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Health and Healthcare in West Bengal: Preliminary Findings from a Research Study on Health Financing Fragmentation and Universal Health Coverage in India

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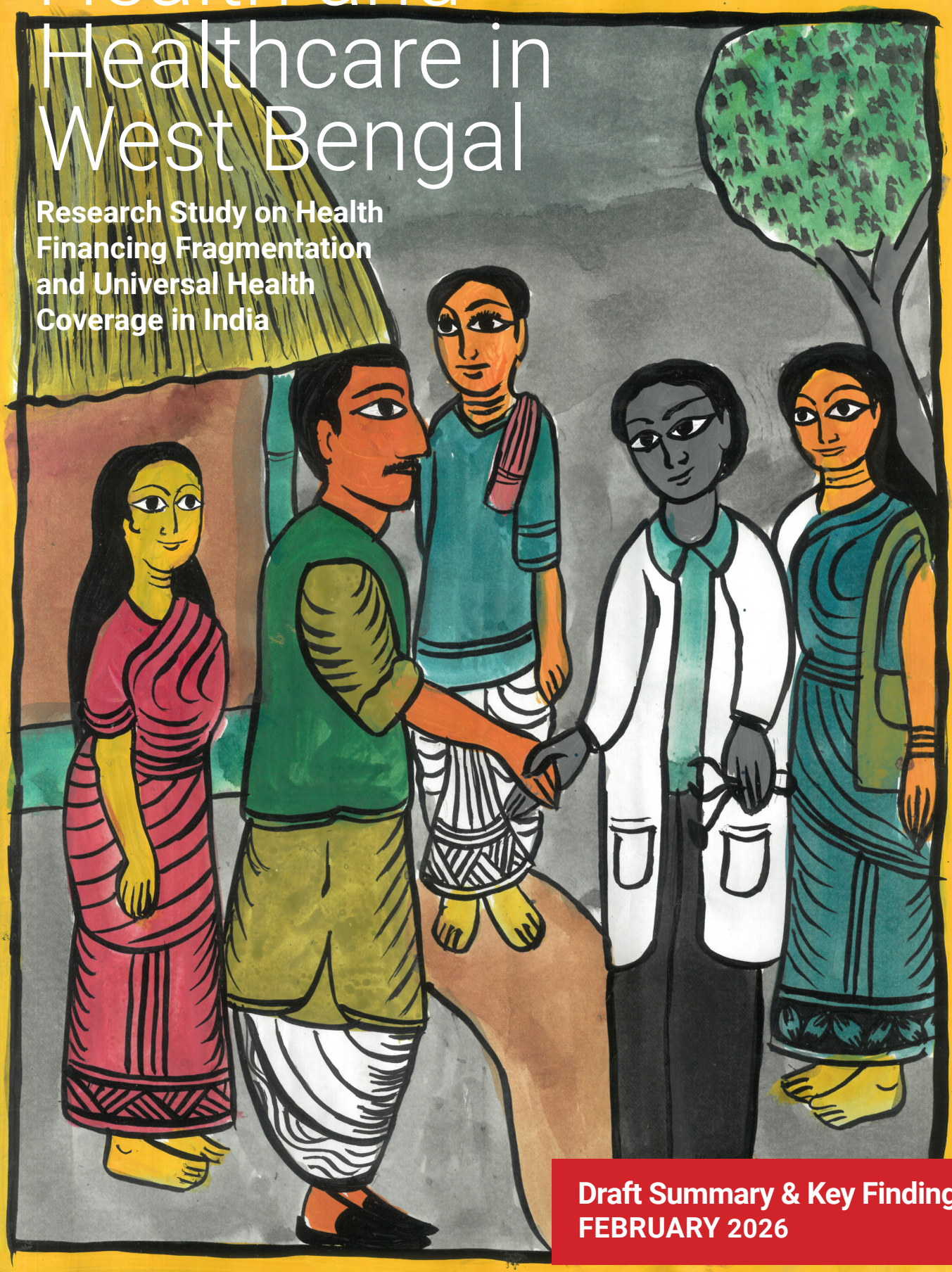
SYMPOSIUM

Health and Healthcare in West Bengal

Research Study on Health Financing Fragmentation and Universal Health Coverage in India



Draft Summary & Key Findings
FEBRUARY 2026

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Introduction to the Study

This booklet "Health and Healthcare in West Bengal" brings together key findings from four-year research programme "Health Financing Fragmentation and Universal Health Coverage Brazil, Colombia, Mexico and India: India study" conducted in West Bengal between 2022 and 2026. The study responds to growing policy concern around the coexistence of multiple financing sources, schemes, risk pools, benefits, and purchasing arrangements, and their effects on access, efficiency, and equity within the health system. Fragmentation in health financing has important implications for health system performance, equity, financial protection, and continuity of care. The research study focuses on the nature, drivers and implications of health financing fragmentation and provide lessons for progress towards universal health coverage. The study uses a range of epidemiological, statistical, econometric, and policy analysis methods to analyse locally collected and collated data to examine demand side and supply side drivers of health financing fragmentation in the state.

Overview

Fragmentation in health system financing exists across different domains, beginning with the presence of numerous financing schemes. This engenders extensive fragmentation across other domains, including risk-pooling, eligibility, benefits, premiums and payment mechanisms, as there is little coordination or regulation across providers.

OP Jindal Global University, Sonipat, Haryana, in collaboration with Imperial College London and the University of York, UK is conducting a multi-country research study on the nature and impacts of health financing fragmentation in LMICs to inform future health system strengthening efforts and drive progress towards UHC. This four-year research programme is rooted in Brazil, Colombia, Mexico and India, which are global exemplars for studying how financing fragmentation impacts health system goals, including UHC. We will undertake a multi-disciplinary programme of policy analysis and evaluation research, drawing on methodologies from health economics, health services research, political economy, and population health sciences.

The study aims to improve the understanding of the nature and impacts of health financing fragmentation in India to inform future health system strengthening efforts and drive progress towards Universal Health Coverage (UHC).

West Bengal, as one of the two sample states, has a mixed health system like the rest of the country. The public sector provides care through the government owned and financed healthcare institutions providing subsidised care and an expanding private sector comprising of clinics, nursing homes, corporate hospitals for healthcare delivery. The mixed health system interacts with publicly financed insurance schemes like Swasthya Sathi and social health protection schemes like ESIS that purchase medical care from both public and empanelled private hospitals. It becomes pertinent to understand how this shapes patterns of access, utilization, and financial risk for households.

West Bengal's health system faces growing challenges arising from rising out-of-pocket expenditures (OOPE) despite state-funded insurance, higher incidences of non-communicable diseases, inequality in health care access and outcomes. Health outcomes in the state are better than in many other states. However, when we look at health financing, we find that the share of out-of-pocket expenditure (OOPE) is higher (58.3%) than the government health expenditure (GHE) share (35.7%) in total health expenditure (THE) in West Bengal.

The objectives of the study on Health and Healthcare in West Bengal involve the following research objectives:

1. **Quantify** the nature and variation of health financing fragmentation in fragmented health systems.
2. **Examine** how health financing fragmentation impacts attainment of UHC and health outcomes.
3. **Evaluate** the impact of recent innovative reforms on health financing fragmentation and UHC – Employees' State Insurance scheme (ESIS) and Publicly funded Health Insurance schemes (PFHIs).
4. **Expand** and strengthen stakeholder coalitions with policymakers, civil society partners and the public in the state to increase research relevance and translation.

5. **Understand** the political drivers of health financing fragmentation and identify enablers and hurdles in policy reforms to address it.

The study has conceived five interconnected work packages (see *Figure 1*) to examine health financing fragmentation from different perspectives.

Materials and Methods

Household Survey

To assess the drivers of demand-side health financing fragmentation, primary survey of households was conducted in West Bengal from June to September 2024. covering 10,235 individuals from 2,525 households in four districts – Murshidabad, Paschim Bardhaman, Jalpaigudi and North 24 Parganas. For the selection of districts, the district-level multidimensional poverty index (MPI) prepared by the NITI Aayog (2023) was used. For household selection, a multi-stage stratified cluster sampling design was adopted. For block selection, a composite index was used based on the agricultural labour force and female literacy. For village selection, distance from the Primary Health Centre using Census 2011 data was used and households with inpatient episodes were oversampled.

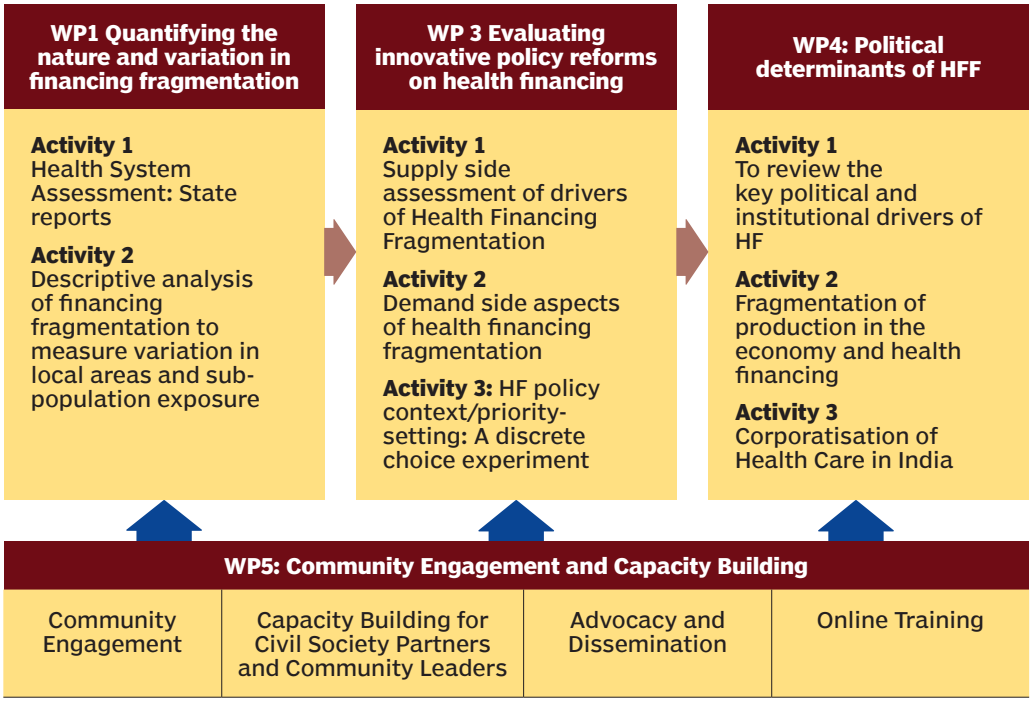
For data collection, a structured questionnaire was used, collecting self-reported information on household socio-demographic, economic status, health care seeking behaviour, health-related expenses and different aspects of unmet needs. *Table 1* provides the district-wise sample of households surveyed in WB in 2024.

Key Informant Interviews (KIIs)

Key Informant Interviews (KIIs) in West Bengal were conducted in 2024-25. The qualitative data (Primary data) derives from 15 Key Informant Interviews (KIIs) with diverse stakeholders, including ESIC and ESIS officials, facility staff, former officials, employers, trade union representatives, and insured persons, capturing nuanced implementation challenges. These insights are triangulated with household-level data from the household survey and secondary sources such as annual reports, RTI responses, and policy documents. Interview transcripts were processed using ATLAS.ti for coding, enabling a robust thematic analysis that identifies systemic gaps in governance, service delivery, and equity.

***Ethical Considerations**: The study followed due ethical procedures, with informed consent obtained and all respondents' iden-*

Figure 1: Schematic Overview of the India Plan



tities anonymized for both household survey and key informant interviews. Formal institutional ethical clearances were obtained.

Unique Features of Household Survey

The household survey in West Bengal (June to September 2024) made an attempt to capture different aspects of health financing behaviour of households. It is unique in the following ways:

- Utilisation and OOPE for outpatient care, inpatient care, chronic care and preventive care.
- Comprehensive assessment of Out-of-pocket expenses – As compared to NSS rounds, survey looks at outpatient and inpatient expenses comprehensively by including more categories of non-medical expenses like lodging charges, informal payments and voluntary contributions. Expenses related to pre-hospitalisation and post-hospitalization related expenses are captured that are not included in the NSS data. Similarly, expenses relating to the chronic out-of-pocket expenses are captured that are not included in NSS data. Further, NSS captures preventive OOPE relating to immunization, pre-natal and post-natal care. However, our survey captures all forms of preventive care. In addition, our survey captures expenses related to wage loss and coping strategies.

Table 1: Number of Households Surveyed in West Bengal, by District

District	Number of Households Surveyed	Rural	Urban
Jalpaiguri	424	261	163
Murshidabad	692	444	248
Paschim Bardhaman	265	142	123
North 24 Parganas	1,144	599	545
Total	**2,525**	**1,446**	**1,079**

- Detailed estimation of consumption expenditure (ten groups).
- Detailed work profile of individuals.
- Person level details of insurance coverage, utilisation, reasons for not using insurance, reasons for no-coverage.
- Awareness of different insurance schemes for publicly funded health insurance Swasthya Sathi and Employees' State Insurance scheme regarding several aspects of the scheme and its benefits related information.
- Care pathways, continuity of care and multiple providers.
- Drivers of fragmentation of care.
- Perceptions about quality of care captured across various dimensions of cleanliness, access and provider related details for the doctor and assisting staff.
- Perceived Unmet health needs.
- Indebtedness, wage and welfare loss.
- Political priority on Health.
- Linking Demand with supply side factors using findings from facility survey.

Analysing the Effectiveness of Publicly-Funded Health Insurance

In Reducing Fragmentation in Financing: Evidence from West Bengal in 2024

Health financing fragmentation is defined as 'division without explicit means of coordination' of functions (e.g. revenue collection), or agents (e.g. providers) of a health system or its sub-system (Bossert et al., 2014). India's health financing system is characterised as highly fragmented, with low levels of risk pooling and passive purchasing (NITI Aayog, 2019; Selvaraj et al., 2022). The health system has different health financing schemes characterised by different risk pools, benefit packages, financing arrangements and healthcare providers. While the Employees' State Insurance Scheme (ESIS) and Central Government Health Scheme (CGHS) are funded mainly by employer and employee contributions and cover inpatient and outpatient care for formal sector workers and civil servants respectively, on the other hand, the more recent publicly-funded health insurance schemes (PFHIs), funded by general taxation, are generally targeted towards the poor and cover only inpatient care.

Despite the presence of multiple health financing schemes, large part of the health spending is in the form of out of pocket (Selvaraj et al., 2022; Patel et al., 2026). Though the recent estimates of the NHA point out decline in share of OOP in THE (NHSRC, several years), the claim has been contested (Mukhopadhyay et al., 2025). The high OOP burden highlights high fragmentation in financing (sources of revenue) and low and fragmented risk pooling. With the rise of PFHIs in India, it is suggested that fragmentation in financing can be reduced (Bossert et al., 2014; NITI Aayog, 2019). This paper attempts to critically evaluate the claim that the insurance-based model in the form of PFHIs plays a role in ensuring financial protection, in particular, in reducing out-of-pocket expenditure (OOPE). We focus our analysis on the state of West Bengal (WB) which implemented a PFHI scheme, Swasthya Sathi (SS hereafter), with the aim of reducing OOPE.

