D&C (Dilatation & curretage)	D	2,500
291	FP00600010		Electro Cauterisation Cryo Surgery	D	2,500
292	FP00600011		Fractional Curretage	D	2,500
293	FP00600012		Gilliams Operation	2	6,000
294	FP00600013		Haemato Colpo/Excision - Vaginal Septum	D	3,000
295	FP00600014	N89	Hymenectomy & Repair of Hymen	D	5,000
296	FP00600015	C53	Hysterectomy - abdominal	5	10,000
297	FP00600016	C53	Hysterectomy - Vaginal	5	10,000
298	FP00600017	C53	Hysterectomy - Wertheims operation	5	12,500
299	FP00600018	D25	Hysterotomy -Tumors removal	5	12,500
300	FP00600019	D25	Myomectomy - Abdominal	5	10,500
301	FP00600020	D27	Ovarectomy/Oophrectomy	3	7,000
302	FP00600021	O70	Perineal Tear Repair	D	1,875
303	FP00600022	N81	Prolapse Uterus -L forts	5	11,250
304	FP00600023	N81	Prolapse Uterus - Manchester	5	11,250
305	FP00600024	N82	Retro Vaginal Fistula -Repair	3	12,250
306	FP00600025	C56	Salpingoophrectomy	3	7,500
307	FP00600026	N97	Tuboplasty	3	8,750
308	FP00600027	O70	Vaginal Tear -Repair	D	3,125
309	FP00600028	D28	Vulvectomy	2	8,000
310	FP00600029	D28	Vulvectomy - Radical	2	7,500
311	FP00600030	D28	Vulval Tumors - Removal	3	5,000
312	FP00600031		Normal Delivery	2	2,500
313	FP00600032		Casearean delivery	3	4,500

7 ENDOSCOPIC PROCEDURES					
314	FP00700001	N80	Ablation of Endometriotic Spot	D	5,000
315	FP00700002		Adhenolysis	D	17,000
316	FP00700003	K35	Appendectomy	2	11,000
317	FP00700004	K80	Cholecystectomy	3	10,000
318	FP00700005	K80	Cholecystectomy and Drainage of Liver abscess	3	14,200
319	FP00700006	K80	Cholecystectomy with Excision of TO Mass	4	15,000
320	FP00700007		Cyst Aspiration	D	1,750
321	FP00700008		Endometria to Endometria Anastomosis	3	7,000
322	FP00700009	N97	Fimbriolysis	2	5,000
323	FP00700010	C18	Hemicolectomy	4	17,000
324	FP00700011	C53	Hysterectomy with bilateral Salpingo Operectomy	3	12,250
325	FP00700012	K43	Incisional Hernia - Repair	2	12,250
326	FP00700013	K40	Inguinal Hernia - Bilateral	2	10,000
327	FP00700014	K40	Inguinal hernia - Unilateral	2	11,000
328	FP00700015	K56	Intestinal resection	3	13,500
329	FP00700016	D25	Myomectomy	2	10,500
330	FP00700017	D27	Oophrectomy	2	7,000
331	FP00700018	N83	Ovarian Cystectomy	D	7,000
332	FP00700019		Peritonitis	5	9,000
333	FP00700020	C56	Salpingo Ophrectomy	3	9,000
334	FP00700021	N97	Salpingostomy	2	9,000
335	FP00700022	Q51	Uterine septum	D	7,500
336	FP00700023	I86	Varicocele - Bilateral	1	15,000
337	FP00700024	I86	Varicocele - Unilateral	1	11,000
338	FP00700025	N28	Repair of Ureterocele	3	10,000
8 HYSTEROSCOPIC					
339	FP00800001	N80	Ablation of Endometrium	D	5,000
340	FP00800002	N97	Hysteroscopic Tubal Cannulation	D	7,500
341	FP00800003	N84	Polypectomy	D	7,000
342	FP00800004	N85	Uterine Synechia - Cutting	D	7,500
9 NEUROSURGERY					
343	FP00900001	I67	Anneurysm	10	29,750
344	FP00900002	Q01	Anterior Encephalocele	10	28,750
345	FP00900003	I60	Burr hole	8	18,750
346	FP00900004	I65	Carotid Endarterectomy	10	18,750
347	FP00900005	G56	Carpal Tunnel Release	5	11,000
348	FP00900006	Q76	Cervical Ribs - Bilateral	7	13,000
349	FP00900007	Q76	Cervical Ribs - Unilateral	5	10,000
350	FP00900008		Cranio Ventricular	9	14,000
351	FP00900009		Cranioplasty	7	10,000
352	FP00900010	Q75	Craniosostenosis	7	20,000
353	FP00900011	S02	Cerebrospinal Fluid (CSF) Rhinorrhoea	3	10,000
354	FP00900012		Duroplasty	5	9,000
355	FP00900013	S06	Haematoma - Brain (head injuries)	9	22,000
356	FP00900014		Haematoma - Brain (hypertensive)	9	22,000
357	FP00900015	S06	Haematoma (Child irritable subdural)	10	22,000
358	FP00900016	M48	Laminectomy with Fusion	6	16,250
359	FP00900017		Local Neurectomy	6	11,000
360	FP00900018	M51	Lumbar Disc	5	10,000
361	FP00900019	Q05	Meningocele - Anterior	10	30,000
362	FP00900020	Q05	Meningocele - Lumbar	8	22,500
363	FP00900021	Q01	Meningocele - Occipital	10	30,000
364	FP00900022	M50	Microdiscectomy - Cervical	10	15,000
365	FP00900023	M51	Microdiscectomy - Lumbar	10	15,000
366	FP00900024	M54	Neurolysis	7	15,000
367	FP00900025		Peripheral Nerve Surgery	7	12,000
368	FP00900026	I82	Posterior Fossa - Decompression	8	18,750

369	FP00900027		Repair & Transposition Nerve	3	6,500
370	FP00900028	S14	Brachial Plexus - Repair	7	18,750
371	FP00900029	Q05	Spina Bifida - Large - Repair	10	22,000
372	FP00900030	Q05	Spina Bifida - Small - Repair	10	18,000
373	FP00900031	G91	Shunt	7	12,000
374	FP00900032	S12	Skull Traction	5	8,000
375	FP00900033		Spine - Anterior Decompression	8	18,000
376	FP00900034	M54	Spine - Canal Stenosis	6	14,000
377	FP00900035	M54	Spine - Decompression & Fusion	6	17,000
378	FP00900036	M54	Spine - Disc Cervical/Lumber	6	15,000
379	FP00900037	C72	Spine - Extradural Tumour	7	14,000
380	FP00900038	C72	Spine - Intradural Tumour	7	14,000
381	FP00900039	C72	Spine - Intramedullar Tumour	7	15,000
382	FP00900040	P10	Subdural aspiration	3	8,000
383	FP00900041	G50	Temporal Rhizotomy	5	12,000
384	FP00900042		Trans Sphenoidal	6	15,000
385	FP00900043	C71	Tumours - Supratentorial	7	22,500
386	FP00900044	D32	Tumours Meninges - Gocussa	7	22,500
387	FP00900045	D32	Tumours Meninges - Posterior	7	22,500
388	FP00900046	K25	Vagotomy - Selective	5	15,000
389	FP00900047	C17	Vagotomy with Gastrojejunostomy	6	15,000
390	FP00900048	K25	Vagotomy with Pyeloplasty	6	15,000
391	FP00900049	K25	Vagotomy - Highly Selective	5	15,000
392	FP00900050	G00	Ventricular Puncture	3	8,000

10 OPHTHALMOLOGY

393	FP01000001	H00	Abscess Drainage of Lid	D	500
394	FP01000002	H40	Anterior Chamber Reconstruction	3	7,000
395	FP01000003	H33	Buckle Removal	2	9,375
396	FP01000004	H04	Canaliculo Dacryocysto Rhinostomy	1	7,000
397	FP01000005	H25	Capsulotomy	1	2,000
398	FP01000006	H25	Cataract - Bilateral	D	5,000
399	FP01000007	H25	Cataract - Unilateral	D	3,500
400	FP01000008	H25	Cataract + Pterygium	D	5000
401	FP01000009	H18	Corneal Grafting	D	4,000
402	FP01000010	H33	Cryoretinopexy - Closed	1	5,000
403	FP01000011	H33	Cryoretinopexy - Open	1	6,000
404	FP01000012	H40	Cyclocryotherapy	D	3,500
405	FP01000013	H04	Cyst	D	1,000
406	FP01000014	H04	Dacrocystectomy With Pterygium - Excision	D	6,500
407	FP01000015	H11	Pterigium + Conjunctival Autograft	D	3,500
408	FP01000016	H04	Dacryocystectomy	D	5,000
409	FP01000017	H46	Endoscopic Optic Nerve Decompression	D	8,000
410	FP01000018	E05	Endoscopic Optic Orbital Decompression	D	8,000
411	FP01000019	C69	Enucleation	1	2,000
412	FP01000020	C69	Enucleation with Implant	1	3,500
413	FP01000021	C69	Exentration	D	3,500
414	FP01000022	H02	Ectropion Correction	D	3,000
415	FP01000023	H40	Glaucoma surgery (trabeculectomy)	2	7,000
416	FP01000024	H44	Intraocular Foreign Body Removal	D	3,000
417	FP01000025	H18	Keratoplasty	1	8,000
418	FP01000026	H52	Lensectomy	D	7,500
419	FP01000027	H04	Limbal Dermoid Removal	D	2,500
420	FP01000028	H33	Membranectomy	D	6,000
421	FP01000029	S05	Perforating corneo - Scleral Injury	2	5,000
422	FP01000030	H11	Pterygium (Day care)	D	1,000
423	FP01000031	H02	Ptosis	D	2,000
424	FP01000032	H52	Radial Keratotomy	1	5,000
425	FP01000033	H21	IRIS Prolapse - Repair	2	5,000

426	FP01000034	H33	Retinal Detachment Surgery		2	10,000
427	FP01000035	D31	Small Tumour of Lid - Excision	D		500
428	FP01000036	D31	Socket Reconstruction		3	6,000
429	FP01000037	H40	Trabeculectomy - Right	D		7,500
430	FP01000038	H40	Iridectomy	D		1,800
431	FP01000039	D31	Tumours of IRIS		2	4,000
432	FP01000040	H33	Vitrectomy		2	4,500
433	FP01000041	H33	Vitrectomy + Retinal Detachment		3	20,000

