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LANDSCAPING OF THE URBAN POOR:
A DIAGNOSTIC STUDY

Description of the project and findings from the PAHAL Diagnostic Study

Pahal
Partnerships for Affordable Healthcare Access and Longevity
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PAHAL (Partnership for Affordable Healthcare Access and Longevity), a joint initiative of USAID and IPE Global, aims to provide catalytic support to growth stage scalable social enterprises in developing affordable & quality healthcare solutions for the urban poor.

The United States Agency for International Development works to end extreme poverty and promote resilient, democratic societies. USAID partners with the Government of India and the private sector to eliminate preventable child and maternal deaths, create an AIDS and tuberculosis (TB) free generation, and achieve universal health coverage. For more information, please visit www.usaid.gov/india

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Abbreviations

BCC	Behavior Change Communication
BOP	Base of Pyramid
BPL	Below Poverty Line
CPR	Contraception Prevalence Rate
FP	Family Planning
IBM	Inclusive Business Model
IPD	In Patient Department
JSSK	Janani Shishu Suraksha Karyakaram
JSY	Janani Suraksha Yojana
MNCH	Mother Neonate Child Health
OPD	Out Patient Department
OOPE	Out Of Pocket Expense
PSU	Primary Sampling Unit
RSBY	Rashtriya Swasthya Bima Yojana

Executive Summary

INTRODUCTION

USAID and IPE Global have partnered to leverage financial and technical resources via Project PAHAL – Partnerships for Affordable Healthcare Access and Longevity. PAHAL aims to catalyze the private sector in developing quality and affordable healthcare solutions for the urban poor. PAHAL is a collaborative platform, which seeks to connect, capacitate and catalyze innovative Inclusive Business Models (IBMs) focused on improving health outcomes and with the potential to scale. PAHAL's vision is to build an inclusive and self-sustainable health ecosystem that would strengthen private healthcare networks in expanding and scaling-up their services and coverage for the urban poor. The project identifies that the private sector, with its strong entrepreneurial culture, exemplary skill sets and access to capital, has the potential to solve some of the biggest healthcare challenges faced by the urban poor with special focus on maternal, neonatal, child health, family planning and Tuberculosis (TB) services for underserved urban communities.

THE DIAGNOSTIC STUDY

Against the above background, PAHAL undertook a diagnostic study and conducted a quantitative survey in selected geographies of India. The diagnostic study was conducted in selected districts of four project states i.e. Rajasthan (Bharatpur and Jaipur), Odisha (Ganjam and Puri), Telangana (Medchal) and West Bengal (Nadia). The selection of districts was based on the RMNCH+A composite index score. One best performing and one poor performing district were selected from Rajasthan and Odisha and one average performing district each was selected from Telangana and West Bengal.

The objective of the survey was to provide information on relevant health, mortality and morbidity indicators linked to maternal, neo-natal, child health (MNCH), Family Planning (FP) and TB (including awareness, diagnosis, treatment and referral). Knowledge, attitude, practice, access, health services utilization pattern, enrolment in health spending support schemes like insurance and out of pocket expenditure (OOPE) on health.

TARGET RESPONDENTS

Target respondents for the quantitative data collection were:

- Women who were pregnant any time during the last one year.
- Mothers of children aged 0-5 years.

METHODOLOGY

A structured survey schedule was used to collect information from the selected respondents. The CAPI (Computer Aided Personal Interview) technique was used to solicit information from the consenting respondents.

Sampling

The sampling framework covered the three IBM partners viz. HLFPPT, Life Spring (LHPL) and Glocal (GHSPL). Based on the calculation, the sample size for the baseline survey was set as 2438 by considering confidence level of 95 per cent, power of 80 per cent with design effect of 1.25.

Sampling Design

A total of 2438 randomly selected households were targeted for the survey. From each selected district, four Primary Sampling Unit (PSUs) were selected for data collection based on the maximum population or highest patient load covered by the IBM facilities. (2 PSUs in West Bengal). A total of 26 PSUs were selected using the above methodology. From each selected PSU, 50 respondents who fulfilled the eligibility criteria were considered for the survey. The selection of households was done using the right hand approach. Only one eligible and consenting respondent from the selected household was interviewed for the survey.

FINDINGS

Health care expenses constituted the second most expensive head for overall household expenditure, both annual and monthly

The data suggests that health care expenses were the second most important expense head for overall household expenses.

People from the richer quintile spent more on health but boreless catastrophic expenses

The mean healthcare expenditure in the overall sample was Rs.6689. A positive gradient was observed in these healthcare expenditures when moving from the poorer to richer quintiles. While the poorest spend Rs.3823 on an average on healthcare in a year, it was observed that the richest 20 per cent of the sample were spending Rs.11883 on the same.

People who were enrolled in any health insurance schemes reported less health care expenses

Healthcare expenses ranged from Rs.6213 among those enrolled in government health insurance schemes to Rs.11377 among those enrolled in private schemes. The individuals not enrolled under any scheme reported annual healthcare expenditure of Rs.7300. While the total hospitalization expenses among individuals who had not enrolled was higher than those enrolled, the total out-patient expenses were lower in their case.

Personal and household income are the main mechanism for coping with healthcare expenses

More than 80 per cent of health care expenses were borne by personal and household incomes, insurance schemes were reported to be used by less than 1 per cent of the households surveyed in the cities of these four states.

Low awareness about social and insurance schemes

Only 20 to 25 per cent of the respondents were aware about any social or insurance schemes. People were mostly aware about Rashtriya Swasthya Bima Yojana (RSBY), more so in West Bengal and Odisha.

Nearly half of the respondents utilized private health facilities for OPD services

Around 37 per cent of respondents who reported an illness in the last 15 days and sought out-patient medical treatment for it, utilized services of the public health system, in comparison to the 48 per cent who went to private healthcare facilities. About three-fourth of respondents who were admitted to hospitals in the last year preferred public health facilities to private health facilities for in-patient services. However, respondents belonging

to the richest quintile in West Bengal were an exception, as these households showed a preference for public sector health facilities for In Patient Department (IPD) services.

Poorer respondents utilized public sector facilities more than private sector facilities

The respondents belonging to the poorer wealth quintiles of the sample utilized public sector facilities more than private sector facilities, however, it varied with states.

Households, which were enrolled under any health insurance preferred private health facilities

Households enrolled under any health insurance preferred private health facilities, emphasizing the popular perception that private health facilities provide quality health care services.

Around two-fifths of pregnant women did not receive the recommended four ANC check-ups

Around 62 per cent of pregnant women had received the recommended four ANC check-ups during their pregnancy. The situation was the worst in Telangana and Rajasthan, where 47.7 per cent and 53.2 per cent of the women respectively, reported four or more ANC check-ups respectively. Fewer women from the poor wealth quintile received four ANCs as compared to richer women. This also reflected in the proportion of women receiving a complete ANC check-up, as a smaller proportion of women from the poorer strata had a complete check-up as compared to those from the richer strata.

Unwanted and mistimed pregnancies in currently pregnant women were reported to be quite high

Mistimed and unwanted pregnancies were reported by more than 47 per cent of currently pregnant women in the age group of 15-49 years. Among those who had a mistimed or unwanted pregnancy, the majority belonged to the poorer quintiles of the population.

High unmet need for family planning

Overall the total unmet need for family planning was observed to be 23 per cent in the study sites. Highest unmet needs, both for spacing and limiting were observed in Rajasthan (16 per cent and 34 per cent respectively), while these were the lowest in Telangana (5 per cent and 3 per cent respectively). The contraception prevalence rate (CPR) was 37.4 per cent with the highest prevalence reported from West Bengal (59.9 per cent).

SUMMARY AND CONCLUSIONS

The result clearly indicates that the out-of-pocket healthcare spending is worrying because there are still population groups that do not have enough capacity to cover their health

expenses, and such expenses could become catastrophic. Results further suggest that personal income and savings are used to meet the bulk of OOPE on health. Since, the burden of expenses does not vary substantially according to variation in income, hence, such expenses can create considerable hardship and financial impoverishment, particularly in poor households.

The awareness of health insurance was also quite low, which ranged from less than one percent to 25 per cent for RSBY, which clearly demands intensive Behavior Change Communication (BCC) strategies to create awareness and demand generation for insurance schemes.

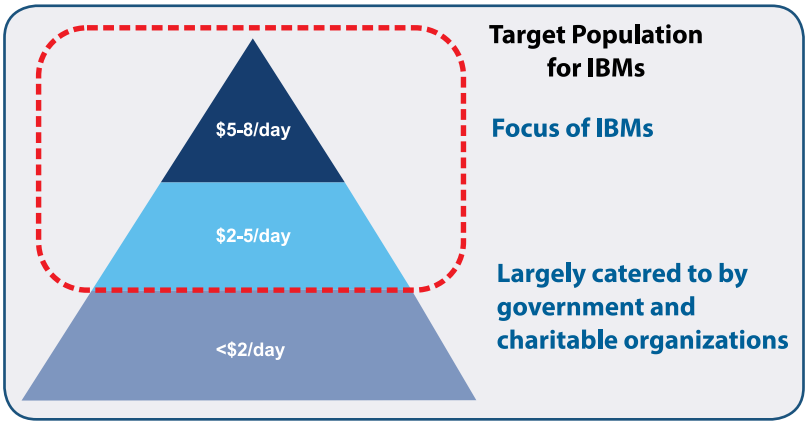
Our findings also suggest that close to half of the respondents preferred to go to private health facilities, which suggests that they were willing to pay more for better services.

Physical access is a major barrier to both preventive and curative health services. The study shows that the average distance to a facility was 4.3 kilometers, which varied in the different states; in West Bengal the average distance of a health facility was 6.2 kilometers. As physical distance to the facilities is a key determinant for access, overcoming this through outreach or better transport, roads and communication networks is important for reaching disadvantaged and physically isolated groups, such as women and children, where the distance remains a major hurdle for women.

Introduction

India's urban poor forms one of the most underserved and vulnerable sections of the population

The Government of India (GOI) launched the National Urban Health Mission (NUHM) to reach an estimated 22.5 million urban poor spread out over 1000 cities. The National Health Policy was also launched in 2017 (NHP, 2017) with the aim of achieving universal health coverage and delivering quality healthcare services to all at affordable costs. The policy looks at problems and solutions holistically with the private sector as a strategic partner. The private sector, with its strong presence in urban areas, has the potential to plug service gaps for the urban population including the under-served urban poor.



The urban poor or the Base of Pyramid (BOP) population spending less than $8 per day, are chronically underserved when it comes to basic necessities, especially healthcare. Despite challenges of access, the BOP population represents a significant unfulfilled demand. While there has been growing policy and project focus on addressing the health needs of the urban poor through the public health system, there are gaps and challenges in service delivery, which makes this group vulnerable and dependent on the private sector, which exceeds public health spending but is also highly fragmented. The private sector provides more than 71 per cent of healthcare services to this segment and it is largely financed through out - of - pocket payments. In this changing landscape, Indian healthcare services and health financing are faced with opportunities brilliantly disguised with challenges.

The private sector, with the strong entrepreneurial culture, start-up ecosystem, internet penetration and access to capital, has the potential to solve some of these problems that address the marginalized and urban poor. They have developed market-based solutions, reducing costs and improving access for the underserved, with the dual objective of creating development impact and generating financial returns. This has led to the growth of private sector led IBMs and the growing recognition that poor are "clients" rather than just "beneficiaries" creating a potential market for affordable and quality healthcare. Several IBMs today exist in healthcare delivery, outreach and medical technologies with significant potential to improve the landscape and health outcomes for the poor. There are improving levels of support for IBMs from the government, donors and the private sector (impact investors, angel investors, PE funding, etc.). However, while the environment is improving for IBMs, they still face a number of challenges especially when it comes to those focusing on urban primary healthcare because of the nature of services and type of clientele.

THE PAHAL PROJECT

Towards the same, USAID and IPE Global have partnered to leverage financial and technical resources via Project PAHAL – Partnerships for Affordable Healthcare Access and Longevity. PAHAL aims to catalyze the private sector in developing quality and affordable healthcare solutions for the urban poor. PAHAL is a collaborative platform, which seeks to connect, capacitate and catalyze innovative IBMs focused on improving health outcomes with a potential to scale. PAHAL was created with a vision to build an inclusive and self-sustainable health ecosystem that will strengthen private healthcare networks to expand and scale-up their services and coverage for the urban poor.

The PAHAL Platform

The project has collaborated with healthcare provider networks consisting of 700+ hospitals, 1000+ doctors and over 15000 community workers and owning an exclusive health care delivery model with the objective of reaching out to 10 million urban poor and reducing out of pocket expenditure by 30%.

The project identifies that the private sector, with its strong entrepreneurial culture, exemplary skill sets and access to capital, has the potential to solve some of the biggest healthcare challenges faced by the urban poor with a special focus on maternal, neonatal, child health, family planning and TB services for underserved urban communities.

STRATEGIC FRAMEWORK

PAHAL has adopted a holistic ecosystem approach to strengthen and scale market based healthcare solutions to improve access to quality healthcare for underserved urban communities. The project focus is to identify innovative business models, and then provide them with Technical Assistance, Market Access and Access to Capital.