For this, the insurance cascade framework (Bauhoff and Sudharsanan, 2021; Karim and de Savigny, 2023; Thakur, 2016; Tanahashi, 1978) is used. The framework evaluates the sequence of steps from being eligible for insurance to the end point, that is utilising care under these schemes. We use the cascade framework to assess the effectiveness of the SS scheme in terms of the following sequence of steps—firstly, enrolment (what per cent of population reported insurance enrolment), secondly, utilisation (what percentage of those reporting insurance coverage utilised the scheme when hospitalised) and thirdly, financial protection upon utilisation of the scheme (what percentage of those reporting insurance coverage and utilisation incurred OOPE versus those covered and not utilising and those not covered by any scheme). This is illustrated in *Figure 2*.

Data and Methods

This study is based on a quantitative analysis using the primary survey data of West Bengal covering 10,235 individuals from 2,525 households in four districts—Murshidabad, Paschim Bardhaman, Jalpaiguri, and North 24 Parganas.

The descriptive analysis will be followed by a multivariate econometric exercise with OOPE per hospitalisation case and log of OOPE as the dependent variables. To address endogeneity, quasi-experimental methods like the technique of propensity score matching are used widely in health insurance evaluation studies to control for unobserved selection bias (Erlangga et al., 2019; Acharya et al., 2012; Reshmi et al., 2021; Witter et al., 2025).

Results

Figure 3 provides a snapshot of the care cascade framework in terms of the SS scheme in WB in 2024. At the individual level, of the 994 total hospitalised individuals, 74.5% were covered by SS. Of the SS-covered hospitalised individuals, 16.6% used their SS scheme whereas 83.4% did not use the scheme. The majority of SS-used hospitalised individuals were in private hospitals whereas for SS-not-used cases, the trend reverses. SS-covered hospitalisations were recorded at 8.5% for public hospitalisations and 33.5% for private hospitalisations. For both SS-used and SS-not-used individuals, the median OOPE incurred is much greater in private hospitals (` 16,300 vs ` 28,700) than public hospitals (` 4,000 vs ` 3,400).

In terms of sample coverage (*Table 2*), 72% of individuals are covered by Swasthya Sathi only, 3% by ESI only and 8% individuals had dual coverage of SS and ESIS. Overall, 15% of the sample was not covered by any health insurance scheme.

Table 3 shows that with SS, mean OOPE is ` 19,449 and median OOPE is ` 6,600. Both mean and median OOPE for ESI-covered cases is lower than SS—` 6,574 and ` 5,500 respectively. *Table 4* shows that for SS-used cases, the mean

Figure 2: Conceptual Framework- Insurance Cascade Framework to study the effectiveness of Swasthya Sathi

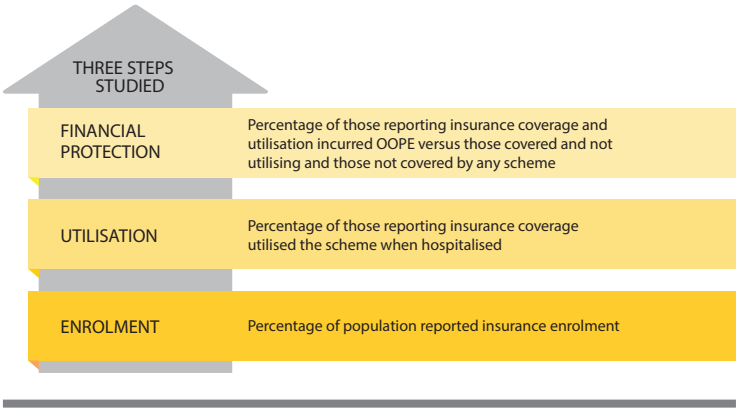
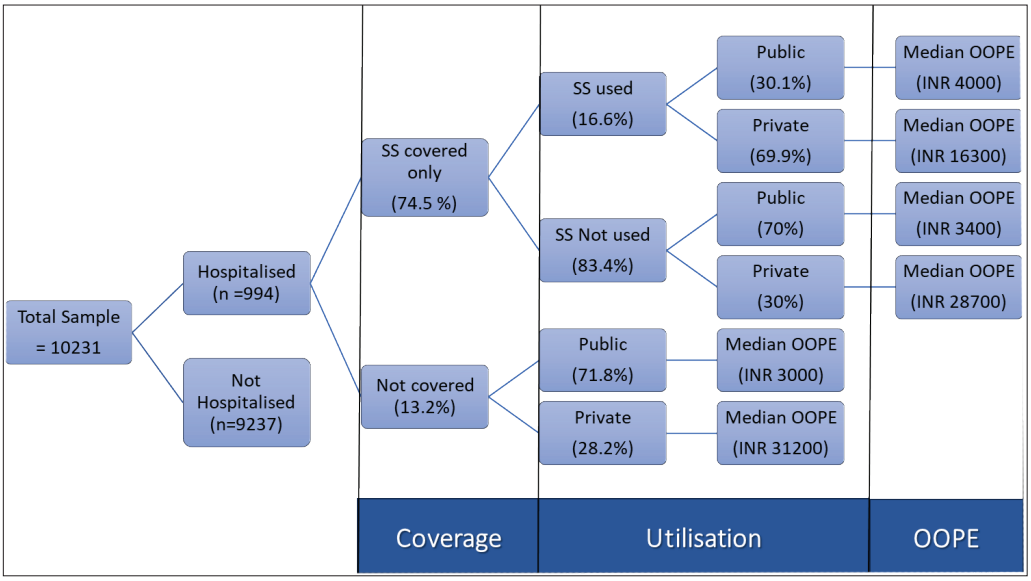


Figure 3: Schematic diagram of SS coverage, utilisation and OOPE in WB (2024) – individual level



Note: The remaining coverage includes other types of coverage including ESI, State government, private insurance (not listed here).

Source: Authors' own calculation using primary data collected in 2024

Table 2: Sample Insurance Coverage in West Bengal (2024)

Insurance Type	Rural (w%)	N	Urban (w%)	N	Total (w%)	N
ESI only	0.3	19	5.9	268	2.8	287
SS only	79.9	4,495	63.4	2,901	72.5	7,396
ESI and SS	2.6	145	15.5	709	8.4	854
Others	0.7	37	0.7	30	0.7	67
Not covered	16.5	927	14.6	667	15.6	1,594
Total	**100**	**5,623**	**100**	**4,575**	**100**	**10,198**

Source: Authors' own calculation using primary data collected in 2024

Table 3: Out of Pocket Spending in West Bengal (2024) by Type of Insurance (in INR)

Insurance Type	N	Mean OOPE	Mean OOPE (95 % CI)	Median OOPE
ESI only	32	6,574	3,979, 9,169	5,500
Swasthya Sathi only	823	19,449	16,640, 22,258	6,600
SS and Other	90	9,582	6,127, 13,037	3,000
Other	7	55,374	18,563, 92,185	49,100
Not covered	139	23,302	11,520, 35,084	5,000
Total	**1,091**	**18,858**		**5,700**

Source: Authors' own calculation using primary data collected in 2024

Table 4: Median OOPE and Median Total OOPE per hospitalisation case (in INR)

	Median OOPE (INR)	Median Total OOPE (INR)	N
SS Used (A)	10,500	19,500	148
SS Not used (B)	6,000	9,450	660
SS Covered (A + B)	6,540	10,800	808

Source: Authors' own calculation using primary data collected in 2024

Table 5: Mean Share of Spending on Pre-, Post- and Hospitalisation Expenses (In per cent), 2024

	Pre-hospitalisation Share	Hospitalisation Share	Post-Hospitalisation share
SS Used (A)	20.3	67.1	12.6
SS Not used (B)	17.1	75.4	75.4
SS covered (A + B)	17.7	74	8.3

Source: Authors' own calculation using primary data collected in 2024

and median OOPE is higher than SS-not-used cases. For CHE-10, we find that the catastrophic incidence of SS-used hospitalisations is greater than SS-not-used cases. Note this could be arising due to the differences in the case-mix of those using the scheme against those not using the scheme. We find that those who used the SS scheme incurred OOPE on drugs (mean ₹6,700, median ₹3,500) and diagnostics (mean ₹6,800, median ₹5,000). On an average, ₹1,000 was spent on transport of the patient. This raises concerns about insurance coverage, particularly Swasthya Sathi, being 'effective' in the context of financial protection.

For scheme usage, logistic regression results show that for OBCs and Others, the odds of using the SS scheme are 1.6 times greater than that of SC and ST population holding all other variables constant (including awareness). For log of OOPE, propensity score matching estimates highlight no significant average treatment effect on treated (ATET) for SS coverage as compared not covered hospitalisation cases. The ATET for SS users is about 57 percent lower OOPE than SS non-users. We also looked at the effectiveness of social health protection scheme – ESI, where ATET for ESI coverage showed about 70% reduction in OOPE as compared to not covered hospitalisation cases.

Discussion

Through this article, we assess the effectiveness of the SS scheme on three steps of the insurance cascade framework. We find that there is scope for improvement across each of the steps analysed. Firstly, in terms of actual reported coverage, while WB has one of the highest enrolment (or coverage) rates in the country (Chaudhary et al., 2025). This is an important positive development we find that for the bottom two quintiles, the ST population, and females, the coverage rate can be more progressive. Secondly, in terms of usage of the scheme, we find that overall usage of the scheme is low and is regressive for SCs and STs, females, and the bottom two quintiles. Thirdly, in terms of financial coverage, our econometric analysis shows that SS coverage is not statistically associated with OOPE. With SS usage, we find that there is a slight reduction in OOPE, however not adequate.

Table 5 shows that despite using the scheme, the share of pre-hospitalisation OOPE was 20.3% and share of post-hospitalisation OOPE was 12.6%.

Financial Protection

The econometric results highlight that financial protection is not associated with SS coverage but rather with SS usage. We also looked at the effectiveness of the social health protection scheme ESI, where ESI coverage showed reduction in OOPE as compared to not-covered hospitalisation cases. Further, comparison of usage of these two schemes shows that OOPE reduced more for ESI-used hospitalisation cases as compared to SS-used hospitalisation cases.

SS Scheme Usage

Another important finding of the paper is that of those covered by the scheme and hospitalised, only 16.6% of such cases used SS. We find significant differences in the SS usage patterns for SC and ST groups as compared to the OBC group and the Others group. The SCs and STs have lower odds of using the scheme despite reporting as being covered by the scheme as compared to the OBCs and Others after controlling for other variables, including the level of awareness. Studies have found that there is a skewed distribution of private hospitals in districts with least vulnerability (Nandi & Schneider, 2020) and those who are enrolled and aware might still utilise the scheme less (Dash & Muraleedharan, 2019; Thakur, 2016; Lagomarsino et al., 2012; Rathi, 2012; Girish et al., 2023). They argue that the fall in coverage for each step is a result of socio-economic, cultural, and political factors (Seshadri et al., 2013).

Reasons for Not Using the SS scheme

Some of the reasons reported for not using the scheme when hospitalised, apart from treatment taken in a government facility, include issues related to provider behaviour and supply-side issues such as hospitals denying service, hospitals not empanelled, service not covered by the scheme, and long waiting periods. This reality needs to be juxtaposed with the high coverage of PFHIs in the country, implying that possession of a health insurance card holds nominal value. The recent NSS HCES data also reiterates the low utilisation of PFHIs in the country, where only 35% of the covered were able to use their schemes (Chaudhary et al., 2025).

Our findings are consistent with the literature, finding no conclusive evidence to highlight greater financial protection with PFHIs like RSBY or PMJAY (Prinja et al., 2017; Reshmi et al., 2021). Some of the reasons highlighted for OOPE in the literature include continued spending on drugs and diagnostics either not covered or not available (Karan et al., 2017; Aashima & Sharma, 2024), provider behaviour in the private health sector (Garg et al., 2019; Ranjan et al., 2018, Garg et al., 2020) and double billing (Garg et al., 2020). Individuals are asked to pay for the difference in cost between the treatment preferred by the healthcare providers (for example, medicine or an implant for treatment of a cardiovascular condition) and that covered under the scheme (Saxena et al., 2022). OOPE was incurred for expenses incurred prior to hospitalisation and post-hospitalisation, including follow-up (Trivedi et al., 2022; D'Cruze, 2020).

Conclusion

While there is some positive effect of SS in reduction in OOPE when the scheme is used, it is important to understand whether insurance-based models can be the route towards UHC in West Bengal. We argue that insurance schemes form a part of a piecemeal approach to solving the problem of universal health coverage. It is important to move from a short term scheme-based approach to a long term health system approach. At the design stage itself, PFHIs only cover select secondary and tertiary healthcare services. Outpatient care and preventive care is left out of the ambit of these schemes when several studies have highlighted the growing burden of outpatient OOPE in the state and the country. Issues regarding non-utilisation of the scheme, role of the private sector and limited financial protection highlight the limitations of a demand side financing scheme in solving the supply problems plaguing the health system.

Key Points for Policymakers

1. PFHI coverage is high—72.3%, however, the scheme utilisation rate is low. To improve utilisation among covered, the public policy focus should be on addressing the supply side issues. We argue that supply of public facilities need to be scaled up in rural areas (where spread of private facilities is limited) following the rise in demand for healthcare post-insurance.

2. To address fragmentation in financing and ensure financial protection, the spending on drugs and diagnostics despite the scheme being used needs to be addressed. This can be done by ensuring the availability of drugs and diagnostics in public facilities.

3. The state must ensure strict enforcement of scheme guidelines and provider regulation especially for dual billing cases.

Awareness and Utilisation of Health Financing Models

Evidence from a Cross-sectional Household Survey in West Bengal

Awareness of health schemes' entitlements plays a crucial role in shaping healthcare utilisation and financial protection outcomes. Evidence shows that the enrolment of entitled populations in using their health services is affected by low awareness and knowledge of their health protection (Feldhaus, 2022). In India, despite the availability of various government and private health financing models, disparities in awareness and utilisation persist, often leading to catastrophic health expenditures (CHE) (Parisi et al., 2023; Reshmi et al., 2021; Sabherwal et al., 2024). Awareness of health insurance models plays a crucial role in supporting households to access necessary healthcare services and protect themselves from unexpected financial burdens (Reshmi et al., 2021; Parisi et al., 2023). Over the last decade, India has made a major push towards Universal Health Coverage and, through expanding the publicly-funded health insurance with various schemes nationwide, with the Pradhan Mantri Jan Arogya Yojana (PMJAY), and state-specific schemes, West Bengal's Swasthya Sathi (SS), Odisha's Biju Swasthya Kalyan Yojana, etc. However, evidence shows that being enrolled does not indicate financial protection (Mohanty et al., 2023). Between being enrolled and having financial protection, there are two crucial factors: awareness of entitlement and actual utilisation of services. These interdependent factors play a crucial role in shaping the financial risks associated with catastrophic health expenditures.

