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OUTPATIENT CARE IN RSBY: A STUDY OF PROGRAM'S PILOT EXPERIMENTS

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EXECUTIVE SUMMARY

The paper reviews the pilot experiments funded by the ILO's Impact Insurance Facility conducted from 2011 onwards in eight districts across six states to test the provision of outpatient (OP) benefits under RSBY, India's Social Health Insurance Scheme for low income populations¹. Administrative data on enrolment, empanelment of care providers and outpatient claims was analysed for the review. The paper also discusses the status of primary care in India and outpatient care provision in similar schemes in other developing nations (Vietnam, Ghana, Indonesia, Philippines and Thailand).

The analysis of National Sample Survey Organization's (NSSO) household level data revealed that 99.6% of the households in India were able to finance outpatient care out of their income or savings. Only a certain type of higher than average OP expenses possibly led to impoverishment. Thus, the authors argue that the rationale for financing outpatient care under RSBY should not be based on the objective of preventing descent into poverty, but on its ability to improve health outcomes and its potential impact on reducing the cost for inpatient insurance program by encouraging early care seeking and preventing aggravation of disease episodes.

RSBY Outpatient (OP) pilots witnessed low utilization across all locations². Claim incidence was highest in Puri district, Odisha (14%) and lowest across three districts of Punjab (4%). Current market rates for OP care, traditional choice of providers and technology related challenges affected utilization patterns under RSBY. Based on interviews and secondary data analysis, the authors believe that the major reason for low utilization was non-participation of private providers in the roll out of RSBY in these locations. Previously documented factors such as shortage of staff, doctor absenteeism and poor infrastructure conditions of public providers has resulted in private players becoming the predominant providers of outpatient care in India. However, private providers reported that the the per visit reimbursement rate under RSBY OP pilots was very low and hence not a viable proposition. Due to this, the private players did not participate actively under the pilot schemes which

¹ www.rsby.gov.in

² Claim incidence was much lower than that in other insurance schemes such as for weavers and artisans, which were at 64% and 71% respectively.

considerably affected utilization. These findings highlight the fact that the pilot design did not take into account existing market dynamics (i.e. outpatient care rates and traditionally prefered provider) in the selected locations. RSBY pilots were also limited in experimentation as other insurance product designs and provider payment mechanisms were not tested and similar ones were followed in all the locations.

Low utilization implies the need for modification in the current design prior to scaling up the provision of outpatient benefits to all RSBY insured households. As current pilots were similar, there is scope for experimentation with product design and service provision to examine the impact and efficiency of approaches. New approaches should other acknowledge that active participation from private players is essential as a large segment of population prefers to seek outpatient care at these facilities. However, the private sector is unorganized and there is huge variation in price and quality of care across different regions in India implying that a single solution for the entire country may not be appropriate. There is also need for integration of various categories of providers (doctors, pharmacies and diagnostic centres) so that fragmentation of care is avoided and regulation of price as well as quality is facilitated. The paper concludes by recommending two approaches which can be tested in new pilot experiments. The first approach consists of a technology based integrated network of providers acting as a single point of access to relatively comprehensive out-patient care. The second approach follows the current service delivery system but alters the product design to provide more flexibility in the number of visits and reimbursement amounts per visit to encourage greater private sector partnership.

1 INTRODUCTION

The paper reviews the pilot experiments funded by the ILO's Impact Insurance Facility conducted from 2011 onwards to test the provision of outpatient benefits under RSBY, India's Social Health Insurance Scheme for low income population. The pilots were conducted in eight locations which included district Puri in Odisha, district Mehsana in Gujarat, districts Rupnagar, Bhatinda, Ferozepur in Punjab, district Rangareddy in Andhra Pradesh, district Serchhip in Mizoram and district Dehradun in Uttarakhand. The pilots at Gujarat and Odisha were funded by the ILO's Impact Insurance Facility and ICICI Foundation while the rest were conducted by the respective state nodal agencies. The objective of this paper is to ascertain the performance of the pilot experiments and to suggest policy recommendations for scale up of outpatient benefits provision. The performance of pilots is evaluated in terms of utilization by beneficiaries and utilization across various empanelled providers. Utilization is defined as the outpatient servies availed by beneficaries. Outpatient care scenario in India is also discussed to understand the context in which these pilot experiments were conducted. Similar social health insurance schemes in other developing countries (such as Vietnam, Ghana, Indonesia, Philippines and Thailand) were also reviewed to derive policy implications for RSBY.

1.1 METHODOLOGY

Administrative data of providers and outpatient claims was analysed on enrolment of beneficiaries under RSBY, empanelment to understand utilization patterns under the pilot experiments.

- Field visits were conducted in the districts of Puri (Odisha) and Rupnagar (Punjab) to interview the staff at RSBY state nodal agency, health care providers, insurers, beneficiaries and district level scheme implementation staff.
- Data from India's National Sample Survey Organization's (NSSO) 60th round survey was analysed to understand outpatient care seeking behavior in the general population of India and to establish the rationale for financing outpatient care.
- Literature review was conducted to identify studies related to primary care provision in India and social health insurance schemes of other developing countries.
- Personal interviews were also conducted with sector experts to further understand the outpatient health care landscape.

The study begins by discussing the primary care context in India including the status of private and public providers. The next section presents the rationale for financing outpatient care in the Indian context, followed by an introduction to RSBY and a review of current RSBY outpatient pilots. Experience from other developing countires in the context of outpatient benefits under social health insurance schemes in discussed in the next section. The paper concludes by identifying the key challenges in outpatient provision under RSBY and suggesting policy recommendations.

2 PRIMARY CARE CONTEXT IN INDIA

Several years before the 1978 Alma Ata declaration of the World Health Organization (WHO) outlining the importance of primary health care, India adopted a primary care focussed approach in its health services provision. As early as 1952, it was envisaged that health and sanitation would be covered through primary health centers and sub-centers³. However, this early start did not lead to improved health conditions as reflected in various indicators, such as infant mortality and maternal mortality rates, in which India fares worse than other similar developing countries⁴. In this section, we review the status of public sector primary care provision and the reasons for its poor conditions.

2.1 PUBLIC SECTOR PRIMARY CARE PROVISION

India has a three tiered structure of healthcare provision with the sub-center (SC), primary health center (PHC) and community health center (CHC). According to the Indian Public Health Standards (IPHS) 2007⁵, the government aims to provide a SC and PHC for a 5,000 and 30,000 population respectively⁶.

Sub-centers are typically at the village level and are run by an Auxiliary Nurse or Midwife (ANM) assisted by Accredited Social Health Activist (ASHA) workers⁷. They are the first level of contact with the public health system. Since the public health system is focussed on reproductive and child health (RCH) initiatives, the main role of the ASHA workers and ANM's at the sub-centers is to promote institutional delivery and refer complicated cases to PHC or CHC as may be required.

A PHC is the referal unit to 5-6 sub centers. IPHS view the PHC as the cornerstone of the provision for primary care and the first place where citizens can meet a qualified doctor. The key differences between SC and PHC are the presence of gualified doctors, inpatient services with at least 6 beds, basic laboratory and diagnostic services at the PHC. CHCs constitute the next level of institutions in this structure. As shown in the Figure 2.1, a CHC is the first point of referal for secondary care from PHC's and SC's. One CHC would be catering to the referral needs of 4-5 PHCs and therefore provide secondary care services to a population of nearly 120,000. Manpower and Staff at CHCs is greater than PHCs with IPHS standards requiring a minimum of 46 essential staff. This is supposed to include public health officials, staff for specialist services e.g. general surgeon, doctors, nurses, other paramedical staff, administrative staff and a pharmacist.

These institutions are primarily funded through supplyside-financing by the government⁸. However, public spending on health is much lower than global standards. For instance, government expenditure per capita on health in India is lower than other similar developing nations. For example, US\$61 in India compared with US\$1056, US\$645 and US\$322 in Brazil, South Africa and China respectively (World bank, 2011). This has resulted in a grossly inadequate public health care infrastructure. Considering this, India started the National Health Mission (NHM) to increase public spending on health care. Launched in 2005 as the National Rural Health Mission (NRHM), in May 2013 it was rechristened to NHM with the addition of urban health into the scope of activities. The budget for NHM related initiatives in 2013-14 was to the tune of US\$3.5 Billion⁹.

Activities include strengthening of primary care provision by upgrading public health facilities to Indian Public Health Standards, establishment of mobile medical clinics and focussed efforts on Maternal and Child Health (MCH) via initiatives such as Janani Suraksha Yojna¹⁰, engagement of ASHA workers, financial incentives for mother and ASHA workers for institutional deliveries.

³ Pandve,,H., Pandve,,T., Primary healthcare system in India: Evolution and challenges (International Journal of Health System and Disaster Management, Vol. 1, Issue 3, Jul-Sep 2013)

⁴ Maternal mortality rate in India (190) is much higher than in countries like Brazil (69), Malaysia (29) and Thailand (26). Similarly, high under five mortality rates in India (56) are observed compared to Brazil (14), Malaysia (9) and Thailand (13). (Source: World Health Statistics 2014, WHO) 5 IPHS are a set of uniform standards envisaged to improve the quality of health care delivery in the country and serve as the bench mark for assessing the functional status of health facilities.

⁶ Population per sub-center and primary health center are not fixed and vary based on density of population, average distance to health facility and case load being experienced 7 ASHA workers are Accredited Social Healthcare Activists and work in a voluntary capacity. However, Indian government provides financial incentives to ASHA workers for certain types of work for example in the case of promoting institutional deliveries under Reproductive and Child Health Initiatives.

⁸ Institutions are also funded, albeit marginally, through demand side funding in form of user fees and insurance schemes.

⁹ Budget figures obtained from Ministry of Health and Family Welfare website.

¹⁰ Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NHM). It is being implemented with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among poor pregnant women.

Fig. 2.1: Structure of public sector primary health care provision in India



2.2 STATUS OF PUBLIC PRIMARY CARE PROVISION

The National Rural Health Mission (NRHM), as the flagship program for health care provision, was launched in 2005, acknowledging the poor state of public health services both in terms of quality and infrastructure. The overarching aim of NRHM was to provide quality healthcare to rural households by making architectural corrections to the health system. It also set out specific goals in terms of lowering maternal mortality ratio, infant mortality ratio and a reduction of total fertility rate.

Recent studies have found that in spite of NRHM, the challenge of inadequate public sector health infrastructure remains. The number of medical workers in India is less than a fourth of the WHO benchmark¹¹. According to a district level facility survey, 35 per cent of SCs and 30 per cent of PHCs had less than 60 per cent of the essential drugs and one third of PHCs had less than 60 percent of the basic refrigeration facilities required for primary health care¹² Several review studies have been undertaken to assess the impact of NRHM. Another study published in 2009 to assess the impact of NRHM focused on three states; Rajasthan, Uttar Pradesh and Madhya Pradesh that are classified as High Focus States¹³. The authors in the paper while recognising

NRHM's progress are aware of the magnitude of the challenge that remains, especially in the high focus states. They recognise that rural public health system while extensive, has several problems and hence the private sector has become the default provider of healthcare services.

This view is also validated by the analysis of NSSO survey data from 2004, which highlights that, 77% of individuals in India prefer private doctors in case of an outpatient (OP) care requirement. In other high focus states like Bihar, Uttar Pradesh, Chhattisgarh and Jharkhand, more than 80% respondents go to private providers for outpatient care.