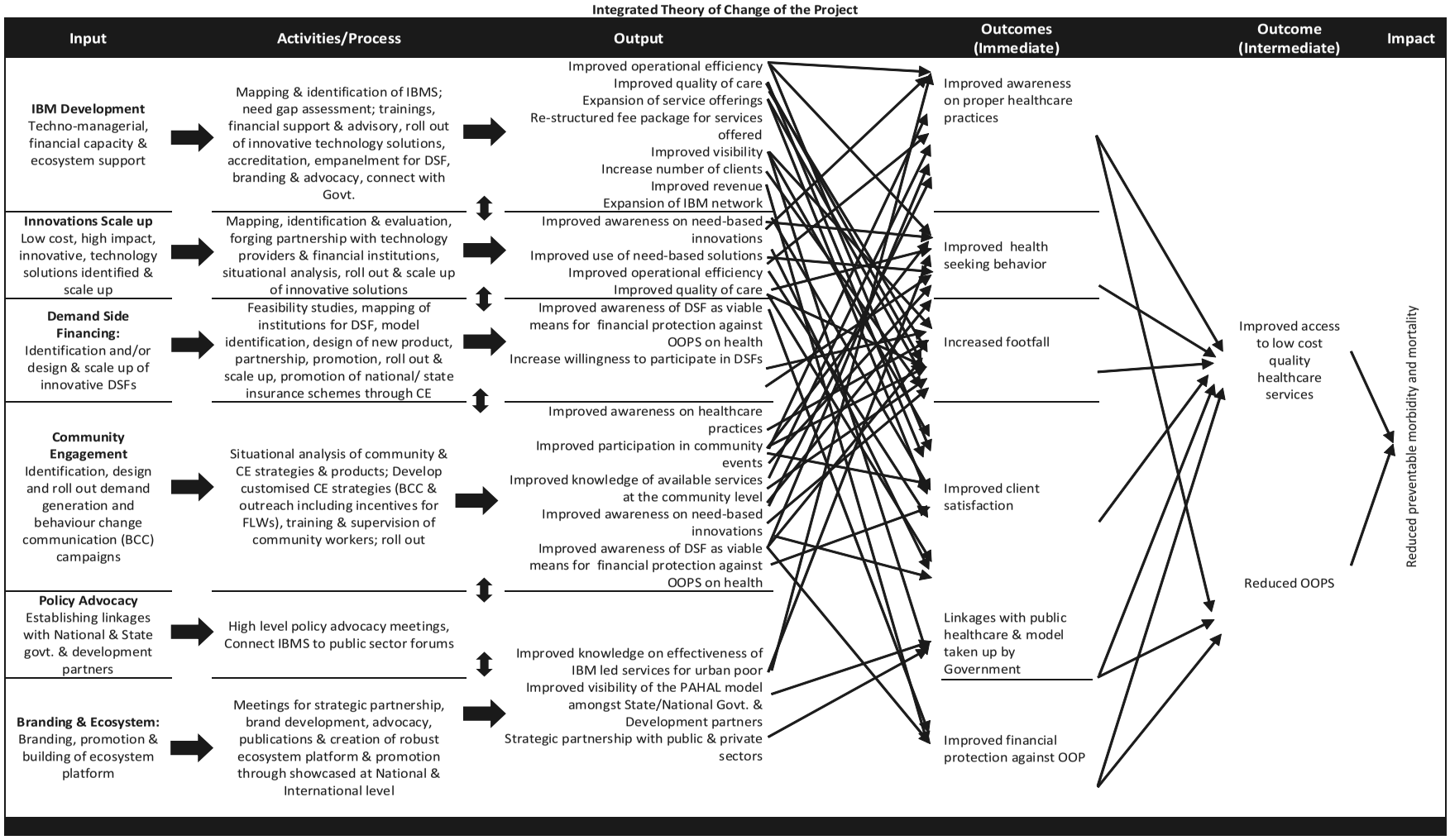
The PAHAL Project's goal is to reduce preventable morbidity and mortality among women and children in urban areas through improved access to affordable, quality services and better health seeking behavior.

The project's intended outcomes are:

- Increased access to affordable and quality health care ensured for 10 million urban poor.
- The urban poor's Out of Pocket Expenditure (OOPE) for health care reduced by 30 per cent.

To achieve those outcomes, PAHAL has partnered with private healthcare sector providers or IBMs, which have the potential to scale-up and serve a large urban poor community. PAHAL partnered with three IBMs viz. Hindustan Latex Family Planning Promotion Trust (HLFPPT), Life Spring Hospitals Private Limited (LHPL) and Glocal Healthcare Systems Private Limited (GHSPL) who are operating chains of healthcare facilities, which cater to low-income populations residing in urban and peri-urban areas and which have a huge reach. The states where these IBMs are currently operational include Rajasthan, Odisha, Telangana, Andhra Pradesh, West Bengal and Madhya Pradesh. In parallel, the project is also looking at the possibility of expansion within these states as well as in USAID's other high focus states.

The theory of change model enlists the key input, activities, output, outcomes and impact. While the impact of the project is one-fold – achieving reduced preventable morbidity and mortality, the outcomes are further categorized into immediate and intermediate outcomes.


Integrated Theory of Change of the Project
Input
Activities/Process
Output
Outcomes (Immediate)
Outcome (Intermediate)
Impact
IBM Development
Techno-managerial, financial capacity & ecosystem support
Mapping & identification of IBMS; need gap assessment; trainings, financial support & advisory, roll out of innovative technology solutions, accreditation, empanelment for DSF, branding & advocacy, connect with Govt.
Improved operational efficiency
Improved quality of care
Expansion of service offerings
Re-structured fee package for services offered
Improved visibility
Increase number of clients
Improved revenue
Expansion of IBM network
Improved awareness on proper healthcare practices
Innovations Scale up
Low cost, high impact, innovative, technology solutions identified & scale up
Mapping, identification & evaluation, forging partnership with technology providers & financial institutions, situational analysis, roll out & scale up of innovative solutions
Improved awareness on need-based innovations
Improved use of need-based solutions
Improved operational efficiency
Improved quality of care
Improved health seeking behavior
Demand Side Financing:
Identification and/or design & scale up of innovative DSFs
Feasibility studies, mapping of institutions for DSF, model identification, design of new product, partnership, promotion, roll out & scale up, promotion of national/ state insurance schemes through CE
Improved awareness of DSF as viable means for financial protection against OOPS on health
Increase willingness to participate in DSFs
Increased footfall
Improved access to low cost quality healthcare services
Community Engagement
Identification, design and roll out demand generation and behaviour change communication (BCC) campaigns
Situational analysis of community & CE strategies & products; Develop customised CE strategies (BCC & outreach including incentives for FLWs), training & supervision of community workers; roll out
Improved awareness on healthcare practices
Improved participation in community events
Improved knowledge of available services at the community level
Improved awareness on need-based innovations
Improved awareness of DSF as viable means for financial protection against OOPS on health
Improved client satisfaction
Reduced OOPS
Reduced preventable morbidity and mortality
Policy Advocacy
Establishing linkages with National & State govt. & development partners
High level policy advocacy meetings, Connect IBMS to public sector forums
Linkages with public healthcare & model taken up by Government
Improved knowledge on effectiveness of IBM led services for urban poor
Improved visibility of the PAHAL model amongst State/National Govt. & Development partners
Branding & Ecosystem:
Branding, promotion & building of ecosystem platform
Meetings for strategic partnership, brand development, advocacy, publications & creation of robust ecosystem platform & promotion through showcased at National & International level
Strategic partnership with public & private sectors
Improved financial protection against OOP

OBJECTIVES

The key objective of the survey was primarily to seek answers to key MNCH indicators such as:

- Health and morbidity pattern of the population related to mother and child health, family planning and TB.
- The level of the knowledge, attitude, practice, access; health services utilization pattern, enrolment in health spending support schemes like insurance, and OOPE on health.

TARGET RESPONDENTS

The target respondents of the assessment were:

- Woman who was/is pregnant any time during the last one year.
- Mothers of children aged 0-6 years.

Accordingly, the expected coverage of these categories has been indicated in the sub-section 'sample size computation'.

GEOGRAPHY

In order to establish a benchmark at the start of the project intervention, a survey was conducted at all the project sites, where existing IBM partners were located i.e. Rajasthan and Odisha (for HLFPPT hospitals), Telangana (for Life Spring hospitals) and West Bengal (for Glocal hospitals).

METHODOLOGY

Sampling

The sampling framework covered the three IBM partners viz. HLFPPT, Life Spring (LHPL) and Glocal (GHSPL) considering that each IBM partner has its own business model and mode of implementation. In order to assess the changes caused by the project, it becomes essential to study the changes at each of the partner levels along the project level. Therefore, a statistically significant sample size was calculated at each of the IBM levels using the following formula:

$$n = \frac{D\left[Z_{1-a}\sqrt{2 * .P(1-P)} + Z_{1-b}\sqrt{P_1(1-P_1) + .P_2(1-.P_2)} \right]}{(P_2 - P_1)^2}$$

Where,

P1 = the proportion of outcome indicator expected at the time of baseline (50 per cent).

P2 = the proportion of outcome indicator expected at the end-line (Assuming 10 per cent change).

P = (P1 + P2)/2,

Z1-α = is the standard normal deviate value for an α type I error (1.65 for 95 per cent confidence level).

Z1-β is the standard normal deviate value for a c type II error (0.84 for 80 percent of power to detect change over time).

D = is the design effect in case of multi-stage cluster sample design (1.25).

Based on the above calculation, the total sample size was considered as **2400** households considering the assumption of (i) a high level of precision at the overall project level; (ii) a moderate level of precision at the IBM level and; (iii) a change of 10 per cent on account of project implementation.

Sampling Design

The sampling design had a three-pronged approach to selecting the respondent.

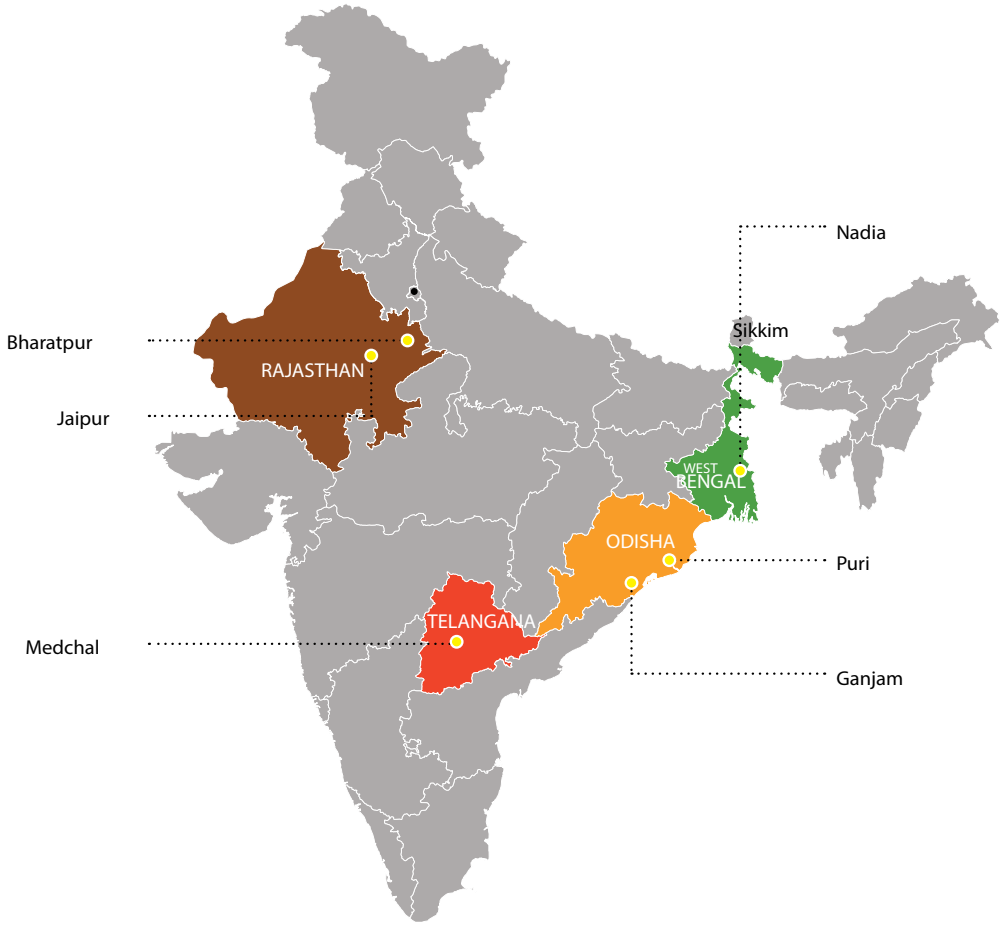
STEP 1: STATE SELECTION

Based on the operating locations of the three IBMs (either direct operation or through franchisee mode), the state's selection was pre-decided primarily because these were the locations where the IBMs were operating.

