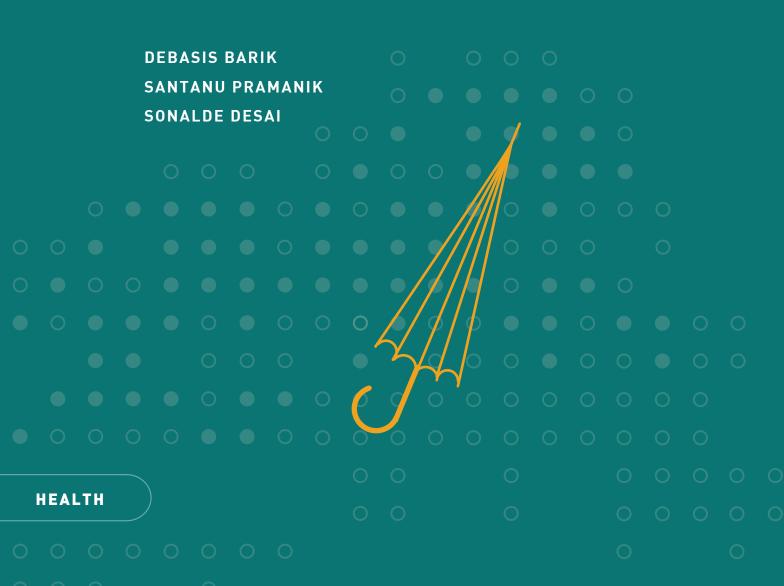


NCAER NATIONAL DATA INNOVATION CENTRE MEASUREMENT BRIEF 2020-02

# Insured but Not Covered: Rising Insurance Coverage Should be Accompanied by Awareness of Entitlements



# Overview and Measurement Challenge

HEALTH INSURANCE COVERAGE, THOUGH far from universal, has increased substantially in recent years. According to the National Family Health Survey (NFHS), the proportion of households having access to health insurance or any other financial assistance mechanism increased from 5 per cent in 2005-06 to 29 per cent in 2015-16. A majority of these households were part of programmes sponsored by either the Central Government or any State government. However, data on out-of-pocket (OOP) health expenditure shows that individuals often do not avail of the benefits of health insurance in spite of having access to health insurance. According to the National Sample Survey (NSS) 71st Round (2014), only 12.6 per cent of the households having health insurance claimed full or partial reimbursement to pay for hospitalisation of an insured household member.

Prior research in the context of developed countries suggests that the effective usage of any health insurance scheme depends, to a large extent, on the knowledge of the terms and conditions of the insurance and awareness about the benefits of the insurance (McCormack, Anderson et al. 2001, Quincy 2012, Paez and Mallery 2014). A few studies in the Asian context have focused on the knowledge and awareness of health insurance schemes and willingness to pay for health insurance among the uninsured (Bawa and Ruchita 2011, Sarwar and Qureshi 2013). However, the understanding of

beneficiaries' knowledge of health insurance and its association with usage in the Indian context is limited. Since a majority of the health insurance beneficiaries in India are covered by government-sponsored health insurance programmes, it becomes particularly important to study the association between knowledge of health insurance and its usage in order to assess the effectiveness of these schemes. The existing surveys covering usage of health insurance, for example, the NSS and NFHS rounds, provide limited scope for identifying the underlying reasons for under-utilisation of the health insurance schemes.

We examined this gap by studying access to health insurance schemes, beneficiaries' knowledge of entitlements, and usage of such schemes during episodes of illness in the Delhi National Capital Region (NCR), using data from the Delhi Metropolitan Area Study (DMAS). DMAS, a flagship study of the NCAER National Data Innovation Centre (NDIC) for conducting methodological experiments in data collection, administered a detailed module on knowledge of enrolled health insurance schemes to a randomly selected sample of 5,255 households in Delhi NCR, covering 27,471 members from these households. Our findings show a striking gap between access to health insurance and knowledge about the benefits of insurance, resulting in lower usage and higher OOP healthcare expenditure.