11 ORTHOPAEDIC

434	FP01100001	S42	Acromion reconstruction		10	20,000
435	FP01100002	Q79	Accessory bone - Excision		3	12,000
436	FP01100003	S48	Amputation - Upper Fore Arm		5	15,000
437	FP01100004	S68	Amputation - Index Fingure		1	1,000
438	FP01100005	S58	Amputation - Forearm Amputation - Wrist Axillary Node		5	18,000
439	FP01100006		Dissection		4	12,000
440	FP01100007		Amputation - 2nd and 3rd Toe		1	2,000
441	FP01100008		Amputation - 2nd Toe		1	1,000
442	FP01100009		Amputation - 3rd and 4th Toes		1	2,000
443	FP01100010		Amputation - 4th and 5th Toes		1	2,000
444	FP01100011		Amputation - Ankle		5	12,000
445	FP01100012		Amputation - Arm		6	18,000
446	FP01100013	M20	Amputation - Digits		1	3,500
447	FP01100014		Amputation - Fifth Toe		1	1,000
448	FP01100015	S98	Amputation - Foot		5	18,000
449	FP01100016		Amputation - Forefoot		5	15,000
450	FP01100017		Amputation - Great Toe		1	1,000
451	FP01100018	S68	Amputation - Wrist		5	12,000
452	FP01100019	S88	Amputation - Leg Amputation - Part of Toe and Fixation of K		7	20,000
453	FP01100020		Wire		5	12,000
454	FP01100021	S78	Amputation - Thigh		7	18,000
455	FP01100022	M41	Anterior & Posterior Spine Fixation		6	25,000
456	FP01100023		Arthroplasty - Excision		3	8,000
457	FP01100024		Arthrotomy		7	15,000
458	FP01100025	Q66	Arthrodesis Ankle Triple		7	16,000
459	FP01100026		Arthrotomy + Synevectomy		3	15,000
460	FP01100027	Q65	Arthroplasty of Femur head - Excision		7	18,000
461	FP01100028	S82	Bimalleolar Fracture Fixation		6	12,000
462	FP01100029		Bone Tumour and Reconstruction -Major - Excision		6	13,000
463	FP01100030		Bone Tumour and Reconstruction - Minor - Excision		4	10,000
464	FP01100031	M77	Calcaneal Spur - Excision of Both		3	9,000
465	FP01100032	S42	Clavicle Surgery		5	15,000
466	FP01100033	S62	Close Fixation - Hand Bones		3	7,000
467	FP01100034	S92	Close Fixation - Foot Bones		2	6,500
468	FP01100035		Close Reduction - Small Joints		1	3,500
469	FP01100036		Closed Interlock Nailing + Bone Grafting		2	12,000
470	FP01100037		Closed Interlocking Intermedullary		2	12,000
471	FP01100038	S82	Closed Interlocking Tibia + Orif of Fracture Fixation		3	12,000
472	FP01100039		Closed Reduction and Internal Fixation		3	12,000
473	FP01100040		Closed Reduction and Internal Fixation with K wire		3	12,000
474	FP01100041		Closed Reduction and Percutaneous Screw Fixation		3	12,000
475	FP01100042		Closed Reduction and Percuteneous Pinning		3	12,000
476	FP01100043		Closed Reduction and Percutaneous Nailing		3	12,000
477	FP01100044		Closed Reduction and Proceed to Posterior Stabilization		5	16,000
478	FP01100045		Debridement & Closure - Major		3	5,000
479	FP01100046		Debridement & Closure - Minor		1	3,000
480	FP01100047	M48	Decompression and Spinal Fixation Decompression and Stabilization with		5	20,000

481	FP01100048	M48	Steffiplate		6	20,000
482	FP01100049	M43	Decompression L5 S1 Fusion with Posterior Stabilization		6	20,000
483	FP01100050	G56	Decompression of Carpal Tunnel Syndrome		2	4,500
484	FP01100051	M51	Decompression Posterior D12+L1 Decompression Stabilization and Laminectomy		5	18,000
485	FP01100052	M51	Laminectomy		5	16,000
486	FP01100053	S53	Dislocation - Elbow	D		1,000
487	FP01100054	S43	Dislocation - Shoulder	D		1,000
488	FP01100055	S73	Dislocation- Hip		1	1,000
489	FP01100056	S83	Dislocation - Knee		1	1,000
490	FP01100057		Drainage of Abscess Cold	D		1,250
491	FP01100058	M72	Dupuytren Contracture		6	12,000
492	FP01100059	M89	Epiphyseal Stimulation		3	10,000
493	FP01100060	M89	Exostosis - Small bones -Excision		2	5,500
494	FP01100061	M89	Exostosis - Femur - Excision		7	15,000
495	FP01100062	M89	Exostosis - Humerus - Excision		7	15,000
496	FP01100063	M89	Exostosis - Radius - Excision		6	12,000
497	FP01100064	M89	Exostosis - Ulna - Excision		6	12,000
498	FP01100065	M89	Exostosis - Tibia- Excision		6	12,000
499	FP01100066	M89	Exostosis - Fibula - Excision		6	12,000
500	FP01100067	M89	Exostosis - Patella - Excision		6	12,000
501	FP01100068		Exploration and Ulnar Repair		5	9,500
502	FP01100069	S72	External fixation - Long bone		4	13,000
503	FP01100070		External fixation - Small bone		2	11,500
504	FP01100071	S32	External fixation - Pelvis		5	15,000
505	FP01100072	M62	Fasciotomy		2	12,000
506	FP01100073		Fixator with Joint Arthrolysis		9	18,000
507	FP01100074	S32	Fracture - Acetabulum		9	18,000
508	FP01100075	S72	Fracture - Femoral neck - MUA & Internal Fixation		7	18,000
509	FP01100076	S72	Fracture - Femoral Neck Open Reduction & Nailing		7	15,000
510	FP01100077	S82	Fracture - Fibula Internal Fixation		7	15,000
511	FP01100078	S72	Fracture - Hip Internal Fixation		7	15,000
512	FP01100079	S42	Fracture - Humerus Internal Fixation		2	13,000
513	FP01100080	S52	Fracture - Olecranon of Ulna		2	9,500
514	FP01100081	S52	Fracture - Radius Internal Fixation		2	9,500
515	FP01100082	S82	Fracture - TIBIA Internal Fixation		4	10,500
516	FP01100083	S82	Fracture - Fibula Internal Fixation		4	10,500
517	FP01100084	S52	Fracture - Ulna Internal Fixation		4	9,500
518	FP01100085		Fractured Fragment Excision		2	7,500
519	FP01100086	M16	Girdle Stone Arthroplasty		7	15,000
520	FP01100087	M41	Harrington Instrumentation		5	15,000
521	FP01100088	S52	Head Radius - Excision		3	15,000
522	FP01100089	M17	High Tibial Osteotomy		5	15,000
523	FP01100090		Hip Region Surgery		7	18,000
524	FP01100091	S72	Hip Spica	D		4,000
525	FP01100092	S42	Internal Fixation Lateral Epicondyle		4	9,000
526	FP01100093		Internal Fixation of other Small Bone		3	7,000
527	FP01100094		Joint Reconstruction		10	22,000
528	FP01100095	M48	Laminectomy		9	18,000
529	FP01100096	M89	Leg Lengthening		8	15,000
530	FP01100097	S72	Lizarov Fixation		6	15,000
531	FP01100098	M66	Multiple Tendon Repair		5	12,500
532	FP01100099		Nerve Repair Surgery		6	14,000
533	FP01100100		Nerve Transplant/Release		5	13,500
534	FP01100101		Neurolysis		7	18,000
535	FP01100102		Open Reduction Internal Fixation (2 Small Bone)		5	12,000
536	FP01100103		Open Reduction Internal Fixation (Large Bone)		6	16,000
537	FP01100104	Q65	Open Reduction of CDH		7	17,000

538	FP01100105		Open Reduction of Small Joint	1	7,500
539	FP01100106		Open Reduction with Phemister Grafting	3	10,000
540	FP01100107		Osteotomy -Small Bone	6	18,000
541	FP01100108		Osteotomy -Long Bone	8	21,000
542	FP01100109	M17	Patellectomy	7	15,000
543	FP01100110	S32	Pelvic Fracture - Fixation	8	17,000
544	FP01100111	M16	Pelvic Osteotomy	10	22,000
545	FP01100112		Percutaneous - Fixation of Fracture	6	10,000
546	FP01100113	M70	Prepatellar Bursa and Repair of MCL of Knee	7	15,500
547	FP01100114	S83	Reconstruction of ACL/PCL	7	19,000
548	FP01100115	M76	Retrocalcaneal Bursa - Excision	4	10,000
549	FP01100116	M86	Sequestrectomy of Long Bones	7	18,000
550	FP01100117	M75	Shoulder Jacket (is it shoulder spica ?	D	5,000
551	FP01100118		Sinus Over Sacrum Excision	2	7,500
552	FP01100119		Skin Grafting	2	7,500
553	FP01100120	M43	Spinal Fusion	10	22,000
554	FP01100121	M05	Synovectomy	7	18,000
555	FP01100122	M71	Synovial Cyst - Excision	1	7,500
556	FP01100123	Q66	Tendo Achilles Tenotomy	1	5,000
557	FP01100124		Tendon Grafting	3	18,000
558	FP01100125	S86	Tendon Nerve Surgery of Foot	1	2,000
559	FP01100126	G56	Tendon Release	1	2,500
560	FP01100127	M67	Tenolysis	2	8,000
561	FP01100128	M67	Tenotomy	2	8,000
562	FP01100129	S82	Tension Band Wiring Patella	5	12,500
563	FP01100130	M65	Trigger Thumb	D	2,500
564	FP01100131		Wound Debridement	D	1,000

12 PAEDIATRIC

565	FP01200001	Q79	Abdomino Perioneal (Exomphalos)	5	13,000
566	FP01200002	Q42	Anal Dilatation	3	5,000
567	FP01200003	Q43	Anal Transposition for Ectopic Anus	7	17,000
568	FP01200004	Q54	Chordee Correction	5	10,000
569	FP01200005	Q43	Closure Colostomy	7	12,500
570	FP01200006	Q43	Colectomy	5	12,000
571	FP01200007	Q39	Colon Transplant	3	18,000
572	FP01200008	N21	Cystolithotomy	3	7,500
573	FP01200009	Q39	Esophageal Atresia (Fistula)	3	18,000
574	FP01200010	R62	Gastrostomy	5	15,000
575	FP01200011	Q79	Hernia - Diaphragmatic	3	10,000
576	FP01200012	K43	Hernia - Epigastric	3	7,000
577	FP01200013	K42	Hernia - Umbilical	3	7,000
578	FP01200014	K40	Hernia-Inguinal - Bilateral	3	10,000
579	FP01200015	K40	Hernia-Inguinal -Unilateral	3	7,000
580	FP01200016	Q43	Meckel's Diverticulectomy	3	12,250
581	FP01200017	Q74	Meniscectomy	3	6,000
582	FP01200018	N20	Nephrolithotomy	3	10,000
583	FP01200019	Q53	Orchidopexy - Bilateral	2	7,500
584	FP01200020	Q53	Orchidopexy - Unilateral)	2	5,000
585	FP01200021	N20	Pyelolithotomy	5	10,000
586	FP01200022	Q62	Pyeloplasty	5	15,000
587	FP01200023	Q40	Pyloric Stenosis (Ramsted OP)	3	10,000
588	FP01200024	K62	Rectal Polyp	2	3,750
589	FP01200025		Resection & Anastomosis of Intestine	7	17,000
590	FP01200026	N21	Supra Pubic Drainage - Open	2	4,000
591	FP01200027	N44	Torsion Testis	5	10,000
592	FP01200028	Q39	Tracheo Esophageal Fistula	5	18,750
593	FP01200029	Q62	Ureterotomy	5	10,000
594	FP01200030	N35	Urethroplasty	5	15,000
595	FP01200031	Q62	Vesicostomy	5	12,000

