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Publicly Funded Health Insurance Schemes and Inequalities in Health Insurance Coverage for Inpatient Care in India

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Abstract

India, known for its low government spending on health, has been considering Publicly Funded Health Insurance (PFHI) as a mechanism to improve access to inpatient care and reduce out-of-pocket expenditure (OOPE) since 2008. Despite these and other health financing reforms, the country remains among the world's highest OOPE countries. In 2018, the government of India revamped and relaunched the existing PFHI, aiming to cover 500 million beneficiaries from the bottom 40 per cent of the Indian population. This study aims to understand the coverage of current PFHI schemes and their contribution to providing health security coverage for vulnerable sections of the country. The nationally representative NFHS-5 (2019-21) data on health insurance participation were used for the study. This information was available for 724,115 women aged 15-49 years and 101,839 men aged 15-54 years who participated in this survey. Results indicate that PFHI coverage was higher among socioeconomically disadvantaged groups and was associated with lower socioeconomic inequality in health insurance coverage in several states. However, the study does not assess whether such coverage translates into financial protection against healthcare expenditures. Further, states with higher PFHI coverage tended to exhibit lower pro-rich inequality in health insurance coverage. A substantial proportion of marginalised population was covered under PFHI schemes. Addressing the interstate disparities in implementation is seen as a key challenge for PFHI in attaining the 500 million target beneficiaries in the near future.

Keywords: PMJAY, Out of Pocket Expenditure, Publicly Funded Health Insurance, Health security coverage.

1. Introduction

India's government spending on health in the last two decades has been hovering around one per cent of GDP, and hence the country has always remained in the small set of countries with the highest out-of-pocket expenditure (OOPE) on health in the world (World Health Organization 2021). The National Health Accounts (NHA) estimates OOPE as a share of total health expenditure, and it was 69 per cent in 2004, 64 per cent in 2014, 62 per cent in 2015, and 48 per cent in 2018-19 (National Health Systems Resource Centre, 2022). Even though there has been a consistent decline in OOPE in recent decades, about half of the total health expenditure is still OOPE, whose consequences on Indian households are well documented. One out of every six households in the country was noted to have OOPE on health greater than 10 per cent of household expenditure, and one out of every eight households has an OOPE on health greater than 25 per cent of the household's non-food expenditures (Selvaraj et al. 2022).

The government of India has been experimenting with various strategies to improve risk pooling schemes to counter OOPE in inpatient care and to provide pathways to Universal Health Coverage (UHC). Coverage data indicate that 86 per cent and 84 per cent of the population in rural and urban areas respectively lack access to health expenditure coverage schemes (Government of India, 2019). Of the 15 per cent of the population with such health security cover, the share of the

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population covered through Publicly Funded Health Insurance (PFHI) was 91 per cent in rural areas and 47 per cent in urban areas YEAR. Although individual state governments were experimenting with their own PFHIs, the major push for the same came through the Rashtriya Swasthya Bima Yojana (RSBY) scheme, launched by the Government of India in 2008, which aimed to protect Below Poverty Line (BPL) families from catastrophic hospital expenditures (Devadasan, N. and Swarup, A., 2008). Several studies in India have evaluated the barriers to enrolment, implementation and patient satisfaction in RSBY and it was reported that households enrolled in RSBY were still having OOP health expenditures. Evidence suggests that the existing infrastructure of publicly sponsored health insurance schemes such as RSBY has failed to manage or reduce OOP health expenditures (Devadasan et al., 2013; Palacios et al., 2011; Prinja et al., 2017; Rajasekhar et al., 2011; Rathi et al., 2012).

Some state governments have launched their own PFHI schemes such as Bhamashah Swasthya Bima Yojana (BSBY) in Rajasthan, Karunya Health Scheme in Kerala, Mahatma Jyotiba Phule Jan Arogya Yojana in Maharashtra, Mukhyamantri Amrutum Yojana in Gujarat, and Rajiv Aarogyasri in Andhra Pradesh, to broaden insurance coverage and reduce the burden of OOP health expenditures. These major state-run PFHI schemes cover families below the poverty line. There has been a mixed response to the effectiveness of state-specific schemes. A few studies have documented their poor performance in improving financial protection, while others have highlighted the effectiveness of state PFHI schemes (Dhanaraj, 2016; Fan et al., 2012; Garg et al., 2019; Rao et al., 2014). In any case, when the number of persons covered under PFHI increased from 189 million in 2010-11 to 357 million in 2018-19, the number insured through other health insurance schemes increased from 64 million to 115 million during the same period (Hooda, 2020).

The National Health Policy, 2017 streamlined PFHI considering its additional capacity to involve the private healthcare sector in delivering healthcare services for the poor. According to the policy prescription, the critical gaps in public health services could be filled by "strategic purchasing" of need-based inpatient care services from non-governmental, not-for-profit and for-profit sectors, through the PFHI mechanism (Ministry of Health and Family Welfare, Government of India, 2017). In accordance with this, the Government of India replaced RSBY with the 'Ayushman Bharat - Pradhan Mantri Jan Arogaya Yojana' (AB-PMJAY) in 2018. The AB-PMJAY/PMJAY, perceived as the largest health assurance scheme in the world, aims to provide health cover for secondary and tertiary care hospitalisation to over 100 million poor and vulnerable families (approximately 50 million beneficiaries) who form the bottom 40 per cent of the Indian population (National Health Authority, 2019).