See Table 2.1, the state wise percentage of individuals opting to utilise private sector in case of need for an OP related treatment.

Only two states i.e. Odisha and Himachal Pradesh have more than 50% of respondents utilising the public providers for primary health care. In the case of Odisha, this could be driven by the large proportion of rural population¹⁴ and concentration of private providers in urban areas¹⁵. In the case of Himachal Pradesh, given the hilly and mountainous terrain of the state and low density of population, the authors believe that private sector presence is low.

Table 2.1: State wise utilisation of private sector for OP treatment (NSSO, 2004)

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NRHM	State Name	Survey	Percentage
Classification		Kespondent	Going
		Sample Size	to Private
	Bihar	1,127	93%
	Uttar Pradesh	5,196	88%
	Chhattisgarh	501	83%
	Jharkhand	273	81%
	Uttarakhand	173	77%
States	Madhya	1,307	74%
Sidles	Pradesh		
	Assam	522	65%
	Rajasthan	1,181	52%
	Odisha	774	43%
	Himachal	201	30%
	Pradesh		
Non-high focus	Haryana	733	86%
states	Maharashtra	3,809	85%
	Punjab	1,149	82%
	Gujarat	1,281	80%
	West Bengal	3,164	79%

14 Rural population constitutes 83% of Odisha total population according to Census 2011 figures. 15 64% of private hospitals in Odisha are located in urban areas. [Gupta, M., State Health Systems: Odisha. (Indian council for research on international economic relations, 2002)

¹¹ Rao, M., Choudhury, M., Health care financing reforms in India. (Working paper No: 2012-100, 2012, National Institute of Public finance and policy.)

¹² lbid.

¹³ Bajpai, N, J D Sachs and R H Dholakia (2009): Improving Access, Service Delivery and Efficiency of the Public Health System in Rural India: Midterm Evaluation of the National Rural Health Mission, Working Paper No 37, Center on Globalisation and Sustainable Development, Columbia University

Non-high	Andhra	2,491	78%
focus	Pradesh		
states	Tamil Nadu	2081	73%
	Karnataka	1,047	71%
	Kerala	3,097	66%
	All India	30,671	77%

2.2.1 FACTORS DRIVING PREFERENCE FOR PRIVATE SECTOR

In the NSSO survey, respondents were also asked to cite their reason for not seeking care at public providers. Interestingly, people who use private facilities typically cited "Not satisfied"¹⁶ (64%) with services at public facility or public facility "Being too far" (21%) as the two main reasons (Table 2.2).

Based on a review of national statistics and other studies, the preference for private sector providers over public providers in OP care is driven by multiple factors. These have been identified as:

- a) Shortage of Staff at Public Facilities
- b) Doctor and Health Worker Absenteeism
- c) Poor Conditions at Public Facilities

Table 2.2: Reason Cited for Non-utilisation of Public Sector by State

NRHM	State Name Not		Distance
Classification		satisfied	(Too far)
	Bihar	65%	24%
	Uttar Pradesh	66%	22%
	Chhattisgarh	39%	38%
	Jharkhand	44%	30%
High Focus	Uttarakhand	57%	35%
States	Madhya Pradesh	54%	31%
	Assam	42%	23%
	Rajasthan	63%	19%
	Odisha	41%	25%
	Himachal Pradesh	66%	11%
	Haryana	72%	22%
	Maharashtra	66%	23%
	Punjab	67%	13%
	Gujarat	77%	16%
Non-	West Bengal	58%	24%
high	Andhra Pradesh	60%	19%
IOCUS states	Tamil Nadu	77%	14%
310103	Karnataka	76%	14%
	Kerala	66%	14%

16 Not satisfied is a combination of "dissatisfied", "long waiting time" and "required facilities not available" being cited as reasons for not using government facilities.

		All India	64%	21%
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Shortage of staff at public facilities is a recognised and perennial challenge faced by the public sector healthcare departments in India. Analysing the public health services data¹⁷, it is observed that at the national level there is a shortfall of 8% in the number of doctors at PHCs and 18% in nursing staff at CHC or PHCs¹⁸ (Table 2.3 on next page). Within these national level aggregates, large variations across states is observed with several high focus states facing shortfall of medical staff. This is the case for example in Uttar Pradesh and Chhattisgarh. The situation is worsened by the disproportionate distribution of health care personnel between rural and urban areas. A research paper published by the Public Health Foundation of India estimates that 60% of healthcare workers live and practise in urban areas which accounts for only 26% of the population¹⁹. Compounding the problem of shortage of staff, the public sector has also faced widespread absen teeism of health care staff. A study published by Banerjee et al in 2004 on the provision of rural healthcare in Rajasthan, found that on average 45% and 46% of medical personnel were absent from sub-centres and PHCs or CHCs respectively²⁰. Such results are not unique to rural Rajasthan as evidenced by a seminal study by Chaudhury et al, which found widespread absenteesim among health workers across six developing countries including India²¹.

Finally, the poor quality of public facilities also remains a major challenge. The government recognises that the current level of functioning and infrastructure leaves a large scope for improvement. Therefore, as part of NRHM, one of the key focus areas has been improvement of infrastructure and regular maintanence. Nevertheless, pictures of conditions in some of the sub-centers, PHCs and CHCs leave a lot of scope for improvement. In light of the above challenges, media reports of corruption in utilisation of NRHM funds in Uttar Pradesh only increase the scale of challenge to improve the infrastructure and functioning of the public health system²².

¹⁷ Available on the website of National Health Mission, Ministry of Health and Family Welfare, Government of India. 18 Shortfall percentage is calculated as the number of vacant positions divided by the total sanctioned positions 19 Rao, K, et al. So many, yet so few: Human Resources for Health in India (2012, Human Resources for Health) 20 Banerjee A, Deaton A, Duflo E. Health care delivery in rural Rajasthan. EPW2004;39:944-9.

²¹ Chaudhury, Nazmul, et al. Missing in action: teacher and health worker absence in developing countries (The Journal of Economic Perspectives 20.1 (2006): 91-116) 22 News Report Dated 12th May 2012 - Hindu

NRHM Classification	State Name	Shortfall percentage of doctors at PHC	Shortfall percentage of Nursing staff at CHCs or PHCs
	Bihar	0%	26%
	Uttar Pradesh	23%	64%
	Chhattisgarh	41%	69%
	Jharkhand	0%	44%
High Focus	Uttarakhand	20%	64%
States	Madhya Pradesh	30%	29%
	Assam	0%	0%
	Rajasthan	0%	0%
	Odisha	13%	78%
	Himachal Pradesh	8%	63%
	Haryana	23%	0%
	Maharashtra	0%	0%
	Punjab	0%	0%
	Gujarat	33%	20%
Non-high	West Bengal	0%	0%
tocus states	Andhra Pradesh	0%	0%
	Tamil Nadu	0%	0%
	Karnataka	10%	0%
	Kerala	0%	13%
	All India	8%	18%

Table 2.3: State wise shortfall of Doctors and Nurses in the Public Sector

We attach some pictures depicting the poor conditions at public sector facilities.

Picture 1: CHC Garhokota, District Sagar, Madhya Pradesh (February 2009)

Picture 1 and 2 source: Bajpai, N, J D Sachs and R H Dholakia (2009): Improving Access, Service Delivery and Efficiency of the Public Health System in Rural India: Midterm Evaluation of the

National Rural Health Mission, (Working Paper No 37, Center on Globalisation and Sustainable Development, Columbia University)

Picture 2: CHC Sindhori, District Barmer, Rajasthan (November 2008)





Picture 3: Poor Conditions at a Sub-Center



2.2.2 CHARACTERISTIC FEATURES OF PRIVATE SECTOR

Considering that 77% of the population seeks outpatient care at private facilities, it is imperative to understand the features of private sector provision in India. The private sector includes for-profit and notfor-profit providers, Nongovernmental Organizations (NGOs), missionary hospitals, private pharmacies, and unqualified (registered or unregistered) informal providers. The shortcomings in public health care system has consequentially led to remarkable growth of the private sector. However, as it has evolved, private sector's characteristic features have also introduced challenges in health care space. Authors identify three such features of the private sector:

- a) Uneven distribution of qualified providers
- b) Fragmented nature of care
- c) Variable quality of services

Private sector infrastructure is unevenly distributed across rural, urban and peri-urban areas. For outpatient treatment or consultations, the distance travelled by rural population is about 5.9 kms on an average, which is approximately three times the distance travelled by the urban population (2.2 kms)²³. This has led to proliferation of unqualified medical practitioners in rural areas who meet outpatient care needs in the village. Studies have estimated that there are more than 500,000 such unqualified practitioners in India²⁴. Despite their lack of proper gualifications, such providers continue to hold public's trust due to absence of other options. This reliance on unqualified practitioners affects the quality of care provided to the patients. A study reporting the quality of care provided by different providers estimated that there are 70% and 55% chance of wrong treatment being prescribed in rural areas of Madhya Pradesh and Delhi²⁵. The quality of services also varies depending on location, type and experience of providers. This variation in quality highlights the lack of oversight on private sector in the absence of effective regulation and accreditation.

The unorganized private sector has also led to fragmented care as different types of service provider (doctors, pharmacist and diagnostic centres) continue to work independently on a commission basis²⁶.

25 Das., J., et al. In Urban And Rural India, A Standardized Patient Study Showed Low Levels Of Provider Training And Huge Quality Gaps (Health affairs, 2012) 26 Fragmentation of care can be understood as focussing Instances have been reported where doctors charge as much as 40%-50% commission for prescribing diagnostic tests²⁷. This often leads to unnecessary prescription of diagnostic tests and households end up spending large amounts on dispensable tests. The unorganized nature also implies that households, often, have to visit at least three different points for the basic consulting, diagnostics and drugs for an outpatient episode. This cumbersome approach, along with high opportunity cost in visiting different providers, leads the households to postpone or delay care, often leading to escalations. In absence of integration, private sector is difficult to monitor or regulate leading to variable price and quality of care.

The main achievement of the private sector has been to address the shortcomings of public system by ensuring presence of medical staff and availability of medical supplies. Because of this, in spite of the aforementioned shortcomings, private sector continues to be the predominant provider of outpatient services.

3 FINANCING OUTPATIENT CARE

The authors believe that the argument for financing outpatient care should not be based on its ability to prevent descent into poverty of the household, but should be based on its ability to improve health outcomes and its effect on inpatient care financing cost. Financing outpatient care can encourage patients to seek care early and prevent aggravation of disease epsiodes which can also result in reduction in number of episodes requiring hospitalization. Thus, outpatient care financing can improve health outcomes and can be effective in reducing the cost for inpatient insurance programs.

As noted previously, public spending on health in India is inadequate. This coupled with poor insurance coverage (only one fourth of India's population is insured) and predominant utilization of private facilities has led to high Out-of-Pocket (OOP) expenses on health care in India²⁸. Out-of-pocket expenses constitute 86% of total private health expenditure²⁹. While historically inpatient care episodes have been considered to be the main impoverishing expenditure, recent papers have argued that outpatient episodes are the leading cause for descent into poverty. Two key papers by Shahrawat and Rao and Bremen et al arguing that a large proportion of the OOP expenditures on healthcare by the poor are for

 $^{23\ \}text{Saxena.}, M.,$ Utilization of Private Sector in Healthcare in India.