In our study, three types of health insurance models are examined—Swasthya Sathi (SS), the Employee State Insurance Scheme (ESI), and private insurance. We know that education, religion, caste, economic condition, gender, and place of residence play a crucial role in shaping awareness of health financing schemes (Parisi et al., 2023). The utilisation of health services is shaped by various factors, such as need, affordability, and accessibility of health care services, as well as awareness of health financing schemes, in which a bi-directional relationship can be observed between awareness and utilisation. This study primarily investigates the effect of socio-demographic and economic factors on awareness of health financing schemes and the relationship between health insurance awareness and the utilisation of health services.

Data & Method

The analysis is based on a cross-sectional household survey conducted between June and August 2024 across rural and urban areas of four districts in West Bengal, covering 2,525 households. To construct the awareness score, nine indicators are used: surgery, transport, medicine, diagnostics, post-hospitalisation, pre-hospitalisation, hospitalisation charges, non-hospitalization outpatient charges, and wage loss. In the survey, the awareness module was administered to the most knowledgeable

household member present at the time of the survey, first requesting unprompted responses on the services covered under each scheme, followed by prompted responses on the covered services. For the Health Insurance Awareness Score, the 'without probing' response received a score of 1, 'with probing' received a score of 0.5, and 'not mentioned' received a score of 0. Using the score, we have done the Principal Component Analysis (PCA) to create an Awareness Index. The PCA has been selected based on the most variance and normalized to a 0 to 1 scale using the min-max normalisation method and then grouped into quintiles.

Results

Coverage and Awareness

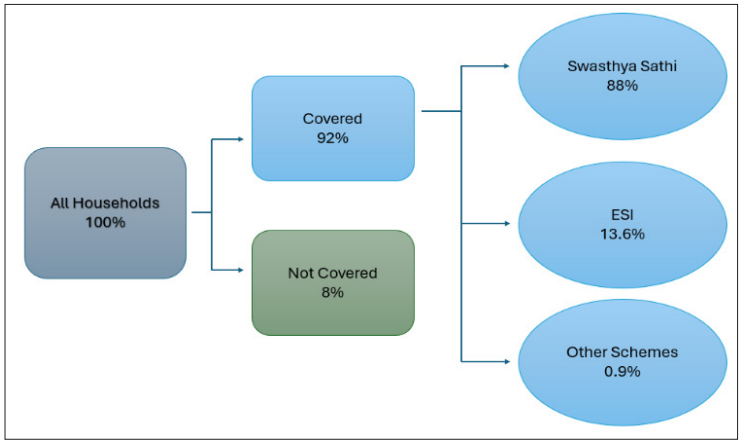
Findings show that 92% of households are covered by some form of health insurance. Among them, 88% are covered by SS, while ESI coverage stands at 13.6% (*Figure 4*). Among the insurance-covered households, the average awareness score is higher for ESI-covered households than for those covered under SS. Notably, district-level analyses reveal low awareness of SS in Jalpaiguri (mean score: 0.097) and Murshidabad (mean score: 0.10). Economic gradients suggest that awareness of SS schemes does not increase markedly with higher household consumption. In contrast, ESI awareness remains consistently high, which is attributed to its connection with formal employment. Additionally, rural households (mean SS score: 0.167; mean ESI score: 0.63) demonstrate slightly lower awareness than their urban counterparts across all schemes. In this study, as only 48 households were enrolled in any private health insurance schemes, we did not consider them for further analysis.

Figure 6 reveals that households that have used SS for hospitalisation are twice as aware as those that have not used the scheme. Similarly, those households that used ESI for hospitalisation have more awareness than those that did not use the scheme.

Awareness and Utilisation

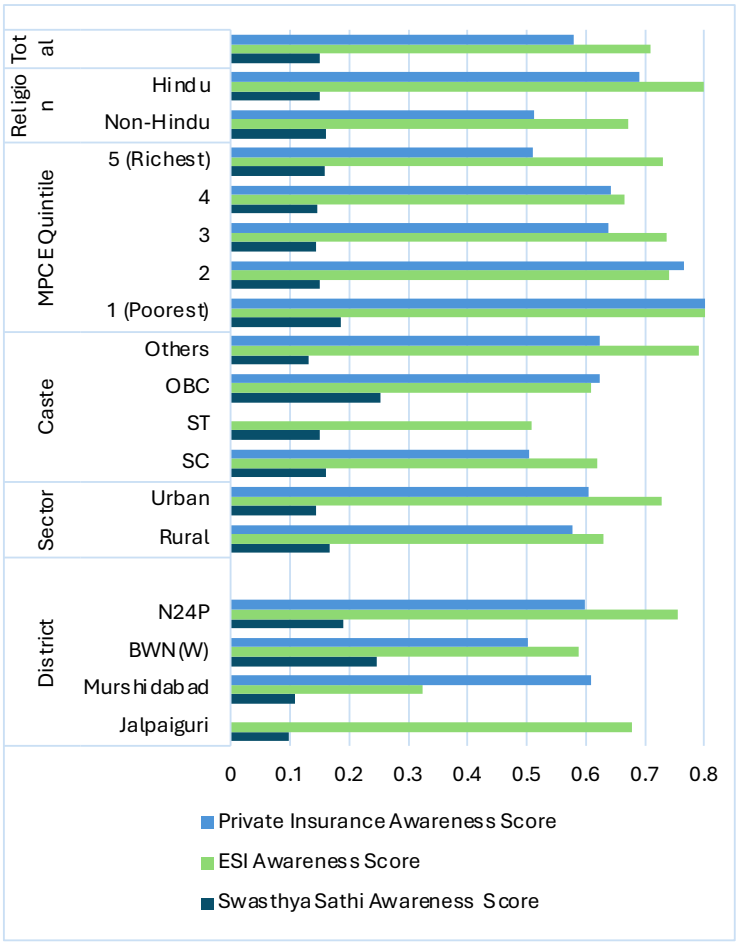
Figures 7A and *7B* reveal a crucial gap between the coverage and effective use of

Figure 4: Coverage of Health Insurance Schemes



Source: Household Survey in West Bengal, 2024

Figure 5: Mean Health Insurance Awareness Scores by Socio-demographic Categories



Source: Household Survey in West Bengal, 2024

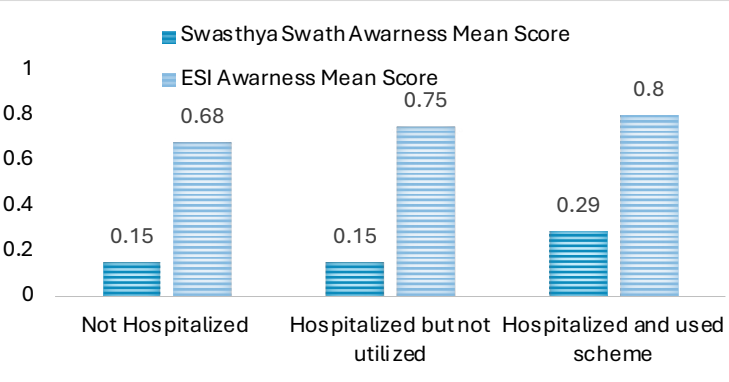
the SS scheme. Only 28.6% of households utilised the scheme for hospitalisation, indicating that coverage does not necessarily equate to usage. The study reveals that households utilising SS exhibit considerably higher awareness scores compared to non-users, suggesting that utilisation may be a critical factor influ-

encing awareness, and it might be due to a limited understanding of the benefits, procedures, and entitlements rather than from eligibility constraints.

In *Table 6*, 15% of respondents were aware of and availed themselves of hospital services but had not used the SS scheme, reporting that hospital services were denied. 5% faced the card enrolment issue, and 16% faced a long waiting period with any type of provider, so they did not use the SS scheme.

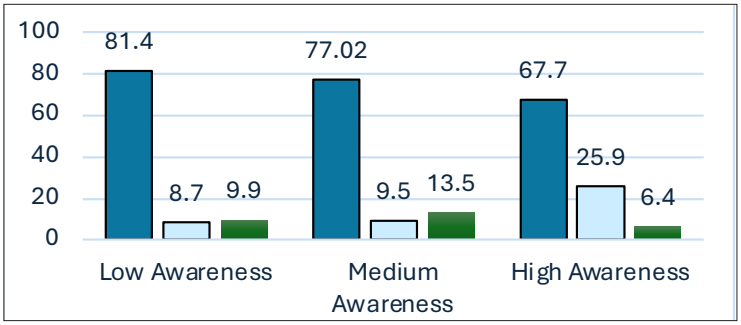
In this study, a two-stage multilevel regression framework has been adopted for understanding the clustering at the block and district levels. Multilevel Ordered Logistic Models have been used to examine which factors are associated with different levels of scheme awareness. Results show that SS awareness is primarily shaped by residential status, education, and occupational categories. For ESI, caste and consumption-related characteristics are the major drivers of awareness. The second set of Multiple Binary Models reveals that awareness plays a central role in translating eligibility into service use (hospitalization scheme utilization), particularly for SS, as households with high awareness were substantially more likely to use the scheme during hospitalization. Households using private or mixed providers have significantly higher odds of SS utilization, while social factors such as caste and gender of the household head continued to shape usage patterns. For ESI, the role of awareness on utilisation of the scheme is limited, and utilisation is closely associated with the religion and caste of the households.

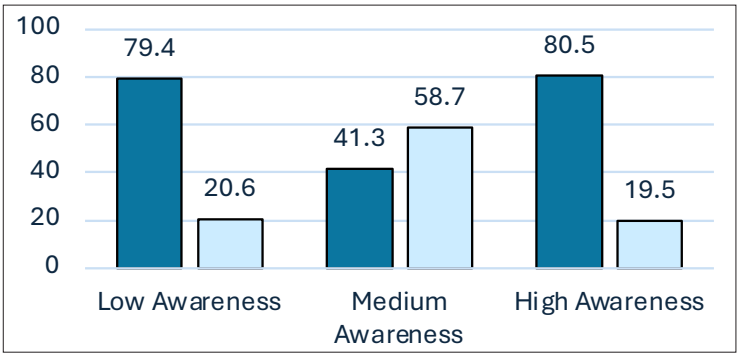
Figure 6: Awareness Score by utilization of Hospitalization Services



Source: Household Survey in West Bengal, 2024

Figure 7A & 7B: Use of health-financing scheme hospitalisation by awareness level





Source: Household Survey in West Bengal, 2024

Table 6: Reasons for non-use of SS scheme in hospitalisation among aware households (%)

Reasons	Public Hospital	Private Hospital	Mixed (Public & Private)	Total
Hospitals denied service	16.1	13.6	7.1	15.2
Hospital non-empanel	7.8	12.8	21.1	9.4
Service not covered under SS	18.1	25.2	33.2	20.3
Long waiting period	14.5	19.5	24.6	16.1
Staff behaviour	2.7	2.7	0	2.6
Card enrolment issue	5.1	6.7	0	5.4
Govt. facility treatment	26.8	6.8	6.9	21
No card carried	4.8	5.1	0	4.8

Source: Household Survey in West Bengal, 2024

Conclusion and Policy Implications

The result of this study shows that West Bengal is close to achieving universal coverage of health insurance schemes, with 88% coverage under the state government-sponsored SS scheme. The findings indicate that awareness of the health financing model is often overlooked in LMICs such as India. Findings indicate that coverage under SS is high, and awareness remains uneven across socio-demographic groups, shaping who meaningfully benefits from these schemes, which is consistent with earlier findings (Reshmi et al., 2021; Parisi et al., 2023). Sector, caste, household head education, and economic condition play a crucial role in shaping awareness of SS. Caste affiliation and economic condition are major drivers of ESI awareness.

A key finding of this study is that awareness of health financing models is significantly increasing through the utilisation of both SS and ESI. It can be aligned with the health-seeking behavior model, which indicates that awareness enhances individuals' abilities to understand their entitlement and navigate administrative procedures (Kusuma et al., 2018). The utilisation of SS is higher among the most aware households. Earlier evidence shows that lower utilisation of PMJAY is associated with low awareness, despite its crucial role in the health financing model (Parisi et al., 2023). Households that are most aware of the SS scheme are considerably more inclined to use it for hospitalisation. The ESI Annual Report and the ESI news journal (ESI Samachar) mentioned that various initiatives were undertaken to raise awareness, including an Awareness Week and activities related to the awareness program on Foundation Day. Consequently, policy initiatives should shift focus from merely meeting enrolment targets to implementing targeted communication strategies tailored to specific districts and groups, thereby enhancing awareness and facilitating meaningful engagement with SS benefits.

Key Findings

- West Bengal has achieved high health insurance coverage, with 88% of households enrolled under the SS scheme.
- Despite high enrolment, awareness of health financing schemes remains uneven, particularly across caste, sector, education, and economic groups.
- Caste affiliation, economic status, sector of work, and the household head's education strongly influence awareness of SS and ESI schemes.
- Higher awareness significantly increases the likelihood of using SS and ESI, especially for hospitalisation.
- From a policy perspective, improving targeted communication and awareness is essential to ensuring meaningful access to scheme benefits beyond enrolment.

Utilisation of Healthcare Services and OOPE for Outpatient Care

Evidence from a Multistage Sample Survey in West Bengal, 2024

Recent studies have shown that out-of-pocket expenditure (OOPE) is higher for non-hospitalisation care than for inpatient care, and that non-hospitalisation care is more impoverishing, often in the absence of insurance coverage (Nanda & Sharma, 2023; Lokesh et al., 2025). The most recent Household Consumption Expenditure Survey conducted by the National Sample Survey (HCES, 2023-24) shows that 90% of OOPE in West Bengal is accounted for by non-hospitalisation care, compared to the national average of 80%. Within non-hospitalisation care[1], outpatient care accounts for a substantial share of total OOPE expenditures (Gupta et al., 2016; Ranjan et al., 2018).

However, although the utilisation of public facilities for outpatient care for ailments reported in the 15 days preceding the survey in West Bengal is similar to the national average of around 30%, the share of outpatient-related OOPE in total OOPE is higher in the state (NSS, 2018). This suggests that higher OOPE in West Bengal cannot be explained solely by lower public outpatient utilisation. Notably, the type of health service provider by ownership, i.e., public or private, has emerged as a major driver of outpatient OOPE, with private providers costing six to seven times more than public providers in India (Gupta et al., 2016).

Despite this, limited attention has been paid to understanding what drives provider choice for outpatient care and how this affects OOPE, particularly in a state like West Bengal, where per capita OOPE is high. In this paper, we examine how the type of provider used during an outpatient episode affects OOPE at the household level in selected districts of West Bengal.