STEP 2: CITIES/TOWNS SELECTION

The cities and town were selected using the **probability proportion to size (PPS) sampling technique** in the selected four states. i.e. Rajasthan (Bharatpur and Jaipur), Odisha (Ganjam

and Puri), Telangana (Medchal) and West Bengal (Nadia). The selection of districts was based on the RMNCH+A composite index score. One best and one poor performing district were selected from Rajasthan and Odisha and one average performing district each were selected from Telangana and West Bengal.



STEP 3: SELECTION OF THE RESPONDENTS

The data collection was initiated after identifying the boundaries of the catchment area by using the maps developed during the pre-field visit. By taking the health facility as the epicenter, one geography/*tola* from each of the four directions (north, south, east, west) of the health facility was randomly selected, which provided a comprehensive representation of the catchment area. The target sample size was then equally distributed in each of the selected geographies/*tolas* and systematic random sampling technique was used for household selection, after starting from a landmark. In each of the households, one respondent was interviewed. In case more than one eligible respondent was present in a HH, the Kish Grid method[1] was used to identify one eligible respondent for the interview.

1 Kish, Leslie (September 1949), "A Procedure for Objective Respondent Selection within the Household", Journal of the American Statistical Association, 44 (247): 380–387, doi:10.1080/01621459.1949.10483314, JSTOR 2280236

In case there was no identifiable eligible respondent in a household, the immediate next household was approached.

Measurements

Some of the key variables were computed for ease of analyses. The details are given below.

Annual Household Consumption Expenditure

This was computed on the basis of variables seeking details of household expenditure patterns on individual items (Section 4 of Household Survey Tool). Sum of items seeking costs for last 30 days (Section 4, questions 401.1 - 401.5) was multiplied by 12 to annualize the cost, which was then added to the sum of items seeking cost for last one year (Section 4, questions 401.6 - 401.13).

Annual Household Income

This was computed by adding annual household consumption expenditure to annual household savings.

Wealth Quintiles

To generate wealth quintiles, the whole sample of households, arranged in ascending order as per their annual household consumption expenditures, was divided into five equal parts. This segregated the households into five groups, ranging from the bottom 20 per cent of the sample with lowest consumption expenditure, to the top 20 per cent households of the sample with highest consumption expenditure.

Annual Household Healthcare Expenditure

This was computed by summing up of variables seeking details of household expenditure on healthcare. Summation of questions on medicines, doctor's consultation and diagnostic tests were indicative of annual household healthcare expenditure on out-patient consultation.

Full ANC Rate

Full ANC rate was computed as proportion of women who received at least four ANC check-ups, had two or more TT injections and consumed at least 90 IFA tablets for more than 90 days among women in the sample who had delivered a child in the last one year.

Full Vaccination Rate

Full vaccination / immunization rate was computed as proportion of 12-23 months old children who received BCG, OPV 1, DPT 1, OPV 2, DPT 2, OPV 3, DPT 3 and measles vaccine among all 12-23 months old children in the sample.

Under-five Pneumonia Cases

Pneumonia prevalence was computed as prevalence of under-five children reporting both fever and difficulty in breathing due to chest problems, among all under-five children covered under the survey.

Unmet Need for Family Planning

The standard approach postulated by WHO was used to generate the unmet need for family planning. This included computing unwanted pregnancies among currently pregnant women, unwanted last pregnancies among currently non-fecund, post-partum amenorrhoeic women, and desire for a child among married, fecund, non-contraceptive using women in the reproductive age group, using question items under Section 12 of the Household Survey Tool. The summation of these categories of women was taken as the numerator, and with the total number of 15-49 years old married women as denominator, a ratio depicting unmet need for family planning was computed in the sample surveyed.

Permanent and Non-permanent Methods of Contraception

Female and male sterilization was clubbed as permanent methods of contraception. Standard day's method, lactational amenorrhea method (LAM) and withdrawal method were aggregated into traditional methods, while all other methods were aggregated as non-permanent methods of contraception.

RESULTS

Background Characteristics of the Study Population

The majority of the households covered under the survey reported being Hindu (89 per cent). Around 7.5 per cent of the remaining households were Muslims; two per cent were Christians while the rest belonged to other religions. West Bengal had the highest proportion of Muslim households (13 per cent) among the total surveyed (Table 1). The overall sample was almost equally divided among Scheduled Castes (31 per cent) and the general category (35 per cent). Only 10 per cent of the surveyed households belonged to the Scheduled Tribes.

Around 64 per cent of the households in Odisha were BPL, while the figure was less than 20 per cent for Telangana and Rajasthan (Table 1). The overall sample of households was distributed into five equal parts after arranging them in ascending order as per their household consumption expenditure. Since the equal division of households was at the overall level, the states presented different numbers of household in different quintiles (Table 1). While a majority of households in Rajasthan were in the richest quintile, the reverse was true for Odisha. West Bengal and Telangana had an almost equal distribution. The majority of the households were found to be living in *pucca* houses, but the figures ranged from 43 per cent in West Bengal to 91 per cent in Rajasthan (Table 1). Participation in *Mahila Aarogya Samitis* and self-help groups was found to be very low, at one per cent and 10 per cent of the total households respectively (Table 1).

Table 1: Household Characteristics

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Religion	Hindu	84	90	88.9	99.8	89.5
	Muslim	13.2	6.6	5.4	0	7.5
	Christian	2.7	3.4	0	0.2	2.1
	Other	0	0	5.7	0	0.9
Caste	Schedule Castes	36	36.2	24.5	17.5	31.1
	Schedule Tribes	4.1	14.1	15.6	10.5	10.5
	Other Backward Castes	10.6	24.5	36.9	31.2	23.1
	General	49.3	25.2	23	40.9	35.4

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
BPL card availability	Available	43.8	19.8	19.8	64.8	45.1*
Socio-economic status	Poorest	22.7	14.9	7.9	37.2	20
	Poor	22.5	20.3	10.6	23.9	20
	Medium	20.6	20.2	17.8	20.7	20
	Rich	19	23.2	23.8	11.5	20
	Richest	15.2	21.4	39.9	6.7	20
Type of house	Kuccha	22.8	5.8	0.5	11	11.4
	Semi-Pucca	34.2	20	8.2	20	22.7
	Pucca	42.9	74.3	91.3	69.1	65.9
Social participation	Self Help Groups	15	8.4	0.7	14.5	10.3
	Mahila Aarogya Samiti	1.7	0.7	0.5	0.5	1

* 2.8% didn't know about their BPL status

Almost half the population (48 per cent) in the surveyed households belonged to the 15-45 years' age group (Table 2). The next largest proportion was of children in the age group of 0-4 years (25 per cent), which ranged from 22 per cent in Rajasthan to 28 per cent in Telangana. Almost 40 per cent of the sample consisted of housewives, while the other 41 per cent of the sample belonged to the working class (Table 2). Around 40 per cent of this working class worked in the private sector, 25 per cent worked on their own, while only a small proportion worked in the government sector. Around 8 per cent of the household members were graduates or had higher educational qualifications, while 31 per cent of the total sample had only been educated upto the primary level (Table 2). Another 39 per cent had never attended school or had any formal education. More than 20 per cent individuals in the sampled population were enrolled under health insurance schemes in West Bengal, while this enrolment was less than 3 per cent in Rajasthan and Telangana (Table 2).

Table 2: Individual Characteristics

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Age profile	0-4 yr.	23.4	27.8	22.2	23.6	24.5
	5-14 yr.	9.4	15.8	17.2	11.3	13.2
	15-29 yr.	29.2	28.8	26.6	26	28
	30-44 yr.	19.8	22.3	19.7	20	20.6
	45-59 yr.	10.1	3.4	8.4	8.7	7.6
	60-69 yr.	5.1	1.3	4	7.2	4.2
	≥ 70 yr.	2.9	0.6	1.8	3.2	2.1

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Occupation characteris-tics*	Government service	1.6	0.5	1.7	0.3	1.1
	Laborer	19.4	6.4	6.9	22.7	14.1
	Own-account worker	10.1	13.3	10.3	2.8	9.6
	Private sector employees	7.8	29.5	22.3	12.7	17.3
	Student	7.4	4.2	11.8	6.5	7.3
	Unemployed/ not working	9.4	3.3	6.8	5.3	6.5
	House wife	36.1	40.8	38.2	43.6	39.1
	Other	8.3	1.8	2.1	6.3	5
Education characteristics	Illiterate	39.9	38.8	41.8	37	39.4
	Up to primary school	35.7	24.9	26.3	40.3	31.5
	Up to higher secondary	18.5	25.2	20	18.9	20.9
	Graduate and above	5.9	11	11.9	3.9	8.2
Enrolment in health insurance schemes		20.1	2.4	2.1	16.9	10.7

* excluding children less than five years of age

Household Expenditure Pattern

CONSUMPTION EXPENDITURE

The health care expenses constitute the second most expensive head for overall household expenditure both annual and monthly

The annual household consumption expenditure was observed to be lowest in Odisha (Rs.87057)and the highest in Rajasthan (Rs.167578). The mean annual consumption expenditure across the sample was Rs.124419 (Table 3). Almost 50 per cent of this total expenditure was on food and essential commodities like vegetables, milk, etc. by the households. The next most expensive heads were healthcare services and utility charges such as electricity bills, water bills, telephone bills, internet bills, etc.

Table 3: Average household expenditure pattern

	West Bengal ₹	Telangana ₹	Rajasthan ₹	Odisha ₹	Total ₹
Annual expenditure on food and essential commodities	61140	52428	86640	38280	58632
Annual expenditure on non-food items	51928	80008	80938	48777	65787
Overall annual expenditure	113068	132436	167578	87057	124419

HEALTHCARE EXPENSES

People from the richer quintile spend more on health but bear less catastrophic expenses

The annual household healthcare expenditure in the last one year ranged from Rs.3075 in West Bengal to Rs.8569 in Telangana (Figure 1). The mean healthcare expenditure in the overall sample was Rs.6689 with a standard error of Rs.319. A positive gradient of these healthcare expenditures was observed when moving from the poorer to richer quintiles

(Table 4). While the poorest spend Rs.3823 on an average on healthcare in a year, the richest 20 per cent of the sample were observed to be spending Rs.11883 on the same.

The average delivery charges were highest in Telangana

The charges were highest for deliveries both in the public and private sectors in Telangana, while Odisha was the most economical. Delivery expenses on an average in the public sector facilities and private sector facilities were Rs.8413, and Rs.19185 respectively.

Healthcare expenditure as a proportion of total consumption expenditure was found to be the lowest in West Bengal (2.6 per cent while it was the highest in Odisha (9 per cent). Overall, it was around 5.2 per cent in the four states (Figure 1).

Figure 1: Average Annual Household Healthcare Expenditure

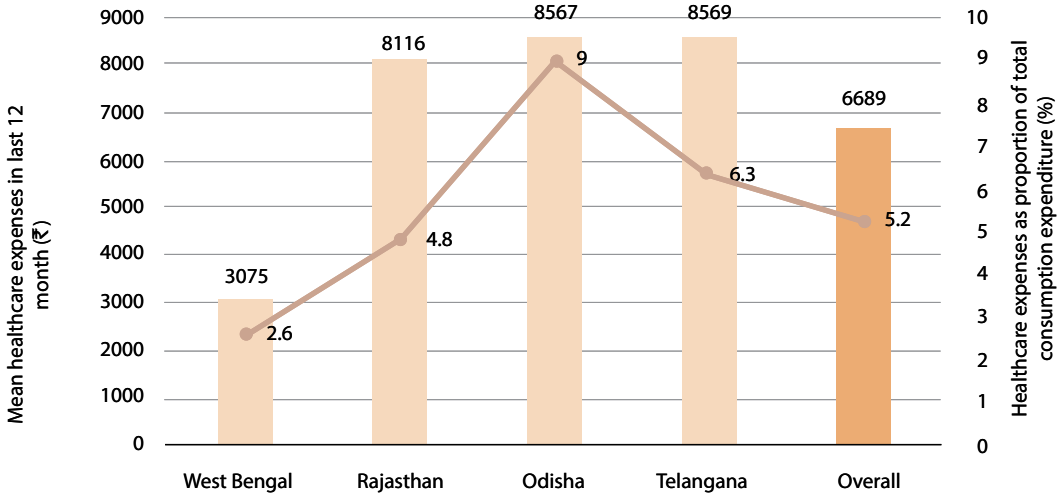


Table 4: Distribution of Average Annual Household Healthcare Expenditure across Wealth Quintiles

	West Bengal Mean (SE)	Telangana Mean (SE)	Rajasthan Mean (SE)	Odisha Mean (SE)	Total Mean (SE)
Poorest	1652 (267)	5637 (1071)	3477 (1428)	5039 (759)	3823 (390)
Poor	1247 (260)	5595 (858)	5038 (1441)	8048 (1276)	4425 (435)
Medium	3653 (869)	6712 (910)	5987 (977)	10800 (1585)	6266 (537)
Rich	4890 (1998)	7680 (862)	7049 (871)	11454 (1612)	7041 (750)
Richest	4855 (1584)	16150 (2422)	11449 (1534)	18099 (3287)	11883 (1124)
Overall	3075 (493)	8569 (645)	8116 (708)	8567 (625)	6689 (319)

People who were enrolled in any health insurance schemes reported less health care expenses

Healthcare expenses ranged from Rs.6213 among those enrolled in government health insurance schemes to Rs.11377 among those enrolled in private schemes (Table 5). Individuals not enrolled under any scheme reported annual healthcare expenditure of Rs.7300. While total hospitalization expenses among those individuals not enrolled were higher than among those enrolled, total out-patient expenses were lower in their case. While there was no significant difference in the number of hospitalizations among those enrolled in government health insurance schemes and private insurance schemes, the average nights of stay in hospital during last hospitalization differed a lot. (10.2 nights among those enrolled in private schemes, 2.8 nights among those enrolled in government insurance schemes).