²⁴ Radwan., I., India - Private health services for the poor (World Bank, 2005)

and acting on parts of care without adequately appreciating their relation to the evolving whole and can lead to inefficiency, ineffectiveness, inequality, and

depersonalization in health systems. (Stange, K., The Problem of Fragmentation and the Need for Integrative Solutions, 2009, Annals of Family Medicine)

²⁷ http://www.thehindu.com/news/cities/Hyderabad/doctorsand-their-moneymaking-mantra/article2608616.ece 28 Krishnan, V., Renewed prescription (July 2014, The Caravan, Vol 6 Issue 7, p.23) 29 World Bank Data Repository

outpatient treatment, were identified. The papers conclude that due to these OOP expenditures, primarily on drugs, families are being pushed into poverty. Shahrawat and Rao analysed data from the Consumer and Expenditure Survey and highlighted that about 3.5% of families are pushed into poverty due to healthcare expenditure³⁰. According to the paper, if OOP expenditures for either medicines or outpatient care are removed, the percentage would fall to 0.5% only. An analysis on similar lines by Bremen, Ahuja and Bhandari using NSSO 60th round survey data similarly argues that out of all the families falling below poverty line (BPL) due to healthcare expenditure, 79% were due to outpatient spending³¹. These arguments make for seemingly convincing evidence in favour of financing outpatient care. However, these analysis while calculating the impoverishing effect of outpatient spending, do not consider the possibility that households can have access to formal and informal savings.

Working with NSSO data, authors find that 99.6% of the families which had OP events contributed out of their income or savings to finance OP expenditure. In addition, 94% of the families financed the entire amount of expenditure. Filtering out non-BPL families from this data, we found that 99.4% of BPL families contributed via savings or income to finance OP expenses. The 92% of BPL families could finance the OP expenses completely and only 8% had to borrow to finance OP expenses. The authors believe these statistics indicate that a large proportion of poor families are aware that an illness episode is likely in the family. Therefore, they plan for potential expenses related to such episodes by proactively saving or are prepared to finance them out of current income. Evaluating the impact of OP expenses on non-BPL families the authors calculated that 4.2% of non BPL families fell into the BPL category due to OP related expenses. The average OP related expense of these families was INR 1142 (US\$ 19) with a rural vs. urban split at INR 1022(US\$ 17) and INR 1472 (US\$ 24.5) respectively³². In comparison, the average expense related to an OP episode for all families in India is INR 285 (USD 4.7) and INR 326 (USD 5.4) in rural and urban areas respectively. The authors believe that this indicates a certain kind of OP expense that is higher than the average OP treatment expense, leads to impoverishment. It is, therefore, important to understand the specific nature of these higher than average OP expenses to devise a targeted policy intervention to reduce OOP expenses.

Table 3.1: Analysis	of outpatient	care expenses	(NSSO,
	2004)		

Feature	All Families	BPL Families
NSSO Sample Size	21,616	4,280
OP expenses completely financed out of income or savings	20,306	3,935
Percentage	94%	92%

In this context, role of an outpatient care financing program needs to be reassessed. There has been evidence that outpatient insurance can lead to less out-of-pocket expenses on hospitalization by incentivising early care seeking for outpatient episodes³³. Therefore, the authors conclude that the argument for financing outpatient care should not be based on preventing the impoverishing effect of outpatient expenses but should be based on its potential ability to:

- Encourage patients to seek care early and prevent aggravation of disease episodes into more severe conditions
- Early care seeking behaviour would reduce inpatient incidence and reduce the costs of inpatient insurance programs.

4 AN INTRODUCTION TO RSBY

Rashtriya Swasthya Bima Yojana (RSBY) was launched by the Ministry of Labour and Employment (MoLE) of the Government of India in 2008, with the primary objective of shielding low-income households from the burden of major health expenses. As of April 2014, the scheme covered 479 districts (out of 640) in 29 states across the country. It covers hospitalization expenses of up to INR 30,000 rupees (US\$500) per household for most procedures at any of the national networks of 12,123 private and public empanelled hospitals. As of 30th April 2014, a total of 37.1 million BPL households were enrolled and 7.1 million hospitalization cases had been covered by the scheme since its launch. The annual premium per household ranges from INR 323 (US\$5) to INR 1,100 (US\$18), with the beneficiary paying a nominal fee of INR 30 (US\$0.5).

³⁰ Shahrawat, Renu, and Krishna D. Rao. 2011. Insured Yet Vulnerable: Out-of- Pocket Payments and India's Poor. Health Policy and Planning (April): 19.

³¹ Berman, Peter, Rajeev Ahuja, and Laveesh Bhandari.
2010. The Impoverishing Effect of Healthcare Payments in India: New Methodology and Findings. Economic and Political Weekly 45 (16): 6571.
32 1 USD = 60 INR

³³ Mahal, A., Krishnaswamy, K., Ruchismita, R., Babu, D. G., What is a health card worth? An evaluation of an outpatient health insurance product in rural India (Geneva, Impact Insurance Facility, International Labour Organization, Research Paper No. 30, 2013).

Picture 4: RSBY beneficiaries displaying their 64kb smart cards



4.1 SALIENT FEATURE OF RSBY

Although other government-run public health insurance schemes already existed in India, RSBY was a pioneering scheme in many respects. Its key design features include:

- Public-Private Partnership (PPP): Public and private medical facilities, third party administrators (TPA) and insurers partner with the State Nodal Agencies (SNAs). SNAs set guidelines, quality standards and monitor programme implementation.
- Centre-state government collaborative model: While the programme was designed by a department of central government, implementation and management is undertaken together with respective state governments. Premium subsidies are co-financed by central government and the states to a ratio of 75 per cent and 25 per cent respectively, thereby ensuring mutual ownership and control³⁴.
- Leveraging technology: Since the scheme targeted Below Poverty Line 1 (BPL) households with low literacy levels, paperwork was minimized by using biometric identification that enabled instant enrolment and facilitated control over fraud.
- 4. Demand-side financing: The scheme offers financial empowerment to patients by providing them with a value-loaded smart card, which offers cashless access to medical facilities, covering almost all procedures. The smart card can be used at any empanelled hospital in the national network, allowing the convenience of portability to the country's considerable migratory population.

- Premium subsidy: The premium is 100 per cent subsidized by government funds, with just a nominal enrolment cost (USD 0.5) payable by the beneficiary.
- 6. Competition: RSBY is unique in encouraging and leveraging competition at two levels; among hospitals and among insurers to improve the quality of outcomes.
- Collection, storage and maintenance of data: Data collected from the administration of the scheme is stored and maintained by the respective central or state government, facilitating future actuarial calculations and market development.

Starting in 2011, RSBY launched pilot experiments funded by the ILO's Impact Insurance Facility to include outpatient care coverage to the existing hospitalization coverage. We review these pilot experiments in the next section.

5 RSBY OUTPATIENT PILOT EXPERIMENTS

5.1 DESIGN

RSBY started experiments to provide outpatient benefits through its platform in 2011. In three years, the pilot scheme has been launched in eight districts in six states. The pilot scheme's target beneficiaries and benefit package were similar across six states with minor variations. All the pilots had an insurance component except in Uttarakhand which consisted of only data collection on outpatient health care utilization in the target population and Mizoram where SNA provided the benefits through only public providers only.

The descriptive comparison between the main features of the pilot scheme across the six locations is presented in Table 5.1. Outpatient benefits were extended to the enrollees of RSBY inpatient scheme which include MGNREGA workers in Odisha, Gujarat and Mizoram³⁵. The pilot in state of Andhra Pradesh was extended only to migrant brick kiln workers from Odisha having a RSBY card and was smallest in scale enrolling 6,883 lives.

35 Mahatma Gandhi National Rural Employment Guarantee Act, abbreviated to MGNREGA, is an Indian labour law and social security measure that aims to guarantee the 'right to work' and ensure livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work.

³⁴ Central government finances a higher share of 90 per cent for north-eastern region states and Jammu and Kashmir

RSBY outpatient benefit package: This included freeof-cost consultation and drugs for 10 outpatient visits per household, per year. Each visit allowed doctors consultation for up to seven days. The per visit reimbursement package was INR 100 (USD 1.67) benefits were included as part of the IP package in the second year and were intended to finance prehospitalization expenses which were not covered under the RSBY IP scheme. In Andhra Pradesh, the scheme had to be stopped as enrolled beneficiaries

KEY HIGHLIGHTS FROM ANALYSIS OF RSBY OP PILOTS

- RSBY OP pilots were characterized by low utilization across all locations. Puri district in Odisha had the highest utilization with 14% incidence rate, while Punjab had the lowest incidence of 4% across three districts.
- Current market rates for OP care, traditional choice of providers and technology related challenges affected the utilization pattern under RSBY.
- In Puri, Mehsana and Punjab, distribution of claims was skewed towards providers which were not the the traditionally preferred providers in these locations. Mehsana in Gujarat and all pilot districts of Punjab had more claims at public facilities while Puri had more claims at private providers.
- In Mehsana district and three districts of Punjab, standalone private providers didn't participate actively with only 18% and 6% cases serviced at these facilities respectively. Traditionally, private providers treat 80% and 82% of OP cases in these areas respectively. As their normal treatment rates were much higher than RSBY OP per visit reimbursement, they opted out of the scheme, possibly leading to low utilization.
- In Puri, standalone public facilities didn't remain active. With a traditional share of 47% in OP care provision, their inactivity potentially led to low utilization.
- Private sector players are the predominant providers of outpatient services and program design should facilitate their active participation to ensure good utilization of OP benefits under RSBY.

inclusive of consultation fees and drugs. Additionally, there was provision to reimburse INR 150 in case of specialist consultation in Mehsana district and three districts of Punjab.

Provision of OP benefits followed the same process as followed for providing IP benefits where the respective SNA engaged the insurer for enrolment and empanelment of OP facilities. In the North-Eastern state of Mizoram, the SNA adopted a different approach and empanelled only public facilities without involving any insurance company or private providers. In other states, all the facilities, public or private, which were empanelled under the IP scheme were empanelled for the OP scheme as well. To increase the outreach of OP scheme, efforts were made to empanel standalone OP providers³⁶. However, such providers were empanelled only in Puri and Mehsana districts. In other locations, no private standalone OP providers could be empanelled; reasons for which are discussed in later sections regarding pilot locations. Odisha adopted a unique approach as it also empanelled AYUSH doctors who practice alternative medicine³⁷. OP pilots were continued for the second year in Odisha, Mizoram and Gujarat. In Punjab, OP

were migrant workers who migrated out of the state during the policy period.

Picture 5: Diagnostic rate list on display in a Punjab public hospital. Diagnostics were covered only in Punjab.

RATE	LIST
HAEMATOLOGY	BIO. CUENUS
HB 10/	CTT CHEMISTRY
TLC,DLC 10+10/	GUOID
ESR IN	SUGAR20/.
RT CT	R.F.T, 60/.
BLOOD CDOUD	UREA 20/.
BLOOD GROUP 30/.	URIC
A CONTRACT OF A CONTRACT OF	CRFAT 20/.
STOOL20/.	LFT 90/.
VDRL	BIL 20/-
RAFACTOF 50/-	SGOT 20/-
WIDAL	SGPT 20/-
HIV FREE	ALKP
Hb S A9	HCV
PREGNAINCY 30/	RAFACTOR . 50/-
URINE COMPLETE 20/-	LIPIDS PROFILE 100/.