Objectives

The primary objectives of this study are as follows:

i. To examine the patterns of utilisation of health services by provider type for outpatient care in the sampled households.
ii. To assess the effect of utilisation of health services by provider type on OOPE for outpatient care and to identify the key determinants of catastrophic health expenditure.

Data

This study uses data from the Household Survey conducted by the Health Financing Research Project in 2024. In total, 1,067 outpatient episodes were reported by 862 individuals with a recall period of 15 days from the day of the survey. In our survey data, 8.5% of individuals reported outpatient care, whereas the share was 5% in West Bengal in 2018 (NSS 75th Round, 2017-18).

Given the fragmented nature of the health service system in India, patients and their families often see more than one provider during the course of illness. We have taken a novel approach to classify the combinations of provider types for which services

1. Non-hospitalisation care comprises chronic care (long-term care), outpatient care (ailments reported in the last 15 days), preventive care, and family planning.

are sought into three sets based on the ownership type used for a single outpatient episode. The first set is all public, and all required service combinations (medicines and diagnostics) were sought from public providers. The second set is all private, where the combination of services was sought from the private providers. In our data, a proportion of sampled households sought a combination of services from different types of providers. For example, consultation was sought at a public hospital, but tests and/or medicines were purchased from a private provider for a single episode. To capture fragmentation, we have labelled this set as the public-private mix. In this analysis, we have considered both medical and non-medical expenses to calculate OOPE.

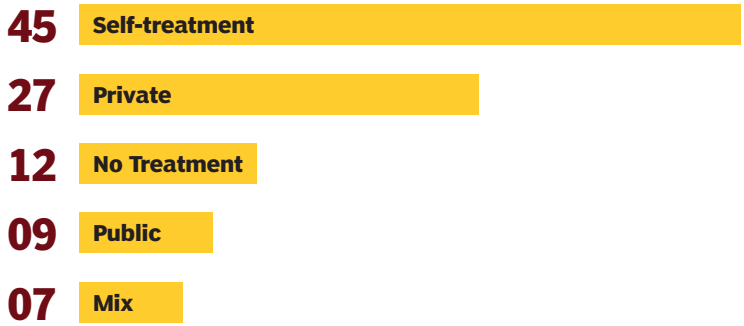
Results

Treatment-seeking behaviour

Our results reveal that 12% of total OP episodes involved no treatment being sought. To our surprise, in nearly half of the episodes, self-treatment was sought. Four in five among those who did not seek treatment reported that they believed the ailment was not severe enough to seek treatment. On the other hand, medical attention was sought for the remaining 43% of episodes. One-fourth of the episodes were treated in private facilities, compared to less than 10% in public facilities. It is pertinent to note that for around 7% of cases, treatment was sought in both public and private facilities (public-private mix). In 40% of the cases that initially started treatment in public facilities, patients could not obtain all the required medicines or tests there and had to get them from private facilities elsewhere.

When we look at the utilisation of health services across different socioeconomic groups, a few stark observations emerge. A clear gender bias against women is evident in health care services: for three out of five cases, no treatment was sought for women compared to half of the cases for men. Hindus are more likely to forgo medical care (three-fifths of the cases were either untreated or self-treated) compared to other religions (52.9%). People from the general caste category, who are relatively well-off in our sample, also visited private facilities more (32.9%) than other caste categories, whereas STs utilised public facilities the most (21.4%). The poor are more likely to forgo medical care (three-fifths of episodes) than the non-poor (half of episodes).

Figure 8: Treatment-seeking behaviour



Source: Household Survey in West Bengal, 2024

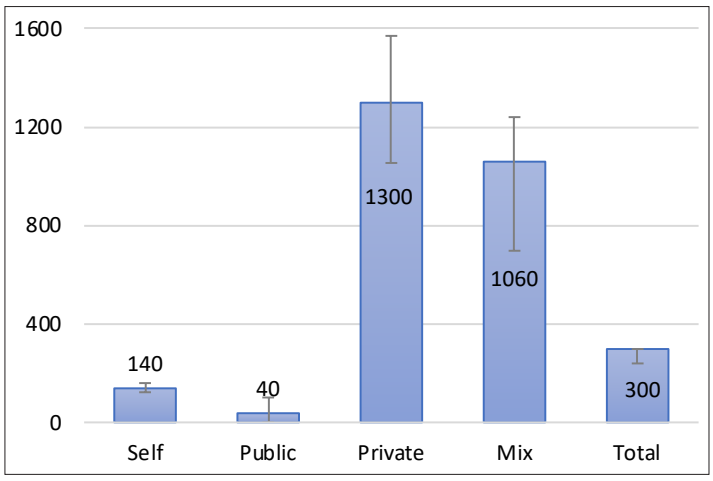
UTILISATION

- For half of the episodes, self-medication was sought primarily, believing that the ailments were not serious enough to seek care.
- Medical care was sought for only two in five cases,
- For one-fourth of the cases, private providers were visited.
- In 40% of cases, those who visited public facilities required medicines or tests that were unavailable and had to obtain them from outside, highlighting supply-side problems in the public sector. Thus, the share of public-private mixed provider for a single episode becomes 7%.
- The poor and women are more likely to forgo care reflecting structural inequality in care-seeking behaviour.

OOPE across different combinations of provider types

Median OOPE is nearly 3.5 times higher for individuals who opted for self-treatment (₹140; 95% CI:₹120-₹162) than for those who used public facilities (₹40; 95%

Figure 9: OOPE Across Utilisation Types in INR



Source: Household Survey in West Bengal, 2024

CI: ₹0-₹100). The median OOPE is the highest (₹1,300; 95% CI: ₹1,053-₹1,569) among individuals who obtained all required services from all private provider sets. Those who had to procure services from a mix of public and private facilities (₹1,060; 95% CI: ₹699-₹1,241) had a median OOPE that was almost four times the overall average. Had they been able to procure each service required from public facilities, their OOPE could have been 25 times lower.

At the aggregate level, non-Hindus (₹460) have higher OOPE than Hindus (₹250). SC households record the highest private OOPE (₹1,600), while ST households incur relatively lower private and mixed OOPE, reflecting possible access or affordability constraints. Although non-poor households incur higher median OOPE (₹300) than poor households (₹204), the latter still face significant expenditures when accessing private-only providers (₹1,220) or mixed provider categories (₹1,080). Rural households, especially the rural non-poor, record a higher median OOPE (₹380) than urban households (₹240). In rural areas, expenses in private (₹1,400) and mixed care facilities (₹1,280) are nearly identical, suggesting supply-side constraints.

Utilisation of facilities and financial protection: CHE incidences

Next, we calculate Catastrophic Health Expenditure (CHE) to examine the share of acute healthcare expenditure in total household expenses for a month, using the capacity-to-pay (CTP) method (Xu et al., 2003; Nguyen et al., 2023). In line with international standards, the incidence of CHE was identified using a 40% cutoff under the CTP approach (Nguyen et al., 2023).

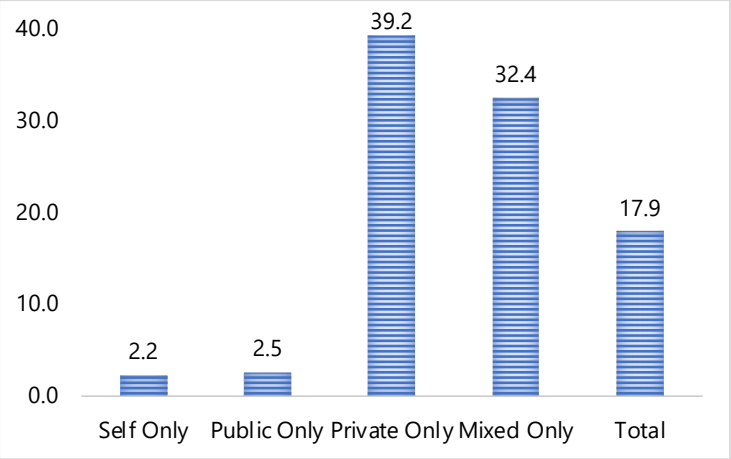
Except for no treatment, all other types of care involve some cost. Moreover, households may use different types of providers (self-care, public, private, or mixed) across multiple episodes of illness. Therefore, households are grouped into five categories based on their utilisation patterns: self-treatment only, public only, private only, mixed only, and other combinations.

At the aggregate level, one-sixth of the outpatient episodes led to catastrophic health expenditure. The incidence of

UTILISATION & OOPE

- When care moves outside the public system, costs rise sharply. Private and mixed care are far more expensive than public-only care.
- Poor and vulnerable households face high costs even for basic outpatient care. Using private or mixed providers often results in high out-of-pocket expenses.
- At the aggregate level, we find evidence of how inadequacy of the public system can lead to a higher financial burden among the vulnerable households.
- Fragmented healthcare provisioning translates into higher and more unequal financial burden, disproportionately affecting socio-economically vulnerable groups.

Figure 10: Incidences of CHE



Source: Household Survey in West Bengal, 2024

CHE is similar for the users of public facilities (2.5%) and among those self-treating (2.2%). CHE, understandably, is the highest for private providers (39.2%). It is also notably higher for a mixed set of providers (32.4%) than for a public set. These patterns underscore the significant financial vulnerability faced by households relying on private outpatient services.

CHE incidences largely follow the median OOPE across socioeconomic groups. Non-Hindu households (22.6%) faced more catastrophic incidents compared to Hindu households (15.5%). Economically-vulnerable households engaged in casual labour (21.8%) and other occupations (26.3%) experienced higher incidences of severe CHE than self-employed (11.5%) or regular-wage households (18.6%). The poor households (27.6%) have 2.5 times higher risk of facing CHE than non-poor households (12%). In particular, poor households in rural areas are the most vulnerable—one-third faced CHE compared to one-fifth in urban areas.

To understand what drives utilisation across different providers, we have developed sets of Binary Logistic Models for five provider choice sets. Our results reveal that socio-economically vulnerable households are more likely to forgo treatment. Age and sex also show modest effects, with older individuals slightly less likely to use formal public services. Individuals in the wealthiest quintile are much more likely to use private facilities than to self-treat. Overall, economic status, location, and ailment characteristics are key drivers of provider choice.

Propensity Score Matching (PSM) and Inverse Probability Weighting (IPW) have been used to examine how provider utilisation affects OOPE, while controlling for selection bias. Utilisation of public facilities is associated with the lowest OOPE, even lower than self-treatment. Private facilities are associated with the highest OOPE, whereas public-private mix providers have much higher OOPE than those who can avail of all required services in public facilities. The same methods have been used to understand the association between healthcare utilisation and CHE. Results for CHE also show that utilisation of public facilities is associated with lower CHE levels. Utilisation of the public-private mixed category makes households more vulnerable to CHE than public facilities.

Discussion

This study shows a higher financial burden for outpatient care once care moves away from the public sector, as private facilities are much more costly in the state. Primary and secondary-level public facilities are overburdened in the state , where most outpatient care should be provided. In 40% of cases, who visited public facilities for outpatient care, could not obtain all the required medicines and diagnostics from those facilities and had to procure from outside. Hence, strengthening public facilities would be crucial to reducing the state's financial burden. Furthermore, in the absence of financial protection in the form of government-funded health insurance schemes, the high cost of outpatient care significantly increases out-of-pocket expenditure (OOPE) in West Bengal. Our results show that for outpatient care, one-sixth of households incurred catastrophic expenditures, disproportionately affecting the vulnerable households. Some form of financial protection for non-hospitalisation care should be put in place if we are to reduce the OOPE level and the financial burden on households in the state.

HEALTH SERVICES UTILISATION AND FINANCIAL RISKS

- Households relying on private or mixed providers face substantially higher CHE risk.
- Those obtaining all required medicines and diagnostics from public facilities have CHE rates nearly four times lower than mixed-provider users.
- Partial reliance on private markets for medicines and diagnostics sharply increases financial vulnerability.
- The risk of CHE is 2.5 times higher among poor households than among non-poor households.
- Vulnerable groups face a higher risk of catastrophic health expenditure, indicating inadequate financial protection and a violation of the equity principle in healthcare financing.

Policy Implications

Given the high dependency of people on public health care facilities, it is imperative to improve quality of inputs in the public system. Particular emphasis should be given to ensuring the availability of medicines and diagnostics.

Exploring the Dimensions and Extent of Unmet Healthcare Needs

Using Household Survey Data from West Bengal

The central objective of Universal Health Coverage (UHC) is to ensure that everyone receives quality health services, when and where they need them, without incurring financial hardship (WHO, 2021). Progress towards UHC can only be achieved when all healthcare needs of the population are met with appropriate and affordable quality healthcare services. Unmet healthcare needs remain as a key barrier to UHC goal. The factors influencing unmet need are highly context specific where the nature of the national healthcare system plays a crucial role (Yoon et al., 2019). In this context, understanding the various dimensions and the extent of unmet need becomes a policy imperative to inform health system strengthening plans.

Understanding Unmet Need

Unmet need is a complex concept which is multidimensional in nature. Some studies define unmet need as the difference between services judged necessary to deal appropriately with health problems and the services actually received (Carr & Wolfe, 1976) and others define it as being unable to obtain care when people believe it to be medically necessary (Reeves et al., 2015). Though the former definition is more widely used in literature, there is no standard agreed-upon definition and measure of unmet healthcare need (Corso et al., 2022). Barriers to healthcare access lead to unmet need arising at any stage along the care-seeking process, from inability to recognise a health issue to situations where services are clinically inadequate or inappropriate.

Conceptual Framework

There are two broad approaches to measure unmet need, namely clinical and subjective assessment. We attempt to measure the following dimensions of perceived unmet need using self-reported household survey data. Unperceived unmet need could not be captured as it also requires clinical assessment,which was beyond the scope of this survey. In addition to directly asking respondents whether they perceived unmet need during the one year preceding the date of survey, we also trace the various dimensions of unmet need when they sought care during episodes of acute ailment, hospitalisation and among those with chronic conditions.

Perceived unmet need as the medical care not sought or received:

- ***Forgone care***: Individuals perceive a need for care but could not access care.
- ***Denied Care***: Individuals perceive a need for care but were denied by the health facility.

Dimensions of perceived unmet need in the medical care sought and received:

- Treatment taken from an unqualified provider.
- ***Self-treatment***: Individuals perceived a need for care but chose to treat themselves either using medicines procured on their own from the pharmacy or resorting to home remedies.
- ***Delayed care***: Individuals perceived a need for care and accessed it but with delay.

- ***Incomplete care***: Individuals perceived a need for care and accessed it but either received incomplete prescribed services from the healthcare provider or could not complete the entire course as suggested by the physician.
- ***Inappropriate care***: Individuals perceived a need for care and accessed it, but the service quality of care was perceived as unsatisfactory or poor.
- ***Distressed care***: Individuals perceived a need for care and accessed it but with financial hardship.
- ***Distanced care***: Individuals perceived a need for care and accessed it but the healthcare provider was situated beyond a particular threshold of distance.

Research Objective

To assess the dimensions and extent of perceived unmet healthcare needs across various socio-economic demographic groups.