Table 5: Average Annual Household Healthcare Expenditure among Individuals not Enrolled and Enrolled in Health Insurance Schemes

	Overall Mean (SE)	Not enrolled Mean (SE)	Enrolled in any insurance scheme Mean (SE)	Covered by private insurance Mean (SE)	Covered by government health plan Mean (SE)	Covered by both Govt. and private insurance Mean (SE)
Total healthcare expenses	7234 (160.2)	7300 (169.3)	6682 (495.6)	11377 (1797.4)	6213 (521.3)	8684 (1980.9)
Total hospitalization expenses	2680 (77.3)	2751 (82.3)	2089 (222.6)	4501 (890.5)	1862 (231.6)	6063 (572.9)
Total outpatient expenses	4078 (98.3)	4066 (104.4)	4180 (292.6)	6332 (1088.9)	3948 (306.9)	6063 (1519.6)
Medicine expenses	2521 (63.8)	2522 (68.5)	2515 (169.5)	2377 (478.9)	2493 (181.5)	4578 (1185.4)
Expenditure on diagnostic tests	835 (28.6)	838 (30.4)	809 (84.6)	1977 (458.4)	704 (83.1)	631 (113.6)
Average number of visits to the last health facility visited for outpatient treatment	1.5 (0.02)	1.5 (0.02)	1.4 (0.07)	1.7 (0.3)	1.3 (0.07)	1.8 (0.4)
Average number of hospitalizations in last year	1.5 (0.04)	1.5 (0.05)	1.3 (0.07)	1.6 (0.4)	1.3 (0.07)	4 (NA)
Average stay in hospital during last hospitalization (Nights)	3.4 (0.3)	3.4 (0.3)	3.5 (0.8)	10.23 (7.5)	2.8 (0.4)	4 (NA)

COPING MECHANISM FOR HEALTH CARE EXPENSES

The majority of households in all states reported the use of personal income and household income as the main mechanisms for coping with healthcare expenses (more than 80 per cent and 20 per cent respectively; Table 6). Less than one per cent of the households surveyed in the four states used insurance schemes.

Table 6: Coping Mechanism for Out of Pocket Healthcare Expenditure

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Personal income	81.8	84.7	98.3	87.3	86.4
Household income excluding personal income	36	20.3	0.5	13.5	21
Savings loans (Banks/ Relatives/Friends)	9.9	3.2	0.7	0.7	4.6
Contribution from friends/ relatives	6.4	7.6	5.4	13.7	7.8
Selling assets/property	0.5	0.5	0	0.5	0.4
Insurance coverage	1.2	0.2	0.5	0.5	0.7
Reimbursement from employer	0.1	0.2	0	0.2	0.2
Other	0.2	0	1.2	0.2	0.3

Awareness of and Enrolment in Health Schemes and Insurance

SOCIAL WELFARE SCHEMES

Less than 20 per cent house holds reported awareness about social welfare schemes (Table 7). Results were better in West Bengal, where 32 per cent and 38 per cent respondents were aware of the *Pradhan Mantri Suraksha Bima Yojana* and *Pradhan Mantri Jeevan Jyoti Bima Yojana* respectively. Awareness levels were least in Telangana. Enrolment levels among eligible age groups were highest for *Pradhan Mantri Jeevan Jyoti Bima Yojana* (1.1 per cent in Telangana and Rajasthan to 2.3 per cent in West Bengal), while these were lowest for *Atal Pension Yojana* (Table 8). The premium amount paid by households for *Pradhan Mantri Jeevan Jyoti Bima Yojana* and *Pradhan Mantri Suraksha Bima Yojana* were Rs.330 and Rs.12, as expected (Table 9). The average premium paid for *Atal Pension Yojana* ranged from Rs. 211 in Telangana to Rs. 3218 in Odisha, with an overall average of Rs.1943 across all states.

Table 7: Awareness about Social Welfare Schemes

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Atal Pension Yojana	24.5	5.4	13.1	24.2	16
Pradhan Mantri Jeevan Jyoti Bima Yojana	38.2	10.1	11.6	15	20.4
Pradhan Mantri Suraksha Bima Yojana	32	5.2	9.2	16.2	16.4
Any other schemes	1.7	0.4	3.2	3.2	1.8

Enrolment in social welfare schemes was quiet low across all the schemes (Table 8).

Table 8: Enrolment in Social Welfare Schemes					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Atal Pension Yojana (Age 18-40 yr)	0.3	0.4	0.8	2.6	0.8
Pradhan Mantri Jeevan Jyoti Bima Yojana	2.3	1.1	1.1	1.6	1.6
Pradhan Mantri Suraksha Bima Yojana (Age 18-70 yr)	1.2	0.7	0.8	0.8	0.9

Table 9: Average Premium Amount paid towards Social Welfare Schemes					
	West Bengal Mean (SE)	Telangana Mean (SE)	Rajasthan Mean (SE)	Odisha Mean (SE)	Total Mean (SE)
Atal Pension Yojana	293 (37)	211 (37)	0 0	3218 (41)	1943 (514)
Pradhan Mantri Jeevan Jyoti Bima Yojana	330 (-)	330 (-)	330 (-)	330 (-)	330 (-)
Pradhan Mantri Suraksha Bima Yojana	12 (-)	12 (-)	12 (-)	12 (-)	12 (-)

In general the awareness about social welfare schemes was lower in poorer quintiles than richer quintiles. The top three quintiles however did not show any significant differences in their awareness levels. It was observed that enrolment in social welfare schemes was not correlated with the household's socio-economic profile. This was especially true for *Atal Pension Yojana* and *Pradhan Mantri Jeevan Jyoti Bima Yojana*. Enrolment rates in *Pradhan Mantri Suraksha Bima Yojana* were, however, found to be higher in the richer quintiles than poorer quintiles of the sample.

AWARENESS ABOUT HEALTH INSURANCE SCHEMES

Almost 25 per cent of the households surveyed were aware of the RSBY, with the proportion being as high as 44 per cent and 51 per cent in West Bengal and Odisha (Table 10). Around 4 per cent of the households were aware of the option of medical reimbursement by employer, while, the awareness of all other options was less than 1 per cent in all states. Around 10 per cent of the family members belonging to the households covered under the survey reported being enrolled under health insurance schemes (Table 11). This ranged from two per cent in Rajasthan to 20 per cent in West Bengal. Central Government Health Scheme (CGHS) and RSBY constituted the two major schemes in terms of enrolment, while less than 0.5 per cent individuals had some private health insurance.

Table 10: Awareness about Various Health Insurance Schemes					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Central Government Health Scheme (CGHS)	1.5	0	0.2	0	0.5
ESIC	0	0.12	0	0	0.04
Rashtriya Swasthya Bima Yojana	44.1	1.9	4.2	51.6	24.3
Medical reimbursement/ insurance through an employer	5.7	4.1	2.2	2	4
Voluntary health insurance scheme	0.7	2.6	1.2	0.5	1.4
Any other scheme	6.8	2.1	3.4	8	4.8

ENROLMENT IN HEALTH INSURANCE SCHEMES

Enrolment rates were observed to be higher in the richer quintiles than poorer quintiles in all the states (Table 11). The highest percentage difference between the poorest and richest sections in terms of their enrolment rates was observed in Odisha, while the lowest difference was in Rajasthan. Among those enrolled, a preference for publicly financed government health insurance schemes was significantly higher than that for voluntary private health insurance schemes (Table 13). This was relevant for individuals in all wealth quintiles however it decreased with an increase in the socio-economic strata.

Table 11: Extent of Enrolment in Health Insurance Scheme					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Central Government Health Scheme (CGHS)	26.2	0	0	0	13.3
ESIC	0	0	0	0	0
Rashtriya Swasthya Bima Yojana	19	0	0.3	8.6	7.8
Medical reimbursement/ insurance through an employer	0.1	0.6	0.4	0	0.3
Voluntary health insurance scheme	0.1	1.4	0.4	0	0.5
Any other scheme	3.6	1.2	2.5	6.8	3.2
Enrolment in any health insurance scheme	20.1	2.4	2.1	16.9	10.7

Table 12: Enrolment Rates in Health Insurance Schemes in Different Quintiles					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	18.1	1.4	1.9	16.8	12.5
Poor	18.9	1.8	4.5	15.4	11.4
Medium	21.6	1.7	2.3	15.5	11.4
Rich	21.2	3.3	0.5	18.7	10.3
Richest	20.3	3.3	2.3	21.6	8.6
Overall	20.1	2.4	2.1	16.9	10.7

Table 13: Choice of Health Insurance Scheme among Households					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Voluntary private health insurance	2.4	79.5	35.4	0.9	8.4
Publicly financed government insurance	97.5	20.5	27.1	99.1	90.1
Both	0.1	0	37.5	0	1.5
Total	100	100	100	100	100

The enrolment levels did not show a clear gradient among wealth quintiles in case of RSBY, while richer quintiles had significantly higher enrolment in CGHS and private health insurance schemes.

Health Care Access and Utilization

OUT PATIENT DEPARTMENT (OPD)

Nearly half of the respondents utilized private health facilities for OPD services

Around 37 per cent of respondents who reported an illness in the last 15 days and sought out-patient medical treatment for it, utilized the services of the public health system, in comparison to 48 per cent who utilized the private healthcare sector (Table 14). Commonly preferred public health facilities included Health Posts in Odisha state, the District/ Sub-district hospital in Rajasthan and tertiary care centers in West Bengal and Telangana. In the private care sector, people preferred private clinics (28 per cent) to nursing homes or private hospitals (13 per cent). Around 9 per cent of respondents sought treatment from pharmacies and drugstores with over the counter drugs.

Table 14: Preference of Healthcare Facility for Outpatient Care

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Public Facility					
Sub Center (SC)/ Health post	8.8	8.9	3.4	27.7	11.7
Primary Health Center (PHC)/ Urban Health Center (UHC)	9.1	0	1.3	9.9	6
Community Health Center (CHC)	1.1	0	1.3	2.9	1.5
District/Sub district Hospital	1.8	0	18.4	3.9	7.2
Government/Tertiary Hospital	19	16.5	4.2	0	9.6
Government AYUSH Hospital	0.2	1.9	0	0.3	0.3
Private Facility					
Private Hospital/Nursing Home	2.7	24.1	27.7	8.9	13.9
IBM Facility	0	20.9	2.1	0	2.7
Private Clinic (OPD based Services)	30.1	7	27.3	37.4	28.7

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
NGO/Charity/Trust/Church run Hospitals	0.2	17.1	0	0	1.8
Private AYUSH Hospitals	1.4	2.5	2.5	0	1.5
Pharmacy/Drugstore	13.6	0.6	7.8	7.1	8.9
Home visit	0.4	0	0	0	0.1
Other	11.6	0.6	3.6	0.3	5.3
Don't Know/ Can't Say	0.2	0	0.6	1.6	0.6
Total	100	100	100	100	100

Poorer respondents utilized public sector facilities more than the private sector

The respondents belonging to the poorer quintiles of the sample utilized public sector facilities more than private sector facilities, while the reverse was true for the upper quintiles of the sample (Table 15). Exceptions to this were the middle wealth quintile respondents in West Bengal, who preferred public facilities, and the poor quintile respondents in Rajasthan, who preferred private facilities for OPD consultations.

Table 15: Choice of Health Facility for Out-patient Care among Different Wealth Quintiles

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	Public Facility	51.8	54.5	66.7	61.5	57.6
	IBM Facility	0	0	0	0	0
	Private Facility	48.2	45.5	33.3	38.5	42.4
Poor	Public Facility	51.8	37.5	34.4	67.7	55.1
	IBM Facility	0	0	0	0	0
	Private Facility	48.2	62.5	65.6	32.3	44.9
Medium	Public Facility	50.9	42.9	35.1	29.8	40.1
	IBM Facility	0	0	1.4	0	0.3
	Private Facility	49.1	57.1	63.5	70.2	59.6
Rich	Public Facility	41.5	13.3	30.2	22.2	30.6
	IBM Facility	0	3.3	2.3	0	1.2
	Private Facility	58.5	83.3	67.4	77.8	68.2
Richest	Public Facility	26.9	24.1	23.5	26.7	24.6
	IBM Facility	0	36.8	2.9	0	9.5
	Private Facility	73.1	39.1	73.5	73.3	65.9
Total	Public Facility	45.4	27.4	29.8	45.6	38.7
	IBM Facility	0	21	2.2	0	2.9
	Private Facility	54.6	51.6	68.1	54.4	58.4

Education had no bearing on the choice of health care utilization

It was observed that the patient's education did not have any bearing on the choice of healthcare facility for out-patient treatment, as respondents in all categories utilized private sector facilities more than the public health sector in all the states (Table 16).