13 ENDOCRINE					
596	FP01300001	D35	Adenoma Parathyroid - Excision	3	15,000
597	FP01300002	D35	Adrenal Gland Tumour - Excision	5	11,250
598	FP01300003	D36	Axillary lymphnode - Excision	3	13,000
599	FP01300004	D11	Parotid Tumour - Excision	3	9,000
600	FP01300005	C25	Pancreatectomy	7	17,000
601	FP01300006	K80	Sphincterotomy (sphincterotomy ?)	5	13,000
602	FP01300007	D34	Thyroid Adenoma Resection Enucleation	5	15,000
603	FP01300008	E05	Thyroidectomy - Hemi	3	9,000
604	FP01300009	E05	Thyroidectomy - Partial	3	10,000
605	FP01300010	C73	Thyroidectomy - Total	5	16,000
606	FP01300011	C73	Total thyroidectomy & block dissection	5	17,000
607	FP01300012	C73	Total Thyroidectomy + Reconstruction	5	15,000
608	FP01300013		Trendal Burge Ligation and Stripping	3	9,000
14 UROLOGY					
609	FP01400001	N21	Bladder Calculi- Removal	2	7,000
610	FP01400002	C67	Bladder Tumour (Fulguration)	2	2,000
611	FP01400003	Q64	Correction of Extrophy of Bladder	2	1,500
612	FP01400004	N21	Cystolithotomy	2	6,000
613	FP01400005	K86	Cysto Gastrostomy	4	10,000
614	FP01400006	K86	Cysto Jejunostomy	4	10,000
615	FP01400007	N20	Dormia Extraction of Calculus	1	5,000
616	FP01400008	N15	Drainage of Perinephric Abscess	1	7,500
617	FP01400009	N21	Cystolithopexy	2	7,500
618	FP01400010	N36	Excision of Urethral Carbuncle	1	5,000
619	FP01400011		Exploration of Epididymus (Unsuccesful Vasco vasectomy)	2	7,500
620	FP01400012	Q64	Urachal Cyst	1	4,000
621	FP01400013	Q54	Hydrospadius	2	9,000
622	FP01400014	N35	Internal Urethrotomy	3	7,000
623	FP01400015	N20	Litholapexy	2	7,500
624	FP01400016	N20	Lithotripsy	2	11,000
625	FP01400017	N36	Meatoplasty	1	2,500
626	FP01400018	N36	Meatotomy	1	1,500
627	FP01400019		Neoblastoma	3	10,000
628	FP01400020	Q61	Nephrectomy	4	10,000
629	FP01400021	C64	Nephrectomy (Renal tumour)	4	10,000
630	FP01400022	C64	Nephro Uretrectomy	4	10,000
631	FP01400023	N20	Nephrolithotomy	3	15,000
632	FP01400024	N28	Nephropexy	2	9,000
633	FP01400025	N13	Nephrostomy	2	10,500
634	FP01400026	C64	Nephrourethrotomy (is it Nephrourethrectomy ?)	3	11,000
635	FP01400027	C67	Open Resection of Bladder Neck	2	7,500
636	FP01400028	N28	Operation for Cyst of Kidney	3	9,625
637	FP01400029	N28	Operation for Double Ureter	3	15,750
638	FP01400030	Q62	Fturp	3	12,250
639	FP01400031	S37	Operation for Injury of Bladder	3	12,250
640	FP01400032	C67	Partial Cystectomy	3	16,500
641	FP01400033	C64	Partial Nephrectomy	3	13,000
642	FP01400034	N20	PCNL (Percutaneous nephro lithotomy) - Bilateral	3	18,000
643	FP01400035	N20	PCNL (Percutaneous nephro lithotomy) - Unilateral	3	14,000
644	FP01400036	Q64	Post Urethral Valve	1	9,000
645	FP01400037	N20	Pyelolithotomy	3	13,500
646	FP01400038	N13	Pyeloplasty & Similar Procedures	3	12,500
647	FP01400039	C64	Radical Nephrectomy	3	13,000
648	FP01400040	N47	Reduction of Paraphimosis	D	1,500
649	FP01400041	N36	Reimplanation of Urethra	5	17,000

650	FP01400042	N32	Reimplantation of Bladder	5	17,000
651	FP01400043	N13	Reimplantation of Ureter	5	17,000
652	FP01400044	N82	Repair of Uretero Vaginal Fistula	2	12,000
653	FP01400045	N28	Repair of Ureterocele	3	10,000
654	FP01400046	N13	Retroperitoneal Fibrosis - Renal	5	26,250
655	FP01400047	C61	Retropubic Prostatectomy	4	15,000
656	FP01400048	K76	Spleno Renal Anastomosis	5	13,000
657	FP01400049	N35	Stricture Urethra	1	7,500
658	FP01400050	N40	Suprapubic Cystostomy - Open	2	3,500
659	FP01400051	N40	Suprapubic Drainage - Closed	2	3,500
660	FP01400052	N44	Torsion testis	1	3,500
661	FP01400053	N40	Trans Vesical Prostatectomy	2	15,750
662	FP01400054	N40	Transurethral Fulguration TURBT (Transurethral Resection of the Bladder Tumor)	2	4,000
663	FP01400055	D30		3	15,000
664	FP01400056	N40	TURP + Circumcision	3	15,000
665	FP01400057	N41	TURP + Closure of Urinary Fistula	3	13,000
666	FP01400058	N40	TURP + Cystolithopexy	3	18,000
667	FP01400059	N40	TURP + Cystolithotomy	3	18,000
668	FP01400060	K60	TURP + Fistulectomy	3	15,000
669	FP01400061	N40	TURP + Cystoscopic Removal of Stone	3	12,000
670	FP01400062	C64	TURP + Nephrectomy	3	25,000
671	FP01400063	C61	TURP + Orchidectomy	3	18,000
672	FP01400064	N40	TURP + Suprapubic Cystolithotomy	3	15,000
673	FP01400065	C61	TURP + TURBT	3	15,000
674	FP01400066	N40	TURP + URS	3	14,000
675	FP01400067	N40	TURP + Vesicolithotripsy	3	15,000
676	FP01400068	N40	TURP + VIU (visual internal urethrotomy)	3	12,000
677	FP01400069	I84	TURP + Haemorrhoidectomy	3	15,000
678	FP01400070	N40	TURP + Hydrocele	3	18,000
679	FP01400071	N40	TURP + Hernioplasty	3	15,000
680	FP01400072	N40	TURP with Repair of Urethra	3	12,000
681	FP01400073		TURP + Herniorrhaphy TURP (Trans-Urethral Resection of Bladder)Prostate	3	17,000
682	FP01400074	N40		3	14,250
683	FP01400075	K60	TURP + Fissurectomy	3	15,000
684	FP01400076	N40	TURP + Urethrolithotomy	3	15,000
685	FP01400077	N40	TURP + Urethral dilatation	3	15,000
686	FP01400078	N82	Uretero Colic Anastomosis	3	8,000
687	FP01400079	N20	Ureterolithotomy	3	10,000
688	FP01400080	N20	Ureteroscopic Calculi - Bilateral	2	18,000
689	FP01400081	N20	Ureteroscopic Calculi - Unilateral	2	12,000
690	FP01400082	N35	Ureteroscopy Urethroplasty	3	17,000
691	FP01400083	N20	Ureteroscopy PCNL Ureteroscopic stone Removal And DJ Stenting	3	17,000
692	FP01400084	N20		3	9,000
693	FP01400085	N35	Urethral Dilatation	1	2,250
694	FP01400086		Urethral Injury	2	10,000
695	FP01400087	N81	Urethral Reconstuction	3	10,000
696	FP01400088	C53	Ureteric Catheterization - Cystoscopy	1	3,000
697	FP01400089	C67	Uretrostomy (Cutanie)	3	10,000
698	FP01400090	N20	URS + Stone Removal	3	9,000
699	FP01400091	N20	URS Extraction of Stone Ureter - Bilateral	3	15,000
700	FP01400092	N20	URS Extraction of Stone Ureter - Unilateral	3	10,500
701	FP01400093	N20	URS with DJ Stenting With ESWL	3	15,000
702	FP01400094		URS with Endolitholopexy	2	9,000
703	FP01400095	N20	URS with Lithotripsy	3	9,000
704	FP01400096	N20	URS with Lithotripsy with DJ Stenting	3	10,000
705	FP01400097	N21	URS+Cysto+Lithotomy	3	9,000
706	FP01400098	N82	V V F Repair	3	15,000
707	FP01400099	Q54	Hypospadias Repair and Orchiopexy	5	16,250
708	FP01400100	N13	Vesico uretero Reflux - Bilateral	3	13,000

709	FP01400101	N13	Vesico Uretero Reflux - Unilateral	3	8,750
710	FP01400102	N21	Vesicolithotomy	3	7,000
711	FP01400103	N35	VIU (Visual Internal Urethrotomy)	3	7,500
712	FP01400104	N21	VIU + Cystolithopexy	3	12,000
713	FP01400105	N43	VIU + Hydrocelectomy	2	15,000
714	FP01400106	N35	VIU and Meatoplasty	2	9,000
715	FP01400107	N35	VIU for Stricture Urethra	2	7,500
716	FP01400108	N35	VIU with Cystoscopy	2	7,500
717	FP01400109	N32	Y V Plasty of Bladder Neck	5	9,500

15 **ONCOLOGY**

718	FP01500001		Adenoma Excision	7	10,000
719	FP01500002	C74	Adrenalectomy - Bilateral	7	19,000
720	FP01500003	C74	Adrenalectomy - Unilateral	7	12,500
721	FP01500004	C00	Carcinoma lip - Wedge excision	5	7,000
722	FP01500005	C00-C97	Chemotherapy - Per sitting	D	1,000
723	FP01500006	D44	Excision Cartoid Body tumour	5	13,000
724	FP01500007	C56	Malignant ovarian	5	15,000
725	FP01500008		Operation for Neoblastoma	5	10,000
726	FP01500009	C16	Partial Subtotal Gastrectomy & Ulcer	7	15,000
727	FP01500010		Radiotherapy - Per sitting	D	1,500

ANNEXURE 2: IN-DEPTH INTERVIEW GUIDE FOR KEY STAKEHOLDERS

IN-DEPTH INTERVIEW GUIDE FOR KEY STAKEHOLDER

PART I – POLITICAL AND REGULATORY ENVIRONMENT

- Formal policy guidelines for PPP (Request copy of any government notification, circulars, orders, policy document etc.?)
 - Central level
 - State level
 - If already promulgated, salient features of the policy
 - If there is no such policy and if the Government proposes to have formal policy, salient features of the proposed policy
- While formulating your policy guidelines towards public-private partnerships in RSBY, have you considered or reviewed or studied similar policies? What are the unique features or improvisations you have made
 - Incentives
 - Eligibility conditions
 - Risk etc
- How has been the support from other Ministries in launching and sustaining RSBY?
- Political environment in launching and sustaining the RSBY
 - Central Level
 - State Level
 - Private Sector Engagement
 - Budget Allocation
 - Coalition Government
- What regulations govern the contracts at central level?
 - Insurance companies
 - NGO
 - TPA
 - Providers (public and private)
- What is the regulatory environment at the state level?
 - Insurance Companies
 - NGO
 - TPA
 - Providers (public and private)
- What is the regulatory environment at the district level?
 - Insurance Companies
 - NGO
 - TPA
 - Providers (public and private)
- Based on your experience in the form of such partnerships, how would you assess the overall benefits of such partnerships?

PART II – INSTITUTIONAL AND ORGANIZATIONAL CAPACITY

1. Human Resources solely dedicated to RSBY

	Permanent	Contract	Specialist Training
Number of administrative staff			
Number of technical staff			
Number of support [including translators, secretarial, and other staff]			

2. Physical Resources solely dedicated to RSBY

For each item below please describe the location, extent/number, age, suitability and condition

Premises

Utilities: Power/Water/Phone

Vehicles

Communications Equipment

Computer Equipment

Specialist Equipment

3. Annual Financial Resources *(Please provide whatever information is available)*

	2009	2010	2011
Pay/Salaries Permanent			
Pay/Salaries Contract			
Pensions			
Total			
Building/repairs			
Utility Bills			
Transportation/travel			
Equipment			
Training			
Publications			
Consultants			
Supplies			
Other			
Total			
Total Liabilities			
Central government			
State government			
Other income sources			
Total income			

4. **What is the allocation of role and responsibility**

- Position/title:
 - Office or Department:
 - Reporting relationship to supervisor
 - Principal areas of responsibility:
 - Who reports directly to you? How often? About what?
 - Principal documents referred to for:
 - Legislation
 - Policies
 - Objectives
 - Strategies
 - Procedures
 - What are the main administrative tasks that occupy the majority of your time?
 - What are the main technical activities [if any] that your section administers?
 - What are the other ministries and agencies that you communicate with about RSBY issues?
 - What are the most urgent/important tasks that you believe should be addressed by your section?
 - What do you anticipate will be the biggest new challenges for your section over the next five years?
 - What are the biggest difficulties encountered by your section? Are they:
 - Insufficient legal authority? [Do you work with out-of-date legislation that does not address the realities of your main challenges? What is missing? What needs to be improved?]
 - Poorly defined standards/guidelines? [Are there clear criteria that allow you to make decisions?]
 - Poorly Defined Administrative Roles? [such as need for clearer roles or responsibilities, better communications or reporting structure]
 - Insufficient Information? [Is there sufficient data available for your section? Is it incomplete? Is it out of date? Be as specific as possible]
 - Insufficient Resources? Human Resources [what additional staff are required? What are they needed for? What additional skills or training are needed?]
 - Physical Resources? [what additional/improved premises, utilities, equipment are needed to allow your section to perform more effectively. What improvements would occur?]
 - Financial Resources? [What are the five biggest financial obstacles that reduce the effectiveness of your section?]
5. Training: Have you received any specific training for your job? If so when did you last receive training? What additional training would help you to do your job better?
6. Is there any independent body which supervises the functions and the effectiveness of RSBY?