When compared with RSBY, the salient features in PMJAY include: (1) the sum insured per family per annum was raised from INR. 30,000/- to INR 5,00,000/-, (2) no limits in family size, (3) convergence between PFHI from the Central government and State governments and (4) benefits portable across India (National Health Authority, 2022a). Four years after the initiation of PMJAY, all states and union territories except Delhi, Odisha and West Bengal have implemented this scheme, covering approximately 195 million individuals (National Health Authority, 2022b). Bigger states such as Madhya Pradesh and Uttar Pradesh have the highest share of PMJAY beneficiaries. In contrast, Goa, Tamil Nadu and the north-eastern states have the lowest beneficiary share.

There is a need to understand the role of existing PFHI, including PMJAY, in providing health security coverage in the country. Monitoring of the same is essential as public policies consider them a pathway for India's efforts to achieve UHC and to attain Sustainable Development Goals (SDGs) related to financial risk protection while needing medical care. In this context, the study examines the contribution of PFHI to overall population access to health security coverage and to interstate disparities in the implementation of the scheme. This analysis is important because there is hardly any national-level analysis on the outreach and targeting in this flagship programme of the Government of India.

II. Data and Methods

Data

Data from the fifth round of the National Family Health Survey (NFHS-5 (2019-21), were used for the analysis. It conducted under the aegis of the Ministry of Health & Family Welfare (MoHFW), covering 707 districts from all 29 states and eight union territories. The primary objective of NFHS surveys has been to provide reliable national and subnational-level information on health and family welfare in India. The NFHS-5 covered a total sample of 636,699 households, 724,115 women aged 15-49 years and 101,839 men aged 15-54 years. Information on health insurance coverage reported by men and women interviewed was utilised to provide an updated picture of the contribution of India's flagship scheme for universalising inpatient care.

Variables

In this study, health insurance coverage refers to enrolment in any health insurance or health expenditure coverage scheme reported in NFHS-5. PFHI coverage refers to enrolment in publicly funded health insurance schemes including State Health Insurance Schemes and RSBY/PMJAY. Health security coverage for inpatient care refers to access to schemes that potentially provide financial coverage for hospitalisation expenses. Financial protection refers to protection against catastrophic health expenditure and out-of-pocket payments and is not directly measured in this analysis.

The response to the question "Are you covered by any health scheme or any health insurance?" in the women's and men's questionnaires in NFHS-5 was used to ascertain the health security cover for inpatient care among these age groups. Respondents reporting "yes" were further asked about the type of health scheme or insurance that they were covered under. This included Employee's State Insurance Schemes (ESIS), Central Government Health Scheme (CGHS), State Health Insurance Scheme, Rashtriya Swasthya Bima Yojana (RSBY), Community Health Insurance Programme, Employer-Sponsored Other health insurance, medical reimbursement from an employer and other privately purchased commercial health insurance.

In this analysis, respondents were considered covered under Publicly Financed Health Insurance (PFHI) if they reported enrolment in either a State Health Insurance Scheme or RSBY. The Government of India strengthened and relaunched its publicly financed health insurance programme in September 2018 under Ayushman Bharat–Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), replacing RSBY as the flagship national PFHI programme. Because NFHS-5 (2019–21) overlapped with the transition period from RSBY to PMJAY and the survey continued to record RSBY as a response category, respondents may have reported coverage under either programme. Furthermore, in districts surveyed during the early phase of NFHS-5, the one-year reference period for insurance coverage could overlap with both the pre-PMJAY and post-PMJAY periods. Therefore, the present analysis focuses on PFHI coverage as a broader category rather than distinguishing between RSBY and PMJAY beneficiaries. Nevertheless, some respondents may not have been fully aware of the transition from RSBY to PMJAY, which could have led to some misclassification. Consequently, the findings should be interpreted as estimates of PFHI coverage rather than programme-specific estimates of PMJAY enrolment.

The PFHI coverage was examined across the following key variables: (1) age of the respondent (15-34 years/ 35 years and above), (2) place of residence (urban/ rural), (3) social groups (Schedule Castes (SC)/ Schedule Tribes (ST)/ Other Backward Classes (OBCs)/ Others), household asset-based wealth quintiles, and state category (EAG/ Non-EAG). The wealth index is a composite measure of the cumulative living standard of the respondent's household. The wealth index is calculated using easy-to-collect data on a household's ownership of selected assets including a television, a bicycle, a car and housing utilities such as sources of drinking water, toilet facilities and flooring materials. Principal component analysis was used to derive scores by categorising wealth

status into five quintiles (poorest, poorer, middle, richer and richest). The state-specific wealth quintiles provided in the NFHS-5 dataset were used in this analysis as states played the primary role in implementing PFHI.

The socioeconomically backward states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttaranchal and Uttar Pradesh are termed Empowered Action Group (EAG) states. These EAG states, along with Assam, account for almost 50 per cent of India's population and lag behind in social and health indicators. In this study, we categorised states into two groups: EAG states (including Assam) and Non-EAG states.