Health insurance benefits differ considerably by type of insurers (public versus private), type of treatment covered (inpatient versus outpatient), diseases covered, and choice of service providers (empanelled hospitals), among others. Figure 1 illustrates the process through which insured people would

Figure 1: How do people decide on providers when they have access to health insurance?

#### Factors to consider when deciding Is the disease Is the facility Cost of treatment Limit of coverage Prior knowledge of empanelled? covered? insurance benefits and empanelment status of the provider is necessary Ideal process of selection Scenario 1 Scenario 2 Scenario 3 Scenario 4 Does the facility provide the required service? Does the facility accept insurance?

ideally choose the provider during illness. A wrong choice due to lack of knowledge of health insurance may lead to inefficient use of the insurance benefits, thus increasing household OOP expenditure on healthcare.

# **Key Results**

- 1. Health insurance coverage in Delhi NCR is low: Only 24 per cent of the households in Delhi NCR have access to any health insurance scheme, and there is a substantial difference between the figures for rural (16 per cent) and urban (28 per cent) respondents.
- 2. Insured households are not always aware about their entitlements: Even households enrolled in health insurance schemes are often unaware about the benefits of the schemes and do not know where to file their claims, if and when required. A large segment of the insured households possess inadequate or erroneous knowledge about insurance schemes. For example, more than one-third of the beneficiaries of the Bhamashah Swasthya Bima Yojana (BSBY) from Rajasthan were not aware that the scheme also covered pregnancy and delivery-related expenses.
- 3. There are inequalities in knowledge of health insurance schemes: The knowledge about the benefits and entitlements of the existing insurance scheme varies significantly by the age and education level of the respondents. We found that younger and more educated respondents and those having someone in the household with chronic conditions have greater knowledge about their health insurance than their counterparts.
- 4. Lack of knowledge is associated with low usage of health insurance: The lack of knowledge about the scheme among the beneficiaries defeats the purpose of health insurance. This has been reflected in the fact that despite having an active health insurance, the beneficiaries in a majority of the hospitalisation cases did not claim any reimbursement or cashless benefits. Among the BSBY beneficieries who had a higher level of knowledge of health insurance (CKI ≥ 3), 17.8 per cent availed of cashless benefits or reimbursement for in-patient treatment. However, among beneficiaries having a comparatively lower level of knowledge (CKI < 3), only 8.7 per cent availed of cashless benefits or reimbursement for in-patient treatment. The method of constructing the Correct Knowledge Index (CKI) is discussed later in this brief.

### Methodology

#### **DATA**

We use data from the DMAS baseline survey to investigate the insured household's knowledge of health insurance entitlements and its association with usage. The target geographical area for DMAS is Delhi NCR, which comprises 31 districts spread across four states, viz., Haryana (13 districts), Delhi (9 districts), Rajasthan (2 districts), and Uttar Pradesh (7 districts) (National Capital Region Planning Board 2017). Although it may not be apparent from the name, Delhi NCR is a highly diverse region covering the metropolitan areas of Delhi as well as both rural and urban areas of districts in Haryana, Rajasthan, and Uttar Pradesh. The findings are based on a representative sample of 5,255 households from Delhi NCR and 27,471 members from these households.

In the DMAS health module, we included questions to capture the knowledge and utilisation of health insurance as well as overall health expenditure. Besides the existing public and private health insurance schemes, DMAS collected data on other financial assistance mechanisms such as medical reimbursement from employers, medical facilities provided by major public employers like railway hospitals, army hospitals, and hospitals set up by private employers to provide treatment to employees and family members. These schemes have a potential role in reducing private OOP healthcare expenditure. Henceforth, we will refer to these schemes together as 'health insurance'. The survey captured the health insurance participation by the households and identified members enrolled in these schemes. These members were asked if they had received reimbursement for healthcare expenditures during any outpatient or inpatient treatment. The health insurance module included questions on knowledge of the existing health insurance scheme and its coverage. This allows us to match insurance knowledge and utilisation.