PART III – MARKET AND DEGREE OF COMPETITION

Refer to Section VI - Contract Details

PART IV – DEGREE OF TRUST

1. What role does trust play in selection and provision of services? (Insurance companies → health providers, TPA, Smart card provider, NGO etc? State → insurance company for contract renewal? Beneficiary → Provider)

PART V – SERVICE DELIVERY

1. How do you feel about case-based pre-negotiated fixed payment for an RSBY beneficiary?
2. Can the pre-negotiated payments for RSBY for certain procedures lead to higher profit margins? (cataract as opposed to complicated c-section)
3. Are beneficiaries availing facilities outside the district or state? Why?
4. In your opinion, is BPL population utilizing facilities which are closest to them, or are they having or choosing to travel further to avail benefits and the reasons behind that choice?
5. How are facilities empanelled by the insurance company and what criterion are used for empanelment? (Proximity to BPL population)
6. Is attention paid to insure that a beneficiary has access to all packages he is entitled to under scheme and the range of services/packages covered by the empanelled facilities?

PART VI – CONTRACT DETAILS (Questionnaire)

1. Type and nature of services under partnership (on contract)
2. Who initiated and when was the decision taken for partnership?
3. Steps followed (from initiating stages till operational implementation)?
4. Time taken for installation and commencement of operations?
5. No. of bidders (who applied for this contract)? Was the market contestable and what was competition in awarding contracts?
6. Pre Bid Seminar – Purpose of the seminar/what information was provided to private agency? Collect a *copy of advertisement/notification*
7. Criteria laid out; no. of bidders; open or closed screening meeting?
8. Criteria for short listing the final list of private agencies?
9. Items negotiated, if any
10. Finalization of contract clauses: Legal consultation, if any?
11. Whether in legal affidavit/whether in front of witnesses, and other procedures followed?
12. Who gave the final approval for contracting partnership?
13. What is the incentive structure for various partners/stakeholders in design of the contract?
14. Are there any specific pre conditions for renewal of the contract?
15. Is there a limit on the maximum no. of contracts allowed to the private agency?
16. Billing and reimbursement procedures for the services provided
 - A. Reimbursed (claim) amount as revenue for the last 3 years.
 - (a) Year I
 - (b) Year II
 - (c) Year III
 - B. Verification of claims (who verifies/certifies? Before reimbursement)
17. What is the composition of the board that oversees the contracts, who are they?
18. Does the contract specify the periodicity of performance review and the parameters of performance review?

19. What approach is adopted for cost overruns, overuse and disputes that may involve legal costs for the parties involved?
20. What mechanisms exist for settling disputes between parties? Is there a governing body for these transactions?
21. Is there a system to periodically evaluate the feedback/complaints from the patients?
22. Could provision on sanctions in contract design influence outcome of contracts? (If any, in the contract design in the selected states)
23. What are some of the actual conflicts going on currently?

DETAILS COLLECTED FROM REVIEW OF BID NOTIFICATION/CONTRACT

- A. Private Agency Details
 - i) Eligibility conditions for the private agency:
 - (a) Required legal status of the private agency (whether registered society/foundation/trust, etc)
 - (b) Bidding (through single bid or bids on technical and financial bid separately)
 - (c) Eligibility conditions (e.g. minimum capital or turnover of the agency)
 - ii) Minimum experience of the private agency (in the related area of services)
 - (a) In other services/business
 - (b) In health sector
 - iii) Infrastructure related pre conditions (including staff)
 - iv) Minimum financial or material surety (in the form of movable/immovable assets)
 - v) Explicit non eligible conditions (for those agencies that does not qualify)
 - vi) Any other eligibility conditions/criteria
- B. Tender application procedure followed - Pre-bid briefing/formalities (if any)
- C. Contract details (*Information to be collected from TOR contract deed/agreement document*)
 - a. List of service (s) covered under partnership (including timing of the services)
 - b. Minimum and maximum duration of the contract offer
 - c. Technical bid details to be submitted (details to be enclosed)
 - i. Earnest money for the bid
 - ii. Technical details to be compiled from agreement
 - d. Financial commercial bid details
 - i. Rate/tariffs per service
 - ii. Validity period for the offered tariff
 - e. Maximum period with in which the agency must commence the service operations
 - f. Time limit to accept or reject the contract and execute the contract
 - g. Penalty for the delay (or) if the agency do not commence the operations at all.
 - h. How service charges (tariff/fee has been fixed, calculated)
 - i. Monitoring and supervising mechanisms to oversee the functioning of the private agency
 - j. Terms and conditions of performance standards, quality control, etc.
 - k. If the contract is to be terminated prematurely, under what circumstances it could be done?
 - l. Under what circumstances the private agency may withdraw/exit/terminate the services?
 - m. The penalties for non performance or penalties for non adherence to the contract clauses
 - n. Pre-conditions, if the private agency wishes to exit or terminate the contract
 - i. Minimum notification period
 - ii. Obligation / penalties of the private agency if exit is premature.
 - iii. Obligation of the parties if the termination is mutually agreed

- iv. Penalty for the private agency if the contractor unilaterally suspends/terminates, based on performance deficiency
- v. Recourse to either of the agency, if any grievance/complaint

ANNEXURE 3: QUESTIONNAIRE FOR AVAILABILITY OF SERVICES OFFERED AT EMPANELLED FACILITIES

SNo.	1	2	3	4	5
Hospital Name					
Distt					
Bed Size					
Neo Natal Care					
Burns					
Snake Bite					
Oncology					
Urology					
Endocrine					
Paediatric					
Orthopaedic					
Ophthalmology					
Neurosurgery					
Hysteroscopic					
Endoscopic Procedures					
Gynaecology					
General Surgery					
Throat					
Nose					
Ear					
Dental					
Medical General Ward ICU					
Medical General Ward Non Surgical					
Medical General Ward Surgical(Not included in package rates)					
ICU					

ANNEXURE 4: OBSERVATIONAL AND FACILITY RECORDS CHECKLIST

Data for the observation checklist shall be collected from selected health facilities which include both public and private facilities. Attempt has been made to include elements that are similar to the criterion that is used by authorities in empanelling hospitals under RSBY. In addition to collecting data by observation and by scrutinizing facility records, questions shall be addressed to health professionals at the facilities during key informant interviews and they would be asked to fill out a health provider checklist.

OBSERVATIONAL AND FACILITY RECORDS CHECKLIST

Particulars of field operation												
Item	Observer						Supervisor					
Interviewer Name (block letters)												
date of survey/inspection	D	D	M	M	Y	Y	D	D	M	M	Y	Y
Signatures												
Name of the Health Facility												
Health Facility (public or private)												

Please check boxes, as appropriate

- A – Strongly Agree**
- B – Agree**
- C – Difficult to Judge**
- D – Disagree**
- E – Strongly Disagree**

PART I - Observation

	A	B	C	D	E
ACCESS AND PHYSICAL FACILITIES					
1. At least 10 inpatient medical beds for inpatient health care					
2. The facility is accessible by a motorable road, allowing for patient movement					
3. Adequate sign postings at various strategic locations are posted, at least two kms from the hospital/health facility					
4. All patient areas are easily accessible by wheelchair					
5. There is a reception desk clearly sited within the department for patient registration					
6. There is adequate lighting and cooling (fans) facilities					
7. Running tap water is available in all areas of the hospital					
8. There is at least one toilet for every 12 in-patient beds					
9. Floor surfaces are non-slip and even					
10. Shower facilities are available with warm water in winter months					
11. Washing facilities with a wash basin and mirror afford privacy					
12. Shredders / needle destroyers are available in all clinical areas					

PATIENT RIGHTS

13. Rights and responsibility of the patients are displayed at prominent places in the health facility
□□□□
14. Information explaining implied consent is prominently displayed at various places in the hospital
□□□□
15. The services being provided and the charges are also prominently displayed
□□□□
16. There is adequate provision for patient privacy in the form of screens and curtains etc
□□□□

HEALTH & SAFETY

17. All emergency telephone numbers concerned with Health and Safety are displayed prominently.
□□□□
18. Pictograms indicating fire exits and escape routes are properly illuminated, clearly visible, unobstructed and are conspicuously displayed at appropriate locations
□□□□
19. Relevant safety information is available including:
- Safety regulations □□□□
- Fire precautions □□□□
- AIDS/HIV/Other guidelines □□□□
20. There are safe procedures for the disposal of clinical, toxic and LIQUID waste
□□□□

OPERATING DEPARTMENT (If providing surgical treatment)

21. Adequate lighting, Air conditioning and Ventilation is provided in each OT
□□□□
22. The OT complex is divided into sterile, clean, protective and disposal zones
□□□□
23. A height adjustable OT Table, and a cold, shadowless operating light is available
□□□□
24. The anaesthetic induction room and operating theatre is equipped for its purpose and includes:
a. Anaesthetic machine and ventilator [Yes- 1, No -2]
b. Laryngoscopes (Adult / Paediatric)[Yes- 1, No -2]
c. Endotracheal tubes/laryngeal masks[Yes- 1, No -2]
d. Airways[Yes- 1, No -2]
e. Nasal tubes[Yes- 1, No -2]
f. Suction apparatus and connectors[Yes- 1, No -2]
g. Oxygen[Yes- 1, No -2]
h. Drugs for emergency situations[Yes- 1, No -2]
i. Monitoring equipment including ECG, ETCO2 (where applicable)[Yes- 1, No -2]
j. Pulse oximeter and blood pressure[Yes- 1, No -2]

RADIOLOGY SERVICES (incase the service is out-sourced, the outsourced agency should comply with these norms)

25. There are prominently displayed signs IN LOCAL LANGUAGE warning women of childbearing age of the dangers of radiation in pregnancy. □□□□
26. Radio diagnostic facilities are accessible by wheelchairs from all parts of the hospital
□□□□

LABOUR ROOM If providing Maternity services

27. The Labour room should have Delivery table which can be turned to Trendelberg position, an Anesthetic machine with emergency oxygen supplies, endotracheal tubes, laryngoscope, an incubator, separate oxygen supply for incubator, resuscitation equipment and drugs for infants and adults
□□□□