Methods

Univariate analysis was conducted to examine the relationship between health insurance coverage and selected background characteristics. The following three insurance indicators were computed to analyse subgroup and regional-level variations: i) Overall health insurance coverage, ii) PFHI coverage and iii) Share of PFHI out of overall health insurance.

$$Share\ of\ public\ health\ insurance = \frac{Respondents\ covered\ under\ PFHI\ scheme}{Respondents\ covered\ under\ any\ health\ insurance\ including\ PFHI} * 100$$

Furthermore, state-wise wealth-based inequality in health insurance coverage was quantified using the concentration index (CI), with wealth quintiles serving as a socio-economic indicator and the binary outcome being health insurance coverage (PFHI schemes with and without PFHI schemes). The concentration index is twice the area between the concentration curve and the line of equality. The value of CI varies from -1 to +1, where a positive value indicates a pro-rich distribution and a negative value depicts a pro-poor distribution. The value zero of CI means no inequality exists. Mathematically, the CI is written as:

$$C = \frac{2}{\mu} cov(y_i, R_i)$$

Where, C is the concentration index, y_i is the index of the outcome variable, μ is the mean of the outcome variable and R is the fractional rank of the i^{th} individual in the distribution of socio-economic status (state-specific wealth factor score) (O'Donnell et al. 2007). All analyses were conducted in Stata v17.0.

As primary objective of this study was to document the extent of PFHI coverage and socioeconomic inequalities in participation across Indian states. Therefore, the analysis was limited to descriptive statistics and concentration indices which are well-suited for assessing population-level coverage patterns and equity in distribution. The study did not seek to identify determinants of PFHI enrolment after controlling for confounding factors. Future research may employ multivariable regression and decomposition approaches to examine factors associated with PFHI participation while accounting for individual, household and contextual characteristics.

III. Results

Health Insurance coverage

The coverage of health insurance schemes among Indian women (15-49 years) and men (15-54 years) by selected background characteristics is shown in Table 1. Health insurance coverage was marginally higher in males (34%) than in females (30%). The coverage was higher in the middle ages (35+ years) among both women and men. Around one-third of respondents from rural areas had health insurance and among social groups STs had the highest coverage. In contrast, individuals in other social groups had the lowest health insurance coverage. The coverage of health insurance

among men increased with the increase in household wealth quintile. Additionally, women in EAG and nearly all non-EAG states had almost equal health insurance coverage, while around 36 per cent of men in EAG states were covered.

PFHI Coverage

One out of every five individuals in the examined age groups was covered under the PFHI. The coverage level is marginally higher in men (21%) than in women (19%). At the same time, the share of PFHI among total health insurance was slightly higher among females (66%) than among males (62%). Together, these suggest the potential of the PFHI to bridge gaps in health insurance coverage between males and females (Table 1).

Interstate variation in PFHI implementation

As mentioned, it is the state governments that play a pivotal role in implementing the PFHI, including the PMJAY or the PMJAY amalgamated state scheme. In reality, according to the scheme design, coverage is expected to be higher in states with a higher share of the population meeting the deprivation criteria. However, the intensity with which these schemes are implemented across states also varies. Hence, access to PFHI depends on the state's commitment to it.

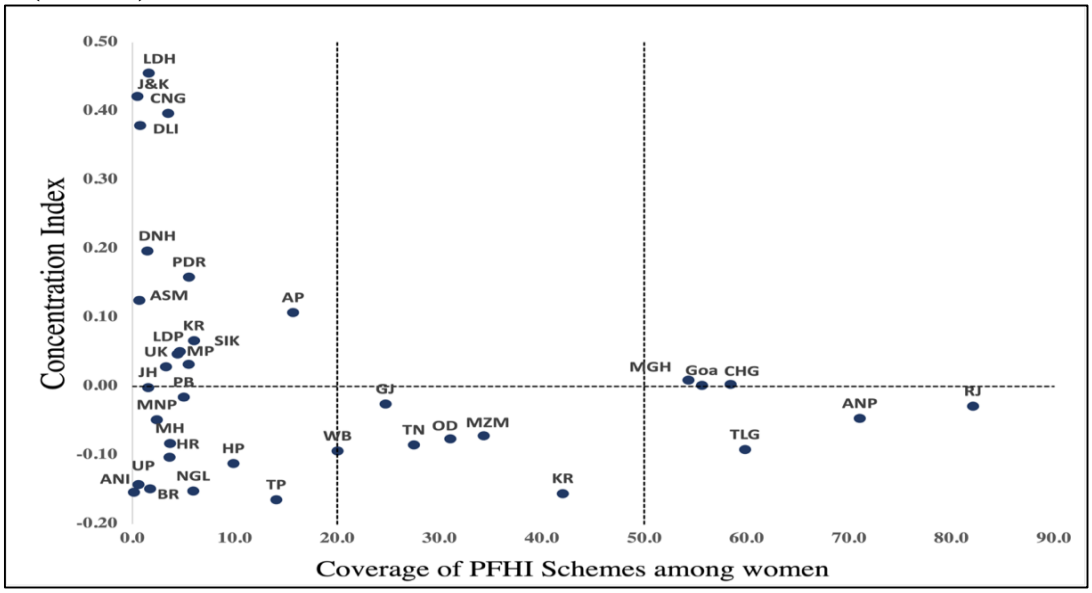
Table 1: Distribution and coverage of health insurance schemes in India by selected characteristics, NFHS-5 (2019-21)