Data and Methods

Using West Bengal household survey data, cross tabulations were applied for descriptive indicators and comparisons were conducted across socio-economic demographic categories using chi square tests to check the statistical significance.

Findings

Perception of Unmet Healthcare Needs

Financial constraints emerge as the most significant barrier to access to medical care. Among those who forgo care, more than half of them reported lack of money as the sole deterrent. Similarly, 96%, 98% and 79% of those individuals who reported delayed, denied and incomplete care respectively highlighted lack of money as the major reason".

The extent of unmet healthcare needs was found to be higher among the disadvantaged such as the elderly, marginalised social groups, illiterate, Hindus and poor. About 14%, 7%, 6% and 4% of those aged 60 years and above reported forgone, delayed, denied and incomplete care respectively. In the case of delayed care, denied care and incomplete care, unmet need among marginalised groups is almost double that of the privileged social groups. The illiterate report unmet need at least three times more than the highly educated. Interestingly, with respect to income quintiles, we find the perception of unmet healthcare needs to be least among the poorest except for incomplete care. However, we see a sustained marginal decline in the extent of unmet need as we go from the second quintile to the richest quintile.

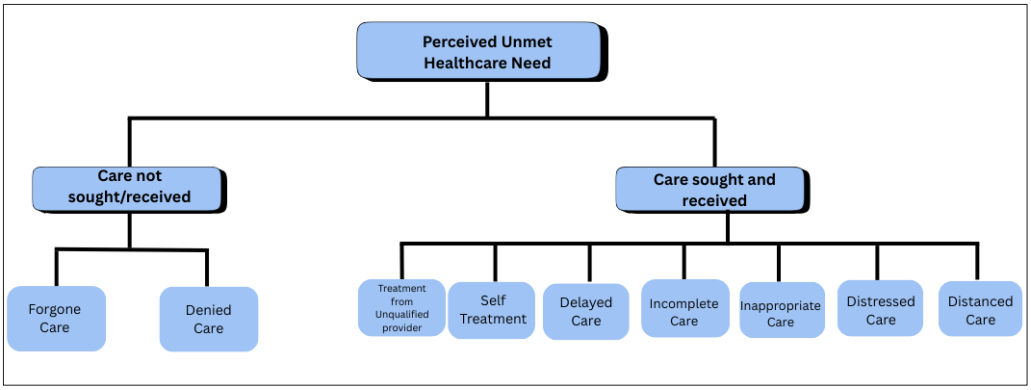
Households with non-regular employment also report higher unmet need indicating stronger presence of barriers to access to medical care among the vulnerable occupational categories. There is also significant inter-district variation wherein forgone and delayed care is about four

Table 7: Proportion of individuals with perceived unmet healthcare need during the last one year (n=10,116)

Dimensions	%	Freq.
Forgone care	6.16	631
Delayed care	3.09	334
Denied care	2.14	224
Incomplete care	1.49	158

Source: Household survey, West Bengal, 2024

Figure 11: Conceptual framework on various dimensions of perceived unmet need



times higher in Jalpaiguri and Paschim Bardhhaman than North 24 Parganas and Murshidabad among our survey districts.

Acute Ailment Episodes

Around 10% of the individuals reported that they fell ill once during the 15 days prior to the survey. Although not considering the ailment serious (65%) is the major reason for not taking any treatment, we consider this as a potential tracer of unmet need (Rahman et.al, 2022). Unaffordable cost of care and the lack of availability of healthcare providers in the neighborhood are the other key reasons for not seeking any treatment.

Among those self-treated, four out of every five individuals took medicines from the pharmacy. Self-treatment is highest among the elderly, females, marginalised social groups, Hindus, and in urban areas wherein at least half of them reported to have treated themselves. Treatment taken from informal providers is higher among the illiterate, OBC, Muslims, and casual labourers in rural areas, Jalpaiguri and Murshidabad.

Of the remaining who sought institution-based medical care, 15% of those who sought care from public facilities received incomplete care, more than double that of private facilities (6%). Only 61% received all required medicines and 58 % received all diagnostic tests, at no cost from the public facilities.

Inappropriate care as perceived by patients along several service quality indicators such as cleanliness, human resources, waiting time etc. is 21% in public as compared to 14% in private facilities. The median distance traversed to seek care in rural and urban areas is 5 km and 3 km respectively. One-fifth of the patients had to travel beyond these threshold distances to seek medical care. Distanced care was reported at 25% and 13% in rural and urban areas respectively. Interestingly, distanced care is higher among those who sought care from public facilities. Further, distanced care is reported higher among SC, Hindus, Paschim Bardhaman and Jalpaiguri.

We have also found that about one -fourth of the households have spent more than 10% of their total household consumption as out of pocket payments during acute ailment episodes. Considering all these various dimensions of unmet need, we find that out of the total episodes reported, only about 24% received complete and quality care but with financial hardship and only 12% received complete and quality care without any financial hardship.

Table 8: Dimensions of unmet need during acute ailment episodes (n=1067)

Dimension	%	Freq.
No treatment	12	124
Self-treatment	50.7	475
Medical Advice sought (n=449)		
Treatment from informal provider	19.4	80
Incomplete care	9.4	39
Inappropriate care	16.9	71
Distanced care	20.6	96

Source: Authors' calculation using household survey data, West Bengal, 2024

Hospitalisation Cases

Incomplete care is 11% in public which is twice as compared to private facilities. Of those hospitalised in public facilities, 63% received only some medicines for free and 8% reported that there was no free provision at all. Whereas 22% and 16% reported they received only some diagnostic tests for the free and no free provision categories respectively.

Almost one in two hospitalisations in public facilities have reported inappropriate care, whereas it is one-fifth in private facilities. Around 17% of those belonging to Jalpaiguri who needed hospitalisation were hospitalised outside the district, followed by 13% in Murshidabad, 9% in North 24 Parganas and 8% in Paschim Bardhhaman. Within the state, a major proportion of outside resident district hospitalisations (44%) took place in Kolkata, implying an uneven spatial distribution of health resources.

About 40% of the households spent more than 10% of their total household consumption as out of pocket payment during hospitalization. Finally, of the total hospi-

talization cases reported, we can say that only in 46% of the cases, quality and complete care was received. Further only about 23% received complete and quality care without incurring any financial hardship.

Table 9: Dimensions of unmet need during hospitalisation cases (n=1107)

Dimension	%	Freq.
Incomplete care	9.3	99
Inappropriate care	37.9	389
Distanced care	10.8	124

Source: Authors' calculation using household survey data, West Bengal, 2024

Discussion

The drivers of unmet need are specific to each of its dimensions. Financial constraints emerge as the paramount reason for forgoing, delaying and denying care. This is quite plausible in the context of a privatised healthcare market supported with the expansion of publicly-funded health insurance schemes and an under-provisioned public health sector in India (Mukhopadhyay & Sinha, 2019). An inequitable spatial distribution of healthcare resources results in situations where patients must travel far from their residences to access the required care. This is seen more in districts like Jalpaiguri and Murshidabad where a significant proportion had to travel outside the districts to seek essential medical care. Supply side constraints contribute to medical care being either incomplete or inappropriate, the extent of both being higher in public facilities. Lack of availability of required medicines and diagnostic tests for free at public facilities forces patients needing care either to purchase from private providers or forgo care partially. This reflects how fragmentation in the health system drives unmet need. Service quality of care in public health facilities suffers from stagnant and low public spending which has systematically undermined its capacity to cater to the growing needs of the increasing population and squeezes the existing capacity.

A crucial step towards bringing down unmet healthcare needs is to focus on strengthening comprehensive primary healthcare services. This also involves ensuring the availability of quality medicines and diagnostics at public facilities thereby enabling the opportunity to access affordable and quality care for the needy.

Concluding Remarks

In a context where healthcare is increasingly commodified and provisioned through a fragmented health system dominated by the private sector, complete access to quality healthcare can only be achieved by the economically and socially privileged section of society. This severely undermines the spirit of health for all and health as a fundamental right, leaving the vast majority of under-privileged sections to suffer.

Situational Assessment of Primary Care Facilities

Findings from a Survey of 63 HWCs Across 4 Districts in West Bengal

Free and quality primary health services form the backbone of a just society. In a developing country like India, where the double burden of infectious and chronic diseases prevails and health services in rural areas have been neglected, emphasis has been laid on a well-functioning primary health system since the time of independence (Health Survey and Development Committee, 1946). Yet significant deficiencies in infrastructure, human resources, services, and the availability of medicines are observed in our primary health services.

Health and Wellness Centres in West Bengal

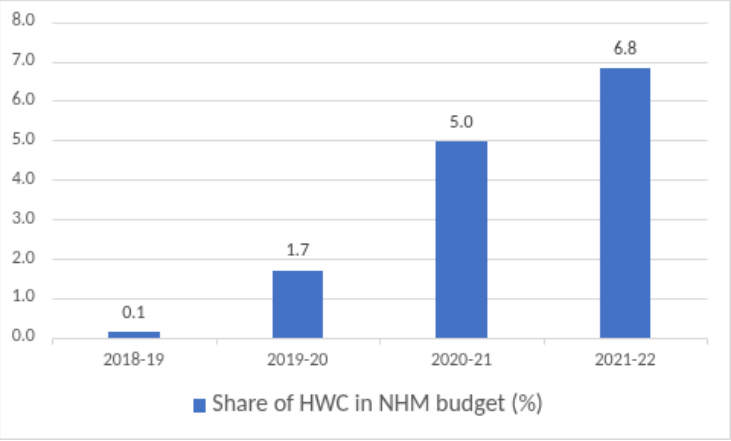
The primary objective of Health and Wellness Centres is to foreground comprehensiveness in primary health services. An exhaustive list of 12 services is proposed to be rolled out by the HWCs as a second component of PMJAY while the first component takes care of secondary and tertiary care through publicly-funded health insurance targeted for below poverty line families. The HWCs are conversions of already existing Primary Health Centres and Sub-Centres with expansion of services which now include non-communicable diseases, geriatric care, mental health, and dental services, in addition to family planning and reproductive and child health. An additional post of Community Health Officer (CHO) was created at the rural SCs to roll out these services alongside reproductive and child health services. As of today, all SCs and PHCs in West Bengal have been converted into HWCs. However, between 2005 and 2022, the number of sub-centres in West Bengal remained unchanged, while approximately 250 PHCs were converted into Community Health Centres (MoHFW, 2023). In effect, the overall physical infrastructure in the state has largely remained the same.

Table 10: Total and Sampled Number of Sub-centres and PHCs in Sampled Districts West Bengal (as of March 2022)

Districts	Sub-Centres	Sampled SC	PHCs	Sampled PHC
North 24 Parganas	742	15		5
Bardhhaman (West)	592	6	83	0
Jalpaiguri	301	13	27	
Murshidabad	832	23	83	1

Source: Rural Health Statistics, 2022

Figure 12: Percent share of HWC budget in NHM



Source: Project Implementation Plan document issued by NHM

Primary Health Facility Survey

To assess the situation and provide assessment of currently-functioning HWCs in West Bengal, a sample survey was conducted in four districts—North

24 Parganas, Bardhhaman (West), Jalpaiguri, and Murshidabad. The survey of HWCs was part of a larger household survey conducted in these districts to collect data on household health expenditure, health service utilisation, coverage of health insurance, and unmet health needs of the population. The approach was to survey the nearest HWC or the HWC that falls under the survey village, whichever was more accessible. A total of 63 HWCs were surveyed across the four districts.

- Out – 18 of the 63 facilities surveyed didn't had functional water supply – 5 in Jalpaiguri, 11 in Murshidabad, 2 in North 24 Parganas.
- 7 out of 63 facility didn't had toilet facility – 2 in Jalpaiguri, 5 in Murshidabad.
- 19 of the 63 facilities didn't had functional OPD room – 1 in Jalpaiguri, 5 in Murshidabad, 9 in North 24 Parganas, 4 in West Burddhman.
- 14 of the 63 facilities were operating from rented buildings – 3 in Jalpaiguri, 7 in Murshidabad, and 4 in North 24 Parganas.
- Out of the 11 and 18 sub-centres surveyed in Jalpaiguri and Murshidabad, only 5 and 12 respectively, had an appointed CHO. In North 24 Parganas, only 2 out of 14 sub-centres had vacant CHO posts.
- The mean distance of an HWC from a survey village was 0.58 km. One village was approximately 3 km away, and five villages were around 2 km away.
- Of the 53 HWCs, 16 did not have telemedicine services.
- Jan Aarogya Samiti was present in only 7 surveyed HWCs.

Method: To analyse the readiness of the HWCs, the WHO's Service Availability and Readiness Assessment (SARA) framework was adapted to evaluate the readiness of sampled facilities (WHO, 2015). SARA provides a structured approach to measure the capacity of health facilities to deliver essential services by examining multiple domains such as infrastructure, equipment, medicines, and human resources. The advantage of SARA is that it does not club services, infrastructure, medicines, and human resources together; instead, it

Table 11: Sampled HWCs in Selected Districts of West Bengal

Survey District	HWC PHC (Rural)	HWC SC (Rural)	HWC Urban	HWC PHC (Urban)	Total
Bardhhaman (West)	0	4	2	0	6
Jalpaiguri	0	11	2	0	13
Murshidabad	0	18	5	1	24
North 24 Parganas	3	14	1	2	20
Total	**3**	**47**	**10**	**3**	**63**

Source: Primary survey, West Bengal, 2024

treats each as a stand-alone domain, enabling identification of domain-specific gaps and targeted interventions for strengthening health systems.

Based on the framework, four domains were identified: services, infrastructure, human resources, and the availability of medicines. For the services domain, all services prescribed for HWCs—except dental services—were taken as indicators. For infrastructure, the indicators included a functional OPD room, internet connectivity, laboratory, water supply, electricity, toilets in use, and availability of computers and mobile/tablet devices. For human resources, separate criteria were defined for SCs and PHCs in accordance with the IPHS (2022) guidelines. For SCs, the presence of a CHO, ANM, a male MPHW, and cleaning staff were considered. For PHCs, the presence of an MBBS doctor, ANM, GNM, lab technician, pharmacist, and cleaning staff were taken as indicators. For the availability of medicines, a binary value of 1 was assigned to each facility if at least 24 out of the 30 essential medicines surveyed were available. All indicators across domains were used in binary form.

A facility readiness index (FRI) was created for each domain. A binary value of 0 or 1 was assigned based on availability of the selected indicator in each domain and mean was taken for that domain. The value was assigned as the domain score and for each HWC the average of the domain score taken which represents the facility readiness score.

In addition to FRI, a backwardness score for the corresponding villages were created using household survey data based on

three indicators. First, economic vulnerability consisting lower two income quintile households, asset and household whose main occupation is casual labour, second, human vulnerability consisting education qualification of household head, dependents on earning members and houshold with more than 6 members and third social vulnerability consisting caste and female headed households. FRI was correlated with backwardness score to understand the relation between performance indicators of the HWC with socio-economic condition of the village it is situated in.