³⁶ Standalone OP providers are the providers empanelled only under OP scheme and not under the IP scheme. Private clinics/General practitioners constitute private, while PHCs constitute public standalone OP providers.

³⁷ AYUSH refers to the alternative medicine of Ayurveda, Yoga, Naturopathy, Unani, Siddha and Homoeopathy.

Scheme	State	С	P Claim incidence
		Year 1	Year 2
	Odisha (Puri)	13%	14%
	Gujarat (Mehsana)	13%	11%
RSBY OP Pilots	Punjab (Bhatinda Rupnagar & Ferozepur	4%	Policy didn't enter second year
	Andhra Pradesh (Rangareddy)	4%	Didn't enter second year
	Mizoram (Serchhip)	10%	NA
Other Government	MGBBY	69%	64%
Schemes	RGSSBY	67%	71%
Microinsurance Scheme	CARE Foundation	110%	169%

lable 5.2: OP Claim incidence in Various Scher	nes
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5.2 ANALYSIS

This analysis examines how effectively the outpatient benefits were utilized by the beneficiaries under the pilot schemes. OP claim incidence is used as the measure of utilization 4. As each OP claim represents one outpatient episode, claim incidence is representative of the number of outpatient episodes in enrolled population for which beneficiaries used the OP benefits to seek care at an empanelled provider. Utilization at the six locations is presented in Table 5.2 in the next page. It is observed that OP claim incidence has remained quite low across all the pilot sites. The incidence was particularly low in Punjab and Andhra Pradesh indicating low utilization by beneficiaries. This is compared with the incidence rate in the Mahatma Gandhi Bunkar Bima Yojna (MGBBY) and Rajiv Gandhi Shilpi Swasthya Bima Yojna (RGSSBY), two insurance schemes run by the Indian government, which provide OP coverage to the limited population of artisans and weavers. OP incidence of 69% and 67% was observed for 4.83 million weavers and 2.41 million artisans insured in these schemes³⁸. While the comparison might not be ideal considering these schemes insure specific groups, it can be observed that incidence under all the RSBY OP pilots has remained low. Another example of outpatient insurance is a health microinsurance pilot in Western India which experienced claim incidence as high as 110% in its first year³⁹. While these three examples were different from RSBY OP pilots in product design and service delivery, their high claim incidence indicates that insuring OP care potentially leads to high utilization. This prompted an investigation to understand the reasons for the different experience in RSBY OP pilots. Authors analysed the administrative data to identify patterns in utilization, which was followed by interviews with health care providers, insurer, SNA staff and beneficiaries to understand the context behind these patterns. The pilots were analysed on following parameters:

- a) Utilization measured as claim incidence
- b) Time trends in utilization
- c) Utilization across different types of providers which include standalone and IP+OP providers in public and private sector

As the pilot in Andhra Pradesh was stopped, the analysis of empanelment and utilization across different providers in this location is not included in the review. Similar analysis is also not included for the pilot in Mizoram as it didn't involve an insurance component.

5.2.1 RSBY OUTPATIENT PILOT: ODISHA

Puri in Odisha was the first district where the RSBY OP pilot was initiated. It had to initially face a number of implementation related challenges in enrolment and activation of facilities as processes took time to get stabilized over the course of the pilot. This also affected the utilization of the policy discussed in this section.

Utilization: The Puri pilot was the largest with highest number of enrolled families and individuals. However, the utilization remained low with incidence at 13% and 14% in year 1 and yearb2 respectively

³⁸ Incidence is reported for the year 2009-10. Data for the schemes was extracted from interview with scheme advisors.

³⁹ Ruchismita, R., Sharma, S., Exploring viability in primary care insurance: A study of CARE Hospital Foundation's innovative experiment in India (Geneva, Impact Insurance Facility, International Labour Organization, Research Paper No. 40, 2014).

Table 5.3: Utilizatio	on in Puri in 27	' months (Jul 11-Dec
	13)	

	Enrolled	Enrolled	Number	OP Claim	
	families	number	of	incidence	
		of lives	OP		
			Claims		
lear	117,873	320,048	41,551	13%	

88,438

14%

During discussions with health care providers and insurer, three main reasons were identified for low utilization in Puri:

180,371 647,043

Year

- a) Pilot faced technology challenges at later stages which affected utilization. The program hit a roadblock when smart cards used to identify beneficiaries were changed from 32 kb to 64 kb format. These new cards were not compatible with the old OP software installed at standalone providers. Thus, during this period, the standalone providers could not operate and the beneficiaries were not able to access OP benefits at these facilities which affected utilization.
- b) Due to aforementioned technology challenges, most of the standalone public sector providers (PHCs) discontinued the provision of OP benefits. This led to low utilization at these facilities.
- c) In this pilot, initially, per visit reimbursement was only INR 50 (USD 0.8), which was increased to INR 100 (USD 1.67) after private providers highlighted that this design was too restrictive as the per visit compensation was inadequate to cover necessary consultation, drugs and diagnostics for an outpatient episode. Providers also had to pay INR 18,000 (USD 300) for the installation of hardware and software required to operate under the scheme. Due to these two reasons, private providers reported that this scheme was not a viable proposition and they either opted out of the scheme or when active, serviced very few claims leading to low utilization.

Time trends in utilization: As presented in Figure 5.1 in the following page, the utilization of policy can be divided into three stages:

- a) July 2011 to March 2013: This was a period of low utilization because of low per visit reimbursement package which discouraged active participation of the private providers.
- b) March 2013 to September 2013: This was a period where a spike in utilization can be observed due to the increase in the amount of benefit package.
- c) After September 2013: As discussed above, due to incompatibility of new smart cards with old OP

software, all the standalone providers became non-functional. This led to a considerable drop in utilization.





Utilization based on type of providers: The empanelment of providers (Figure 5.2, below) in Puri was characterized by:





- All the RSBY inpatient facilities were converted to IP+OP facilities and most of them continued to be functional.
- b) Special attention was paid to empanel standalone providers which included eight homeopathic doctors. This was unique for this experiment as no homeopathic doctors were empanelled in other locations.
- c) Out of 18 empanelled standalone public providers only 3 remained functional during the entire period of the pilot scheme.

This distribution of empanelled providers also explains the utilization at different type of providers. As observed in Figure 5.3, private standalone OP providers were the main provider of services in the area accounting for 87% of total claims. Proportion of claims at the standalone public providers was quite low with less than 1% claims. Traditionally, PHCs are a major source for providing OP services in the area as reflected in the NSSO data that 57% of OP cases in Odisha are treated at public facilities and as these facilities discontinued the provision of OP benefits, overall utilization also decreased⁴⁰. This led to less number of total claims, skewed towards private providers.

Fig. 5.3: Distribution of claims across different types of providers (Puri)



5.2.2 RSBY Outpatient Pilot: Gujarat

Similar to other pilot locations which demonstrated low utilisation rates, the pilot in Mehsana district, Gujarat also experienced only a 13% claims incidence in the first year, which, further dropped to 11% in the second year.

Table 5.4: Utilization in Mehsana in 26 months

Enrolled		Enrolled Number of		OP Claim	
families		number OP Claims		incidence	
		of lives		per enrolled	
				individual	
Year 1	80,312	281,244	36,948	13%	
Year 2	76,929	298,446	34,079	11%	

Time trends in utilization: Utilization in Mehsana had similar trend as Puri with three distinct periods: First, initial low utilization, second, a spike after increase in per visit reimbursement rate, and third, a decrease due to technology challenges. However, there were two main differences:

a) The spike in utilization was experienced for a brief period of 3 months compared to 7 months in Puri. Thus, increase in per visit coverage from INR 75 to INR 100 did not have a sustained impact on utilization as experienced in Puri. This is due to two reasons: a) Charges for outpatient services are less in Odisha than Gujarat⁴¹. Thus, private providers were more active in Odisha at this reimbursement rate. b) Also in Puri, affordable generic medicines were made available through

40 OP care at public facilities rises to 85% in district Puri according to NSSO data. However, the sample size is too low i.e. 32 OP cases to draw valid inferences. 41 Under this scheme affordable and high quality unbranded generic medicines are made available through 'Jan Aushadhi' stores. Jan Aushadhi Scheme to control claim costs and to make the scheme attractive to private providers9. Due to these two reasons private providers were more active in Puri compared to Mehsana even though the benefit package was similar.

b) Period of low utilization was longer than in Puri. Technology challenges, when 64kb cards not being compatible with installed software, further decreased the utilization rate.

Fig. 5.4: Number of claims over time in Mehsana



Utilization based on type of providers: The empanelment was characterized by:

- a) None of the provider categories were as inactive as the public standalone OP providers in Puri. Instead, most of the providers empanelled initially, remained functional. There was almost an equal share of providers with 68 public and 63 private functional facilities (Figure 5.5).
- b) Public standalone OP providers were the highest among empanelled providers and all of them remained active during the policy period as reflected in high proportion of claims at these facilities.



The pilot in Mehsana district had an uncharacteristically high proportion of claims (82%) at public facilities (Standalone and IP facilities). This is in sharp contrast with NSSO data which shows that in Gujarat 80% of OP cases (76% in Mehsana) are treated at private facilities (Fig 5.6 in the following page). This skewing in distribution of claims towards public providers can be explained as:

Fig. 5.5: Empanelment of providers in Mehsana

- Akin to Puri, private providers were not excited a) about the OP scheme in Mehsana as per visit reimbursement was considered to be too low, even lower than their normal market rates. The product was also considered by doctors to be inflexible as expenses for different types of outpatient conditions varies and it is difficult to put an artificial ceiling of INR 100 on per episode expenses. Thus, while the private facilities remained active technologically, the number of claims registered at these facilities was guite low. A possible explanation is that as the empanelled private providers were not actively participating, patients continued to use their traditionally preferred provider by paying out-of-pocket and not using the RSBY benefits.
- b) Authors infer that there was not an actual change in utilization pattern but due to active participation of only public facilities under RSBY, distribution of claims is skewed towards these facilties. Thus, it is believed that the noninvolvement of standalone private providers was the major reason for low utilization in Mehsana. These findings were mapped with results from the NSSO survey where respondents were asked to cite their reasons for not seeking OP care at public providers. It was found that 85% respondents in Mehsana find public facilities as non-satisfactory and thus, prefer to seek care at private facilities.

Fig. 5.6: Distribution of claims across different types of providers (Mehsana)



Table 5.5: Reasons cited for non-utilization at public provider (NSSO Survey)

Name	Dissatisfied	Distance	Other
		(Too far)	reasons
Mehsana	85%	13%	2%
Gujarat	77%	16%	7%
All India	64%	21%	15%

This explains overall low utilization as private providers did not actively participate and a large

segment of population, which prefers to seek care at private facilities could not utilize RSBY benefits.

5.2.3 RSBY OUTPATIENT PILOT: PUNJAB

The outpatient pilot was implemented in three districts in Punjab; Bhatinda, Ferozepur and Rupnagar. However, fewer beneficaries were enrolled compared to the pilots in Odisha and Gujarat. All the three districts in Punjab experienced the lowest claim incidence amongst all OP pilots ranging from 3% to 6%. Overall incidence in the three districts was also a paltry 4%.