Table 16: Choice of Health Facility for Out-patient Care among Households of Different Education Levels

Education	Source of treatment	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Illiterate	Public Facility	46.8	29.4	26.9	46	39.3
	IBM Facility	0	8.8	3.6	0	1.8
	Private Facility	53.2	61.8	69.5	54	58.9
Up to Primary School	Public Facility	42.3	27	31.5	39.8	37
	IBM Facility	0	8.1	0	0	0.8
	Private Facility	57.7	64.9	68.5	60.2	62.2
Up to Higher Secondary	Public Facility	44.9	27.5	36.1	47.5	38.9
	IBM Facility	0	42.5	1.6	0	9.5
	Private Facility	55.1	30	62.3	52.5	51.6
Graduate and above	Public Facility	46.7	16.7	33.3	81.8	40.5
	IBM Facility	0	58.3	0	0	9.5
	Private Facility	53.3	25	66.7	18.2	50
Total	Public Facility	45.4	27.4	29.8	45.6	38.7
	IBM Facility	0	21	2.2	0	2.9
	Private Facility	54.6	51.6	68.1	54.4	58.4

Households enrolled under health insurance preferred private sector facilities

Households enrolled under health insurance schemes preferred private sector facilities over public health facilities in West Bengal, Telangana and Rajasthan, while the opposite was true for Odisha (Table 17). Overall, insured households preferred to utilize private facilities. Respondents in Rajasthan preferred facilities closer to their homes (mean distance of 3 km), while the average distance of respondents' homes from facilities in West Bengal was six kilometers (Table 18).

Table 17: Choice of Health Facility for Out-patient Care among Households Enrolled under Health Insurance

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Public Facility	13.9	0	2.2	14	7.5
IBM Facility	0	3	0	0	2.3
Private Facility	16.4	2.5	2.6	11.3	8.9

Table 18: Average Distance (km) of Preferred Health Facility from Respondents' Residence					
	West Bengal Mean (SE)	Telangana Mean (SE)	Rajasthan Mean (SE)	Odisha Mean (SE)	Total Mean (SE)
Mean distance facility to home	6.2(0.7)	3.8(0.5)	2.9(0.5)	5.2(0.4)	4.7(0.3)

IN PATIENT DEPARTMENT (IPD)

Majority of respondents preferred public health facilities for IP services

More than 65 per cent of respondents who were admitted to hospitals in the last year preferred public health facilities to private health facilities for IP services (Table 19). Most of these hospitalizations were at Tertiary Care Hospitals (19 per cent) and District Hospitals (9 per cent). A large proportion of respondents from Odisha also reported going to health posts in urban areas. A marked difference was observed between rich and poor segments of the population when choosing the facility for IP treatment. While the bottom three quintiles preferred public facilities more than the private sector, the reverse was true for the richest quintile (Table 20).

Table 19: Choice of Healthcare Facility for In-patient Care					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Health Post/ SCs	0	2.2	0	58	29
PHC/UHC	6.2	1.4	0	8.9	6
CHC	1.1	0.7	0	4.1	2.4
Public Health Facility	65.7	34.8	43.5	6.5	28.5
IBM Facility	1.1	13	1.9	0.7	3
Private Facility	25.8	47.8	54.6	21.7	31.1
Total	100	100	100	100	100

Table 20: Choice of Health Facility for In-patient Care among Different Wealth Quintiles						
		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	Public Facility	79.2	62.5	71.4	83.5	80.8
	IBM Facility	4.2	20.8	0	0	2.3
	Private Facility	16.7	16.7	28.6	16.5	16.9
Poor	Public Facility	90	50	60	74.1	75.3
	IBM Facility	0	0	0	0	0
	Private Facility	10	50	40	25.9	24.7

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Medium	Public Facility	76.1	41.2	41.7	75.9	68.2
	IBM Facility	0	0	8.3	1.9	1.6
	Private Facility	23.9	58.8	50	22.2	30.2
Rich	Public Facility	57.1	29.8	40	77.4	49
	IBM Facility	2.9	8.5	0	0	3.5
	Private Facility	40	61.7	60	22.6	47.6
Richest	Public Facility	60.6	31.6	38.8	26.7	40.7
	IBM Facility	0	23.7	2	13.3	8.9
	Private Facility	39.4	44.7	59.2	60	50.4
Total	Public Facility	73	39.1	43.5	77.5	65.9
	IBM Facility	1.1	13	1.9	0.7	3
	Private Facility	25.8	47.8	54.6	21.7	31.1

However, the richest quintile in West Bengal was an exception, as these households showed a preference for public sector health facilities. Patients with an education level of graduation and above showed a clear predilection for private sector facilities in Telangana and Rajasthan, except in the state of Odisha, where, like all other patients, these also preferred public sector facilities for in-patient treatment (Table 21). The patients' enrolment in health insurance schemes made no difference to the choice of selecting public facilities in Odisha and West Bengal (Table 22), in other states the preference shifted from public sector to private sector facilities.

Table 21: Variations in Choice of Health Facility for In-patient Care with Education of the Patient

Education	Source of treatment	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Illiterate	Public Facility	88.1	36.2	47.7	71.3	64.9
	IBM Facility	0	12.1	2.3	1.2	3
	Private Facility	11.9	51.7	50	27.5	32
Up to Primary School	Public Facility	80.3	37.1	43.3	77.9	69.4
	IBM Facility	0	17.1	3.3	0.7	3
	Private Facility	19.7	45.7	53.3	21.4	27.7
Up to Higher secondary	Public Facility	47.2	47.4	47.4	88	66.5
	IBM Facility	2.8	10.5	0	0	2.8
	Private Facility	50	42.1	52.6	12	30.7
Graduate and above	Public Facility	47.1	28.6	26.7	83.3	54
	IBM Facility	5.9	14.3	0	0	3.2
	Private Facility	47.1	57.1	73.3	16.7	42.9
Total	Public Facility	73	39.1	43.5	77.5	65.9
	IBM Facility	1.1	13	1.9	0.7	3
	Private Facility	25.8	47.8	54.6	21.7	31.1

Table 22: Choice of Health Facility for In-patient Care among Households Insured with Health Insurance Schemes					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Public Facility	77.3	10	50	78.9	72.1
IBM Facility	0	20	0	2.6	2.9
Private Facility	22.7	70	50	18.4	25
Total	100	100	100	100	100

More than 67 per cent of those hospitalized in the last one year reported undergoing medical examination, while around 48 per cent received prescriptions for allopathic medication (Table 23). One-fourth of the total patients reported a laboratory test, while nine per cent of the total reported undergoing a diagnostic test. Respondents in Rajasthan reported the highest proportion of laboratory tests and diagnostic tests, while the lowest proportions were in Telangana and Odisha respectively.

Table 23: Services Received During Hospitalization					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Medical check-up (under observation/routine check-up)	88.2	52.9	70.4	61.8	67.1
Injection & IV (drip infusion)	50.6	30.4	77.8	23.2	37.2
Laboratory test (Blood/Urine/ Stool/Sputum/Saliva)	25.8	10.9	64.8	14	22.6
Endoscopy or colonoscopy	0.6	6.5	2.8	0.5	1.8
Surgery	29.8	22.5	8.3	1.2	11.7
X-ray, CT scan, ultrasound, MRI	10.1	10.1	39.8	1.7	9.8
Medications (allopathic)	79.2	20.3	89.8	34.3	48.7
Medications (AYUSH)	0.6	2.9	4.6	0.2	1.3
Traditional treatment (massage, acupuncture)	0.6	1.4	0.9	0.5	0.7
Others	3.9	2.9	0.9	2.7	2.7

QUALITY OF CARE

More than 90 per cent of patients reported high satisfaction levels for OPD services received in private facilities, while this figure was 84 per cent for public health sector facilities (Figure 2). Only 72 per cent patients who had in-patient treatment at public facilities reported high satisfaction levels, as compared to 94 per cent of those who underwent IP treatment at private facilities (Figure 3).

Figure 2: Proportion of Patients Reporting Satisfactory Satisfaction Levels with Quality of Services Received During Out-patient Treatment at Public and Private Facilities

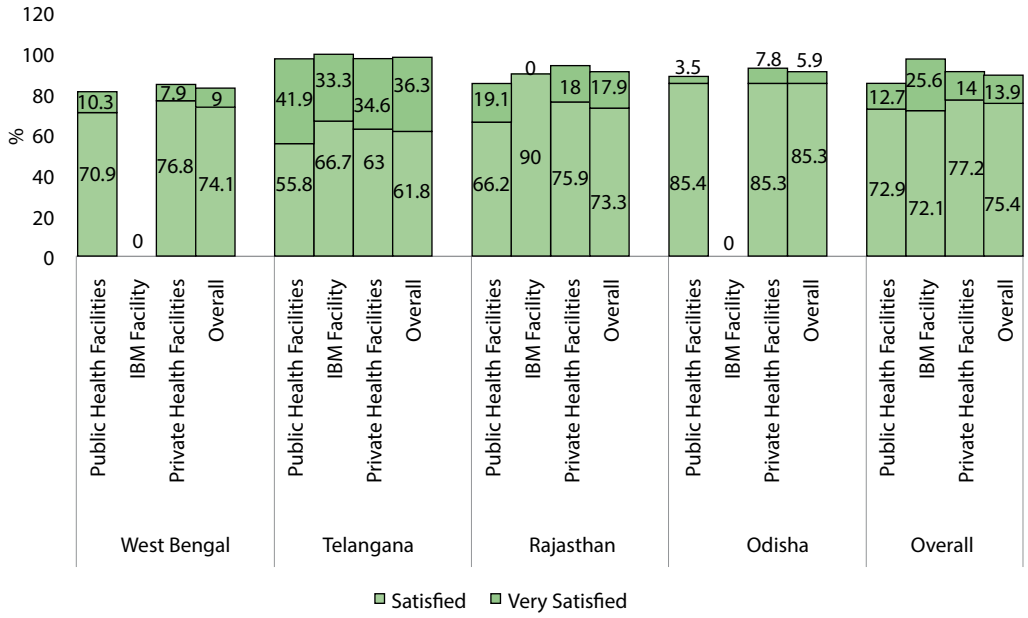
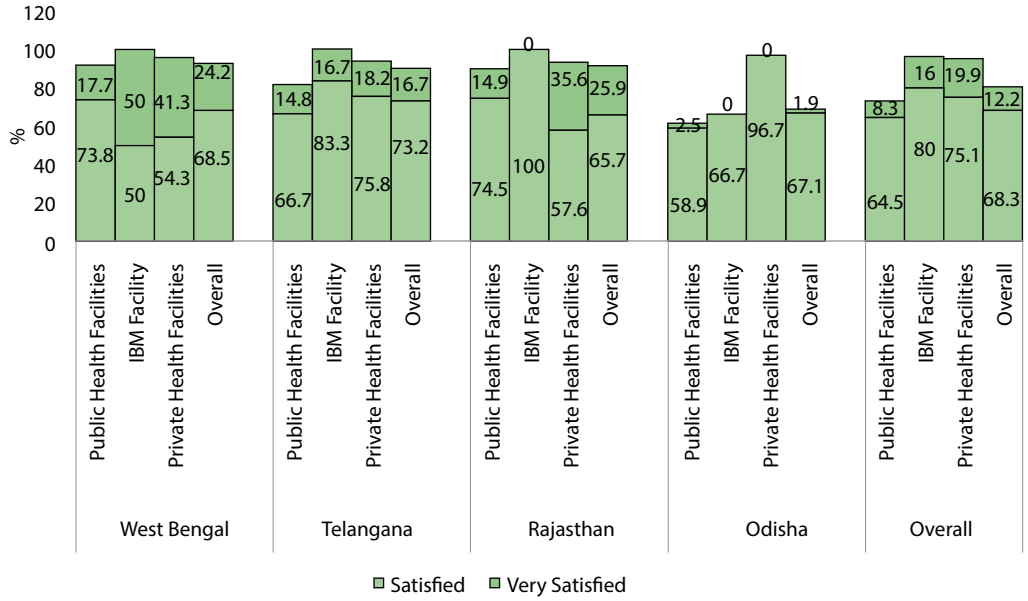


Figure 3: Proportion of Patients Reporting Satisfactory Satisfaction Levels with Quality of Services Received During In-patient Treatment at Public and Private Facilities



Maternal and Reproductive Health

MATERNAL HEALTH

Antenatal Care

More than 99 per cent of pregnancies among women who had delivered a child in the last one year, were found to be registered in West Bengal and Odisha (Table 24). Telangana presented the least number of pregnancy registrations (86 per cent). Almost 98 per cent and 88 per cent pregnancies in West Bengal and Odisha respectively were registered with public sector healthcare providers, unlike Telangana, where 45 per cent of all registrations were in the private sector. Women from the poorer quintiles had slightly lower registration rates than those from richer quintiles (Table 25) however the difference was most marked in Rajasthan.