Across districts, service scores are uniformly high (90-100), while human resources are comparatively lower (40-60). Infrastructure is mid-range, with Jalpaiguri and North 24 Parganas at 71, Barddhaman (West) at 65, and Murshidabad at 64. Medicines show the widest spread—highest in Barddhaman (West) at 68, followed by North 24 Parganas at 61, Jalpaiguri at 47, and lowest in Murshidabad at 30; sample sizes vary, with n=24 in Murshidabad, 20 in North 24 Parganas, 12 in Jalpaiguri, and 6 in Barddhaman (West).

Rural facilities in Barddhaman (West) and North 24 Parganas have Mean FRI scores around 70, with a few facilities scoring above 70%, while Murshidabad rural facilities show the lowest Mean FRI at 56. Urban facilities generally perform better, with Jalpaiguri Urban recording the highest Mean FRI of 89 and North 24 Parganas Urban at 79, alongside higher OPD volumes compared to rural areas. Median OPD for the last month varies widely, from 250 in Barddhaman Urban to 2,500 in Jalpaiguri Urban, indicating significant differences in service utilisation across districts and sectors.

Discussion and Conclusion

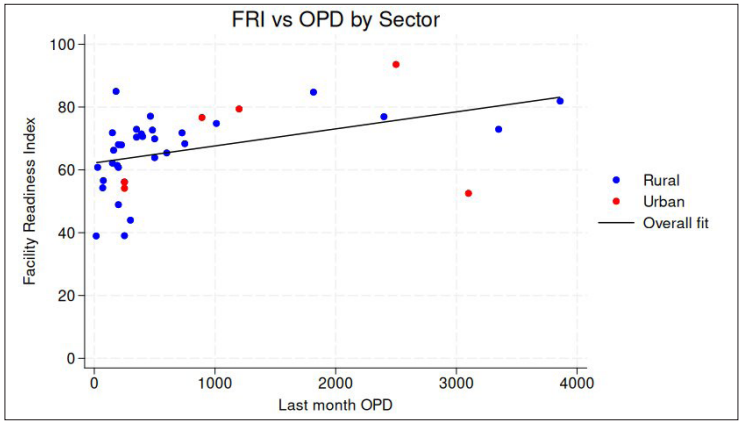
The budget share of HWC in NHM has increased over time from 0.4% in 2018-19 to 6.8% in 2021-22 but there still remains areas of improvement to make the HWC comprehensive and useful to the local communities. The Spearman Rho correlation confirms the established fact that better-equipped facilities, indicated by higher FRI scores, tend to handle more OPD cases and diagnostic tests. However, week correlation

Table 12: District Wise Mean Domain Score

District	Services	Infrastructure	Human Resource	Availability of Medicines	n
Bardhhaman (West)	100	65	43	68	6
Jalpaiguri	95	71	42	47	12
Murshidabad	90	64	40	30	24
North 24 Parganas	93	71	60	61	20

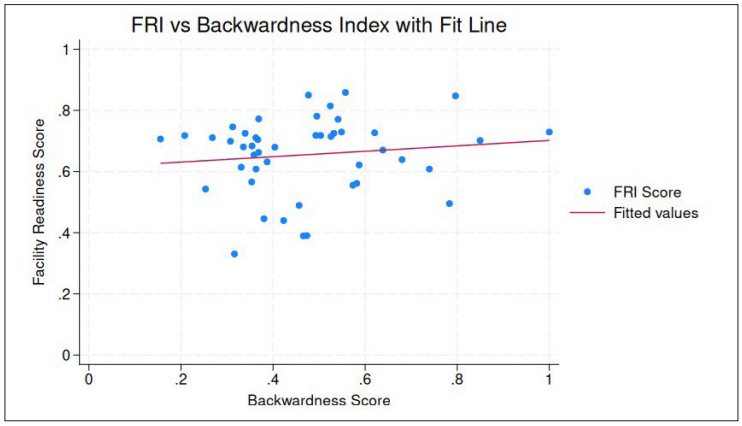
Source: Author's calculation, primary survey, West Bengal, 2024

Figure 13: Mean FRI and Median OPD for Rural and Urban HWCs in Detected Districts



Source: Author's calculation, primary survey, West Bengal, 2024

Figure 14: Correlating FRI Scores and Backwardness Scores



Source: Author's calculation, primary survey, West Bengal, 2024

Table 13: Spearman Correlation between FRI, OPD, and Diagnostics for Previous Month

Metric 1	Metric 2	Spearman Rho	P value	No. of observations
FRI (excluding missing values)	OPD (last month)	0.619	0	48
FRI (excluding missing values)	Diagnostic tests (last month)	0.3648	0.0112	48
OPD (last month)	Diagnostic tests (last month)	0.6366	0	48

Source: Author's calculation, primary survey, West Bengal, 2024

was observed between FRI and backwardness score and a weaker correlation between FRI and OPD completed last month. The OPD load at urban HWCs was recorded as the highest.

The renewed focus on comprehensive care under National Health Policy (2017) requires services such as geriatric care, mental health, and others, along with the functioning of Jan Aarogya Samiti (JAS) to democratize decision making and capture community needs at the village level. Among the surveyed HWCs, only seven had a JAS in place.

District-wise analysis shows that while respondents reported the availability of all prescribed services, a shortfall in human resources was observed across all districts. Out of 47 HWCs (SC) in rural areas, 16 did not have a CHO—a position created to extend services beyond reproductive and child health. In terms of basic amenities like water and toilets, facilities in Murshidabad and Jalpaiguri lag behind those in North 24 Parganas and Bardhhaman (West).

To achieve the goal of comprehensiveness, especially in terms of screening for NCDs, mental health, and geriatric services, the appointment of CHOs at sub-centres, regular meetings of Jan Aarogya Samiti, and provision of basic amenities like clean drinking water and toilets for women are some of the essential starting points.

Out-of-Pocket Health Expenditure & Provider Utilisation for Chronic Care:

Evidence from Household Survey in West Bengal

Evidence on out of pocket expenditure (OOPE) on chronic care in India remains limited (Kamath et al., 2025). While National Statistical Office (NSO) surveys collect data on outpatient care, hospitalisation, and chronic care, chronic care reporting is constrained by a 15 day recall period and is combined with outpatient care. Chronic conditions, however, require longitudinal management (Starfield, 1998; Strauss, 1976), characterised by repeated outpatient department (OPD) visits and prolonged medication use. Over two consecutive rounds of the NSO's Social Consumption: Health survey (2017–18 and 2025), the proportion of persons reporting ailments (including chronic conditions) during the preceding 15 days increased from 6.8 per cent to 12.2 per cent at the all India level. In contrast, the corresponding proportion for West Bengal declined from 13.8 per cent to 8.9 per cent. The latest NSS round (2025) reports average OOPE per episode in private hospitals of INR 1,541 and INR 1,343 at the all-India level, and INR 1,750 and INR 1,144 for rural and urban West Bengal for out-patient care, respectively.

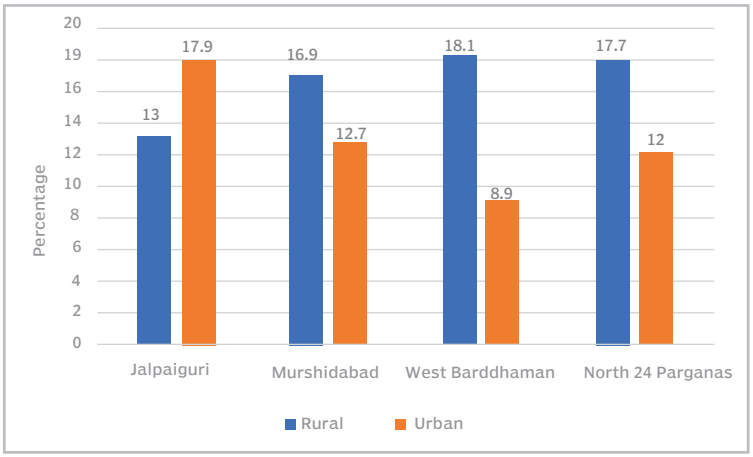
NSO data do not provide chronic specific expenditure estimates, nor do they disaggregate OOPE by level of care, despite growing evidence that provider tier, first point of care, and private sector dominance shape chronic care financial trajectories (McPake et al., 2025). These limitations point to significant gaps in the OOPE literature, particularly the absence of disaggregated estimates for medicines, diagnostics, and consultations, and an over reliance on public–private binaries that fail to capture the continuum between the two.

Evidence from Primary Survey

To examine the utilisation of chronic care by provider type and its contribution to OOPE, a household survey was conducted across four districts of West Bengal. To comprehensively capture health care spending, a 365 day recall period was employed, and individuals across all age groups were probed for chronic ailments and utilisation. Data were collected on self reported chronic conditions, type of provider accessed, and expenditures incurred on physician consultations, tests and diagnostics, and medicines. All figures reported in the analysis pertain to expenditures incurred during the 365 days preceding the survey.

Prevalence of self-reported chronic ailments

Figure 15: Proportion of persons reported chronic ailment (%)



Source: Primary Survey, West Bengal, 2024

Figure 15 shows district level variation in the proportion of individuals reporting chronic ailments, with rural areas generally exhibiting higher prevalence. Jalpaiguri reports a higher proportion of chronic conditions in urban areas (approximately 18 per cent) compared to rural areas (12.9 per cent), whereas West Barddhaman records the highest prevalence in rural areas. Across districts, overall chronic reporting remains narrowly distributed between approximately 13 and 15 per cent, indicating moderate yet persistent inter district variation.

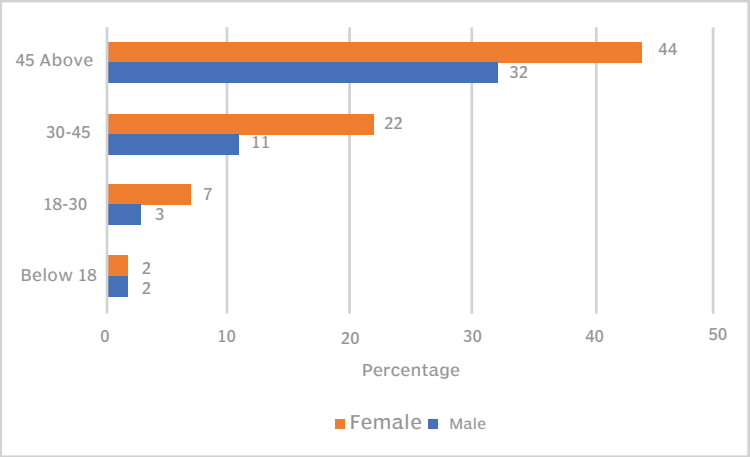
Figure 16 shows a clear age gradient in chronic ailment reporting, with prevalence rising sharply among individuals aged 45 years and above for both males and females. Reporting of chronic ailments is similar among males and females in childhood (below 18 years), whereas female reporting exceeds that of males in the 18–30, 30–45, and 45+ age groups.

Figure 17 shows variation in the sex distribution of self reported chronic ailments across ailment categories, with females constituting a higher proportion of cases in diabetes, thyroid, and gastro liver conditions, while males are more prevalent in kidney/urinary and lung diseases. Overall, females account for a larger share of individuals reporting chronic ailments, indicating notable sex differentials in the distribution of chronic conditions.

OOPE and Utilisation of chronic care by provider type and level of care

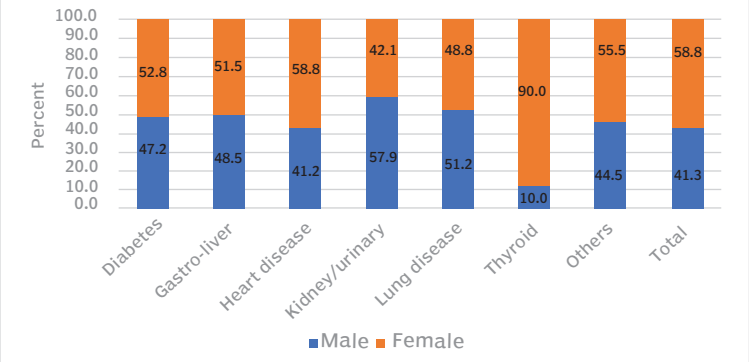
The break up of OOPE on medicines, physician consultations, and tests and diagnostics shows that medicines account for the largest share of total OOPE (fig. 18A). Among individuals reporting chronic ailments, 33.2 per cent consulted physicians, 13.1 per cent underwent diagnostic tests, and 53.7 per cent purchased medicines. However, in terms of cost composition, the median share of medicines constitutes 66.2 per cent of total OOPE, followed by physician consultations (13.3 per cent) and tests and diagnostics (7.9 per cent). Among individuals who availed all three services in last 12 months, the cost shares of medicines, physician consultations, and tests and diagnostics were 74.2 per cent, 18.6 per cent, and 7.2 per cent, respectively (fig. 18B).

Figure 16: Age and sex wise distribution ofself-reported chronic ailment (%)



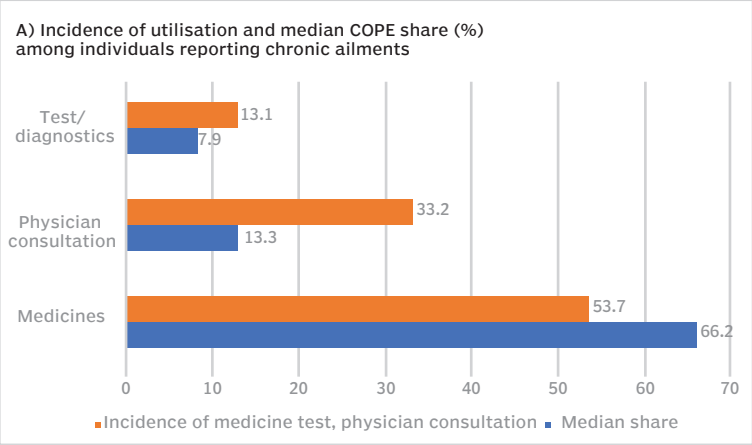
Source: Primary Survey, West Bengal, 2024

Figure 17: Self-reported chronic ailments by sex (%)



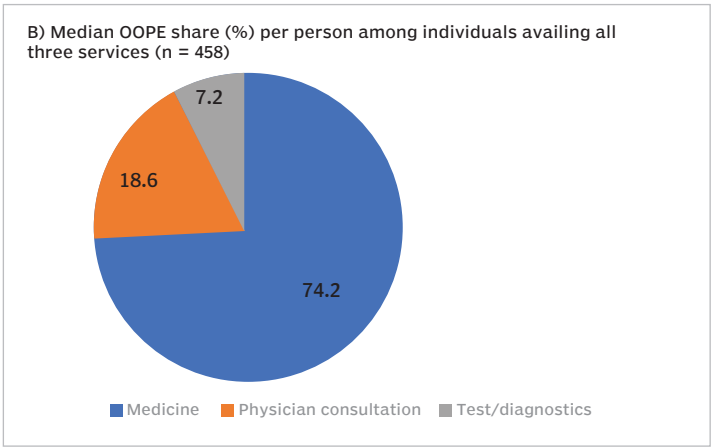
Source: Primary Survey, West Bengal, 2024

Figure 18: OOPE composition across medicine purchase, physician consultation and diagnostic tests among individuals with chronic ailments



When medicine expenditure is analysed by provider type, utilisation patterns show a clear dominance of private providers, with drug stores alone accounting for over one third of all medicine purchases (see Table 14). Median medicine expenditure is substantially higher in drug stores and private hospitals or clinics, at INR 8,400 and INR 1,200, respectively. In contrast, public facilities—particularly Primary Health Centres (PHCs)/Health and Wellness Centres (HWCs) and the Employees' State Insurance Scheme (ESIS)—record negligible median medicine expenditure; however, utilisation of these facilities for medicine procurement remains low at 15.7 and 3.6 per cent, respectively.