Background characteristics	Women				Men			
	Sample N (%)	Distribution of health insurance	Coverage of health insurance	Proportion covered under PFHI schemes	Sample N (%)	Distribution	Coverage	Proportion covered under PFHI schemes
Page group[1]								
15-35	459512 (63.5)	56.3	26.4	17.1	58073 (57)	51.4	30.6	19.1
>35	264603 (36.5)	43.7	35.6	22.9	43766 (43)	48.6	38.3	23.2
Place of residence								
Urban	235279 (32.5)	29.2	26.8	15.8	35837 (35.2)	31.9	30.7	17.3
Rural	488836 (67.5)	70.8	31.2	20.9	66002 (64.8)	68.1	35.6	22.8
Social groups[2]								
SCs	158483 (21.9)	22.4	30.5	20.0	20548 (20.2)	20.6	34.7	22.0
STs	67263 (9.3)	11.7	37.6	25.3	9112 (9)	10.4	39.5	22.9
OBCs	310783 (42.9)	44.3	30.7	20.9	42589 (41.8)	45.0	36.4	24.3
Others	187586 (25.9)	21.6	24.8	13.7	29590 (29.1)	24.0	28.0	14.4
Wealth Quintiles[3]								
Poorest	133973 (18.5)	16.7	26.8	20.6	16995 (16.7)	17.3	27.6	22.3
Poor	144813 (20)	20.7	30.8	20.8	20051 (19.7)	20.1	32.0	21.7
Middle	148616 (20.5)	22.2	32.3	20.6	21692 (21.3)	21.4	37.3	23.0
Richer	150680 (20.8)	21.6	30.9	18.9	22695 (22.3)	21.3	37.4	22.7
Richest	146032 (20.2)	18.8	27.8	15.4	20405 (20)	19.9	33.5	14.9
State category[4]								
EAG States	354177 (48.9)	48.2	30.2	21.8	32432.57 (31.9)	28.2	35.7	24.5
Non-EAG States	369938 (51.1)	51.8	29.4	16.5	69406.43 (68.2)	71.8	30.0	13.0
Total	724115	100	29.8	19.2	101839 (100.0)	100.0	33.9	20.9

Note: Source- Authors' calculation based on data from NFHS-5, 2019-21. 1 - Women 15-49 years; Men: 15-54 years; 2 - SC – Schedule Castes; ST – Schedule Tribes; OBC – Other Backward Class; 3 - State-specific wealth quintiles; 4 - EAG – Empowered Action Group (including Assam).

Figure 1 illustrates state-wise coverage and concentration indices for PFHI schemes among women aged 15-49. The bottom-left and bottom-right quadrants represent the low and high coverage of PFHI schemes respectively and both quadrants also depict pro-poor inequality.

Figure 1: State-wise coverage and concentration of PFHI schemes among women aged 15-49 years, NFHS-5 (2019-20)



In contrast, the top-right and top-left sections show pro-rich inequality. Besides high coverage of PFHI schemes, states such as Rajasthan, Andhra Pradesh, Telangana and Chhattisgarh also have pro-poor inequality. Coverage of PFHI schemes was below 40 per cent in three-fourths of Indian states and about 14 states fell below the line of equality, indicating the pro-poor nature of PFHI coverage in these states. The coverage of PFHI schemes was proportionate among poor and rich women in Goa, Meghalaya and Chhattisgarh. The highest inequality was in states such as Assam, Arunachal Pradesh, Karnataka, Uttarakhand and Madhya Pradesh, where the coverage of PFHI was more among affluent households.

Similarly, *Appendix F1* depicts state-wise coverage and concentration index of PFHI schemes among men aged 15-54. In line with the coverage and distribution of PFHI schemes among women, similar results were also for men in Rajasthan, Andhra Pradesh and Telangana. Additionally, states such as Sikkim, Assam, Jharkhand, Arunachal Pradesh and Punjab had high coverage of PFHI schemes among affluent individuals.

PFHI induced equalities in health security coverage

As we know, non-PFHI-related health security coverage for inpatient care is mostly available to those employed in the formal sector and those with the capacity to pay for private voluntary health insurance. In this context, this section examines the contribution of the pro-poor PFHI in bridging inequalities and providing health security coverage to the respective population. Figure 2 illustrates the concentration index for variation in health security coverage inequality with and without PFHI schemes among women (15-49 years) in all Indian states. Substantial reductions in inequalities were observed in Kerala, Telangana, Odisha, Mizoram, West Bengal, Tamil Nadu, Andhra Pradesh and Rajasthan. In states without PFHI schemes, health insurance coverage was concentrated among rich women, whereas in states with PFHI schemes, it was high among poor women. Tripura, Bihar, Nagaland and Uttar Pradesh had no changes in CI, indicating a favouring of the poor. Similarly, no changes were observed in Delhi, also indicating the null effect of PFHI schemes on coverage of health insurance among the poor.

Figure 3 illustrates the variation in concentration indices for health insurance coverage with and without PHFI among men (15-54 years) in all Indian states. The major variation in CI was observed in Odisha, Kerala and Telangana where PFHI played an instrumental role in shifting health security coverage from a pro-rich to a pro-poor one. However, there were states and UTs like

Haryana, Maharashtra, Himachal Pradesh, Arunachal Pradesh, Punjab, Sikkim and Delhi where the inequality in insurance coverage remained in favour of rich men despite the availability of PFHI schemes. In Meghalaya, with PFHI schemes there was no inequality; however, without PFHI schemes, pro-poor inequality existed among both women and men.