Table 5.6: Utilization	in Punjab	OP Pilot	districts
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Name	Enrolled	Enrolled	Number	OP Claim
	families	number	of OP	incidence
		of lives	Claims	per enrolled
				individual
Bhatinda	6,697	10,749	427	4%
Ferozepur	11,786	27,902	762	3%
Rupanagar	4,250	12,375	711	6%
Punjab	22,733	51,026	1900	4%

Time trends in utilization: Punjab experienced similar trend over time as observed in Puri and Mehsana characterized by an initial period of low utilization, followed by a minor spike in utilization which again dropped.

- Punjab SNA organized considerable number of health camps for awareness generation among the enrolled beneficiaries. This led to a spike in utilization to some extent across all the three districts.
- b) Contrary to other locations where technology challenges affected utilization, in Punjab migration of beneficiaries had a more pronounced effect on program utilization. A large segment of beneficiaries work as migrant laborers in the neighboring state of Rajasthan during winter months⁴². This led to a significant drop in number of claims after September, 2013, which was the 10th month of policy period.

Fig. 5.7: Number of claims in Punjab over time



Utilization based on type of providers: The empanelment of OP care providers was characterized as follows:

a) No private standalone providers were active in the three districts. Private providers considered the reimbursement amount per claim as too low compared to normal market rates. During interviews, their representatives reported that coupled with the cost of empanelment, RSBY pilot in its current form is not a viable proposition. Hence, they stayed away from the scheme and only private facilities which were empanelled under IP scheme remained active, as it was mandatory for them to get empanelled as an OP scheme provider.

Fig. 5.8: Empanelment of providers in Punjab



- Even the public standalone provider (PHCs) didn't participate as only six such providers were active and Bathinda district had no such active provider.
- c) Facilities which were empanelled for both IP and OP turned out to be the main providers with 88% of all empanelled facilities providing both benefits.

As presented in Figure 5.9, distribution of claims was skewed towards public facilities as they had 94% of total claims (IP + OP 92%, Standalone OP 2%).

Fig. 5.9: Distribution of claims across different types of providers (Punjab)



This is in sharp contrast with the results of the NSSO survey regarding utilization of OP services in Punjab. According to the NSSO survey, 82% of OP cases are treated in private facilities; a trend which is entirely reversed under RSBY OP pilot. To understand the reason for this change, NSSO findings were further examined. When asked to cite a reason for seeking care at private facilities instead of public ones, 67% respondents in Punjab replied that they were dissatisfied with the services provided at public facilities (Table 5.7).

Table 5.7: Reasons cited for non-utilization at public provider (NSSO Survey)

Name	Dissatisfied	Distance	Other
		(Too far)	reasons
Punjab	67%	13%	20%
Bhatinda	24%	56%	20%
Ferozepur	14%	80%	6%
Rupnagar	69%	26%	5%
All India	64%	21%	15%

Thus, given a choice individuals preferred to visit private facilities. However, under RSBY OP pilot not a single standalone OP provider was active due to low reimbursement rates. Thus, households could not exercise their choice while availing RSBY benefits. Authors interpret that households preferred to get treated at private facilities even if they had to finance it as an out-of-pocket expense. Thus, non-involvement of standalone private providers and traditional preference towards private providers led to very low utilization under the scheme.

Picture 6: A hospitalized beneficiary with the RSBYcard at a private OP + IP facility in Rupnagar district. It was mandatory for these facilities to provide OP benefits.



Picture 7: District hospital in Rupnagar district (left) and patients waiting outside the outpatient ward (Right). Public facilities empanelled under both OP and IP schemes had the highest proportion of claims in Punjab.



THE CHALLENGE IN THE PROVISION OF DRUGS

In the district of Puri, private providers were supported to some extent by supplying them with affordable generic drugs under the central government's Jan Aushadhi Scheme (JAS)°.

• In India, expenses on drugs constitutes 82% of total out-of-pocket expenditure on outpatient care^b. However, studies have found that cost of medicines is highly variable depending on the brand of medicine prescribed^c.

• Even the government's attempts to regulate drug prices have been limited as only 18% of medicines were covered under the drug price control order (2013) which was instituted to regulate drug prices^d. This scenario leads to low income households spending a majority of outpatient expenses on expensive branded drugs.

• While the availability of affordable generic drugs can address this, it remains low in the Indian market^e.

Thus, supply of affordable and high quality generic drugs through JAS was expected to lower outpatient expenses on drugs and to make the OP scheme more viable for private providers. But the supply of drugs under the scheme remained erratic and inadequate. In an interview with Red Cross Society (RCS) Odisha, which runs the JAS program in Odisha, two reasons were found for inadequate and erratic supply. One, central JAS providers supply only bulk orders of medicines due to their production capacity but RCSs needs are much lesser than this amount leading to delayed supply. Two, the supply of essential drugs remains low. RCS submitted a list of 161 essential medicines to JAS but only 85 medicines out of the list were available. Thus, the attempts to lower claim costs by providing affordable generic drugs under JAS were not effective. RSBY has to address this challenge in provision of drugs to control outpatient claim costs. Provision of affordable generic drugs is a right step in this direction and RSBY can partner with JAS and other such providers of generic drugs at the national or state level to ensure consistent and sufficient supply.

a In this initiative by the Government of India, affordable and high quality generic medicines are made available through the Jan Aushadhi stores.

b Shahrawat, R., Rao, K., Insured yet vulnerable: out-of-pocket payments and India's poor (2011, Health policy and planning). c Roy, V., et al Cost of medicines and their affordability in private pharmacies in Delhi. (2012, Indian Journal of Medical Research).

d News report in the December 1, 2013 issue of The Times of India (Accessed on 8th August, 2014).

e Bera, A., Mukherjee, A., The importance of generic drugs in India (2012, International Journal of Pharmaceutical, Chemical and Biological Sciences)

5.2.4 RSBY OUTPATIENT PILOT: OTHER LOCATIONS

As reported in the beginning of this section, utilization remained low in the pilots in the states of Andhra Pradesh and Mizoram with 10% and 4% of claim incidence.

Table 5.8: Utilization in other locations

Name	Enrolled families	Enrolled number of lives	Number of OP Claims	OP Claim incidence per enrolled individual
Andhra	2,151	6,883	249	4%
Mizoram	7,337	30,368	2,995	10%

Andhra Pradesh pilot had a smaller scale as it only enrolled brick kiln workers which were mostly migrants from the neighboring state of Odisha. After 6-7 months into the policy period, majority of the population migrated back to Odisha where they couldn't avail OP benefits. This led to an overall low utilization in this location. On the other hand, in Mizoram the scheme was launched only with public providers and private facilities were not empanelled to provide the OP benefits. Mizoram had a paper based scheme and did not use the RSBY technology platform to provide these benefits. The authors interpret that the non-involvement of private facilities led to poor utilization in this location.

5.2.5 AWARENESS GENERATION FOR OUTPATIENT PILOTS

Authors also reviewed the activities conducted to generate awareness among the beneficaries regarding outpatient benefits in RSBY. The outpatient coverage was provided as an add-on benefit to the existing inpatient coverage. Thus, awareness generation activities were reviewed to ascertain if low awareness was a reason for low utilization in the OP pilots. While limited information is available regarding similar activities in other locations, it was found that a number of awareness generation activities were conducted across three locations (Puri, Mehsana and Punjab), . Following activties were conducted:

- Activites focussed on health care providers were conducted to educate them on the benefits package and administration of the scheme to ensure awareness on the supply side.
- Demand side awareness was generated among the beneficiaries by involving ASHA workers and distributing RSBY branded material during enrolment drives. Communication material was also distributed to the health care providers to improve the visibility of the message regarding OP benefits.
- Local culture specific activities were also conducted which included information dissemination through local dance and folk art performances and festivals at the village level
- Health camps were organized in Punjab where the public sector doctors provided OP services near to the village. This improved utilization and led to awareness generation as well.

It can be noted that a wide range of activities were conducted at the pilot locations to generate awareness regarding OP benefits. However, it can be conceded that such activities may not reach all the enrolled beneficaries. Also, as OP benefit package was an add-on service, which was added three years after inpatient coverage was made available, there is a possibility that a few beneficaries may not be fully aware of the benefit package. This may have had a marginal impact on utilization as well. Thus, it is preferable that awareness generation regarding an add-on service such as OP benefits should not be limited to the time of enrolment and should be conducted at the different timeperiods during the entire policy period.

5.3 CONCLUSION

The RSBY outpatient pilot experiments demonstrated that OP benefits can be provided on the RSBY platform, however, poor utilization limits the scope of learning from these experiments. The major reason for low utilization has been the unenthusiastic private providers. Especially the artificial limit on per visit reimbursement was felt to be quite low and insufficient to cover expenses of one outpatient episode. Puri in Odisha faced a different challenge where public providers did not remain active in the scheme, which in turn led to low utilization as they are the main OP care providers in the region. The authors infer that the local contextual factors such as preferred service provider in the area and prevalent market rates for care, considerably influence the provision of OP insurance coverage in a specific location and should be factored in during product and program design. The role of private players is central in providing

outpatient care and product design needs to be modified to ensure their participation. Ensuring consistent and sufficient supply of affordable generic medicines can be quite effective in improving the viability of the outpatient program.

Picture 8: RSBY beneficiary recieving drugs from a private pharmacy in Puri district. High drug costs consitute the major portion of the outpatient expenses.



6 EXPERIENCE FROM DEVELOPING COUNTRIES

The analysis of RSBYs current pilots found that there was poor utilization in all locations. This prompted to review similar programs in other developing countries to understand provision of outpatient care in these programs. In this section, the health insurance programs of the selected countries are reviewed to understand their program design and to identify any policy implications for RSBY.

6.1 OBJECTIVE OF THE REVIEW

The review focuses on the outpatient coverage, service delivery and provider payment mechanisms followed under different programs. The objective is to understand how developing countries are providing outpatient benefits in terms of what is covered, how it is delivered and how are the providers paid. While due to different contextual factors the lessons from other countries might not be directly applicable for RSBY but principles followed to incentivize care providers can be understood and adapted to Indian context.

6.2 SELECTION CRITERIA

The systematic review conducted as part of World Bank's Universal Health Coverage Study Series (UNICO) was used to identify relevant programs⁴³. Additionally, Joint Learning Network's repository was referred as a secondary source of information. A systematic review as part of UNICO series identifies 15 developing countries (excluding India) which have introduced health financing reforms with an objective of universal coverage. We used three inclusion criteria which are relevant for this discussion:

- a) Availability of outpatient coverage under the scheme
- b) Targeting of scheme towards low income population
- c) Government funding e.g. Bangladesh where all programs are provider based models are not included in the review

6.3 REVIEW OF THE SCHEMES

Outpatient Coverage: It is observed that the countries studied are moving towards comprehensive benefits which include all the dimensions of outpatient care. This is to address out-of-pocket expenses related to all the services in an outpatient episode. The schemes vary in terms of the focus on the level of care. For instance, Thailands Universal Coverage Scheme (UCS) has special focus on primary care and covers all form of services considered to be part of primary care. On the other hand, Vietnams Compulsory Health Insurance (CHI) scheme is unique as it covers expensive high-end health services as part of secondary and tertiary care.