PART II – FACILITY RECORDS

1. Mopping of all areas at least twice a day (documented)
2. Carbolisation of the OT, Labor Room after every procedure (documented)
3. Mechanisms to ensure toilet sanitation (verified from duty roasters for sweepers)
4. Regular documented autoclaving of instruments & linen
5. There is evidence that there is a documented grievance redressal mechanism which is practiced
6. Procedures are available and up to date for:
 - a. Informed patient consent[Yes- 1, No -2]
 - b. Pre-operative assessment[Yes- 1, No -2]
 - c. Post-operative care[Yes- 1, No -2]
7. LABORATORY SERVICES (incase the service is out-sourced, the outsourced agency should comply with these norms)
 - a. A system for registration of patients exists for
 - i. Identification of samples[Yes- 1, No -2]
 - ii. Recording of type and no. of investigations[Yes- 1, No -2]
 - iii. Recording of personal data for identification[Yes- 1, No -2]
8. RADIOLOGY SERVICES (incase the service is out-sourced, the outsourced agency should comply with these norms)
 - a. Records of protection of staff conforming to the BARC guidelines are kept for the working lifetime of staff employed by the service
 - b. Request Forms contain:
 - i. - Patients name[Yes- 1, No -2]
 - ii. - Identification number[Yes- 1, No -2]
 - iii. - Address[Yes- 1, No -2]
 - iv. - Age[Yes- 1, No -2]
 - v. - Examination requested[Yes- 1, No -2]
 - vi. - Previous examinations[Yes- 1, No -2]
 - vii. - Clinical diagnosis[Yes- 1, No -2]
 - viii. - Information relating to the pregnancy in women of child-bearing age[Yes- 1, No -2]
 - ix. - Identity of requesting physician[Yes- 1, No -2]
 - x. - History of allergy in red ink.[Yes- 1, No -2]
 - xi. - For medico legal cases mark of identification of the patient and name of police official bringing the patient [Yes- 1, No -2]
 - c. Fee to be charged/not to be charged[Yes- 1, No -2]
9. EVALUATION AND CARE OF INPATIENT
 - a. All patients receive a physical examination and a full medical history is recorded in the patient record; dated, timed and signed.
 - b. A written informed consent is taken from all patients undergoing a procedure
 - c. IPD patients are evaluated at least twice a day
 - d. If patients are transferred to another hospital, copies of their clinical notes accompany them
 - e. A copy of the Discharge summary / Death Summary (if applicable) is provided to the patient/attendant and explained to the patient / attendant by the treating doctor
 - f. After examining the patient, the doctor shall legibly endorse the course of action on the OPD card (to be kept by the patient) and direct the patient to the appropriate medical facility
 - g. In cases where laboratory/radiographic investigations are required, the doctors shall completely fill up the respective requisition slip
10. BLOOD BANK (IF THE HOSPITAL HAS ONE)
 - a. The Blood Bank meets the licensing requirement of the Drugs and Cosmetic Act and Supreme Court rules
 - b. Blood collected is labeled appropriately with the donor's name, registration number, blood group, date and time of collection and expiry
 - c. The Blood Bank maintains records of procurement, issue and transfusion of blood, cross-matching and any issue related to blood and blood components. The records are kept for at least 5 years.

ANNEXURE 5: HEALTH PROVIDER CHECKLIST

Data from the health providers shall be collected from selected health facilities which include both public and private facilities. Part I shall adopt a semi structured and qualitative approach where information from the provider shall be collected by the interviewer in English and shall be transcribed for further analysis. Part II shall be a checklist that shall be given to the provider to filled out post the interview.

Please check boxes, as appropriate

- A. - Strongly Agree
- B. - Agree
- C. - Difficult to Judge
- D. - Disagree
- E. - Strongly Disagree

ACCESS AND FACILITIES

- | | A | B | C | D | E |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Apart from beds at least one suction machine for 20 beds and one filled oxygen cylinder for three beds and one needle destroyer per ward are available | <input type="checkbox"/> |
| 2. The hospital has provision of emergency electric supply | <input type="checkbox"/> |
| 3. The OPD area has - BP Apparatus, thermometer, torchlight, weighing machine, and an examination table in a chamber providing adequate privacy. | <input type="checkbox"/> |
| 4. Telephone/Fax, 64KBPS connectivity and machine to read and manage smart card transactions. | <input type="checkbox"/> |
| 5. In case a male doctor is attending a female patient, there is provision for a female attendant to be present during such an event | <input type="checkbox"/> |
| 6. Shower facilities are available with warm water in winter months | <input type="checkbox"/> |

AVAILABILITY OF STAFF

- | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 7. At least 1 medical officer & 1 nurse available at all times | <input type="checkbox"/> |
| 8. Emergency department is manned by an MBBS doctor on 24x7 basis | <input type="checkbox"/> |
| 9. There is a system for calling specialists in an emergency | <input type="checkbox"/> |
| 10. At least 1 information provider is present (staff) at all times | <input type="checkbox"/> |
| 11. There is a first level registered nurse appropriately qualified and/or experienced who is responsible for the management of each ward. | <input type="checkbox"/> |
| 12. The hospital has 24 hour on-site cover from qualified medical doctors (including anesthesiologist or M.O who has received 6-month orientation course in anesthesiology) | <input type="checkbox"/> |

HOSPITAL WASTE MANAGEMENT

- | | A | B | C | D | E |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 13. The waste disposal is in accordance with the Biomedical waste management & handling rules | <input type="checkbox"/> |
| 14. The health facility has a valid license from the PCB | <input type="checkbox"/> |

OPERATING DEPARTMENT (If providing surgical treatment)

- | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 15. Adequate lighting, Air conditioning and Ventilation is provided in each OT | <input type="checkbox"/> |
| 16. The OT complex is divided into sterile, clean, protective and disposal zones | <input type="checkbox"/> |
| 17. A height adjustable OT Table, and a cold, shadowless operating light is available | <input type="checkbox"/> |
| 18. Sterilabels are used for maintaining the quality of autoclaving | <input type="checkbox"/> |
| 19. The anaesthetic induction room and operating theatre is equipped for its purpose and includes: | | | | | |
| a. Anaesthetic machine and ventilator (Y/N) | | | | | |
| b. Laryngoscopes (Adult / Paediatric) (Y/N) | | | | | |
| c. Endotracheal tubes/laryngeal masks (Y/N) | | | | | |
| d. Airways (Y/N) | | | | | |
| e. Nasal tubes (Y/N) | | | | | |
| f. Suction apparatus and connectors (Y/N) | | | | | |
| g. Oxygen (Y/N) | | | | | |
| h. Drugs for emergency situations (Y/N) | | | | | |
| i. Monitoring equipment including ECG, ETCO2 (where applicable) (Y/N) | | | | | |
| j. Pulse oximeter and blood pressure (Y/N) | | | | | |
| 20. Procedures are available and up to date for: | | | | | |
| a. Informed patient consent (Y/N) | | | | | |
| b. Pre-operative assessment(Y/N) | | | | | |
| c. Post-operative care (Y/N) | | | | | |
| 21. Emergency power supply connection is available for all OT equipment | <input type="checkbox"/> |
| 22. LABORATORY SERVICES (incase the service is out-sourced, the outsourced agency should comply with these norms) | | | | | |
| a. A system for registration of patients exists for | | | | | |
| i. Identification of samples (Y/N) | | | | | |
| ii. Recording of type and no. of investigations (Y/N) | | | | | |
| iii. Recording of personal data for identification (Y/N) | | | | | |

23. RADIOLOGY SERVICES (incase the service is out-sourced, the outsourced agency should comply with these norms)
- | | A | B | C | D | E |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. There is an in-charge radiology/ or the radiologist identified with clearly defined responsibility for all aspects of the department. | <input type="checkbox"/> |
| b. The services and facilities satisfy statutory requirements under the Atomic Energy Act of BARC, the PNDR Act and guidelines from BARC regarding radiation policies and procedures. | <input type="checkbox"/> |
| c. There is provision for a female attendant to accompany female patients during radiological procedures | <input type="checkbox"/> |
| d. The protection of staff conforms to the BARC guidelines | <input type="checkbox"/> |
| i. Staff working with radiological equipment wear radiation monitoring devices | | | | | |
| ii. These devices are assessed and maintained in accordance with statutory regulations | | | | | |
| e. Records of these tests are kept for the working lifetime of staff employed by the service | <input type="checkbox"/> |

LABOUR ROOM if providing Maternity services

24. The Labour room should have Delivery table which can be turned to Trendelberg position, an Anesthetic machine with emergency oxygen supplies, endotracheal tubes, laryngoscope, an incubator, separate oxygen supply for incubator, resuscitation equipment and drugs for infants and adults
-
25. There is a suitably experienced and qualified doctor responsible for the day to day management of the unit.
-
26. A trained mid-wife/nurse is present at every birth.
-

EVALUATION AND CARE OF INPATIENT

27. All patients receive a physical examination and a full medical history is recorded in the patient record; dated, timed and signed.
-
28. A written informed consent is taken from all patients undergoing procedure
-
29. IPD patients are evaluated at least twice a day
-
30. If patients are transferred to another hospital, copies of their clinical notes accompany them
-
31. A copy of the Discharge summary / Death Summary (if applicable) is provided to the patient/attendant and explained to the patient / attendant by the treating doctor
-
32. After examining the patient, doctor shall legibly endorse the course of action on the OPD card (to be kept by the patient) and direct the patient to the appropriate medical facility
-
33. In cases where laboratory/radiographic investigations are required, the doctors shall completely fill up the respective requisition slip
-

ANNEXURE 6: EXIT PATIENT INTERVIEW QUESTIONNAIRE

Particulars of field operation													
Item	Interviewer						Supervisor						
Name (block letters) नाम (बड़े अक्षर में)													
Date of survey/inspection सर्वे की तारीख	D	D	M	M	Y	Y	D	D	M	M	Y	Y	
Signatures /हस्ताक्षर													
District/Block/Village(Panchayat) जिला / ब्लॉक / गाँव													
Name of the Health Facility हस्पताल का नाम													
Type of Health Facility (public hospital (incl. PHC/ sub-centres/CHC), public dispensary (incl.CGHS/ESI), private for profit hospital, private not for profit hospital) स्वास्थ्य सुविधा के प्रकार (सार्वजनिक हस्पताल / पी.एच.सी. / उपस्वास्थ्यकेन्द्र / सार्वजनिक डिसपेंसरी / प्राइवेट, लाभाकित हस्पताल, प्राइवेट अलाभाकित हस्पताल													

Are you a BPL card holder? [Yes- 1, No -2] _____

क्या तुम बी.पी.एल. कार्ड होल्डर हो।

Are you enrolled under RSBY? [Yes- 1, No -2] _____

क्या तुम आर.एस.बी.वाई. के अन्तर्गत अनरोल्ड हो? (हां-1, नहीं-2)

Were you hospitalized using RSBY card? (Yes -1, No 2) _____

क्या आप आर.एस.बी.वाई. कार्ड के आधार पर हस्पताल में दाखिल हुये थे।

Are you enrolled under any other health insurance? If yes, which one? _____

क्या आपने कोई और हैल्थ इंशोरेस करवाई है यदि हां तो कौन सी?