Figure 2: Concentration index for health security cover for inpatient care with PFHI and without PFHI across Indian states, Women, 2019-21

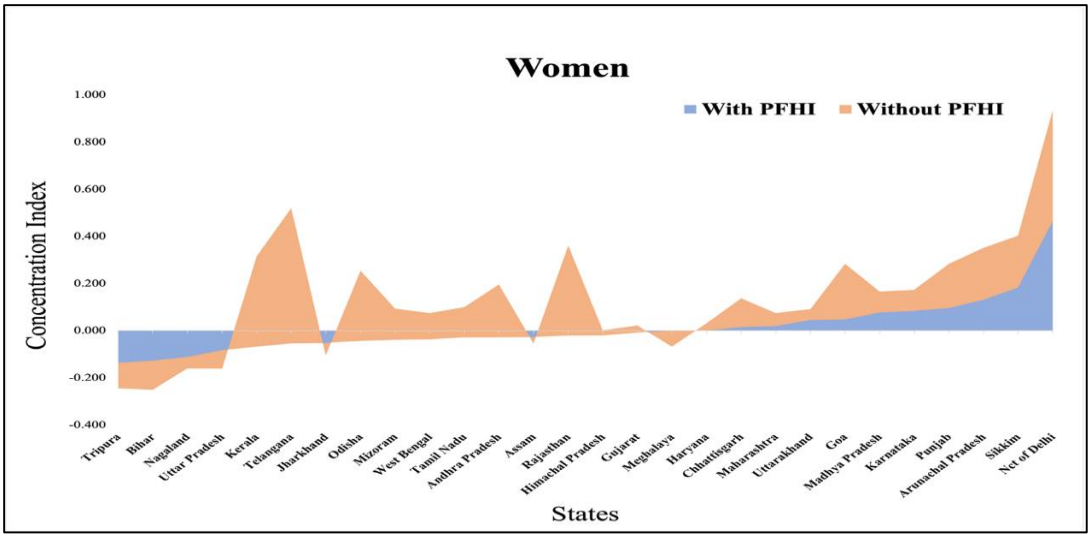
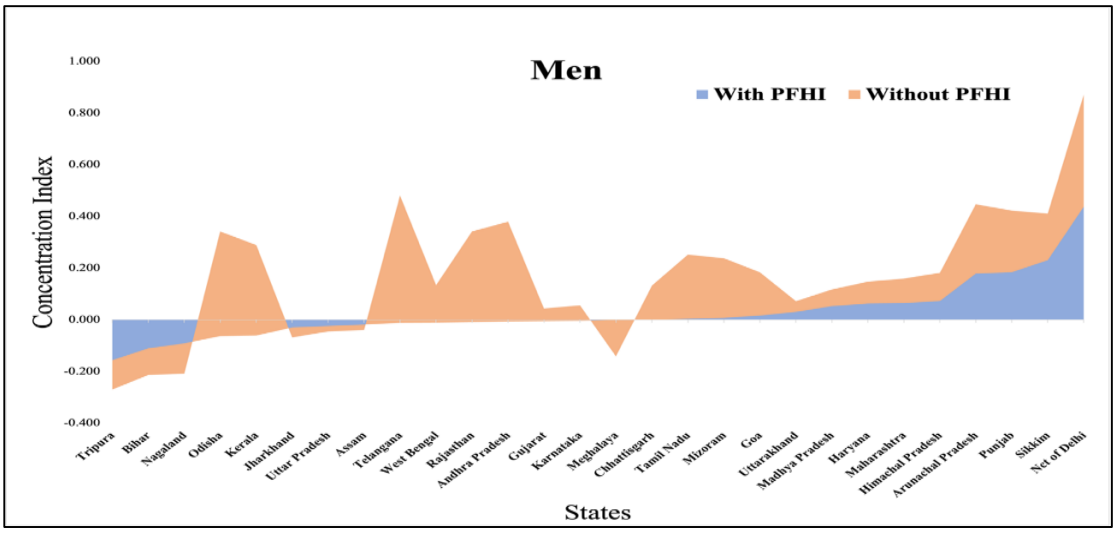


Figure 3: Concentration index for health security cover for inpatient care with PFHI and without PFHI across Indian states, Men, 2019-21



Discussion and conclusion

Results show that one-fifth of the male and female population in the age group examined were covered under the PFHI. The comparatively more vulnerable sub-groups in the country such as women, low-income groups and the poorer, would not have had the observed health insurance coverage levels in the absence of these PFHIs. The coverage needs to be enhanced considerably to meet the programme target as the latest available figure shows that over 195 million PFHI health cards have been issued (National Health Authority, 2022). A part of this gap in the target could be attributed to the fact that the distribution of the health cards associated with PFHI were in the initiation stage at the time of Phase-I (June 2019 to January 2020) of the NFHS-5 used here for

analysis and due to acceleration in the distribution of the same in Phase-II (January 2020 to April 2021), which was immediately after wave 1 of COVID-19. Further, two Indian states, Orissa (40 per cent) and West Bengal (17 per cent), have their own PFHI that is independent of PMJAY whose coverage is not reflected in the PMJAY data available from NFHS-5.

Rajasthan is the best-performing state in both coverages of PFHI schemes and its concentration among poor individuals. There is positive evidence from the government records and earlier literature that shows the success of these PFHI schemes in Rajasthan (Kulshreshtha et al., 2018 and Prinja et al., 2017). Similarly, Andhra Pradesh, Telangana, Chhattisgarh and Goa are better-performing states in terms of PFHI coverage and concentration among the poor. State-run health insurance schemes such as 'Rajiv Aarogyasri Health Insurance Scheme' (RAS) in Andhra Pradesh, 'Aarogyasri Health Scheme' in Telangana, 'Mukhyamantri Swasthya Bima Yojana' (MSBY) in Chhattisgarh, and 'Deen Dayal Swasthya Seva' Yojana in Goa along with RSBY have resulted in high performance in comparison with other states (Nandi and Schneider 2020a and Yellaiah 2013). Tripura and Kerala are also better-performing states where the concentration of PFHI schemes is higher among poor individuals compared with other states. The Tripura Health Assurance Scheme was launched to provide financial support to individuals living below the poverty line. Similarly, the Karunya Arogya Suraksha Padhathi (KASP) in Kerala is a convergence of all central and state government-run insurance schemes, providing health coverage to poor and vulnerable families.