We analyse the three dimensions of outpatient coverage:

- Consultation: Outpatient consultation is covered in all the schemes. However, it is noted that these schemes limit general consultation to the registered facilities which are public providers in most cases. This helps in reducing costs as private providers charge higher consultation fees. It also acts as a referral system in countries like Ghana, Thailand and Vietnam where all referrals for specialist consultations are routed through registered primary care providers. This mechanism is discussed in more detail in the next section.
- 2. Drugs: Drugs covered by these schemes can be categorized into three levels. Indonesia's

Jamkesmas covers a very limited range of drugs as only generic drugs and within specified formulatory provisions are covered under the program. This is to control the medical costs for the insurance scheme. Philippines's PhilHealth and Thailand's UCS programs provide comprehensive coverage which applies to drugs also as schemes in these countries cover all forms of drugs consumed for primary care. Ghana's National Health Insurance Scheme (NHIS) and Vietnam's CHI program follow a more measured approach towards drug reimbursements. Both these countries have instituted an inclusive list of drugs which is prepared based on usage of drugs among the general population (Table 6.1). Their schemes cover drug costs only if medicines from the reim bursement list are prescribed by the providers.

Country	Drugs	Diagnostics	Consultation
Vietnam	750 Drugs	Laboratory	At registered
	reimburse ment	and radiology	health centers
	list		
Ghana	NHIS Medicine	Laboratory	General and
	List	and radiology	specialist at
			public facilities
Indonesia	Only generics	Covered	At public
	within for	unless	facilities
	mulatory	specifically	
	provisions	excluded	
Philippines	Comprehensive	Laboratory	Comprehensive
		and radiology	
		including	
		diagnostics for	
		specific	
		diseases such	
		as HIV and	
		diabetes	
Thailand	Comprehensive	Comprehensive	Comprehensive

Table 6.1: Outpatient benefits under different schemes

This approach helps in controlling prescription of unnecessary or ineffective drugs. However, preparing an exhaustive list is not enough as observed in Vietnam. These lists use only international non-proprietary names of medicines and providers are free to prescribe branded or generic drugs. While it provides medical autonomy to providers, there are concerns that they may prescribe more expensive branded drugs in the absence of clear directions in this regard. Another concern is that prices of drugs

⁴³ G., Ursula., et al Impact of Universal Health Coverage Schemes (World Bank UNICO series No. 25, 2013)

are not monitored or regulated leading to high costs of drugs in medical treatment. This leads to high out-of-pocket expenditure to buy these drugs in spite of an exhaustive reimbursement list⁴⁴. Similarly, Indonesia's Jamkesmas with an aim to control escalation of costs covers only generic drugs. However, availability of such drugs remains low as indicated in a facility survey in 2011 that only 15% local registered facilities have 80% of essential drugs with availability of some core medicines as low as 19%⁴⁵. This non-availability of drugs again leads to high out-of-pocket expenditure.

Diagnostics: Laboratory and radiology diagnostic 3. services as urine, blood analysis and X-ray are covered under all schemes. Nigeria's insurance program has also prepared a list of covered essential diagnostic services similar to essential drug lists. Additionally, some countries such as Philippines cover screening tests for specific diseases such as HIV and diabetes. This is considered as part of preventive care and are provided by outpatient facilities indicating that covering diagnostics is important for Philippines comprehensive coverage. is experimenting with new technologies such as RxBox and Microscopy on wheels to provide low cost diagnostics in rural areas. Some countries have experimented with innovative voucher system to deliver specific diagnostic services such as cancer screening in Vietnam⁴⁶. Vouchers are provided by the consulting doctor based on patient's need and help in targeted provision of diagnostic services and in including private service providers.

Service delivery system: Service delivery system refers to the network of health care providers which cater to insured population under the schemes. It was found that all the countries deliver services under their national schemes through both public and private providers without any exception. The degree of reliance on any one type of provider may vary depending on the existing market structure in the country. The inclusion of both type of providers is done to ensure access and quality of care. Another reason is to create competition as all the schemes use demand side financing where competition among providers may improve quality of care for the insured population. There are two interesting observations on service delivery systems:

- 1. Predominance of referral system for primary care: A number of countries are attempting to create a network of care providers by following a referral system where beneficiary registers with one medical institution which acts as the first point of access and for referrals to secondary and tertiary levels of care. The difference between countries lies in the institution which can be used as a referral point. While in the rural areas of Thailand and in entire Vietnam, only public providers act as referral points, this system is more extensive in Ghana as it enables a wide range of providers including health centers, district hospitals, quasipublic hospitals, private hospitals, clinics and maternity homes to act as registered first points of care. Diagnostic services are also provided similarly, where primary care provider will refer and direct the patients to service providers based on their needs. Such a networked system of providers has its advantages such as continuity and wholeness of care, coordination of care seeking and maintenance of medical history of the patients.
- 2. Wide provider network: Philippines has an interesting delivery system which might be applicable for India. It comprises of accredited providers including hospitals, day surgery centers, maternity care clinics, midwife-operated clinics, freestanding dialysis centers, physician clinics, and state-run health centers. This has resulted in access to a wide network of providers with 61% private and 39% public providers. Similarly, Kenya has a network of predominantly private but diverse range of providers. This can be relevant for India as outpatient care providers are unevenly distributed across the country.

⁴⁴ Tien, T., et al, (2011) A health financing review of Vietnam with a focus on social health insurance, World Health Organization.

⁴⁵ Harimurti, P., et al, (2013) The nuts and bolts of Jamkesmas: Indonesia's government-financed health coverage program, UNICO Studies series 8, The World Bank.

⁴⁶ Sochas., L., (2013) What can vouchers do for UHC? UHC Forward blog

KEY HIGHLIGHTS OF THE REVIEW OF INSURANCE SCHEMES IN DEVELOPING COUNTRIES

• All the countries have moved towards providing comprehensive outpatient benefits which includes all the dimensions of outpatient care i.e. drugs, diagnostics and consultation.

• The countries use a mix of public and private providers to deliver outpatient benefits and the degree of reliance on any one type of provider may vary depending on the existing market structure in the country.

• Majority of programs are using a networked system to integrate different levels of health care so that fragmentation of care provision can be prevented.

• Different payment mechanisms have performed differently in countries based on the local context and existing market interactions.

• Capitation model for provider payment is preferred by a number of programs due to cost efficiency and to promote outpatient care facilities as the first step into health care system.

Provider payment mechanism⁴⁷: Capitation and feefor-service (with or without fixed-fee schedule) are two predominant mechanisms to purchase primary care. In the capitation system, providers are paid a fixed amount for each enrolled individual to provide a defined set of services for a fixed time period. In case of fee-for-service, providers are paid for providing each individual service. Fees schedule for each service may or may not be fixed. For example, a blood test may have a fixed-fee and the provider is reimbursed the fixed amount for each time it conducts a blood test. Conversely, no such fee may be fixed where providers are allowed to set prices for each service based on their costs.

The payment mechanisms have been analyzed by using agency theory⁴⁸⁴⁹, where a health professional or facility is identified as an agent for various principals (Patient in out-of-pocket payments, insurer in private insurance and government in social insurance). These analysis have suggested that the provider payment mechanisms should be modified and customized to generate incentives which will align provider's goals with principals'. While contextual factors such as health care market structure, resource endowment and regulations alter the effect of payment mechanisms, the main incentives created by each of them have been recognized. Capitation is a cost reducing mechanism which creates incentives for providers to improve efficiency, but may also lead to underservicing, rationing and low quality of care⁵⁰. Similarly, fee-for-service, while improving access

47 Provider payment mechanisms is defined as the payment method, combined with all supporting systems such as contracting, accountability mechanisms that accompany the payment method and management information World Bank p. 3. promote primary care facilities as the first step into health care system by acting as referral institutions and providing preventive care as well. The capitation

suffers from cost escalations as providers have

It is observed that capitation is the predominant model

for purchasing outpatient care and is followed in

Thailand, Philippines and Vietnam. Indonesia is an

interesting case as it shifted to fee-forservice model

due to underutilization of outpatient funds under

capitation. Ghana uses diagnosis related group (DRG)

to create reimbursement rate categories for outpatient

care⁵². Capitation model is preferred in a number of

countries due to its impact on cost efficiency and to

incentive to increase units of services⁵¹

and providing preventive care as well. The capitation model has faced its own challenges. In Indonesia, 50% of funds earmarked for primary care were not utilized in 2011⁵³. This prompted a shift from capitation to feefor-service mechanism. It is believed that this was due to no incentives for providers under the capitation model to increase services⁵⁴. The shift to fee-forservice was also done to improve the reporting of outpatient services delivered, which was absent in the capitation model⁵⁵. Philippines and Thailand have continued with the capitation model in spite of challenges in its implementation. Philippines had a comprehensive outpatient benefit package and used capitation to purchase outpatient care at the public primary care facilities. But this has not improved access to primary care facilities for poor households⁵⁶. The failure to properly communicate the objective of

⁴⁸ Ellis, R., McGuire, T., (1990) Optimal payment systems for health services, Journal of Health Economics 9 (1990) 49 Langenbrunner, J., et al (2009) p. 15.

⁵⁰ Maceira, D., (1998) Provider payment mechanisms in health care: incentives, outcomes and organizational impact in developing countries. Abt Associates Inc.

⁵¹ ibid.

⁵² In DRG, conditions are categorized on the basis of diagnosis and payment is made based on the pre-defined tariff of the category.

⁵³ Harimurti, P., et al, (2013) The nuts and bolts of Jamkesmas: Indonesia's government-financed health coverage program, UNICO Studies series 8, The World Bank.

⁵⁴ lbid. p.11.

⁵⁵ lbid. p.23.

⁵⁶ Chakraborty, S., (2013) Philippines's Government sponsored health coverage program for poor households, UNICO Studies series 22, The World Bank.

capitation funds to rural public providers and to closely monitor the utilization of the capitation fund are identified as the main reasons for the underperformance of the outpatient benefit package⁵⁷. Thus, as can be observed in Table 6.2 in the previous page that different payment mechanisms have performed differently based on the local context. This leads to the conclusion that a mix of context specific payment mechanisms will have to be implemented to ensure quality service delivery.

6.4 IMPLICATIONS FOR RSBY

Outpatient coverage: It is observed that while there is variation in implementation strategies, other developing countries' programs are providing comprehensive benefits (Drugs, diagnostics and consultation) as part of outpatient coverage. This stems from the understanding that outpatient care not only leads to high out-of-pocket (OOP) expenses but its effective provision can also prevent aggravation of health conditions and positively impact the overall viability of the program. India faces a similar challenge of high OOP and delayed care seeking by low income population. In this context, provision of comprehensive benefits to low income population can be a potential strategy for RSBY as well.

Service delivery system: Various countries have tried to create an integrated and wide network of providers to deliver outpatient care. This is to improve access and to prevent fragmentation at different levels of health care. This is quite relevant for India as the private sector, which is the predominant provider of outpatient care, is highly unorganized and fragmented. RSBY in its capacity as a bulk purchaser of health services can attempt to integrate different type of providers to ensure continuity of care for the beneficiaries.