Quantifying the extent of correct knowledge is not easy because of the diversity in the scope and coverage of different types of health insurance schemes captured in DMAS. Our analysis of incorrect knowledge of health insurance is limited only to the BSBY scheme of the Government of Rajasthan. We matched the reported benefits with policy entitlements to assess the knowledge gap. The CKI has been constructed as a linear combination of the correct knowledge of six dimensions of the BSBY scheme. The values in the knowledge index range from 0 to 6, where '0' implies 'No Knowledge' or that the respondent did not have correct knowledge of any of the six dimensions. A value of '6' denotes 'Full Knowledge' or that the respondent had correct knowledge of all the six dimensions of their health insurance.

#### Results

#### Health insurance coverage is low and unequally distributed.

The findings suggest that one-fourth of the households in Delhi NCR have access to any health insurance scheme. The rural-urban gap is quite significant, with 28 per cent of the urban residents having health insurance as compared to 16 per cent in rural areas (Figure 2). Interestingly, access to health insurance in rural and urban areas is not uniformly distributed across wealth quintiles (Figure 2). The richest households in the urban areas have a significantly higher coverage than their rural counterparts. In contrast, the poorest households in the urban areas have lower insurance coverage than

their rural counterparts. The lower coverage among the urban poor households indicates that various government-sponsored health insurance programmes are not fully successful in targeting urban households in greater need of health insurance.

#### 2. Knowledge of health insurance entitlements is low.

Although a majority of the health insurance schemes in India usually pay for inpatient treatments with a few exceptions pertaining to critical illnesses, 4 per cent of the beneficiary households were not aware of this (Figure 3). A large portion of the households (38.5 per cent) were not aware of the amount of health insurance premium they were paying; 24 per cent of the households were unaware if there was any maximum coverage limit in the scheme. One-fourth of the beneficiary households did not know if any co-payment was required towards

Figure 2: Access to any health insurance among households of various wealth quintiles by rural-urban residence

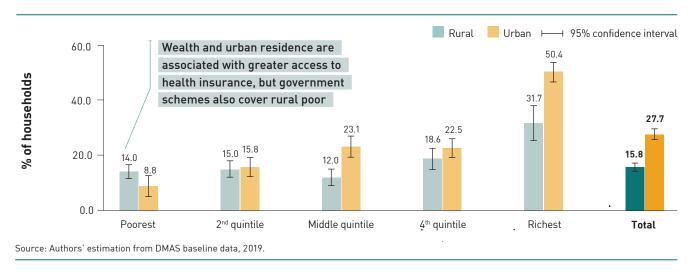
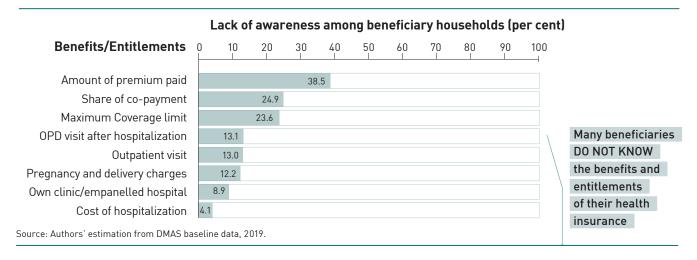


Figure 3: Knowledge gap in benefits and entitlements of health insurance schemes among beneficiaries



- meeting the hospital bill. The fact checking box on Page 6 delineates the level of correct knowledge among the beneficiaries about the various benefits offered under the BSBY health insurance scheme.
- 3. Age, level of education, and the presence of chronic conditions determine the knowledge of health insurance. Knowledge about the benefits and entitlements of the existing insurance schemes among the beneficiaries varies significantly by the respondent's age, education level, and the experience of dealing with chronic illnesses. Knowledge was found to be higher among younger respondents below the age of 25 years (Figure 4). Beneficiaries having secondary or higher level of education possess greater
- knowledge about the benefits of health insurance than respondents having a lower level of education. Beneficiaries from households wherein someone is suffering from a chronic health issue are more knowledgeable than those from households where no one has experienced chronic conditions.
- 4. Less than one-third of the individuals with insurance actually claimed their benefits.