Another major issue is the poor targeting of the PFHI, which is primarily designed to provide healthcare for the poor. The study indicates low coverage and high concentration of PFHI schemes among rich individuals in states such as Assam, Sikkim, Arunachal Pradesh, Karnataka and Delhi. However, more than 50 per cent of women and men were covered by any health insurance schemes in Assam where the uptake of PFHI schemes was negligible. In Jharkhand as well total insurance coverage was high, but only around 2 per cent of individuals had PFHI schemes. This is primarily a data limitation issue as most respondents in Assam and Jharkhand did not report the type of health insurance scheme in NFHS-5 (IIPS and ICF, 2021).

The analysis demonstrates the critical role of state governments in determining the success of centrally sponsored health insurance programmes as they are primarily responsible for implementation, delivery and monitoring. Considerable interstate variation in PFHI coverage reflects differences in administrative capacity, political prioritisation, beneficiary identification systems, awareness generation and the integration of state-sponsored insurance programmes with PMJAY. Coverage remained particularly low in populous states such as Uttar Pradesh, Bihar and Madhya Pradesh, indicating persistent challenges in expanding coverage among eligible populations.

Indian states also differ in their ability to ensure equitable distribution of PFHI benefits. Rajasthan, Andhra Pradesh, Telangana, Kerala and Chhattisgarh demonstrated relatively high PFHI participation coverage and lower socioeconomic inequality. These states had prior experience implementing large-scale state-sponsored health insurance programmes which may have facilitated smoother implementation and broader outreach among vulnerable population. Conversely, lower coverage and pro-rich concentration observed in states such as Assam, Sikkim, Arunachal Pradesh and Punjab may reflect challenges in beneficiary identification, enrolment outreach, awareness generation and access to empanelled healthcare facilities. Similar patterns have been documented in studies examining the governance and implementation of publicly funded health insurance programmes in India (Garg et al., 2024; Hooda 2020 & Nandi and Schneider, 2020b).

At the same time, contextual factors should be considered when interpreting concentration indices. In north-eastern states, a substantial proportion of tribal population is eligible for PFHI enrolment irrespective of economic status as per programme design (National Health Authority, 2019). Consequently, concentration indices may not fully capture programme targeting among socially vulnerable groups. Ensuring that the most disadvantaged households within the eligible population are effectively enrolled remains an important implementation challenge.

The present study examines enrolment in publicly funded health insurance schemes rather than actual utilisation of healthcare services or protection against out-of-pocket expenditure. Therefore, the findings should be interpreted as evidence on coverage and distribution of insurance schemes rather than their effectiveness in improving financial protection. Future studies linking insurance enrolment with hospitalisation, healthcare utilisation and expenditure data are required to assess the extent to which PFHI schemes contribute to financial risk protection and universal health coverage. Another limitation of the study is that it does not investigate the determinants of PFHI enrolment using multivariable analytical techniques. Consequently, the observed associations should not be interpreted as evidence of causal relationships between socioeconomic characteristics and PFHI participation.

Due to data constraints, the analysis is restricted to understanding the coverage or enrolment of the poor and those eligible for the PFHI. More focused studies are required to understand how participation in PFHI has contributed to household actual financial security, particularly for those who have availed inpatient care. This is because mere enrollment in the scheme is unlikely to ensure universal access to inpatient care services, especially in medically underserved areas (Garg et al., 2022; Malani et al., 2021). In these areas, there is a need to attract/engage more not-for-profit and for-profit sectors, along with developing sustainable mechanisms to enable strategic purchasing of needed inpatient care for the overall success of PMJAY in India.

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Appendix

F1: State-wise coverage and concentration of PFHI schemes among men aged 15-54 years, NFHS-5 (2019-21)