Private clinics and private hospitals report higher annual median expenditures on physician consultations, with per person median consultation costs of INR 2,000 and INR 4,200, respectively, and corresponding median diagnostic expenditures of INR 370 and INR 1,120 (Table 15). In contrast, public facilities—including District Hospitals (DHs)/Community Health Centres (CHCs), and Primary Health Centres (PHCs)—account for substantial utilisation shares, at approximately 32 per cent and 30 per cent for physician consultations and 25 per cent and 32 per cent for tests and diagnostics, respectively, yet record a median expenditure of INR 0 for both services. Private "other" providers register relatively low median physician consultation costs of INR 1,200, with a utilisation share of 12.6 per cent; however, this category includes a substantial presence of informal providers.



Source: Primary Survey, West Bengal, 2024

Table 14: Source of medicine purchase by type of provider and level of care

Provider type	Percentage (n)	Median medicine expenditure (INR)
Private: Drug Store	35.2 (567)	8,400
Private: Hospital/Clinic	25.2 (406)	1,200
Private: Others	4.8 (78)	3,600
Public: ESIS	3.6 (59)	0
Public: Hospital/Clinic	15.2 (246)	3,600
Public: PHC/HWC	15.7 (254)	0

Source: Primary Survey, West Bengal, 2024

Table 15: Utilisation by provider type (%) and OOPE on physician consultation and tests/diagnostics

Provider type	Physician consultation (n)	Median medicine expenditure (INR)	Diagnostic tests (n)	Median expenditure on diagnostic tests (INR)
Private Clinic	9.8 (63)	2,000	13.3 (45)	370
Private Hospital/Nursing Home	15.3 (98)	4,200	25.6 (100)	1,120
Private Others	12.6 (81)	1,200	0	0
Public (Hospital & DH CHC)	32 (205)	0	25.15 (85)	0
Public (PHC/HWC)	30.3 (194)	0	32 (108)	0

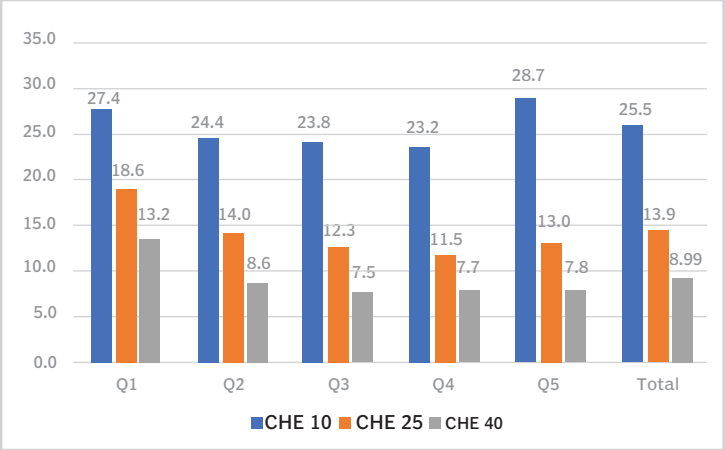
Source: Primary Survey, West Bengal, 2024

Expenditure on chronic care results in a substantial proportion of households incurring catastrophic health expenditure (CHE). Across consumption quintiles and with increasing CHE thresholds, a clearer gradient emerges between poorer and richer households (fig. 19). Using the budget share approach, at the 10 per cent threshold, 27 per cent of the poorest households and 28 per cent of the richest household's experience CHE. However, as the threshold increases, the gradient becomes more pronounced: at the 25 per cent and 40 per cent thresholds, 18.6 per cent and 13.2 per cent of the poorest households incur CHE, compared to 13.0 per cent and 7.7 per cent of the richest households, respectively.

Conclusion

Overall, the findings point to a clear and consistent pattern in which chronic care disproportionately affects older women, while high medication costs impose a substantial financial burden on poorer households. While NSO estimates combine outpatient visits and chronic care reporting, the rising incidence of chronic ailments and the long term nature of their management warrant closer and more focused examination. Our household survey reports a higher prevalence of chronic ailments (14.9 per cent), and expenditures incurred during the 365 days preceding the survey are substantially higher in private health facilities. The findings further indicate a higher utilisation of primary care facilities (PHCs and HWCs) for physician consultations; however, households continue to rely on drug stores and private hospitals for medicine procurement, thereby contributing to higher out of pocket expenditure.

Figure 19: Catastrophic Health Expenditure across consumption quintile (%)



Source: Primary Survey, West Bengal, 2024

Contribution of ESI to the West Bengal Health System: Preliminary Findings

Employee State Insurance (ESI) scheme is an essential arm of the mixed health system of the State of West Bengal

> "One of our workers was referred to PLS, a private hospital. For over 1 year expenses were covered under ESI and he is still getting ESI treatment."
>
> – Steel Factory Employer, WB

The Employees' State Insurance (ESI) scheme (governed by the ESI Act, 1948) in India is a pioneering social health protection. Developed in a period when India's economy and industrial sector were still emerging, the 1948 Act embodies the principle of social security as both a right of workers and a state obligation. Drawing inspiration from the 1931 Royal Commission on Labour and European models of social security, this comprehensive scheme was the country's first national statutory measure to safeguard against medical, maternity, disablement, and occupational risks associated with employment. It institutionalised shared responsibility among employers, employees, and the state, aligning with the Directive Principles of State Policy of the Indian Constitution, to ensure protection for industrial and organised sector workers.

Structure and Benefit Framework

The Employees' State Insurance Corporation (ESIC) governs the ESI scheme as a statutory body under the Ministry of Labour and Employment, with representatives on its board from central government, state governments, employers, employees, Parliament, and the medical profession. The ESI scheme is financed by the 'tripartite' contributions from employers (3.25%), employees (0.75%), and state governments (limited medical support), ensuring shared responsibility and sustainability. Section 46 of the Act provides a comprehensive benefits package, including sickness, maternity, injuries, disablement, unemployment (RGSKY), dependent, and funeral benefits, along with medical care to retired and disabled persons. By integrating income replacement with healthcare support, the scheme functions as a holistic social protection mechanism rather than just a basic insurance model.

The scheme mandatorily applies to factories and non-seasonal establishments with 10 or more employees (20 in some states) for workers who earn below ` 21,000 monthly.

Reflecting this interest, the study on Health Finance Fragmentation examined the ESI scheme to draw lessons for progress towards UHC. Based on Key Informant Interviews (KIIs) with ESI officials at different levels, employers, and service providers, evidence from the household survey conducted in 2024, and analysing available system data, this summary note presents some key findings and issues for discussion related to access and utilisation, supply-side gaps, and governance issues within the ESI scheme.

Medical Services for the insured persons (IPs) and their families are delivered through a nationwide network of ESI Facilities comprising 165 own hospitals, 1,590 dispensaries, 105 dispensaries cum branch officers, 863 Insurance Medical practitioners (IMPs) along with 300+ private empaneled hospitals. (Annual Report 2024-25). The ESI medical benefits seek to maintain worker productivity by reducing vulnerability to health and employment shocks.

The ESI scheme is widely recognised for the comprehensiveness of its medical coverage and for operating its own network of health facilities—features that distinguish it from most public and private insurance schemes. In the context of universal health coverage (UHC), there is growing policy interest in whether the ESI model can be extended to workers across sectors, including those in the informal sector.

ESIC is the national statutory body, and ESIS is the health insurance scheme it administers under the ESI Act. designs the scheme, sets rules, and finances it, while state ESIS machinery and facilities deliver medical services to insured persons under a cost-sharing arrangement with states.

STATUS OF THE IPS

As of 31 March 2025, 3.84 crore insured persons (IPs) are covered under the ESI Scheme, an increase from 3.43 crores in 2022-23. West Bengal is one of the states which has seen a high increase in coverage, and has also been a state with relatively high ESI covered workforce, with its dense industrial clusters.

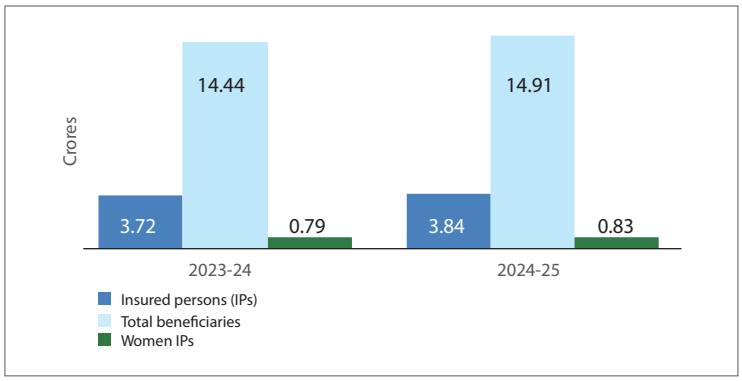
All 23 districts (100%) in West Bengal have fully implemented the ESI Scheme as of April 1 2025, making the state one among the 25 states/UTs with complete ESI coverage.

Utilisation Gaps

Utilisation of the ESI Comparative to Other Schemes

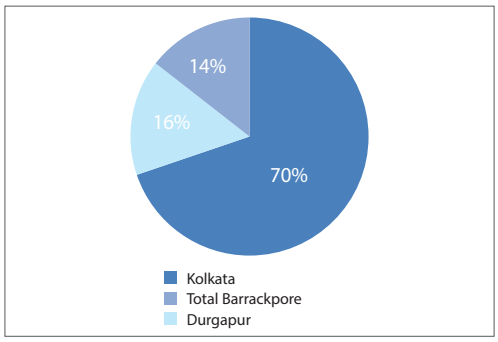
The household survey showed that those covered with ESI are more likely to use the scheme (59.4%), compared to those who are covered by the Swasthya Sathi (SS) scheme. Among those who had both SS and ESI, ESI is used more often (52.9%) than SS (10.6%), indicating a clear preference when both options are available. In contrast, among those with only SS coverage, only 18.3% of

Figure 20: IPs and Beneficiaries' Annual Growth



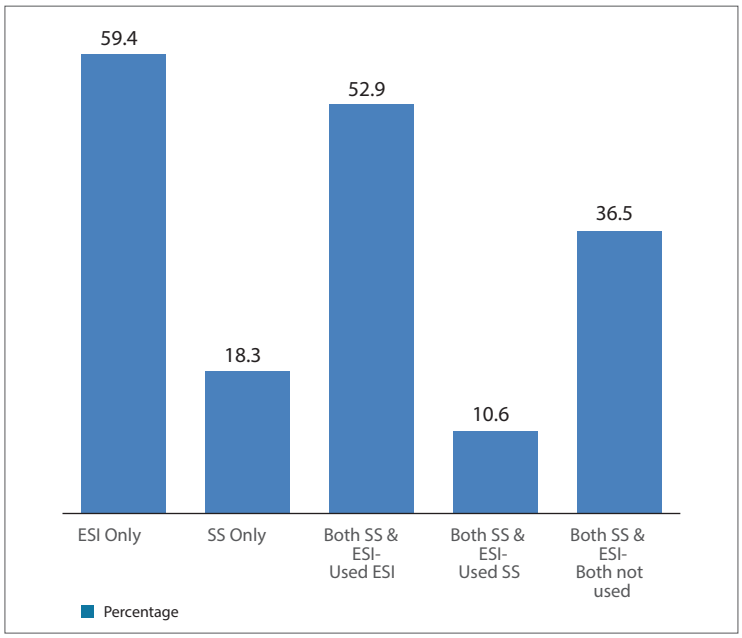
Source: ESI annual report 2024-2025

Figure 21: Regional Wise IPs – West Bengal



Source: Authors' calculation based on household survey 2024

Figure 22: Utilisation of the ESI Comparative to Other Schemes



Source: Authors' calculation based on household survey 2024

households that required inpatient care used the scheme, reflecting lower awareness, weaker perceived benefits, and/or greater barriers to accessing SS services compared to ESI. Additionally, a substantial share of those covered by both schemes do not use either during hospitalisation (36.5%), pointing to possible gaps in awareness, clarity on eligibility, or administrative ease, despite being formally insured.

Access Gaps

Our household survey found that aware ness levels (derived from 7 indicative questions on services covered, eligibility, maximum coverage, provider, family cap, card requirement and payment modality) of IPs of the ESI scheme in West Bengal is highly uneven across social and economic groups. Men are more aware than women, indicating gender gaps in access to information and in links to the formal labour mar ket. Caste differences are stark: people in the 'other' (likely upper-caste) cate gory have very high awareness, while SCs have moderate awareness and STs and especially OBCs have very low awareness, suggesting that historical ly-disadvantaged groups are not being reached effectively by scheme commu nication. Religious differences are also pronounced. Hindus have relatively high levels of awareness, whereas Muslims have about half that level, and other minority groups show negligible aware ness. The urban-rural divide is the most striking pattern: urban respondents show very high awareness of the ESI scheme, while rural respondents have extremely low awareness. This points to ESI effectively functioning as an urban-centric scheme in terms of infor mation reach.

Additionally, digital employer registra tions exclude workers from orientation, leaving IPs unaware of the ESIC card usage or emergency access, perpetu ating exclusion despite automation efficiencies.

Taken together, these patterns suggest that any strategy to improve awareness should prioritise rural areas, women, OBC and ST communities, and Muslim popula tions, using targeted, community-based and workplace-based outreach beyond the formal urban sector.

- ***Urban Rural Gaps***
  In terms of availability of services as well, it is observed that ESI health ser vices are concentrated in urban areas and in industrial clusters, especially around Kolkata. For certain specialties like burn units, IPs are forced to travel long distances from Asansol/Durgapur to Kolkata, delaying care and increas ing expenses. Therefore, IPs are driven away from utilising ESI facilities despite the high expanses and compro mission on quality.