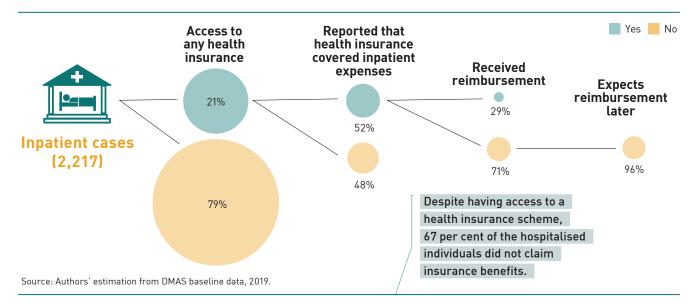
We find significant under-utilisation of the existing health insurance schemes among the beneficiary households. Among the hospitalised cases that we studied, about onefifth had access to some form of health insurance (Figure 5). However, despite having access to a health insurance

Figure 4: Knowledge about BSBY benefits varies by age, education and health condition

		CORRECT KNOWLEDGE OF BSBY				
		Mean CK	l (0-6)#	p value from t-test®	SD	Sample size
SEX	Male	3.56		0.3442	1.36	197
	Female	3.41			1.34	116
AGE	Less than 25 years	3.82		0.0603*	1.32	55
	25 years & above	3.44			1.35	258
EDUCATION	Less than Secondary	3.41		0.0711*	1.38	202
	Secondary & above	3.69			1.27	111
ANY MEMBER WITH CHRONIC MORBIDITY	No	3.22		0.005***	1.23	110
	Yes	3.67			1.39	203
PLACE OF RESIDENCE	Rural	3.52		0.7179	1.39	247
	Urban	3.45			1.19	66

Note: \*p<0.1 \*\*\* p<0.01 @testing the difference of means "Correct knowledge index Source: Authors' estimation from DMAS baseline data, 2019.

Figure 5: Utilisation of health insurance for inpatient treatment



Fact Checking: Incorrect Knowledge/No Knowledge of Benefits and Entitlements among Beneficiaries of Bhamashah Swasthya Bima Yojana (BSBY) of Rajasthan

BSBY is a popular health insurance scheme introduced by the Government of Rajasthan in 2014-15, which provides cashless benefits to the beneficiaries covered under the National Food Security Act or Rashtriya Swasthya Bima Yojana. In order to assess the knowledge of the beneficiary households about the benefits and coverage of the scheme, we matched their reported knowledge with the publicly available policy entitlement document. The findings indicate a wide knowledge gap among the BSBY beneficiaries (Figure 6).

Figure 6: BSBY beneficiaries lack knowledge of their entitlements and what knowledge they have is often incorrect Wrong Knowledge No Knowledge Share of households (per cent) Benefits/Entitlements 0 60 70 OPD visit after hospitalization 47.5 14.1 Maximum Coverage limit 33.2 8.3 8.5 Pregnancy and delivery charges 25.7 Share of co-payment 9.1 10.8 Amount of premium paid 9.5 9.1

Source: Authors' estimation from DMAS baseline data, 2019.

Cost of hospitalization

# The questions asked during the survey and the concomitant responses are as follows:

#### 1. Does BSBY cover pregnancy and delivery costs?

Response: About 26 per cent of the respondents answered 'No', and another 9 per cent responded 'Don't know'.

Fact Check: BSBY pays for pregnancy and delivery-related expenses.

#### 2. Is there a maximum limit to be covered under BSBY in a year?

**Response:** About one-third of the respondents reported that there was no such limit under BSBY and another 8 per cent answered 'Don't know'.

Fact Check: The BSBY has a maximum coverage limit of up to Rs 30,000 annually for general illnesses and Rs 300,000 for critical illnesses.