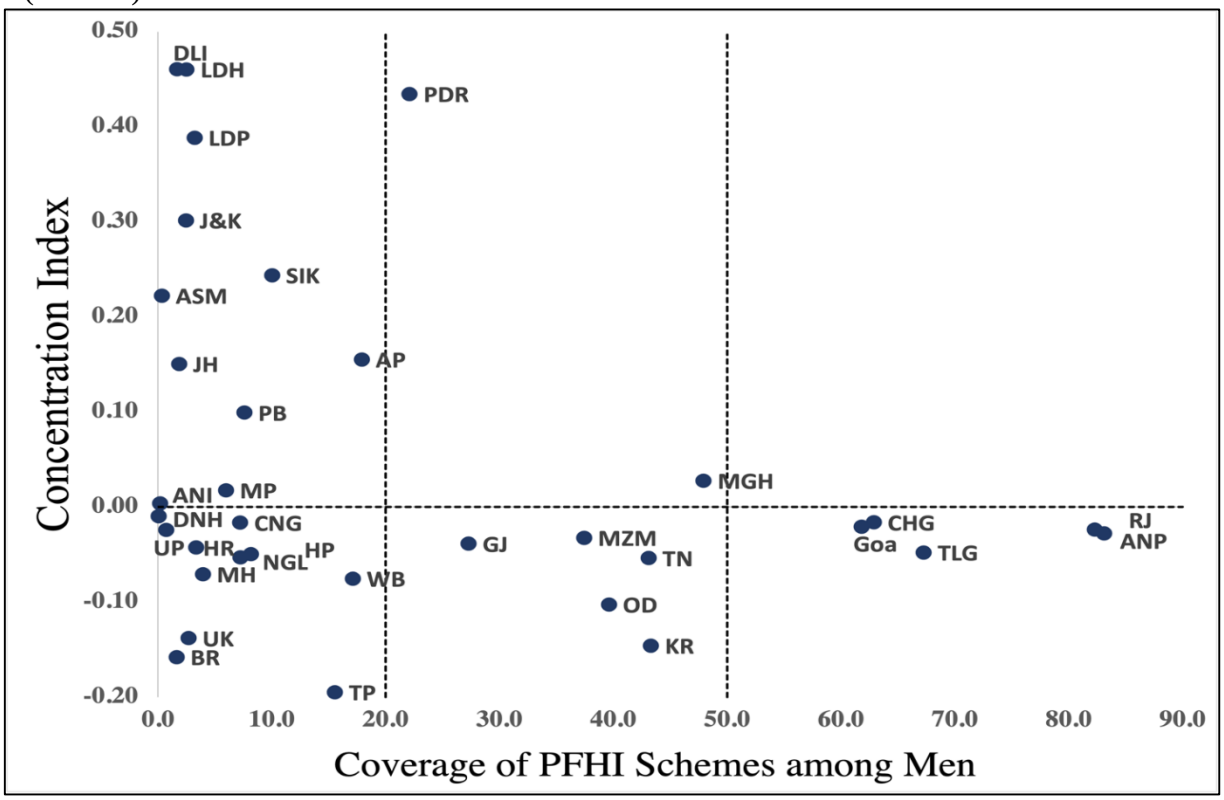

Table A1: State-wise coverage of health insurance schemes & share of PFHI out of total HI among women aged 15-49 years, NFHS-5 (2019-21)

States	Any insurance coverage	PFHI coverage	Share of PFHI among any insurance	Distribution of PFHI					
				Poorest	Poorer	Middle	Richer	Richest	CI
Andaman & Nicobar Islands	0.9	0.2	17.0	50.0	0.0	0.0	50.0	0.0	-0.15
Andhra Pradesh	73.6	71.1	96.5	19.9	21.8	21.4	21.0	16.0	-0.05
Arunachal Pradesh	20.2	15.7	77.8	9.4	16.8	21.8	25.5	26.5	0.11
Assam	52.9	0.7	1.3	14.2	17.1	23.9	17.1	27.8	0.13
Bihar	10.5	1.7	16.3	22.6	21.7	23.3	19.2	13.2	-0.15
Chandigarh	13.2	3.5	26.5	4.0	28.0	8.0	20.0	40.0	0.40
Chhattisgarh	66.9	58.4	87.3	25.8	20.7	19.4	18.5	15.6	0.00
Dadra & Nagar Haveli	63.4	1.5	2.3	0.0	7.8	25.5	49.0	17.7	0.20
Goa	68.4	55.6	81.4	17.9	20.3	23.5	18.8	19.5	0.00
Gujarat	34.0	24.7	72.7	21.3	24.3	22.7	20.1	11.6	-0.03
Haryana	16.5	3.6	22.0	24.9	22.9	18.7	17.3	16.2	-0.10
Himachal Pradesh	30.5	9.9	32.4	25.2	26.0	21.9	17.4	9.5	-0.11
Jammu & Kashmir	2.3	0.5	20.9	4.9	12.8	20.6	30.4	31.4	0.42
Jharkhand	36.3	1.6	4.3	17.6	22.1	22.6	24.7	13.1	0.00
Karnataka	21.6	6.0	27.8	19.7	23.7	22.6	20.1	14.0	0.07
Kerala	49.9	42.0	84.3	28.1	24.9	21.2	16.0	9.8	-0.16
Ladakh	4.8	1.6	33.0	5.1	10.3	10.3	15.4	59.0	0.46
Lakshadweep	63.7	4.6	7.2	13.6	20.3	25.4	22.0	18.6	0.05
Madhya Pradesh	26.5	5.5	20.7	16.6	21.2	24.7	21.7	15.9	0.03
Maharashtra	13.8	3.7	26.6	24.9	26.6	21.8	17.0	9.8	-0.08
Manipur	8.4	2.4	28.3	23.1	25.1	22.1	15.4	14.4	-0.05
Meghalaya	61.8	54.3	87.8	18.7	20.2	20.8	22.5	17.8	0.01
Mizoram	39.7	34.3	86.5	22.2	26.6	24.7	17.3	9.1	-0.07
Nagaland	9.8	5.9	60.4	25.0	26.6	24.5	13.5	10.4	-0.15
NCT of Delhi	16.5	0.8	4.5	4.4	5.6	18.9	36.7	34.4	0.38
Odisha	33.7	31.0	92.0	21.0	24.0	24.9	19.9	10.3	-0.08
Puducherry	13.7	5.5	40.2	16.3	26.6	16.7	25.8	14.6	0.16
Punjab	11.3	5.0	44.6	20.5	21.8	23.7	17.9	16.3	-0.02
Rajasthan	83.5	82.1	98.4	21.9	20.9	20.9	19.9	16.4	-0.03
Sikkim	20.1	4.4	22.0	27.1	25.3	18.1	15.7	13.9	0.05
Tamil Nadu	32.6	27.5	84.3	23.2	24.6	22.9	17.7	11.7	-0.08
Telangana	63.1	59.9	94.9	23.3	25.2	23.8	19.2	8.5	-0.09
Tripura	28.2	14.1	49.9	28.3	26.6	20.5	17.9	6.6	-0.16
Uttar Pradesh	8.4	0.6	7.1	24.1	29.1	20.0	13.3	13.5	-0.14
Uttarakhand	43.8	3.3	7.5	24.6	25.1	15.9	19.2	15.2	0.03
West Bengal	26.0	20.0	77.2	22.9	25.3	23.4	17.3	11.1	-0.09
Total	29.8	19.2	64.5	22.1	22.6	21.9	19.5	13.9	0.02