Table 24: Pregnancy Registrations

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Pregnancy registrations		99.7	86.8	92.8	99.2	94.1
Preferred healthcare provider	Public sector healthcare providers*	98.4	55	75.4	87.2	79.1
	Private sector healthcare providers	1.6	45	24.3	4.3	19.3
	Others	0	0	0.3	8.4	1.6

* Includes government doctors, ANMs, ASHAs, AWWs

Table 25: Pregnancy Registration among Different Wealth Quintiles

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	99.4	87.9	80	99.3	95.2
Poor	100	81.8	95	97.9	92.7
Medium	100	87	97.1	100	95.1
Rich	99.3	87.6	93.8	100	93.8
Richest	100	90.1	92.3	100	94
Overall	99.7	86.8	92.8	99.2	94.1

Around 62 per cent of pregnant women had received the recommended four ANC check-ups during their pregnancy (Table 26). The situation was worst in Telangana and Rajasthan, where 47.7 per cent and 53.2 per cent of women reported four or more ANC check-ups respectively. Among the quality of ANC parameters, height measurement was found to be very poor in both Rajasthan (38 per cent) and Odisha (64 per cent), while only 76 per cent women in West Bengal reported abdominal examinations. Telangana also lagged behind other states in terms of TT injections, IFA tablet consumption or availability of MCP cards, while West Bengal appeared to be the best state in this regard.

Fewer women from poorer quintiles reported having received four ANC check-ups than those from richer quintiles in all the states except Odisha, which presented no clear pattern (Table 27). This also reflected in the proportion of women who had had a complete ANC check-up, as fewer women from poorer strata received a complete check-up as compared to those from the richer strata (Table 28).

Table 26: Quality Parameters for ANC Services Received During Last Pregnancy

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
4 or more ANC visits in last pregnancy		73.7	47.7	53.2	71.7	62.6
Quality of ANC	Weight measurement	99.6	99.4	77.8	98.7	95.3
	BP measurement	99.6	98.4	87.8	95.9	96.3
	Height measurement	74.1	67.2	38.8	64.8	63.8
	Ultrasound examination	89.9	95.5	87.8	87	90.4
	Urine examination	97.9	98.3	88.4	97.4	96.1
	Blood examination	97.6	98.4	93.4	96.4	96.8
	Abdominal examination	76.5	98.3	90	91.8	87.9
	Counseling on nutrition and birth preparedness	93.9	96.5	90.6	90.8	93.4
2 or more Tetanus injection		94.4	60.4	79.7	96.7	8.1
90 or more Iron Folic Acid tablets or syrup consumption		57.4	34.2	38.2	37	42.7
Mother and Child Protection (MCP) card availability at home		93.1	36.2	62.8	85.3	67.5

Table 27: Four or More ANC Visits among Different Wealth Quintiles

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	61.4	38.8	25	74.1	59
Poor	72.3	50.5	54.5	70.8	64.2
Medium	75.2	52.4	55.6	68.8	64.5
Rich	80.7	48	51.8	77.8	64.6
Richest	80	46.6	57.1	62.5	61
Overall	73.7	47.7	53.2	71.7	62.6

Table 28: Complete ANC Check-up among Different Wealth Quintiles					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	35.3	5	3.7	21.7	22.3
Poor	36.2	8.4	12.1	24.5	23
Medium	39.8	11.2	16.1	21.8	23.8
Rich	44.4	9.8	20.5	22.7	25.7
Richest	58.8	25.6	30.2	31.3	37.4
Overall	42.3	12.5	21.3	23.3	26.5

Delivery and Post-partum Care

Public health facilities were by and large the most preferred choice for delivery in all the states (Table 29). The situation was different in Telangana, where the private sector could manage a 39 per cent share of deliveries, with almost 10 per cent of deliveries occurring at home, reducing the public sector's share to 39 per cent. Home deliveries were negligible in all other states.

Table 29: Place of Delivery					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Public Facility	59.5	39.4	67.3	84	58.3
IBM Facility	4	10.4	2.3	2.2	5.5
Private Facility	35.6	39.8	28.4	13.8	32.1
Home	1	10.4	2	0	4.2
Total	100	100	100	100	100

It was observed that the preference for place of delivery did not change by the socio-economic status in the lower four quintiles (Table 30). The richest quintile in West Bengal and Telangana were utilizing private sector facilities more than public sector ones for delivery.

Table 30: Choice of Health Facility for Delivery among Different Wealth Quintiles						
		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	Public Facility	74.2	49.5	86.7	89.7	73.8
	IBM Facility	2.5	2.8	0	1.5	2.1
	Private Facility	20.8	39.3	13.3	8.8	21.1
	Home	2.5	8.4	0	0	3
Poor	Public Facility	68.8	45.2	76.9	82.4	64
	IBM Facility	1.9	7	0	3.3	3.8
	Private Facility	28	42.7	17.9	14.3	29.5
	Home	1.3	5.1	5.1	0	2.7

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Medium	Public Facility	64.1	40.4	74.6	79.7	60.3
	IBM Facility	6.1	5.5	3	1.4	4.5
	Private Facility	29.8	39.7	22.4	18.9	30.1
	Home	0	14.4	0	0	5
Rich	Public Facility	54.3	35.9	58.1	72.5	49.7
	IBM Facility	2.9	6.5	4.3	2.5	4.5
	Private Facility	42	41.8	32.3	25	38.3
	Home	0.7	15.9	5.4	0	7.5
Richest	Public Facility	28.9	29.6	63.9	89.3	44.9
	IBM Facility	7.4	27.7	1.8	3.6	12
	Private Facility	63.6	35.2	33.7	7.1	40.3
	Home	0	7.5	0.6	0	2.7
Overall	Public Facility	59.5	39.4	67.3	84	58.3
	IBM Facility	4	10.4	2.3	2.2	5.5
	Private Facility	35.6	39.8	28.4	13.8	32.1
	Home	1	10.4	2	0	4.2

The proportion of women who availed the conditional cash transfer program at the time of delivery varied from 6 per cent in Telangana to 79 per cent in Odisha (Table 31). Overall, less than one-third of the pregnant women were found to be able to avail this benefit. While the JSY scheme was the mainstay of the cash transfer program in West Bengal and Rajasthan, 58 per cent of women who received cash in Telangana and 77 per cent in Odisha received the amount through other government schemes. Around 20 per cent women utilized free referral transport services run by the government under Janani Shishu Suraksha Karyakaram (JSSK) or other state run programs, which ranged from two per cent in Telangana to 40 per cent in West Bengal.

More women from the poorer quintile used referral transport services as compared to the richer quintiles, except in Telangana, where a larger proportion of the rich were utilizing these services (Table 32). Among women who were enrolled in any health insurance scheme, around 84 per cent of the women received maternity cash benefits through the JSY scheme, while around 16 per cent received financial assistance through other schemes (Table 33).

Table 31: Conditional Cash Transfer Program, Source of Financial Assistance for Delivery Care and Utilization of Referral Transport Services

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Proportion of women received any financial assistance during last delivery	23.1	6.5	45.2	79.2	31.4

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Source of financial assistance to women who received it	*Janani Suraksha Yojana* (JSY)	94.5	58.3	96.2	77.6	85
	Other maternity benefit scheme	3.7	43.8	4.9	37.1	21.5
	Others	1.8	4.2	0.5	0.3	1
Utilization of free transport facility services for pregnant women		40.7	2	8.2	28.6	20

Table 32: Utilization of Free Transport Facility Services by Pregnant Women among Different Wealth Quintiles

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	46.9	0.9	6.7	31.2	27.9
Poor	45.9	0.6	25	24.7	23.6
Medium	44.4	2.7	13	36.3	23.6
Rich	34.1	3.5	7.3	22.2	15.6
Richest	29.5	1.9	3	18.8	10.3
Overall	40.7	2	8.2	28.6	20

Table 33: Source of Financial Assistance for Delivery Care among Women Enrolled in Health Insurance Schemes

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Janani Suraksha Yojana (JSY)	83.3	0	66.7	90	84
Other maternity benefit scheme	16.6	0	33.3	10	16

CHILD HEALTH

Postnatal Care

Forty-eight percent of newly born children do not receive postnatal check-ups within two months of delivery

Around 52 per cent women reported that their youngest child had received at least onepostnatal check-up in the first two months of birth. This figure was high for West Bengal and Odisha (77 per cent), but low in Telangana (22 per cent) (Table 34).

Table 34: Postnatal Health Check-up (at least one) of Youngest Child within Two Months of Delivery					
	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
PNC check-up of youngest child	77.0	22.6	38.7	77.7	52.3

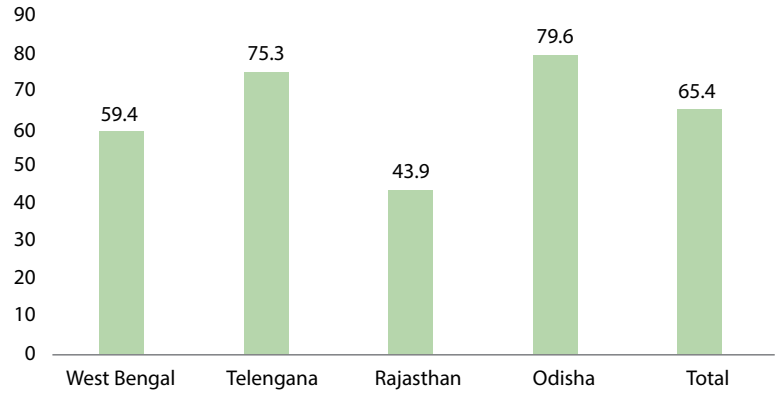
The average number of check-ups within the first 42 days was around three in all the states except for one check-up in Rajasthan (Table 35). This was found more in the richest quintile as compared to the poorest quintile in three states with the exception of Rajasthan where the number of visits was more in the poorest quintile (Table 36).

Table 35: Average Number of Check-ups in First 42 days					
	West Bengal Mean (SE)	Telangana Mean (SE)	Rajasthan Mean (SE)	Odisha Mean (SE)	Total Mean (SE)
Average no. of check-ups	3.5 (0.11)	3.6 (0.22)	1.5 (0.08)	2.4 (0.08)	3.0 (0.1)

Table 36: Average Number of Check-ups in First 42 days among Wealth Quintiles					
	West Bengal Mean (SE)	Telangana Mean (SE)	Rajasthan Mean (SE)	Odisha Mean (SE)	Total Mean (SE)
Poorest	2.9(0.2)	2.2(0.3)	2.3(0.6)	2.3(0.1)	2.6(0.1)
Poor	2.9(0.2)	2.6(0.5)	1.8(0.3)	2.4(0.1)	2.6(0.1)
Medium	3.5(0.2)	3.1(0.4)	1.6(0.2)	2.4(0.1)	2.9(0.1)
Rich	4.0(0.3)	3.4(0.4)	1.4(0.2)	2.7(0.4)	3.2(0.2)
Richest	4.5(0.3)	4.8(0.5)	1.4(0.1)	2.5(0.3)	3.6(0.2)
Overall	3.5(0.1)	3.6(0.2)	1.5(0.1)	2.4(0.1)	3.0(0.1)

Breastfeeding initiation within one hour of birth varied between 79 per cent in Odisha to 43 per cent in Rajasthan (Figure 4).

Figure 4: Initiation of Breastfeeding (within one hour)



The initiation of breastfeeding within one hour was higher in the poorest quintile and showed a decreasing trend towards the richest quintiles in West Bengal and Rajasthan while the other two states showed the highest percentage among the richest quintile (Table 37).

Table 37: Initiation of Breastfeeding (within one hour) among Wealth Quintiles

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	73.1	64.5	58.6	80.1	72.2
Poor	63.5	69.9	56.4	80	68.6
Medium	54.5	78.5	52.2	76.3	66.4
Rich	52.2	73.8	44.2	77.3	61
Richest	49.6	86.8	34.6	87.5	59.1
Overall	59.4	75.3	43.9	79.6	65.4

Immunization

Immunization rates were the highest in West Bengal at 89 per cent, while they were the lowest in Rajasthan with 46.8 per cent (Table 38). The average BCG vaccination rate at birth was 96 per cent in the overall sample, which dropped down to 92 per cent for DPT3 vaccination (at 3 and a half months) and to 91 per cent for measles vaccination (at 9 months). Complete immunization was found to be higher in the richer quintiles in all the four states (Table 39).