7 RECOMMENDATIONS TO THE PROGRAM

RSBY OP pilots suffered poor utilization in all locations, suggesting the need for modification in the current design prior to scaling up the outpatient benefits to all RSBY running states. Authors believe that as all the current pilots were similar, there is still scope for experimentation with product design and service provision to test different approaches of providing outpatient benefits through RSBY. Thus, authors suggest that program should conduct new pilot experiments in existing or new locations. This will help RSBY in testing different approaches and will facilitate the selection of the best approach to provide outpatient benefits.

7.1 KEY CHALLENGES IN RSBY OUTPATIENT PROVISION

Based on outpatient care context in India, review of current pilots and learning from other countries's programs, three key challenges are identified, which need to be addressed in any future OP experiments in India:

- a) Predominance of unorganized private sector in India: Private providers account for 77% of outpatient care in India. Given a choice, people prefer private providers over public. Thus, without active participation of private players, utilization will not improve as experienced in the pilots in Gujarat and Punjab. The unorganized nature of the private sector not only affects beneficiaries but also impacts the program as it is difficult to monitor. Fragmented care provision may lead the beneficiaries to visit, at least, three different points for the necessary consulting, diagnostics and drugs for a single outpatient episode. Furthermore, the presence of gualified providers varies in rural and urban areas and even among rural areas of different states. This leads to further fragmentation of care as access to different types of services is not uniform.
- b) Lack of Human Resources for Health: India faces an acute shortage of human resources for health and health worker to population ratios are even more negatively skewed in rural areas⁵⁸. This negatively impacts the provision of outpatient services, especially in rural areas.
- c) Variation in quality and price of care: The unorganized private sector is characterized by wide variation in quality and price of care depending upon the type and location of provider. Absence of accreditation makes it even more difficult to regulate the price and quality of care delivered by the private sector.

An Outpatient pilot needs to recognize these challenges and the pilot design should be based on the following considerations to address the aforementioned challenges:

a) Private sector needs to actively participate in providing outpatient benefits. Without its participation, a large segment of Indian population which prefers to seek outpatient care

⁵⁷ Health systems in transition (09/2013), Asia Pacific Observatory on Health Systems and Policies.

⁵⁸ Rao., Et al. So many, yet few: Human resources for health in India. (2012, Human Resources for Health)

at private facilities due to dissatisfaction with public facilities may opt to avail services at their preferred provider by paying out-of-pocket.

- b) A single solution for the entire country may not be appropriate as huge variation exists in health care systems across different geographies. In rural areas where health infrastructure is not adequate, innovative approaches such as skilled Community Health Workers (CHW) and telemedicine can be explored to provide outpatient services.
- c) There needs to be networking of various categories of providers i.e. doctors, pharmacies and diagnostic centers so that fragmentation of care is avoided and regulation of price as well as guality is facilitated.

7.2 SUGGESTIONS FOR NEW PILOT EXPERIMENTS

Based on the above discussion, we suggest two designs which can be tested through new pilot experiments:

A) PILOT 1

Service provision: Networked outpatient care providers

Provider payment mechanism: Capitation

Pilot Design: In this design, an integrated network of outpatient providers for different services such as diagnostics, drugs and consultations will partner to provide a single point of access to care (figure 7.1). Such arrangements already exist informally in India where doctors refer their patients to other pharmacies and diagnostic centers. RSBY can formalize such arrangements which can help in standardization of price, thus helping beneficiaries by providing an integrated experience and controlling programmatic costs. Instead of a fee-for-service payment system, capitation fees per enrolled beneficiary can be prepaid to the network to deliver agreed upon services. Capitation fees can be calculated based on different age groups and expected incidence levels. This model will help in maintaining client servicing data regarding different types of outpatient services which can be used to make informed modifications to the program.

Using a capitation based model to pre-pay providers presents opportunity to introduce innovations in the form of telemedicine and mobile care which are difficult to empanel under a fee-for-service model as itll need tracking of every single consultation. In capitation, such providers can be prepaid to provide year round services instead of tracking each consultation. Remote consultations through audio or video based telemedicine can connect households at far off villages to qualified doctors and can also act as an easy to access, low cost, first point of access in a referral system. Similarly, mobile vans for remote villages can be employed to improve access to care. Punjabs SNA had already considered this possibility under RSBY OP Pilot but it couldnt be implemented due to delay in development of compatible software for mobile vans. In the new pilot experiments, mobile vans and telemedicine can both be tested as the first point of access at the village and as a link in the network between the beneficiary and the local doctor.

This recommendation also aligns with the future road map recommended by the High Level Expert Group (HLEG) on health commissioned by the Planning Commission of India2. HLEG recommends that the government should consider experimenting with arrangements where the state government purchase care from an integrated network of combined primary, secondary and tertiary care providers. These provider networks should be regulated by the government so that they meet the rules and requirements for delivering cost effective, accountable and quality health care.

Feasibility: The network of providers can be formed in two ways. Firstly, Insurers and SNAs can work together to network the existing local doctors, diagnostic centres and pharmacies in a location. The insurer will be responsible for maintenance and payment of the network. To improve access, telemedicine can be introduced at the village level and linked to the local providers, who are mostly located in per-urban areas. However, at the pilot stage it is preferable to work with an existing network such that this approach can be tested before scaling up or integrating local providers.



TELEMEDICINE: TO OVERCOME THE LAST MILE CHALLENGE

Telemedicine holds huge potential in a India as the access to qualified providers is not uniform. It can connect households in remote villages to qualified providers, based either locally (in nearby towns and peri-urban areas) or at a central facility (in major cities). Telemedicine can be instrumental in:

- Providing low-cost point of access in the village.
 - The existing network of mobile phones in India can be leveraged to increase outreach.
 - Improving quality of care at village level by replacing unqualified providers as the first point of care.
- Maintaining important programmatic and beneficiary level data
- Enabling transparency through easy monitoring of virtual networks.

Recognizing its potential, the Government of India has started a number of telemedicine initiatives. These include Department of Information technologys initiatives in premier medical institutions, Indian Space Research Organization's telemedicine network, and Ministry of Health's e-health project to create a National Knowledge Network on Health^a. The central government's National e- Governance Plan (NeGP) also identifies telemedicine as one of the service which could be offered at Common Service Centres (CSCs)^b. These centres have been started in public private parternship mode to provide information technology related services in more than 100,000 Indian villages^c. Non-state players such as Apollo hospitals, CARE Hospital Foundation and Narayan Hrudayalaya hospitals have also started their telemedicine initiatives^d. This expansion in telemedicine network presents an opportunity for RSBY to engage with such providers to improve access and to introduce a referral system at the village level.

a Mishra, M., et al. Current Status of Telemedicine Network in India and Future Perspective (2012, Asia Pacific Advanced Network)

b Website of the Ministry of Communications and IT, Government of India (Accessed on 8th August, 2014)

c Website of the Department of Electronics and Information Technology, Government of India (Accessed on 8th

August, 2014)

d Respective websites

For instance, World Health Partners (Appendix C) is currently working in the states of Bihar and UP with a similar model. They have franchised village based health workers who are connected to a local network of outpatient providers through telemedicine. Thus, the patient has access to an integrated and convenient experience by engaging with the network in the village level. This existing network can be tested without any additional costs to the program. In the first case where such network is not available, providers can be integrated and then, supplemented by independent telemedicine providers.

Two types of telemedicine providers can be empanelled:

 Audio based telemedicine: The beneficiary can directly call the doctor from their phones. Diagnostic players can be networked to provide comprehensive care.

Examples: Mhealth services, a private player provides audio telemedicine services called Mera Doctor (My Doctor) in UP and Maharashtra. It is linked with a centralized diagnostic services provider i.e. Thyrocare to complement audio consultations (Appendix C). This model has a low initial cost and it is easily accessible to households through mobile phones including women.

b) Assisted telemedicine: This can be audio or video based. A community health worker (CHW) is present in the village who connects beneficiaries to the remote doctor and assists the doctor by recording history and physiological parameters. It can be established as a hub-and-spoke model where CHWs use a digital diagnosis Decision Support System (DSS) available on hand held devices/mobiles and are linked to a central clinic for any referrals.

Examples: CARE Hospital Foundation has tested a hub-and-spoke model in Maharashtra with encouraging results in improving access to primary care. More details on model and impact are provided in Annexure C.

Challenges: Integrating different providers and standardizing prices will be difficult to implement. Therefore, it is necessary to test the design with an existing partner such as WHP before replicating it in other locations. The design also faces the different challenges related to a capitation based provider payment mechanism which encourages providers to keep costs at a minimum. Thus, providers may tend to deny or provide incomplete care. Considering this, a pilot of this nature would have to plan for greater monitoring and regulation of service providers to ensure adequate care provision to households.

COMMUNITY HEALTH WORKERS: AN OPPORTUNITY FOR RSBY

Various policy studies have identified that CHWs can play a critical role in addressing the challenge of shortage of health workforce by providing primary care in the village. A systematic review conducted by the World Health Organization on impact evalution studies of the CHW programs noted that CHWs have helped in the decline of maternal and child mortality rates and have also assisted in decreasing the burden of costs of TB and malaria^a. India has a huge network of CHWs with more than 800,000 ASHA workers selected to work as an interface between community and public health system^b. They play an important role in Maternal and Child Health and also provide basic preventive and primary care. ASHA workers are also instrumental in RSBY enrolment, acting as the key field executives during identification and enrolment of beneficiaries. RSBY can leverage this network of ASHA workers by linking them through telemedicine to local care providers for referral and diagnosis support. This will improve the experience for beneficiaries as the telemedicine equipped ASHA workers will work as the first point of contact and can potentially improve the viability of ASHA workers as well. RSBY can also potentially explore public private partnership mode to engage private CHW network providers such as CARE Hospital Foundation.

a Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals (2010, WHO)

b Website of the MInistry of Health and Family Welfare, Government of India (Accessed on 12th August, 2014)

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B) PILOT 2

Service provision: Independent outpatient care providers

Provider payment mechanism: Existing mechanism i.e. fee-for-service with modified coverage

Pilot Design: In this design, the existing approach to service provision and provider payment can be continued. Instead, product design can be altered to provide more flexibility in per visit reimbursement rates. There can be an overall ceiling of INR 1000 (USD 17) on the reimbursable expenses but per visit ceiling of INR 100 (USD 1.6) can be removed. It was found in interviews with care providers that it is very difficult to provide complete treatment under permissible reimbursement rate of INR 100 for one visit. An advantage of this design is that the doctor will not have to restrict per episode treatment expenses to the mandatory ceiling. It may reduce total number of episodes which are eventually covered but will be more effective in controlling out-of-pocket expenses on high-cost outpatient episodes which are mainly responsible for the impoverishing effect of outpatient health care as discussed in section 3 of this paper.

Two national insurance schemes i.e. Mahatama Gandhi Bunkar Bima Yojna (MGBBY) and Rajiv Gandhi Shilpi Swasthya Yojna (RGSSY) for weavers and artisans respectively, provide outpatient benefits in this form where expenses up to INR 7,500 (USD 125) are covered without any per visit ceiling. These schemes have experienced high incidence rates of 64% and 71% respectively⁵⁹. It can be argued that the factor contributing to high utilization is coverage amount, which is considerably higher than RSBY OP benefits. However, according to scheme designers and implementors,

placing an overall limit on coverage amount instead of per visit limits has also been a factor in improving utilization as it provides more flexibility to care providers. Escalation in per episode expenses can be a disadvantage but this can be controlled by monitoring for unnecessary prescriptions. Such a pilot will also provide programmatic information on actual OP expenses per episode, instead of putting an artificial cap of INR 100, thus, feeding into future product design.