Note: CI- Concentration index

Table A2: State-wise coverage of health insurance schemes & share of PFHI out of total HI among men aged 15-54 years, NFHS-5 (2019-21)

States	Any Insurance Coverage	PFHI Coverage	Share of PFHI Among any Insurance	Distribution of PFHI					
				Poorest	Poorer	Middle	Richer	Richest	CI
Andaman & Nicobar Islands	1.5	0.2	12.9	0.0	0.0	1.1	0.0	0.0	0.00
Andhra Pradesh	86.6	83.1	96.0	84.3	85.4	88.2	88.6	69.3	-0.03
Arunachal Pradesh	22.9	17.9	78.2	7.3	12.0	24.4	25.7	18.1	0.16
Assam	55.0	0.4	0.6	0.1	0.3	0.3	0.4	0.6	0.22
Bihar	10.7	1.6	15.3	1.9	2.0	2.0	2.0	0.6	-0.16
Chandigarh	27.0	7.2	26.7	0.0	11.0	7.8	8.5	0.0	-0.02
Chhattisgarh	70.6	62.9	89.1	60.4	66.3	65.8	66.6	54.2	-0.02
Dadra & Nagar Haveli	58.7	0.1	0.1	0.0	0.0	0.3	0.0	0.0	-0.01
Goa	73.5	61.8	84.1	62.4	63.2	65.2	66.1	51.3	-0.02
Gujarat	39.7	27.3	68.7	26.3	27.4	32.8	30.8	18.7	-0.04
Haryana	18.6	3.3	18.0	4.2	3.1	3.5	2.1	3.9	-0.04
Himachal Pradesh	31.3	8.2	26.1	8.5	7.4	11.6	7.5	5.8	-0.05
Jammu & Kashmir	10.9	2.5	22.6	0.2	1.8	2.4	3.6	4.1	0.30
Jharkhand	42.5	1.9	4.4	0.9	1.8	0.7	3.5	1.9	0.15
Karnataka	26.3	6.7	25.6	11.2	6.5	8.7	5.1	2.7	-0.21
Kerala	52.3	43.3	82.8	54.6	52.3	48.7	36.1	21.8	-0.15
Ladakh	17.4	2.5	14.4	0.0	1.9	1.3	1.4	7.2	0.46
Lakshadweep	45.1	3.2	7.1	0.0	4.8	0.0	3.9	8.0	0.39
Madhya Pradesh	32.1	6.0	18.6	5.5	4.9	7.2	6.8	5.3	0.02
Maharashtra	19.6	3.9	20.1	4.9	3.2	4.1	6.2	1.8	-0.07
Manipur	6.4	2.2	34.0	2.4	2.6	4.6	1.5	0.0	-0.23
Meghalaya	57.7	47.9	83.1	44.3	43.7	49.9	53.2	48.5	0.03
Mizoram	43.5	37.4	86.1	34.6	45.6	38.0	38.0	30.3	-0.03
Nagaland	12.3	7.2	59.0	9.7	7.0	6.3	6.2	7.4	-0.05
NCT of Delhi	14.5	1.7	11.5	0.4	0.5	1.1	3.3	3.9	0.46
Odisha	42.7	39.6	92.7	44.6	45.7	45.2	40.8	21.7	-0.10
Puducherry	33.7	22.1	65.6	12.6	4.9	10.6	7.4	57.1	0.43
Punjab	19.1	7.6	39.8	6.0	5.5	7.6	11.2	7.7	0.10
Rajasthan	84.4	82.3	97.5	85.3	84.4	84.3	85.3	73.2	-0.02
Sikkim	24.4	10.0	41.1	4.6	7.9	9.1	9.3	20.2	0.24
Tamil Nadu	49.7	43.1	86.7	47.5	46.3	45.8	40.7	35.8	-0.05
Telangana	71.5	67.3	94.0	66.7	73.8	74.3	71.6	48.1	-0.05
Tripura	29.3	15.6	53.1	19.5	23.0	18.7	10.6	7.0	-0.19
Uttar Pradesh	10.8	0.7	6.6	1.0	0.6	0.8	0.2	1.0	-0.02
Uttarakhand	50.6	2.7	5.3	4.2	3.5	0.7	1.9	2.6	-0.14
West Bengal	22.7	17.1	75.4	18.7	19.2	18.4	18.4	11.1	-0.08
Total	33.9	20.9	61.5	22.34	21.7	23.0	22.7	14.9	0.04

Note: CI- Concentration index