Serial number of the hospitalisation case _____

हस्पताल में दाखिल होने का सीरियल नम्बर

PART 1 – BACKGROUND INFORMATION

[I] Basic Information	
1. district you belong to:	2. tehsil/town:

आप किस जिले से हैं।	तहसील / कस्बा
3. Village name गाँव का नाम	4. Ward/inv. unit/block वार्ड / ब्लॉक
5. Name of head of household: घर के मुखिया का नाम	6. Name of Patient: मरीज का नाम
7. Household BPL number (from ration card) घर का बी.पी.एल. नम्बर (राशन कार्ड में)	8. Household URN No. (From RSBY card) घर का यू.आर.एन.नम्बर (आर.एस.बी.वाई. कार्ड से)
9. Contact phone number: मोबाईल नम्बर	

Question 5 and 6 would be coded to protect anonymity

[II] Patient and Household characteristics¹ / मरीज और घर के बारे में

1. Household size

Adults	Children under 18	Number of Women	Number of Girls under 18	Adults over 59

2. Religion / धर्म

- Islam / मुस्लिम

- Sikhism / सिख

- Buddhism / बुद्ध

- Other / अन्य

- Brahmin / ब्राह्मण

- Other Backward Classes / अन्य पिछड़ी जाति

- Scheduled Castes / अनुसूचित जाति

- Scheduled Tribes / अनुसूचित जन-जाति

- Other / अन्य

- Hinduism / हिन्दु

- Christianity / ईसाई

- Jainism / जैन

- Zoroastrianism

- Social group / जाति

- High caste / ऊँची जाति

3. Dwelling unit / रहने की जगह

- Owned / अपनी खुद की है

- Hired / किराये पर

- No dwelling unit / रहने की जगह नहीं है।

- Other / अन्य

4. What is the number of dwelling rooms exclusively in possession of this household? (record 1,2..)

घर में कितने कमरे हैं जो आपके अपने हैं।

¹ The questions in this section try and assess the socio economic status of the patient and include questions that address the inclusion and exclusion criterion set up by the GOI for determining the BPL status

5. Type of structure/ घर का प्रकार
 - Pucca / पक्का
 - Semi-pucca/ कच्चा / पक्का
 - Serviceable kutchha/ ठीक किये जाने वाला कच्चा
 - Unserviceable kutchha / ठीक ना किये जाने वाला कच्चा
 - No structure/ कोई ढांचा नहीं
 - Other / अन्य
6. Type of Latrine /शौचालय का प्रकार
 - Service शौचाल की सुविधा
 - Pit गढ़ड़ा वाला
 - Septic tank/ flush system पानी वाला शौचालय
 - No latrines शौचालय नहीं
 - Others अन्य
7. Do you possess land? (Yes-1, No-2) _____
 क्या आपके पास जमीन है?
8. What is your occupation? (see code)/ व्यवसाय
 Government job /सरकारी नौकरी
 Farming /किसान
 Business /व्यापारी
 Other /अन्य
9. What is the highest grade or level of school that you have completed?
 ऊंच स्कूली शिक्षा जहां तक पढ़ाई की है?
 Primary school graduate 5th grade/प्राइमरी स्कूल पांचवी तक
 High school graduate 10th grade/हाईस्कूल दसवीं तक
 Higher secondary school graduate 12th grade/सैकेण्डरी स्कूल तक
 Higher than 12th grade/12वीं से ऊंचा
10. Monthly income of the highest earning household member?
 मुखिया की महीने की आय
 Less than Rs. 5,000 (5,000 से कम)
 Between Rs. 5,000 to Rs. 10,000 (5,000 से 10,000 के बीच)
 Rs 10,000 (10,000 /दस हजार)
 More than 10,000 (10,000 से ज्यादा)
11. Main source of household income from?
 मुखिया का आय का साधन
 Cultivation /खेती
 Manual casual labour /मजदूरी
 Part-time or full-time domestic service /पार्टटाइम और फुलटाइम घरेलू नौकरी
 Foraging/rag picking / कबाड़ी
 Non-agricultural own account enterprise /कोई खेती नहीं

- Begging/charity/alms collection/ भिखारी
 Manual Scavenging
 Other / अन्य
12. Household Assets: Does the household own the following assets?
घर की संपत्ति
- i. Refrigerator (Yes-1, No-2)/ फ्रिज
- ii. Telephone landline/Mobile टेलिफोन / मोबाईल
 Landline only / केवल टेलिफोन
 Mobile only/ केवल मोबाईल
 Both landline and mobile / टेलिफोन और मोबाईल दोनों
 None कोई नहीं
- iii. Motorised Vehicle for personal transportation(Yes-1, No-2) _____
अपने काम के लिए मोटरसाईकिल
13. Do you possess a mechanized three/four wheeler agricultural equipment such as tractors, harvesters etc? (Yes-1, No-2) _____
क्या आपके पास 3-4 पहियों वाला वाहन ट्रैक्टर और फसल काटने वाली मशीन है।
14. Does any member of your household possess a Kisan credit card with credit limit of 50,000 or above?
क्या मुखिया के पास 50,000 की लिमिट का किसान क्रेडिट कार्ड है (Yes-1, No-2) _____
15. Are you or any member of your household a legally released bonded labourer? (Yes-1, No-2) _____
क्या आप या कोई परिवार का अन्य सदस्य कानूनी तौर पर जारी बंधुवा मजदूर है।
16. Is the head of your household a woman with no male member between the age of 16 and 59?
क्या घर की मुखिया औरत है कोई पुरुष नहीं है 16 से 59 साल के बीच का?
(Yes-1, No-2) _____
17. Are you or anyone in your family chronically disabled? (Yes-1, No-2) _____
क्या आप या परिवार का अन्य सदस्य लम्बे समय से बीमार है

[III] Answer ONLY IF ENROLLED in RSBY

1	Did you have to pay anything to be a part of the scheme? क्या आपको कोई भुगतान करना है इस स्कीम का हिस्सा बनने के लिए ?	Yes . How much? कितना No
2	How far is this hospital from your house (Approximately)? आपके घर से हस्पताल कितना दूर है	_____ km. _____ minutes/ hours मिन्ट / घण्टे
3	Is this the closest empanelled facility to your home? क्या ये आपके घर के नजदीकी पैनल	Yes (Go to Q5) हाँ No (Go to Q4) नहीं

	सुविधा है	
4	How many kilometres is the nearest empanelled facility from your home? (Record 1,2,3...) आपके घर से हस्पताल कितनी किलोमीटर दूर है	
5	Which hospital was first visited for the treatment of the patient किस हस्पताल में मरीज ने पहला इलाज करवाया था	Name: नाम:-
6	Was that hospital empanelled under RSBY? क्या वह हस्पताल त्तर पैनल के अन्दर था	Yes (Go to Q8)/ हाँ No/ नहीं Don't know (Got to Q10)/ मालूम नहीं
7	If no, why did you go to a RSBY non-empanelled hospital? यदि नहीं तो आप NON RSBY हस्पताल में क्यों गए ?	Emergency /अपातकालीन स्थिती
		Near from Home/ घर के नजदीक
		Good Reputation / अच्छी प्रतिष्ठा
		Place where family usually go वह स्थान जहां परिवार हमेशा जाता है।
		Didn't know /मालूम नहीं
	Others (Please Specify) /अन्य	
8	If yes, did the hospital provide treatment? यदि हां, तो क्या हस्पताल ने इलाज किया	Yes (Go to Q10) हाँ No/ नहीं
9	If no, why didn't the hospital provide treatment? यदि नहीं, तो हस्पताल ने इलाज क्यों नहीं	Hospital staff was not aware about the empanelment in RSBY हास्पिटल स्टाफ त्तर के बारे में अनजान था

	किया?	<p>Refused to treat based on low rates of RSBY इलाज से मना कर दिया की कम दर के आधार पर</p> <p>Refused to treat without any reason बिना किसी कारण के इलाज करने से इनकार कर दिया</p> <p>Disease was not in package list पैकेज लिस्ट में बीमारी नहीं है</p> <p>Refused by TPA TPA से इनकार कर दिया</p> <p>Smart card machine/ smart card not working स्मार्ट कार्ड मशीन/ स्मार्ट कार्ड काम नहीं कर रहा</p> <p>Fingerprints did not match- फिंगरप्रिंट मिल नहीं रहे हैं।</p> <p>Other (specify) अन्य</p>
10	<p>What was the name of the empanelled hospital where patient was finally treated under RSBY?</p> <p>अन्य पैनल हस्पताल जहां मरीज का टैल के तहत इलाज किया गया था का नाम क्या था ?</p>	Name: नाम
11	<p>Was there a RSBY help desk at the hospital?</p> <p>क्या हस्पताल में RSBY सहायक डेस्क था</p>	<p>Yes हाँ</p> <p>No नहीं</p> <p>Do not know मालूम नहीं</p>

12	Was it a separate desk for RSBY or part of the other desk like reception? क्या हस्पताल में RSBY सहायक केन्द्र अलग डेस्क था या Reception की तरह डेस्क था ?	Yes हाँ No नहीं Do not know मालूम नहीं
13	Were following equipments available at the helpdesk? क्या हस्पताल में RSBY की डेस्क पर सारे उपकरण उपलब्ध थे ?	Fingerprint Scanner * उगली का निशान Smart Card Reader / Computer / कम्प्यूटर Printer/ छपाई वाली मशीन
14	How did the beneficiary find out about the RSBY helpdesk? जरूरतमंद व्यक्ति हैल्प डेस्क कैसे ढुंडेगा ।	Visible sign boards हस्ताक्षर बोर्ड दिखाई देना By Asking Hospital Staff हास्पिटल स्टाफ से पुछकर No signboard but found by themselves without any assistance कोई चिन्ह बोर्ड नहीं परन्तु स्वयं खोजना बिना किसी सहायता से
15	How long did the patient have to wait before he/she was attended by the staff? मरीज ने कितनी देर इन्तजार किया जब तक उसका इलाज शुरू हुआ ?	Less than 5 minutes/ पांच मिनट से कम 5-15 मिनट के बीच Between 15 to 30 minutes /15-30 मिनट के बीच Between 30 to 60 minutes / 30-60 मिनट के बीच More than 60 minutes / 60 मिनट से ज्यादा Others, specify /अन्य

16	Was fingerprint verification done through a fingerprint scanner? क्या उंगलियों के निशान मिलाने के लिए fingerprint scanner का इस्तेमाल किया	Yes / हां No / नहीं
17	Whose finger print was used for verification and registration? रेजिस्ट्रेशन और बेरीफिकेशन के लिए कौन सा fingerprint इस्तेमाल किया	Patient (Go to Q19)/ मरीज Family member listed on RSBY card परिवार के सदस्यों की सूची के कार्ड पर
18	Why patient's fingerprint was not verified? मरीज के उंगलियों के निशान क्यों नहीं मिले	Patient was not in a condition to give fingerprint मरीज fingerprint देने की हालत में नहीं था Patient's thumb is injured मरीज का अंगूठा चोटिल था Suggested by the hospital हस्पताल द्वारा सुझाव Other (Provide the reason) / अन्य
19	Was the family told about the cost involved for treating the patient in advance? क्या परिवार को बताया गया था कि मरीज के इलाज के लिए कितने रुपये लगेंगे।	Yes / हां No/ नहीं
20	If yes, what was the cost? यदि हां तो इलाज का खर्च कितना	Rs. _____
21	Was the family told about the money left in the smartcard? क्या परिवार के सदस्य को बताया गया है कि स्मार्ट कार्ड में कितने पैसे बकाया है	Yes / हां No / नहीं
22	Was the money in the card sufficient to pay for this treatment? क्या जो स्मार्ट कार्ड में पैसे बचे हैं वो इलाज के लिए पर्याप्त है	Yes / हां No / नहीं

23	If the money in the card was not sufficient was the patient told that he would have to pay the difference? यदि कार्ड में पैसे पर्याप्त नहीं हैं तो मरीज को बताया गया है कि उसे अलग से भुगतान करना होगा।	Yes / हां No / नहीं
24	How much was the shortfall in the card from the package/ treatment rate? कार्ड में कितने रूपयों की कमी पड़ रही थी, इलाज के लिए	
25	Was the staff at the RSBY help-desk polite and helpful? क्या RSBY का स्टाफ हैल्प डेस्क पर विनम्र और सहायक था	Yes / हां No / नहीं
26	Was the patient asked to get any diagnostic tests done from outside? क्या मरीज को बाहर से कोई टेस्ट करवाने के लिए दिया था।	Yes / हां No / नहीं (Go to Q29)
27	Were the family asked to pay by themselves if the tests were done outside? अगर टेस्ट बाहर से हुआ है तो परिवार को कहां पर रूपये जमा करवाने थे।	Yes / हां No / नहीं
28	If yes, how much did the family pay for those tests? (Where possible please verify from fee receipts and note details of the tests done.) अगर हां, तो परिवार ने इस टेस्ट पर कितना खर्चा किया ? (जहां हो सके रसीद और नोट डिटेल् की जांच किजिए)।	Rs. _____
29	Were the family asked to get any medicines from outside for the patient? मरीज को बाहर से दवाईयां मंगवाने के लिए पूछां।	Yes / हां No / नहीं (Go to Q32)
30	Were the family asked to pay if the medicines were brought from outside? मरीज अगर बाहर से दवाईयां लाया हो तो क्या उसने बाहर पैसे दिए	Yes / हां No / नहीं
31	If yes, how much did the family pay for those medicines? (Where possible please verify from receipts and note details of medicines bought) यदि हां अगर मरीज बाहर से दवाई लाया हो तो उसकी पैसे की रसीद दिखाएं।	Yes / हां No / नहीं