Feasibility: This recommendation is easier to implement as it makes incremental changes to the existing outpatient pilots. However, it is more appropriate where access to qualified providers is available as it does not improve overall access but increases benefit package for individual episodes. Thus, this design can be tested in urban or semi-urban areas with good presence of outpatient providers.

Challenges: The main challenge to this design stems from the incentives for the providers. There is a possibility that doctors may over-prescribe as there is no limit on per visit reimbursement. Thus, beneficiaries may end up expending their entire coverage amount on one or two outpatient episodes. Another possibility is that beneficiary seek care at expensive empanelled clinics compared to more reasonably priced clinics/providers. This will lead to cost escalation for individual episode. However, these two challenges can be addressed by monitoring the providers and

⁵⁹ Claim incidence data for these schemes has been derived from interviews with insurers and scheme advisers.

organizing awareness generation activities among beneficiaries during enrolment.

As discussed in the beginning of this section, one solution may not be appropriate considering the vast and fragmented provision of outpatient care in India. Instead, context specific product design and service delivery will be the key to providing effective outpatient benefits under the RSBY program. Authors believe that testing the above mentioned two designs can help in identifying the appropriate approach for provision of outpatient benefits under RSBY and can inform future program design.

8 CONCLUDING REMARKS

Providing outpatient coverage under its ambit is a natural progression for RSBY. Outpatient insurance is expected to encourage patients to seek care early and prevent aggravation of disease episodes into more severe conditions, thus, improving overall cost efficiency and viability of RSBY. Also, it is expected that early care seeking behavior would reduce inpatient incidence and can potentially reduce the costs of the inpatient component of RSBY. However, designing an outpatient insurance is more challenging due to the high-frequency and low-cost nature of outpatient episodes which is also prone to moral hazard. Similarly, predominance of the unorganized private sector, uneven geographic distribution of providers and wide variety in price and quality of care are major challenges in outpatient service delivery. As private players are the predominant provider of outpatient care, their participation is essential for a successful outpatient insurance program in India. Current RSBY outpatient pilots were not able to address this and faced low utilization in all locations. Non-participation of private providers was the major reason for poor utilization. Authors infer that the pilot design failed to acknowledge the current market dynamics (i.e. fees and traditionally preferred providers) in OP care at the locations which led to non-participation of private providers. RSBY OP pilot experiments were also found to be limited in experimentation as similar product design and provider payment mechanisms were followed in all locations. There is scope for experimentation with product design and service provision to improve utilization and to test the best way of providing outpatient benefits through RSBY. Thus, the authors conclude that OP pilots should not be scaled-up in their current form and RSBY should test other designs through new pilot programs. The design for the new pilots should be based on principles that a single solution for the entire country may not be appropriate, private sector needs to actively participate, and there should be networking of various categories of providers so that fragmentation of care is avoided. Innovative approaches such as skilled CHWs and telemedicine can be explored to improve overall access. Authors would like to conclude by acknowledging that as RSBY moves forward to become a comprehensive benefit program, informed experimentation in the initial years will be the key to long term sustainability and efficacy.

APPENDIX A INTERNATIONAL HEALTH INSURANCE SCHEMES

We present a descriptive comparison between the main schemes which were reviewed to draw lessons from other developing nations. We compare three components a) Population covered b) Outpatient coverage and c) Service delivery mechanisms under different schemes.

	Country	Program	Started in	Target group	Outreach	Unit of enrolment
1	Vietnam	Health care fund for poor	2003	The poor, ethnic minorities in mountainous areas and inhabitants in disadvantaged communities	13 Million (96% of poor and minority groups)	Individual
2	Kenya	National Hospital Insurance	1966 (OP in 2009)	Formal sector employees	27 Million	Individual with coverage of dependants
3	Ghana	National health Insurance scheme	2003	All groups	12 Million	Individual
4	Indonesia	Jamkesmas	2004	BPL Population	76.4 Million	
5	Philippines	PhilHealth	2005	All groups	75 Million	Individual with coverage of dependants
6	Thailand	Universal Coverage Scheme	2002	All groups	50 Million	
7	Mexico	Seguro popular	2003	BPL informal sector	48 Million	Family

World Health Organization (WHO) proposed three dimensions to consider while moving towards Universal health coverage 1⁶⁰ (UHC): Who is covered? Which services are covered? What proportion of costs are covered? Our discussion is limited to which services are to be covered under outpatient benefits and does not delve into the other two above-mentioned points, which is already defined under RSBY. The health insurance programs reviewed in this section are part of the UHC strategy of the respective countries. Thus, almost all such programs provide comprehensive benefits including outpatient, inpatient, preventive and rehabilitative care. We compare only the outpatient services and divide them into three components: consultation, drugs, and diagnostics. We find that all the countries are providing comprehensive outpatient benefits which cover drugs, diagnostics and consultation. Most of the countries have institued accredited list of medicines to control claim costs. However, Indonesia has limited the benefits to include only generic medicines. In case of diagnostics, two countries (Vietnam and Ghana) cover both laboratory and radiology related diagnoscic services. Philippines also covers investigation for specific diseases such as Tuberculosis and cervical cancer.

Countries are using a mix of public and private providers to deliver outpatient care. We find that five out of seven countries use capitation mechanisms to pay for outpatient services. This predominance of capitation is because of two reasons a) It is administratively more convenient to implement as each and every outpatient episode need not to be tracked b) It can reduce overall claim cost as provider's incentive is to control health costs and maximize their profits. In

⁶⁰ Health systems financing: The path to universal coverage, The World Health report 2010, WHO

comparison, in the fee-for-service mechanism, provider's incentive is to maximize number of visits. The need to emphasize primary care is acknowledged in three schemes through the adoption of a referral system. A referral insitution is a physician, typically a primary care physician who is responsible for determining a patient's primary services and coordinating higher levels of care so that appropriate services are given. This system is followed to maintain continuity of care and to promote early care seekeing.

	Country	Program	Public	Private	Provision	Payment
			providers	providers		
1	Vietnam	Health	Yes (980	Yes (85	Register with	Capitation
		fund for	providers)	providers)	one public	
		poor			facility	
2	Kenya	National	Yes (150	Yes(450	Any	Fee for
		hospital insurance fund	providers)	providers)	facility	service
3	Ghana	National	Yes (1368	Yes (966	Gatekeeper	Diagnsosis
		health	providers	providers	system	related
		insurance				group
		scheme				
4	Indonesia	Jamkesmas	Yes (926	Yes (220		Capitation
			providers)	providers)		Fee for
						service
5	Philippines	PhilHealth	Yes (39%)	Yes (61%)		Capitation
6	Thailand	Universal	Yes	Yes	Gatekeeper	Capitation
		coverage			system	
		scheme				
7	Mexico	Seguro	Yes	yes		Capitation
		popular				

APPENDIX B DESCRIPTIVE COMPARISON OF PILOTS

We present a comparison of the RSBY OP pilots across all locations in terms of operational features such as premium funder, technology support provider and different health care providers.

Feature	Odisha	Gujarat	Punjab	AP	Mizoram	Uttarakhand
Premium paid by	ICICI Foundation	ICICI Foundation	SNA	AP Building and other Construction workers welfare board	SNA	No insurance component was introduced
Technology support	FINO	FINO	FINO	FINO	Managed offline	State managed server
Number of empanelled providers	75	162	53	7	7	45
Number of active providers	54	121	51	7	7	3
Number of public providers	18	49	24	4	7	3
Number of private providers	36	72	27	3	0	0
Standalone OP providers empanelled	Yes	Yes	No	No	No	No

Table B.1: Population covered under various schemes

APPENDIX C INNOVATIONS IN OUTPATIENT CARE

The various innovative delivery models which can be explored by RSBY as part of new outpatient pilots are discussed in this annexure. First, we discuss the three models which have been included in the recommendations section of this paper and then present a tabular description of other innovative models which can be explored. Three models which constitute our recommendations are:

- a) World Health Partners
- b) Mera Doctor and Thyrocare
- c) CARE Foundation primary care model

World Health Partners(WHP): WHP is a technology based integrated network of providers which are franchised under a common network. The service model consists of:

Rural Health Providers: RHPs are based in the village and are the first point of contact for clients. WHP trains and equips them with low cost mobile solutions for audio based telemedicine consultations.

Health centres: Health centres are the next level of based in nearby larger villages and serve 7-10

RHPs. They use a video assisted telemedicine and telediagnostic system for consultations. The physiological parameters such as blood pressure, body temperature and pulse rate are recorded using a diagnostic device which is connected to clinics via internet. Thus, remote doctor can observe the physiological parameters and revert back with the diagnosis. Health centers also refer patients to the nearby franchised clinics.

Franchised clinics, diagnostic centres and pharmacies: WHP also partners with local clinics, diagnostic centres and pharmacies and connects them with health centres to serve patients. Central Medical Facility: This facility is based in large cities and houses a panel of experienced, accredited physicians and specialists who consult with clients via telemedicine at RHPs and health centres. They also provide training to the various providers unde the WHP network and is also responsible for coordination with the entire network.

WHP currently serves 18 districts in Bihar and Uttar Pradesh through more than 800 rural health providers and the network of franchised providers. RSBY can benefit by leveraging their existing network for OP services delivery. As the network is present in Bihar and Uttar Pradesh, it can be tested to provide OP benefits under RSBY without any additional investments in networking health care providers.

CARE Foundation rural primary health care model: The CARE foundation model (Fig C.1) is run through a rural, huband-spoke model, with a central primary care clinic and telemedicinebased decision support system (DSS) at the back end supporting a network of CHWs (who also sell insurance). The CHWs are connected to the doctor at the primary clinic through two possible channels, a mobile phone or a hand-held-device (HHD), which support telemedicine-based consultation and medicine provision. The CHWs also sell preventative health-care products, such as mosquito nets, soap and water-purifying tablets, in their village. The model is currently present in 35 villages. However, it is easy to replicate such a model by building capacity of the existing resources. This model can be implemented through the ASHA workers who can be trained and equipped with telemedicine solution to connect them to qualified providers which are empanelled under RSBY. ASHA workers already play important role in RSBY by acting as key field personnel during RSBY enrolment and increasing their role in service delivery can help in improving utilization under the outpatient scheme.



Mera doctor and Thyrocare: Mera Doctor is a audio based telemedicine service. The key differentiating feature from CARE model is that it doesn't require health workers to assist tele-consultations. The clients can get their mobile phones registered and can directly call the doctors based in the central facility. The doctors provide consultations and can send prescriptions through SMSes on registered mobile phone. Mera Doctor has also partnered with local pharmacies to provide discount on drugs. For diagnostic services, Mera Doctor has partnered with Thyrocare. Thyrocare works on a centralized laboratory model which is provided with samples through more than 700 collection centres across the country.

This model will be applicable in the areas where there is limited infrastructure for consultation and diagnosis. Instead, Mera Doctor can act as the first contact point and can serve a similar role as played by rural health providers in WHP and CHWs in CARE model.







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