Table 38: Immunization Rates for Individual Vaccines

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Polio 0	98	98	97	87	96
HEP B0	92	96	90	77	90
BCG	99	96	90	96	96
Pentavalent 1	96	94	87	76	90
Pentavalent 2	95	87	84	73	86
Pentavalent 3	93	80	84	68	83
DPT 1	99	96	90	96	96
HEP B1	99	96	90	85	94
OPV 1	99	92	64	97	90
Rotavirus 1	41	82	45	66	59
DPT 2	99	93	89	97	95
HEP B2	98	91	88	84	91
OPV 2	98	85	61	98	88
Rotavirus 2	42	76	44	64	57
DPT 3	97	87	87	95	92

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
HEP B3	97	84	87	83	89
OPV 3	93	73	57	94	81
Rotavirus 3	41	65	37	57	50
Measles	97	89	77	95	91
Vitamin A	97	86	70	94	89

Table 39: Full Immunization Rate among Wealth Quintiles

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	82.1	63	35.7	83.1	75.6
Poor	88	60.3	18.8	83.6	72.9
Medium	94.2	67.6	50	85.7	76.6
Rich	95.2	66.7	43.5	89.3	73.3
Richest	91.4	72.4	55.1	93.3	72.7
Overall	89.7	66	46.8	85.3	74.3

Under-five Morbidities

The overall prevalence of diarrhea in under-five children was found to be 3.6 per cent, with Odisha and West Bengal reporting a slightly higher prevalence (7.1 per cent and 5.7 per cent respectively) as compared to the other two states (Table 40). The prevalence of fever was higher in Rajasthan (42 per cent) and Odisha (36 per cent) whereas the prevalence of blocked or running nose was found to be higher in Odisha (25 per cent) compared to other states. The prevalence of respiratory illnesses like cough, chest pain and pneumonia was reported to be more in Rajasthan and Odisha (Table 40). A total of five per cent of children reported being afflicted by pneumonia in the last two weeks in the overall sample.

Table 40: Prevalence of Morbidity/Symptoms in Under-five Children in the Last Two Weeks

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Prevalence of diarrhea	5.7	0.2	3.7	7.1	3.6
Prevalence of dysentery	1.1	0.3	0.7	1.5	0.8
Prevalence of fever	23.5	4.5	42.6	36.5	20.7
Prevalence of blocked or running nose	13.8	3.7	15.5	25.4	12.5
Prevalence of cough	17.5	1.4	24.2	21.7	13.8
Problem of chest pain during breathing	5.7	0.6	9.5	15	6.2
Prevalence of pneumonia	4.6	0.3	8.7	11.5	5

Pregnancy and Family Planning

UNWANTED AND MISTIMED PREGNANCIES IN CURRENTLY PREGNANT WOMEN

Mistimed and unwanted pregnancies were reported by more than 47 per cent of currently pregnant women in the age group of 15-49 years (Table 41). Among those who had a mistimed or unwanted pregnancy, the majority belonged to poorer quintiles of the population in Telangana and Odisha, while the opposite was true for West Bengal and Rajasthan (Table 41). Both illiterate mothers and those with an education up to graduation and above presented remarkably low rates of unintended pregnancies than those educated upto primary and secondary levels (Table 41). Around 67-68 per cent of currently pregnant women in West Bengal and Telangana wanted another child, while only 15 per cent in Rajasthan reported such a desire (Table 41).

Table 41: Intended, Mistimed and Unwanted Pregnancies among Pregnant Women aged 15-49 years

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Intended pregnancy	Wanted now	50	55.3	50	53.3	52.6
	Wanted later	23.3	36.8	13.5	33.3	27.2
	Wanted no more	26.7	7.9	36.5	13.3	20.2
Across wealth quintile	Poorest	20	38.2	0	57.1	24.4
	Poor	13.3	5.9	15.4	14.3	11
	Medium	13.3	20.6	23.1	0	18.3
	Rich	13.3	8.8	30.8	28.6	18.3
	Richest	40	26.5	30.8	0	28
Education	Illiterate	20	2.9	26.9	0	13.4
	Up to Primary	46.7	52.9	26.9	57.1	43.9
	Up to higher secondary	6.7	38.2	34.6	42.9	31.7
	Graduate and above	26.7	5.9	11.5	0	11
Desire for another child	Want another child	68.2	67.1	15.2	46.2	52.9
	No more child	13.6	27.1	63.6	46.2	35.5
	Undecided	18.2	5.7	21.2	7.7	11.6

Similarly, a majority of currently pregnant women with mistimed and unwanted pregnancies belonged to the SC and OBC social groups (Table 42).

Table 42: Unwanted and Mistimed Pregnancies among Currently Pregnant Women in Different Castes

	Total %
Schedule caste	32.9
Schedule tribe	14.6
Other backward caste	34.1
General	18.3
Overall	100

UNMET NEED FOR FAMILY PLANNING

The highest unmet needs, both for family spacing and limiting were observed in Rajasthan (16.5 per cent and 35 per cent respectively), while they were the lowest in Telangana (5 per cent and 3 per cent respectively) (Table 43). The total unmet need ranged from 7 per cent in Telangana to 51 per cent in Rajasthan. Overall, the total unmet need was observed to be 24 per cent in all four states surveyed.

Table 43: Unmet Need for Family Spacing and Family Limiting

State	Unmet need category	15-49 married females currently pregnant	15-49 married females infecund postpartum amenorrheic	15-49 married fecund females not currently pregnant not using contraception	Total	15-49 married females	Specific unmet need	Total unmet need (Spacing + limiting)
		(n_1)	(n_2)	(n_3)	(n_1+n_2+n_3)	(x)	(n_1+n_2+n_3)/x	
West Bengal	Spacing	6	0	92	98	956	10.2	25.7
	Limiting	8	0	140	148	956	15.4	
Telangana	Spacing	27	2	13	42	868	4.8	7.4
	Limiting	6	3	14	23	868	2.6	
Rajasthan	Spacing	6	0	76	82	494	16.5	51.4
	Limiting	17	0	155	172	494	34.8	
Odisha	Spacing	5	0	27	32	408	7.8	19.6
	Limiting	2	1	45	48	408	11.7	
Overall	Spacing	44	2	208	254	2726	9.3	23.6
	Limiting	33	4	354	391	2726	14.3	

CONTRACEPTION USAGE

The contraception prevalence rate was found to be the lowest in West Bengal (37.5 per cent) while it was highest in Rajasthan (55 per cent) (Table 44).

Table 44: Contraception Prevalence Rate (CPR) among Currently Non-pregnant Women aged 15-49 years

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Contraception Prevalence Rate	37.5	39.1	55.0	51.1	43.2

West Bengal reported an increasing trend of CPR from the richest (37 per cent) to the poorest (43 per cent) quintiles while Rajasthan presented a reverse trend (Table 45). No specific patterns were observed in Odisha. Similarly, the women's education levels and castes did not present any particular pattern (Table 45). While Hindu women reported a higher CPR in Rajasthan and Odisha, this was not the case in West Bengal, where this rate was found to be higher in Muslim women (Table 45).

Table 45: Contraception Prevalence Rate among Currently Non-pregnant Women by Background Characteristics of Women aged 15-49 years

Background Characteristics of the women	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Wealth Quintile					
Poorest	43.4	38.7	37.5	45.6	42.5
Poor	38.3	47.9	58.1	50.0	45.7
Medium	31.5	44.0	52.8	62.7	44.3
Rich	36.2	35.8	51.0	54.3	40.7
Richest	36.9	29.8	60.9	44.4	42.6
Education					
Illiterate	30.3	54.5	40.0	70.6	45.1
Up to Primary	38.2	39.6	53.4	50.7	43.2
Primary and above	32.5	35.5	71.4	46.9	42.4
Religion					
Hindu	37.0	39.7	56.0	51.2	43.6
Muslim	40.6	36.4	54.5	0.0	41.0
Others	36.4	28.6	39.1	0.0	33.8
Ethnicity					
Schedule Caste/ Schedule Tribe	38.3	40.0	53.7	39.3	41.6
Other Backward Castes	41.2	37.7	59.1	62.4	49.4
General	35.9	38.6	50.5	50.6	41.0
Overall	37.5	39.1	55.0	51.1	43.2

Among the different methods of contraception used, modern spacing methods (54 per cent) were preferred over the permanent (24 per cent) and traditional methods (22 per cent) in all the four states (Table 46) and significant with $p<0.05$ on doing Chi-square test.

Table 46: Preferred Mode of Contraception

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Permanent Method	21.5	27.6	27.1	26.8	24.4
Modern Spacing Method	53.5	43.3	64.1	53.0	54.0
Traditional Spacing Method	25.0	29.1	8.8	20.1	21.6

The use of modern spacing methods for family planning was found to be more than 50 per cent in all the wealth quintiles, while the use of permanent methods was found to be around 19 per cent in the poorest quintile, increasing to 27.5 per cent in the richest quintile (Table 47). Traditional methods were used by 23 per cent of the eligible women in the poorest quintiles while it was 20 per cent in the richest quintile. The use of traditional methods was highest in Telangana where around 52 per cent women in the richest quintile (Table 47).

Table 47: Preferred Mode of Contraception across Wealth Quintile

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Poorest	Permanent Method	18.5	5.9	45.8	14.3	18.8
	Modern Spacing Method	66.7	70.6	50	47.3	57.9
	Traditional Spacing Method	14.8	23.5	4.2	38.5	23.3
Poor	Permanent Method	23.1	0	27.8	41.7	27.1
	Modern Spacing Method	56.2	73.3	72.2	41.7	54.7
	Traditional Spacing Method	20.7	26.7	0	16.7	18.2
Medium	Permanent Method	21.9	0	31	40	25.7
	Modern Spacing Method	53.1	25	69	50	54.5
	Traditional Spacing Method	25	75	0	10	19.9
Rich	Permanent Method	18.8	13.3	21.4	9.1	17.9
	Modern Spacing Method	53.8	46.7	78.6	68.2	60.2
	Traditional Spacing Method	27.4	40	0	22.7	21.9
Richest	Permanent Method	25.4	33.3	33.3	13	27.5
	Modern Spacing Method	46.6	14.3	66.7	73.9	52.9
	Traditional Spacing Method	28	52.4	0	13	19.6
Total	Permanent Method	21.6	13.9	31.4	24.3	23.4
	Modern Spacing Method	55.1	47.2	68.1	50.9	56
	Traditional Spacing Method	23.3	38.9	0.5	24.8	20.6

The use of non- permanent methods was more in Muslim couples as compared to Hindus and Christians (Table 48). It was observed that traditional methods were practiced more by Hindus than other religions.

Table 48: Methods Used for Family Planning by Different Religion Groups

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Hindu	Permanent Method	22.3	14.3	34.5	24.4	24.3
	Modern Spacing Method	52.1	48.6	64.8	51.1	53.8
	Traditional Spacing Method	25.6	37.1	0.6	24.4	21.8
Muslim	Permanent Method	16.5	0	18.2	0	16.5
	Modern Spacing Method	70.9	0	81.8	0	71.4
	Traditional Spacing Method	12.7	100	0	0	12.1
Christian	Permanent Method	25	0	0	0	22.2
	Modern Spacing Method	68.8	0	0	0	61.1
	Traditional Spacing Method	6.3	100	0	100	16.7
Other	Permanent Method	0	0	6.7	0	6.7
	Modern Spacing Method	0	0	93.3	0	93.3
	Traditional Spacing Method	0	0	0	0	0
Total	Permanent Method	21.6	13.9	31.4	24.3	23.4
	Modern Spacing Method	55.1	47.2	68.1	50.9	56
	Traditional Spacing Method	23.3	38.9	0.5	24.8	20.6

The utilization of permanent methods was observed to be higher in SC and OBC couples (29 per cent and 26 per cent respectively), while it was lowest among ST couples (15 per cent). (Table 49)

Table 49: Methods Used for Family Planning by Different Castes

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Schedule Castes	Permanent Method	25.5	16.7	40.7	43.6	29.2
	Modern Spacing Method	54.6	46.7	59.3	41	53.1
	Traditional Spacing Method	19.9	36.7	0	15.4	17.7
Schedule Tribes	Permanent Method	21.1	0	10.7	15.6	14.8
	Modern Spacing Method	63.2	100	89.3	53.1	69.1
	Traditional Spacing Method	15.8	0	0	31.3	16
Other Backward Castes	Permanent Method	20.4	15.2	42.6	21.2	25.9
	Modern Spacing Method	53.7	45.5	55.6	61.5	54.9
	Traditional Spacing Method	25.9	39.4	1.9	17.3	19.2
General	Permanent Method	19.1	0	21.8	21.4	19.7
	Modern Spacing Method	55.1	42.9	78.2	48.5	56.2
	Traditional Spacing Method	25.7	57.1	0	30.1	24.1
Total	Permanent Method	21.6	13.9	31.4	24.3	23.4
	Modern Spacing Method	55.1	47.2	68.1	50.9	56
	Traditional Spacing Method	23.3	38.9	0.5	24.8	20.6

Tuberculosis

AWARENESS

Around 55 per cent of the respondents surveyed were aware of TB symptoms (Table 50). The awareness was highest in Rajasthan (91 per cent) and lowest in Telangana (16 per cent).