32	Were you provided with food during stay at the hospital? क्या मरीज़ को ईलाज के दौरान भोजन दिया?	Yes / हां No / नहीं
33	If not, why? यदि नहीं तो क्यों	Hospital staff said it was not a part of the RSBY package हस्पताल के स्टाफ ने कहा कि वह आर.एस. बी.वाई. पैकज का हिस्सा नहीं था। Hospital did not have food serving facility हस्पताल ने भोजन देने की सुविधा नहीं की Hospital paid cash to patient to buy food Others, specify / अन्य
34	What was the quality of food? भोजन की क्वालिटी क्या थी?	Very Good / बहुत अच्छा Good / अच्छा Average/ ठीक-ठीक Poor/ अच्छा नहीं Very Bad / बहुत खराब
35	Did the hospital reimburse the cost of transport? क्या हस्पताल में ट्रासपोर्ट पर क्या लागत खर्च किया	Yes / हां No / नहीं (Go to Q 37)
36	How much was the reimbursement? वह अदायगी कौन सी है।	
37	If no, why? यदि नहीं क्यों	Hospital refused हास्पिटल वा Did not know there was such provision Hospital said they will give this later हस्पताल ने कहा वे इसे बाद में देंगे Patient did not ask for it मरीज ने इसके बारे में नहीं पूछा Others / अन्य
38	On discharge was discharge summary provided to the family? डिस्चार्ज के समय सदस्य को डिस्चार्ज समग्री दी या नहीं	Yes No
39	Was the fingerprint verification done at the time of discharge? डिस्चार्ज के समय मरीज के फिंगर परिन्ट	Yes (Go to Q 41) No

	मिलाएं	
40	If no, then why fingerprint verification was not done at the time of discharge? यदि नहीं तो fingerprint क्यों नहीं मिलाएं डिस्चार्ज के टाइम	Hospital did not ask for it हस्पताल ने इसके बारे में नहीं पूछा
		Hospital said it is not necessary हस्पताल ने इसे जरूरी नहीं कहा
		Did not know about this क्या इसके बारे में जानते हो
		Machine was not working मशीन काम नहीं कर रही
		Don't know जानते नहीं
		Others (Please specify)
41	Whose fingerprint was taken? किसके उंगलियों के निशान लिए	Patient मरीज
		Family Member परिवार का सदस्य
42	Did you get the card back on the day of discharge? छुट्टी के समय कार्ड वापिस कर दिया	Yes (Go to Q45) हां No/ नहीं
43	If no, after how many days you got it back? यदि नहीं तो कई दिन बाद कैसे वापिस करोगें	Days _____ दिन.....
44	What was the reason for holding back the card? कार्ड वापिस न करने का क्या कारण है।	Staff wanted money for returning the card स्टाफ कार्ड वापिस करने के लिए पैसे चाहता था
		Staff wanted to keep the card till insurance claims were settled स्टाफ कार्ड को इन्शोरेंस (कलेम) करने के लिए रखना चाहता था।
		Staff said the card will stay deposited at the hospital
		Others (Please specify) छूसरे
45	Were you told about the amount of money left in the card at the time of discharge? छुट्टी के समय सदस्य को यह बताया कि आपके कार्ड में कितने पैसे निकले है।	Yes / हां No / नहीं
46	Do you know about 5 day post hospitalization expenses coverage in RSBY?	Yes / हां

		No / नहीं
47	Was the patient prescribed any medicines after the discharge मरीज़ छुटी के कई दिन बाद जरूरत पड़ने पर दवाई कैसे लेगा।	Yes / हां No (Go to Q52) / नहीं
48	For how many days the medicines needed to be taken after discharge? मरीज़ छुटी के कई दिन बाद जरूरत पड़ने पर दवाई कैसे लेगा।	1
		2
		3
		4
		5
		More Than 5 ज्यादा
49	Were these medicines provided by the hospital? क्या ये दवाईयां हस्पताल द्वारा दी गई है।	Yes / हां No / नहीं
50	These medicines were for how many days? यह दवाईयां कितने दिन चलेंगी।	1
		2
		3
		4
		5
		More Than 5 ज्यादा
51	Was any reason cited by the hospital for not providing the medicines? हस्पताल से दवाई न देने का क्या कारण था	Family did not ask परिवार ने कुछ नहीं पूछा
		No reason provided / कोई कारण नहीं था
		It is not part of RSBY/ आर.एस.बी.वाई. का भाग नहीं है।
		Other, Specify / अन्य बताएँ
52	Was the patient prescribed any tests after discharge? मरीज़ की छुट्टी के बाद क्या टैस्ट कराने के लिए कहा	Yes / हां No (Go to Q56) / नहीं
53	Within how many days of discharge those tests were supposed to be done? छुट्टी होने के कितने दिन बाद यह टैस्ट करवाने चाहिए।	1
		2
		3
		4
		5
		More Than 5 / 5 से अधिक
54	Were facilities for those tests organized by the hospital free of cost? हस्पताल की तरह से किन टैस्ट के लिए फ्री कोस्ट की सहायता दी गई	
55	Was any reason cited by the hospital for not	Family did not ask

	providing the facility of free test? कोई ऐसा कारण था कि हस्पताल की तरफ से मुफ्त की सुविधाएं नहीं दी थी।	परिवार ने नहीं पूछा था
		No reason provided/ कोई कारण नहीं था
		It is not part of RSBY आर.एस.बी.वाई का कार्ड नहीं
		Other, Specify/दूसरा, स्पेशीफाई
56	How often have you or household member used RSBY card for each enrolled policy year? मुखिया या परिवार के सदस्य ने वर्ष में कितनी बार आर.एस.बी.वाई कार्ड का प्रयोग किया	Number of times used RSBY card (Record 0,1,2,3...) आर.एस.बी.वाई कितनी बार इस्तेमाल किया
		Year 1 / एक वर्ष
		Year 2 / दो वर्ष
		Year 3 / तीन वर्ष
57	Will you consider renewing the Scheme next year? (Cite Reasons) क्या आप अगले वर्ष यह स्कीम चलाना चाहोगें	Year 4 / चार वर्ष
		Yes / हां No / नहीं

[IV] Details on Hospitalisation

1	Serial number of the hospitalisation case हस्पताल के केस का सीरियल नम्बर	
2	Age (years) आयु	
3	Patient's id from the transactional data मरीज़ की फार्म डाटा	
4	What was the disease for which hospitalization/treatment was sought? बीमारी क्या थी और आपको क्या बीमारी हैं जिससे आपको हस्पताल में ईलाज करवाना पड़ा।	
5	Which hospital was first visited for the treatment of the patient (Repeat-flow better) कौन से हस्पताल में सबसे पहले मरीज़ ईलाज के लिए गया	Name: नाम:
6	Why this particular hospital was chosen for treatment? ईलाज के लिए तुम कौन सा हस्पताल	Near to the home आपके घर के पास
		Reputation of the hospital is good

	चुनोगे।	हस्पताल की हालत अच्छी है। Suggested by the relative/ friends क्या आप अपने किसी दोस्त या रिस्तेदार को सलाह देंगे Referred by doctors दूसरे डाक्टर के पास भेजना Always go to this hospital क्या आप हमेशा इसी हस्पताल जाते हो। There is no other RSBY empanelled hospitals nearby आपके आस-पास आर.एस.बी.वाई. कोई दूसरा हस्पताल नहीं है। Other / और दूसरा
7	For how many days patient was admitted? मरीज़ कितने दिन तक भर्ती रहा	Days / दिन
8	Besides the facility that you were currently admitted to, which type of facility had you previously contacted for treatment of this particular illness? जहां पर अभी आप दाखिल थे, उसके इलावा आपको इस बीमारी के लिए क्या सुविधा दी गई।	Contacted No one किसी और सूचित नहीं किया Another public facility कोई अन्य सुविधा Another private facility कोई अन्य प्राइवेट सुविधा Individual Practitioner Drug seller/ दवाईयां बेचने वाला Traditional healer Other / दूसरा
9	How did the patient go to the hospital? कौन से तरीके के मरीज़ हस्पताल में गया है।	Bus / बस Metro/ ट्रेन Rickshaw/ रिक्शा Two wheeler/ मोटर साइकिल Three wheeler / थ्रीवीलर Car/ कार Other/ दूसरे
10	Did any family member accompany patient to the hospital? मरीज़ के इलाज के दौरान परिवार का सदस्य हस्पताल में था	Yes / हां No (Go to Q 12) नहीं
11	How many family members accompanied patient	One / एक

	to the hospital? ईलाज के दौरान मरीज़ की कितने सदस्य हस्पताल में रहें	Two/ दो
		Three/ तीन
		Four / चार
		More than Four / चार से ज्यादा
12	What was the estimated transportation cost to reach the hospital? हस्पताल पहुंचने तक वाहन का खर्च कितना था।	

[V] Health Expenditure to Treat this Particular Illness

		Current facility	Another public Facility	Another private facility	Individual Practitioner	Drug	Traditional healer	Other
Doctor's/ surgeon's fee डाक्टर की सर्जन फीस	Hospital Staff हस्पताल स्टाफ							
	Other Speciality दूसरे खर्च							
Medicines दवाईयां	Hospital हस्पताल							
	Outside कहर							
Bed Charges बैड का किराया								
Diagnostic डाइग्नोस्टी क								
Attendant charges हाजरी मरीज़ के रिश्तेदार के चार्जिस								
Physiotherapy मसाज़								
Personal medical Appliances अपना दवाई								

खाना खोलना								
Transportation Cost (Rs) वाहन का किराया								
Other दूसरा	food and other materials भोजन और दूसरा पदार्थ							
	blood, oxygen cylinder, etc. खून, ऑक्सी जन, सलैडर आदि							
	Services (ambulance, etc.) नौकरी रोगी वाहन सेवा							
Other expenses incurred by the household (Rs) दूसरा खर्च	transport other than ambulance वाहन या फिर रोगी वाहन							
	lodging charges of escort(s)							
	Other दूसरा							
Expenditure not elsewhere reported टाईमटेबल रिपोर्टीड								
Total cost for this illness सारा खर्चा बीमारी का								

[VI] Source of Money for Health Expenditure to Treat this Particular Illness

11

1. How did you find the money to pay for treatment and medicine of this particular illness?

	Household Income	Family Savings	Money Lender	Selling of goods (Jewellery, Land)	Selling of livestock	Medical Insurance	Other
Amount							

2. Amount of reimbursement for cost of treatment of this particular illness(Rs) (if any) _____

If positive entry above, amount reimbursed in Rs	Employer	Government		
		Private		
	Medical insurance companies			
	Other agencies			

[VII] Current state of access to finance for health care

1. In the last year, was there ever a time when you or to a member of your household needed health care but was unable to get it due to lack of money to pay for it? (yes -1, no -2)