#### 3. Does BSBY cover OPD visits after hospitalisation?

**Response:** About 62 per cent of the respondents reported that BSBY does not cover OPD expenses after hospitalisation.

Fact Check: BSBY covers OPD expenses for 15 days after hospitalisation.

scheme, 67 per cent of the hospitalised individuals did not claim the insurance benefits. Among those who did not receive any reimbursement, 96 per cent did not expect any reimbursement in future. The low usage of health insurance defeats the purpose of reduced OOP health expenditure in the presence of health insurance.

# **Policy Lessons**

In recent years, the Government of India has made substantial efforts to increase access to health insurance and the proportion of households enrolled in an insurance scheme has increased over time. However, access to insurance is not synonymous with access to coverage. A vast majority of the insured fail to utilise the benefits extended by health insurance schemes. This may lead to higher OOP for the households even if they have access to health insurance. Our findings suggest that lack of knowledge about the benefits and entitlements among the beneficiaries could be one of the main reasons behind under-utilisation of health insurance schemes towards payment for treatment.

This is not unique to India. Studies evaluating the implementation of the 2010 Affordable Care Act (ACA) in the USA have also reported lack of awareness about the coverage and services offered by the schemes as one of the major hindrances in accessing benefits (Paez and Mallery 2014, Molina and Briggs-Malonson 2017). This highlights the importance of ensuring that individuals are better informed about their rights as beneficiaries of insurance schemes. In addition to lack of knowledge regarding the types and limits of insurance coverage, individuals are often unaware of the diseases covered in their insurance policies. About half (48 per cent)

of the hospitalised households with health insurance reported that the insurance did not cover their hospitalisation expenses and 67 per cent did not make a reimbursement claim even when the need arose. It seems that in a majority of the cases, the beneficiary households either had no information about the diseases covered under the scheme and/or the list of in-network hospitals which accept the health insurance cards, or they did not follow the required processes to claim the benefits. The list of diseases covered and list of in-network hospitals are usually uploaded on the insurance website of government sponsored-health insurance schemes, but the beneficiaries rarely visit the websites to obtain such information. Sometimes, they find it difficult to understand various concepts such as co-payment and deductibles. Therefore, it is important to use plain language to describe the benefits and coverage of insurance schemes to the beneficiaries. If insurance cards are accompanied by simply and clearly written booklets describing the benefits and the process for reimbursement or cashless coverage in local language, it may help make the insurance programmes more effective.

Older and less educated insured members are the least likely to know and understand insurance benefits. Their insurance usage can be enhanced by appointing "navigators", who can assist the beneficiaries in choosing an in-network hospital and guide them while making and settling their claims. The navigators can be incentivised by linking their performance to the usage of health insurance for beneficiaries' treatment. Effective knowledge among the beneficiaries about the different benefits and entitlements of insurance schemes may help create a demand for better treatment and lower OOP expenditure on health by the population in the long run.

#### **FURTHER READING:**

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Measurement Brief Editor: Anupma Mehta

**Suggested citation:** Barik, Debasis, Santanu Pramanik and Sonalde Desai (2020). "Insured but Not Covered: Rising Insurance Coverage Should be Accompanied by Awareness of Entitlements", Measurement Brief No. 2020-2, New Delhi: NCAER National Data Innovation Centre.

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- (1) To pilot innovative data collection methods and mainstream successful pilots into larger data collection efforts;
- (2) To impart formal and informal training to a new generation of data scientists; and
- (3) To serve as a resource for data stakeholders, including Government data agencies and ministries.

NDIC is experimenting with survey instruments and modes of data collection to address shortcomings in existing approaches. Other capacity building activities that enable NDIC to serve as a key partner in India's evolving data infrastructure include regular workshops and lectures addressing critical issues related to statistical data collection, and an annual data collectors' conference.

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NCAER is grateful to the Bill & Melinda Gates Foundation for generous financial support for setting up the NCAER National Data Innovation Centre.

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