Respondents from the richest quintile were slightly more aware (58 per cent) than those from poorer quintiles (Table 50), except in Telangana, where a decreasing trend was observed from the poorest (27 per cent) to richest (11 per cent) quintile. As compared to Hindus in Rajasthan and Odisha, Muslims reported higher awareness levels in West Bengal while Christians reported the highest levels in Telangana (Table 50). Households belonging to the ST community presented lower awareness levels as compared to those belonging to the SC and general community (Table 50).

Table 50: TB Awareness among Households

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Across wealth quintile	Poorest	89	27.4	90.6	32.2	56.1
	Poor	85.6	21.3	88.4	27.1	52
	Medium	86.1	15.5	91.7	37.3	54.3
	Rich	89.5	10.9	89.6	43.5	54
	Richest	90.2	10.7	92.5	22.2	58.2
	Overall	87.9	16.3	91.1	32.7	54.9
Across religion	Hindu	87.2	16.3	90.8	32.8	53.5
	Muslim	94.3	16.4	86.4	0	69.9
	Christian	77.3	17.9	0	0	43.1
	Other	0	0	100	0	100
Across ethnicity	Schedule caste	85.1	16.9	94.9	37.1	54.9
	Schedule tribe	87.9	11.1	81	31	41.6
	Other backward caste	89.4	18.6	91.9	24.8	50.1
	General	89.6	16.2	92.5	37.2	62.1

DIAGNOSED CASES

Around two per cent of the sample individuals were reported to be medically diagnosed with TB (Table 51). This prevalence was highest in Telangana (3.5 per cent) and lowest in Odisha (0.5 per cent).

Table 51: Medically Diagnosed Cases of TB

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Diagnosed cases of TB	0.9	3.5	2.7	0.5	2

Higher prevalence of TB was found in the poorest quintile (3.5 per cent) than in the richest quintile (2 per cent). Telangana reported a high prevalence of around 10 per cent in the poorest quintile (Table 52).

The prevalence of TB was observed to be higher among the Hindus (2 per cent) in all the states, except Rajasthan, where the proportion of positive cases was higher in Muslims (Table 52). The maximum number of TB cases (3.4 per cent) were found in the OBCs in all the states, while the general category (0.9 per cent) reported the least number of medically diagnosed cases of TB in all the states (Table 52).

Table 52: Medically Diagnosed Cases of TB among Wealth Quintiles, Religion and Caste

		West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Across Wealth Quintile	Poorest	1.6	10.5	0	0.7	3.5
	Poor	0	3	2.3	0	1.2
	Medium	1.2	2.4	2.8	0	1.6
	Rich	0.7	1.6	3.1	2.2	1.6
	Richest	0.8	2.2	3.1	0	2
Across Religion	Hindu	0.9	3.7	2.5	0.5	2.1
	Muslim	0.9	0	9.1	0	1.6
	Christian	0	3.6	0	0	2
	Other	0	0	0	0	0
	Overall	0.9	3.5	2.7	0.5	2
Across Caste	Schedule caste	1	3.3	1	0	1.8
	Schedule tribe	3	4.3	3.2	0	3.1
	Other backward caste	0	5.4	4.7	0.8	3.4
	General	0.8	1.4	1.1	0.6	0.9
	Overall	0.9	3.5	2.7	0.5	2

TREATMENT SEEKING

All diagnosed cases in West Bengal, Rajasthan and Odisha sought medical treatment for TB, while only 69 per cent of the cases in Telangana did so, showing the large unmet need for treatment in this state (Table 53).

Table 53: Treatment Seeking by Medically Diagnosed TB Cases

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Treatment seeking for TB	100	69	100	100	81.6

Tertiary care hospitals (42 per cent) were found to be the most preferred choice for seeking treatment by diagnosed TB cases in all four states (Table 54). While respondents from West Bengal preferred using government facilities, those in Rajasthan preferred private hospitals and nursing homes.

Table 54: Choice of Healthcare Facility for Seeking Treatment for TB

	West Bengal %	Telangana %	Rajasthan %	Odisha %	Total %
Health post/Sub Centers	14.3	0	0	0	2.5
Primary Health Center/Urban Health Centre	28.6	5	0	0	7.5
District / Sub-district Hospital	0	0	27.3	100	12.5
Government/Tertiary Hospital	57.1	60	9.1	0	42.5
Other Private Hospital / Nursing Home	0	35	27.3	0	25
Private Clinic (OPD based Services)	0	0	27.3	0	7.5
Others	0	0	9.1	0	2.5

Conclusions

The results clearly indicate that the out-of-pocket healthcare spending is worrying because there are still population groups that do not have enough capacity to pay to cover their health expenses, and such expenses could become catastrophic. Results further suggest that personal income and savings meet the bulk of OOPE on health. Since, the burden of expenses does not vary substantially according to variation in income, such expenses can create considerable hardship and financial impoverishment, particularly in poor households. Poor households tend to take loans or sell assets to cover OOPE2 implying more public sector involvement is needed to better redistribute resources. Subsidized or free tertiary healthcare services targeting households with low per-capita income will enable them to utilize these with a lower burden. It emphasizes the importance of establishing intervention mechanisms in order to improve equity in access and payment for health care, protect vulnerable groups against financial risk, and, consequently, reduce the incidence of catastrophic healthcare spending. For this, it is essential to achieve universal health coverage through standardized and improved health service packages for the vulnerable population and implement healthcare campaigns in pockets where the incidence of OOPE is higher.

The awareness of health insurance was also quite low, which ranged from less than one percent to 25 percent for RSBY, which clearly demands intensive Behavior Change Communication (BCC) strategies to create awareness and demand generation for insurance schemes.

The findings also suggest that close to half of the respondents preferred to utilize private health facilities, which suggests that they are willing to pay more for better services. However, it was found that more respondents from the poorer community accessed public health facilities for OPD services. A majority of the respondents preferred public health facilities for IPD, primarily because of lower costs, however, the richer respondents preferred private facilities. Interestingly, people who were enrolled in any insurance schemes opted for public facilities for IPD services. This might be due to the fact the state sponsored insurance services like RSBY or Bhama Shah Insurance scheme do not cover maternity care. In public health facilities, maternity care is provided free of cost. It opens a window of opportunities for insurance companies to introduce community group insurance products to bring down

2 LeiveAXuK.2008, Coping with out-of-pocket health payments: empirical evidence from 15 African countries, Bulletin of the World Health Organization86: 849–56

distribution costs and determine the genuineness of health insurance claims. There is a clear need to create health insurance products that are simple and intelligible to customers, provide coverage to the aged and infirm and those suffering from chronic ailments.

Physical access is a major barrier to both preventive and curative health services. This study shows that the average distance of a facility was 4.3 kilometers, which varied in the different states; in West Bengal the average distance of a health facility was 6.2 kilometers. As physical distance to facilities is a key determinant for access, overcoming this through outreach or better transport, roads and communication networks is important for reaching the disadvantaged and physically isolated groups, such as women and children. Distance remains a greater barrier for women. Furthermore, physical access of services does not necessarily assure utilization since the costs associated with seeking care also preclude uptake, even when services are physically available.

Factsheet

PAHAL DIAGNOSTIC STUDY

Indicators	West Bengal (%)	Telangana (%)	Rajasthan (%)	Odisha (%)	Overall (%)
Socio-Demographic Profile					
Average Household size (Mean ± SD)	4.76±1.69	4.10±1.19	5.76 ±2.42	5.16 ±1.80	4.77±1.80
Ethnicity					
Scheduled Caste	36.0	36.2	24.5	17.5	31.1
Scheduled Tribes	4.1	14.1	15.6	10.5	10.4
OBC	10.6	24.5	36.9	31.2	23.1
Others	49.3	25.2	23	40.9	35.4
Proportion of Household having Pucca house	42.9	74.3	91.3	69.1	66.0
Proportion of BPL households	43.8	49.2	19.8	64.8	45.1
Health Expenditure and Insurance Coverage					
OOPE among urban poor in Pahal Assessment states (%)	76.2	97.2	94.3	81.3	87.2
Proportion of expenses on health in the last 1 month (%)	2.6	6.3	4.8	9.0	5.2
Insurance coverage (%)	23.8	2.8	5.7	18.7	12.8
OOPE among urban poor in Pahal Assessment states (%)	76.2	97.2	94.3	81.3	87.2
Proportion of expenses on health in the last 1 month (%)	2.6	6.3	4.8	9.0	5.2
Community Mobilization					
Proportion of Household participating in community related functions, meetings and other events	9.4	9.3	1.2	2.5	6.8
Proportion of women who are member of any Self-Help Group or Youth club or Mahila Mandal	15.0	8.4	0.7	14.5	10.3
Morbidity Pattern					
Percentage of people fallen sick in last 15 days	16.9	5.7	21.4	19.2	14.9
Proportion of people who fell sick during last 15 days and did not take any treatment	13.2	19.0	4.6	3.8	9.2

Indicators	West Bengal (%)	Telangana (%)	Rajasthan (%)	Odisha (%)	Overall (%)
Percentage of People Seeking Treatment (OPD) from:					
Public Sector Facilities	45.2	27.4	29.8	45.6	38.7
Private Sector Facilities	38.9	51.0	60.0	47.2	48.8
IBM Health Facility	0.0	21.0	2.2	0.0	2.9
Percentage of People Seeking Treatment (IPD) from:					
Public Sector Facilities	73.0	39.1	43.5	77.5	65.9
Private Sector Facilities	25.8	47.8	54.6	21.7	31.1
IBM Health Facility	1.1	13.0	1.9	0.7	3.0
Sources to Meet Healthcare Expenses for Households					
Personal income	81.8	84.7	98.3	87.3	86.4
Household income excluding personal income	36.0	20.3	0.5	13.5	21.0
Savings Loans (Banks/Relatives/ Friends)	9.9	3.2	0.7	0.7	4.6
Contribution from friends/relatives	6.4	7.6	5.4	13.7	7.8
Selling assets/property	0.5	0.5	0.0	0.5	0.4
Insurance coverage	1.2	0.2	0.5	0.5	0.7
Reimbursement from employer	0.1	0.2	0.0	0.2	0.2
Others	0.2	0.0	1.2	0.2	0.3
Maternal and Child Health					
Proportion of women registered for ANC during last pregnancy	99.7	86.8	92.8	99.2	94.1
Proportion of women registered in their first three months of pregnancy	92.8	57.4	62.9	84.6	74.3
Proportion of women had at least 4 ANC check-ups during last pregnancy	73.6	47.7	53.2	71.7	62.6
Proportion of women who had complete ANC done during last visit	42.3	12.5	21.3	23.3	26.5
Proportion of women had institutional delivery	99.0	89.6	98.0	100.0	95.8
Proportion of women breast feed their child with in an hour of birth	59.4	75.2	43.9	80.2	65.4
Exclusive Breastfeeding for atleast 6 months (%)	44.4	36.2	44.9	62.7	45.2
Proportion of children aged 12-23 months who received complete immunization	89.7	66.0	46.8	85.3	74.3
Childhood Morbidity					
Proportion of children who had diarrhea during the last 2 weeks preceding the survey	5.7	0.2	3.7	7.1	3.6
Proportion of Children received ORS Packet Solution for Diarrhea Treatment	61.1	100.0	34.8	68.4	59.0
Proportion of Children who had cough in the last 2 weeks	17.5	1.4	24.2	21.7	13.8

Indicators	West Bengal (%)	Telangana (%)	Rajasthan (%)	Odisha (%)	Overall (%)
Family Planning Methods					
Proportion of Women currently using any FP Methods to avoid pregnancy	37.5	39.1	55.0	51.1	43.2
Unmet need for spacing	10.2	4.8	16.5	7.8	9.3
Unmet need for Limiting	15.4	2.6	34.8	11.7	14.3
Tuberculosis					
Proportion of respondents aware of TB as a disease	87.9	16.3	91.1	32.7	54.9
Respondents who reported 2 acute symptoms of TB-Persistent cough for 2 weeks and Blood while coughing	23.3	2.3	30.4	1.0	13.7
Respondents who reported 2 or more symptoms of TB*	28.3	15.3	34.2	5.2	21.0
Respondents who had 2 acute symptoms of TB -Persistent cough for 2 weeks and reported blood while coughing	9.5	1.0	19.8	0.5	6.8
Respondents who reported Persistent cough for 2 weeks	9.9	1.9	20.3	0.2	7.3
Respondents who reported blood during coughing	20.2	0.7	21.8	0.7	10.6
Proportion of population diagnosed with TB	0.9	3.5	2.7	0.5	2.0
Water, Sanitation and Hygiene (WASH)					
Open Defecation	2.6	3.0	4.2	40.1	9.2
Piped water inside the home	12.1	84.6	80.4	42.4	53.2
Proportion of household using conventional means of cooking fuel**	47.4	12.6	12.6	47.4	28.0

* TB Symptoms: Dry Cough, Persistent cough for 2 weeks, Cough with phlegm, Cough with blood, Persistent Fever, Sweating, Restlessness, Loss of appetite, Tiredness/ Fatigue, Weight loss, Chest Pain
**Conventional means of cooking fuel includes, Wood, Charcoal, Coal, Kerosene, Straw/shrubs/grass, Agricultural crop waste, Dung cake

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Pahal
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