पिछले साल में कोई ऐसा समय था जब आपको या घर के सदस्य को स्वास्थ्य देखभाल की जरूरत थी। लेकिन पैसे की कमी के कारण आप इलाज नहीं कर पाये।
(हां-1, नहीं-2)

2. Has it ever happened that a sick person in your family died because you did not have the money to take care of him/her in the last 5 years? (yes -1, no -2)

पिछले पांच सालों में आपके परिवार में ऐसा कुछ हुआ है कि पैसे की कमी के कारण बीमार व्यक्ति की मृत्यु हुई हो। (हां-1, नहीं-2)

PART II – Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS²)

YOUR EXPERIENCE WITH HOSPITAL ADMISSION

हास्पिटल में दाखिल होने में तुम्हारा अनुभव

1. Was the bed made available as soon as the patient was advised admission?

मरीज को दाखिले के लिए परामर्श करने के बाद कितनी देर बाद बैड लगाया

1- Yes/ हाँ

2- Patient was asked to wait for a few hours / मरीज कुछ घण्टों के बाद पुछता है

3- Patient asked to come back on another day^६ मरीज पुछता है कि वो दोबारा अगले दिन कब आए

4- Other, Specify/ अन्य

2. What was the condition of the patient at the time of admission?

मरीज के दाखिले के समय क्या स्थिती थी ।

1- Able to Walk by own (Go to Q5) / वह स्वयं चलने योग्य था

2- Able to Walk by support (Go to Q5) /चलने योग्य के लिए सहारे की जरूरत है

3- Needed stretcher/ wheelchair / स्टैचर की आवश्यकता / व्हीलचियर की आवश्यकता है

3. Was a wheelchair/ stretcher available? / क्या व्हीलचियर/स्टैचर हस्पताल में उपलब्ध थे।

1- Yes /हाँ

2- No / नहीं

4. Who pushed wheelchair/ stretcher available? / व्हीलचियर/स्टैचर को किसने धकेला?

1- Hospital Staff / हस्पताल स्टाफ

2- Relatives / रिशतेदार

3- Others / कोई और/ दूसरे

5. After admission how long did the nursing staff take to come and check the patient?

दाखिल होने के बाद कितनी देर बाद नर्सिंग स्टाफ आया और मरीज को चैक किया

1- Less than 15 minutes / 15 मिनट से कम

2- Between 15 to 30 minute/ 15 से 30 मिनट के बीच में

3- Between 30 to 60 minutes/ 30 से 60 मिनट के बीच में

4- More than 60 minutes/ 60 मिनट से ज्यादा

² The HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) survey is the first national, standardized, publicly reported survey of patients' perspectives of hospital care. HCAHPS (pronounced "H-caps"), also known as the CAHPS® Hospital Survey, is a survey instrument and data collection methodology for measuring patients' perceptions of their hospital experience. It had been adapted for local context

5- Others, specify/ अन्य

6. **After admission how long did the doctors take to come and check the patient?**

जब मरीज दाखिल हो जाता है तो डॉक्टर कितने टाइम में आकर मरीज को चैक करता है।

1- Less than 15 minutes/15 मिनट से कम

2- Between 15 to 30 minute/15 से 30 मिनट के बीच में

3- Between 30 to 60 minutes/ 30 से 60 मिनट के बीच में

4- More than 60 minutes/ 60 मिनट से ज्यादा

5- Others, specify/ अन्य

YOUR CARE FROM NURSES

7. **During this hospital stay, how often did nurses treat you with courtesy and respect?**

हस्पताल में मरीज के इलाज के दौरान कितनी नर्स आपके साथ इज्जत के साथ बात करती है।

1- Never / नहीं

2- Sometimes /कुछ समय

3- Usually / हमेशा

4- Always / हमेशा

8. **During this hospital stay, how often did nurses listen carefully to you?**

मेशा जब आप हस्पताल में दाखिल हो तो नर्स आपकी बातें जो आपने उनसे कहीं है। कितनी ध्यान से सुनते है।

1- Never /कभी—नहीं

2- Sometimes / कभी—कभी

3- Usually / जरूरत पडने पर

4- Always / हमेशा

9. **During this hospital stay, how often did nurses explain things in a way you could understand?**

हमेशा जब आप हस्पताल में दाखिल होते हो तब नर्स आपको बातें कितनी व्याख्या में समझाते है। जिससे वह बात आपको समझ आ जाए।

1- Never /कभी—नहीं

2- Sometimes / कभी—कभी

3- Usually / जरूरत पडने पर

4- Always / हमेशा

10. **During this hospital stay, after you called for assistance, how often did you get help as soon as you wanted it?**

जब आप हस्पताल में दाखिल होते हो तो अगर आप किसी नर्स को बलाते हो तो तुम्हें कितनी देर में मदद मिलती है।

- 1- Never / कभी—नहीं
- 2- Sometimes / कभी—कभी
- 3- Usually/ जरूरत पडने पर
- 4- Always / हमेशा
- 5- I never asked for assistance / मैंने कभी नर्स के लिए नहीं कहा

YOUR CARE FROM DOCTORS

11. **During this hospital stay, how often did doctors treat you with courtesy and respect?**

जब तुम हस्पताल में दाखिल होते हो तो डॉक्टर तुम्हें कितनी इज्जत देते हैं।

- 1- Never / कभी—नहीं
- 2- Sometimes / कभी—कभी
- 3- Usually / जरूरत पडने पर
- 4- Always / हमेशा

12. **During this hospital stay, how often did doctors listen carefully to you?**

जब तुम हस्पताल में दाखिल होते हो तो डॉक्टर आपको कितनी ध्यान से सुनते हैं।

- 1- Never / कभी—नहीं
- 2- Sometimes / कभी—कभी
- 3- Usually / जरूरत पडने पर
- 4- Always / हमेशा

13. **During this hospital stay, how often did doctors explain things in a way you could understand?**

जब तुम हस्पताल में दाखिल होते हो तो तब डॉक्टर आपको हर बात की कितनी व्याख्या देते हैं। जिससे आप समझ सकें।

- 1- Never / कभी—नहीं
- 2- Sometimes / कभी — कभी
- 3- Usually / जरूरत पडने पर
- 4- Always / हमेशा

THE HOSPITAL ENVIRONMENT

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14. **During this hospital stay, how often were your surrounding area and bathroom area kept clean?**

जब हस्पताल में दाखिल हो तो आपके आस-पास कितनी जगह होती है।

- 1- Never / कभी नहीं
2- Sometimes ε कभी – कभी
3- Usually ε जरूरत पड़ने पर
4- Always/ हमेशा

15. **During this hospital stay, how often was the area around your bed quiet at night?**

जब आप हस्पताल में दाखिल होते हैं। तो आपके बैड के इर्द गिर्द कितनी जगह है। और रात को शान्ती है या नहीं ?

- 1- Never / कभी नहीं
2- Sometimes / कभी – कभी
3- Usually / जरूरत पड़ने पर
4- Always / हमेशा

YOUR EXPERIENCES IN THIS HOSPITAL

16. **During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?**

जब आप हस्पताल में दाखिल होते हो तो आपको किसी नर्स की जरूरत होती है। जब आपको बाथरूम या बैड का इस्तेमाल करना हो ?

- 1- Yes / हाँ
2- No □ **If No, Go to Question 18 / नहीं**

17. **How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?**

जब आपको बाथरूम या बैड की जरूरत होती है तो आपको उस समय मिलता है। जिस समय आप चाहते हो ?

- 1- Never / कभी नहीं
2- Sometimes ε कभी – कभी
3- Usually / जरूरत पड़ने पर
4- Always / हमेशा

18. **During this hospital stay, did you need medicine for pain?**

जब आप हस्पताल में दाखिल होते ही तो आपको दवाई मिलती है। जब आपके दर्द होता है।

- 1- Yes हाँ
2- No □ **If No, Go to Question 21 नहीं**

19. **During this hospital stay, how often was your pain well controlled?**

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जब आप हस्पताल में दाखिल होते हैं तो आपका दर्द कितनी देर तक कंट्रोल होता है ?

- 1- Never/ कभी नहीं
- 2- Sometimes/ कभी – कभी
- 3- Usually/ जरूरत पड़ने पर
- 4- Always/ हमेशा

20. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?

जब आप हस्पताल में दाखिल होते हैं तो हस्पताल की नर्स आपके लिए वॉ सब कुछ करते हैं। जिससे आपकी दर्द में मदद कर सकें।

- 1- Never/ कभी नहीं
- 2- Sometimes/ कभी – कभी
- 3- Usually/ जरूरत पड़ने पर
- 4- Always / हमेशा

21. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?

जब दवाई देने से पहले हस्पताल की नर्स आपको कितना बताती हैं

- 1- Never / कभी नहीं
- 2- Sometimes/ कभी – कभी
- 3- Usually / जरूरत पड़ने पर
- 4- Always / हमेशा

22. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?

नई दवाई देने से पहले आपको हस्पताल की नर्स कितने दवाई के साइड इफैक्ट्स बताते हैं जिससे आपके वह समझ आ सकें।

- 1- Never / कभी नहीं
- 2- Sometimes / कभी – कभी
- 3- Usually / जरूरत पड़ने पर
- 4- Always / हमेशा

WHEN LEAVING THE HOSPITAL

23. After leaving the hospital, will you go directly to your own home, to someone else's home, or to another health facility?

हस्पताल छोड़ने के बाद क्या आप सीधा घर जाना चाहते हैं या कहीं और या दूसरी Health facility लेना चाहोगे।

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- 1- Own home (Go to Question 25) / अपना घर
- 2- Someone else's home (Go to Question 25) / किसी दूसरे घर
- 3- Another health facility / किसी दूसरे स्वास्थ्य केन्द्र
24. If you are going to another health facility upon discharge from this facility, why?
अगर आप Health facility लेना चाहते हो छुट्टी होने के बाद इस सेवा को छोडकर क्यों ?
25. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
जब आप हस्पताल में दाखिल होते हो तो क्या नर्स आपसे बात करती है जब आपको किसी चीज की जरूरत होती है। जब आप हस्पताल से जाते हो?
- 1- Yes / हां
- 2- No / नहीं
26. Upon Discharge, what is the present health status of patient?
छुट्टी होने के बाद मरीज़ का क्या धन था?
- 1-Has improved completely / आप पूरी तरह से ठीक हो
- 2- Passed away / किसी दूसरे हस्पताल में भेजना
- 3-No improvement / कोई बदलाव नहीं
- 4-Partially improved / हिस्सों में बदलाव
27. Was there a suggestion for follow-up?
उन्होने ठीक होने का सुझाव दिया
- 1- Yes / हां
- 2- No / नहीं

OVERALL RATING OF HOSPITAL

28. Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.
कृप्या इन प्रश्नों के उत्तर दीजिये जब आपका हस्पताल में दाखिला होता है। तो आपको किसी और हस्पताल में दाखिले के बारे में जवाब नहीं देना है।
29. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?
आपको जवाब देना है 0 से 10 के बीच में अगर आप 0 देते है तो हस्पताल बिल्कुल भी अच्छा नहीं। अगर आप 10 देते है तो हस्पताल बहुत अच्छा है। आप क्या नम्बर देते हैं जब आप हस्पताल में दाखिल होते है।

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0-10 Worst hospital possible

1. 1

2. 2

3. 3

4. 4

5. 5

6. 6

7. 7

8. 8

9. 9

10.10 Best hospital possible

30. Would you recommend this hospital to your friends and family?

क्या इस हस्पताल में जाने की सलाह देते हैं अपने दोस्तों और परिवार को?

1- Definitely no / बिल्कुल नहीं

2- Probably no / कभी—कभी नहीं

3- Probably yes / कभी—कभी हां

4- Definitely yes / बिल्कुल हां

THANK YOU/ धन्यवाद