Table 16: Table Showing General Scheme Aware ness of ESI Households

Population Categories		Proportion of those with Scheme awareness (%)
Gender	Male	55.30
	Female	44.70
Caste	SC	19.83
	ST	8.60
	OBC	3.10
	Others	68.47
Religion	Hindu	65.19
	Muslim	33.99
	Sikh	0.35
	Jain	0.48
Sector	Rural	7.68
	Urban	92.32

Source: Authors' calculation based on household survey 2024

Out-of-Pocket Expenditure

We find that the OOPE faced by patients with ESI-covered hospitalisations is much lower than for those covered under Swasthya Sathi. Further, while OOPE is relatively lower in public facilities for everyone, ESI gives larger protection in private hospitals.

In public hospitals, OOPE for ESI-covered and uninsured patients is similar and not statistically different. In private hospitals, ESI reduces mean OOPE by about

` 46,972 per hospitalisation compared to uninsured patients, a statistically significant gap.

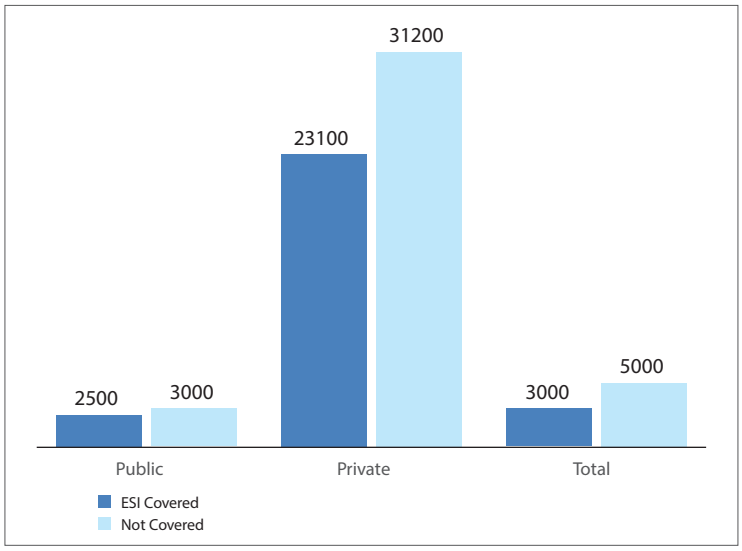
Across all facilities combined, ESI coverage lowers mean OOPE per hospitalisation by ` 15,801, also statistically significant. Overall, the results imply that ESI provides substantial financial protection, particularly by shielding patients from high OOPE which can lead to low catastrophic health spending.

Medical Expenditure

State-wise per capita medical spending by ESIC and ESIS indicates disparities across India. In 2023-24, Delhi recorded the highest per capita spending, followed by Kerala, Assam, West Bengal, Haryana, Mizoram, and Karnataka, while Andhra Pradesh, Tripura, Meghalaya, Maharashtra and Odisha were at the lower end of the spectrum. West Bengal reported per capita total medical spending in 2023-24 that exceeded the all-India average of ` 3,624. There are also notable differences in how this spending is split between ESIC and ESIS across states: in 2023-24, some states had a higher per capita share from ESIC, whereas others relied more on ESIS. West Bengal's total per capita spending is more heavily driven by ESIS.

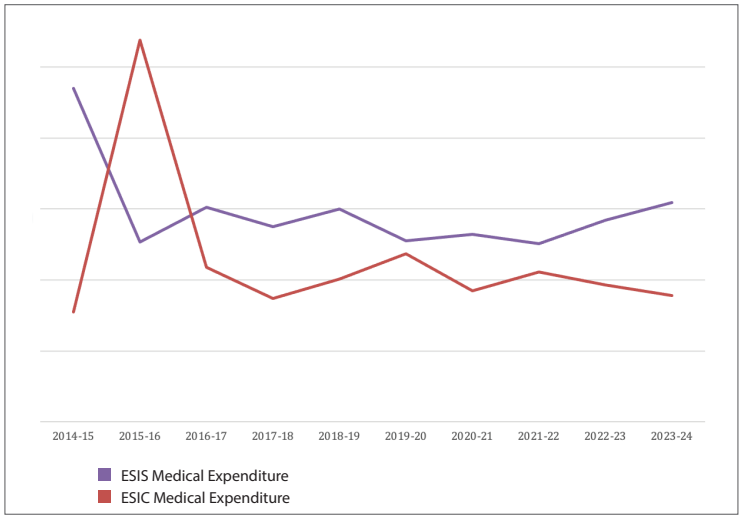
ESIS and ESIC medical expenditure from 2014-15 to 2023-24 and reveals contrasting trends across the decade for West Bengal. ESIS medical expenditure starts very high in 2014-15 at 4,704, then drops sharply to nearly half in 2015-16, and thereafter stabilises in a narrower band between about 2,500 and 3,100, with a modest rising tendency in recent years (reaching 3,089 in 2023-24). ESIC medical expenditure, by contrast, begins lower at 1,546 in 2014-15, spikes dramatically to 5,377 in 2015-16, and then falls back to the 1,700-2,300 range, where it fluctuates without a clear upward or downward trend. In almost every year except 2015-16, ESIS spends more on medical care than ESIC, suggesting that the state-run ESIS system consistently bears a larger share of total medical spending. The extraordinary ESIC peak in 2015-16 stands out as an anomaly, indicating a one-time surge in expenditure—possibly due to exceptional payouts, accounting changes, or special initiatives—rather than a sustained structural increase in ESIC's medical spending pattern.

Figure 23: Median OOPE per Hospitalization Case (INR)



Source: Authors' calculation based on household survey 2024

Figure 24: Real Medical Expenditure Per Capita ESIS and ESIC, WB (2014-2023) at 2023 Prices



Source: Authors' calculation based on household survey 2024

West Bengal's ESI (Medical Benefit) Scheme operates from a position of financial sufficiency but operational suboptimality. With ` 435.12 crore in base allocation for FY 2024-25, per-IP spending of ` 2,693 placing it among higher-spending states, and a mature institutional framework spanning 69 years, the scheme possesses the fiscal foundation for effective social security healthcare delivery.

In conclusion, ESI has high levels of access and awareness and low OOPEs in comparison to other schemes. However, within ESI there are issues of exclusion and drivers of OOPE which are examined further in the below sections.

In conclusion, the ESI scheme demonstrates relatively high levels of access and awareness, along with lower out-of-pocket expenditures compared to other schemes. However, there are significant intra-scheme inequities and specific drivers of OOP spending within ESI itself, which are examined in detail in the sections that follow.

> "If a machine is there, it needs to be made sure that the entire process is available and the staff running the machine is available."
>
> – ESIC Official

> "Funds exist, but the main challenge is manpower."
>
> – ESIC Hospital Officials

> "What is the real purpose of the NonPracticing Allowance (NPA) if there is now an "exit" from NPA, and could policy be reframed to allow limited, regulated private practice after working hours (for example, after 6 p.m.) as a matter of choice rather than blanket prohibition?"
>
> – ESIC Official, WB

SUPPLY-SIDE GAPS

Human Resource Gaps

Shortages and Rigidities

Severe deficits in specialists, paramedics, and technicians (e.g., dialysis treatment needs 50 technicians for 85-95 cases daily); Cath lab sanctioned but understaffed). Cumbersome recruitment (state-controlled, lengthy processes prioritising government hospitals), longer promotions than AIIMS, and contract reliance deter talent amid private sector competition. The need for addressing vacancies of doctors (vacancy rate being 20.6%) in ESIS-West Bengal is also pertinent, given the high scheme utilisation signalled by its highest bed occupancy rate in the country (76.8) (Annual Report 2022-23).

- ***Recruitment:*** Core medical posts (e.g., GDMOs for ESIS) are filled mainly through periodic WBPSC drives (such as the 300-post GDMO recruitment in 2023), while hospitals simultaneously depend on ad-hoc contractual CGDMOs/CSMOs and walk-in interviews, so vacancies persist between cycles. Circulars and employment notices show that contractual hiring and panel recruitment are triggered when vacancies accumulate (e.g., multiple CGDMO/CSMO posts advertised together) rather than through rolling recruitment, causing prolonged gaps at facility level.

- ***ESIS vs Government Hospitals***
  Although ESIS GDMOs are recruited under a dedicated West Bengal ESI Medical Service, state managers often give higher priority and faster deployment to mainstream government hospitals, leaving ESIS positions filled later or kept at lower sanctioned strength.

- ***Competition from Private Sector***
  Private hospitals in West Bengal increasingly offer better pay, technology, work environments, and opportunities in high-end diagnostics and oncology, while ESIS/ESIC hospitals lag in equipment and support services, making recruitment and retention of specialists particularly difficult. The career trajectory in ESI S caps a senior doctor at around ` 4.5-5 lakh per month after 10-15 years, while the same specialist could earn ` 25-30 lakh per month in private practice, so the opportunity cost is simply too high.

Correlation Between Vacancy Rate and Bed Occupancy

Across ESIS and ESIC facilities, higher vacancy rates are generally associated with lower bed occupancy, and this inverse relationship becomes stronger when contract workers are excluded in the vacancy calculation. For ESIS, doctor vacancies in both dispensaries and hospitals show moderate negative correlations with bed occupancy that become stronger and statistically significant once contractual doctors are counted, especially in hospitals. In ESIC hospitals, vacancies among general duty

medical officers, nurses, and paramedics display moderate to strong correlations with bed occupancy, which intensify further when contractual staff are included, while specialists show weaker, non-significant correlations. Overall, the pattern suggests that total staff availability (regular plus contractual) is closely linked to how fully beds are utilised, implying that effective human resource management, including the strategic use of contractual appointments, is critical for improving bed occupancy.

HOSPITAL OPERATIONS AND PROCUREMENT GAPS

- ***ESIS vs. ESIC Hospitals:*** ESIS hospitals (state-managed) suffer from procurement misuse and supply shortages due to fragmented purchasing instead of annual bulk plans. ESIC hospitals (corporation-run) face poor implementation, excessive administrative meetings without outcomes, and fragmented procurement of consumables, causing persistent disruptions.

> "I procure medical equipment for the state-run facilities from four different funds. I have utilised my funds and when a year-end PIP is rejected on a certain ground, it would hinder my performance."
>
> – ESIS Official

- ***Underperforming Facilities:*** Local priorities often diverge from ESIC goals, deprioritising critical units (e.g., burn, NICU, PICU) for less essential equipment.

- ***Medical Colleges:*** ESI medical colleges maintain higher standards via National Medical Commission inspections, fines for deficiencies, and accountable leadership (e.g., Deans with autonomy; examples include IAS-led colleges in Faridabad and private-sector-experienced colleges in Joka), outperforming non-college hospitals lacking oversight.

- ***Procurments:*** ESIS purchases medical equipment using multiple funding sources, but sudden rejection of the Performance Improvement Plan (PIP) late in the year regardless of approved funds spent disrupts services; functioning of one machine depends on another, cancelling even a few requested items undermines overall service performance.

Table 17: Vacancy Rate and Bed Occupancy Rate of ESIC West Bengal

West Bengal	Bed Occupancy Rate	VR-Specialist & GDMOs	VR-GDMO	VR- Nurse	VR-Paramed
ESIC	61	40	51.06	20	34.37

Source: Authors' calculation from ESIC Annual report 2022-23, VR: Vacancy Rate (including contract), GDMO-General Duty medical officer -

Table 18: Vacancy Rate and Bed Occupancy Rate of ESIC West Bengal

West Bengal	Bed Occupancy Rate	VR-doc in dispensary	VR-doc in dispensary (contract)	VR-doc in hospital	VR-doc in hospital (contract)
ESIS	76.84	0	0	59.45	20.67

Source: Authors' calculation from ESIC Annual report 2022-23, VR: Vacancy Rate (including contract), GDMO-General Duty medical officer -

- ***Maintenance and Operational Challenges*** stem from ESIC's lack of a proactive maintenance strategy and fragmented responsibilities. All infrastructure upkeep—whether minor (Annual Repair and Maintenance) or major (Special Repair and Maintenance)—is under ESIC's purview, but delays and bureaucratic procedures lead to frequent neglect. Hospitals often face leaking roofs, broken drainage, or unusable toilets, yet repairs remain pending for long periods. In such situations, ESIS is compelled to carry out urgent fixes, even though it is not officially responsible, to ensure patient safety and uninterrupted services.

INFRASTRUCTURE AND MAINTENANCE GAPS

The ongoing infrastructure projects in West Bengal are as follows: a 100-bedded ESIC hospital at Haldia for a budget of ` 70.12 crore and a 22,100-bedded ESIC hospital at Siliguri for a budget of ` 75.02 crore are under construction currently. Additionally, the 100-150 bed ESI hospital at Ansasol is under modification with a budget of ` 35.92 crore. (Annual Report 2024-2025 pg. 42-44).

> "If you want to run a home properly, you need to have regular maintenance. We cannot take an ICU patient a leaking room."
>
> – ESIS Officials, WB

- ***Overcrowding Hospitals Exceed Capacity:*** For example, 130% occupancy, violating 1.5m bed norms.
- ***Delays in Ongoing Construction:*** States lacking control over ESIC-maintained assets and interventions to complete the pending expansion such as >2.5 years; unfinished North Bengal hospital lacking sewage/water plants.
- ***Safety and Supplies:*** No fire clearances despite requests; top-down policies (e.g., Jan Aushadhi sourcing) ignore ground realities.
- ***Hospital Infrastructure*** is unevenly distributed, concentrating specialty services (e.g., orthopedics, cardiology) in select hubs like Sealdah and Maniktala, requiring some patients to travel over 100 km for specialised care.

PRIMARY CARE GAPS

ESI Dispensaries

ESI in West Bengal contributes to primary care mainly through a network of ESI/ESIS dispensaries, tie-up clinics, and empanelled centres that provide first-contact outpatient services, basic diagnostics, and preventive care for insured workers and their families. These primary-level units act as the gatekeepers for the system: they offer routine consultations, essential medicines and lab tests, manage referrals to secondary/tertiary hospitals.

Several issues have been highlighted concerning the state's dispensaries. These include their considerable distance from worker localities and a higher concentration in urban areas compared to semi-urban and rural regions. Moreover, an evaluation of hospital-attached dispensaries has been suggested, given the sharing of human resources between hospitals and dispensaries. In such cases, when hospital staff allocate a portion of their time to dispensary services, it can result in a shortage of personnel within the hospital during those hours.

Expansion through Innovations

The Annual Report highlights several expansions in primary-level beneficiary-friendly services such as the home delivery of medicines for vulnerable and immobile chronic patients; annual preventive health check-ups with home sample collection for senior citizens aged 40+; online OPD appointment booking through the AAA+ mobile app for all dispensaries and hospitals; and telemedicine plus e-ICU support using 5G-enabled ambulances in seven medical colleges. However, the actual availability of these services in ESI West Bengal is uneven. Implementation depends on where an ESIC medical college or designated hub hospital implements the SOP, onboarded with OPD e-appointments and available at primary care level—for example, 5G enabled ambulance service is a tertiary-care, hub-level service.

> "IMPs are so low. If that model is implemented everywhere, so that any worker can register with any IMP, and that there is no need to visit a dispensary, this will be the biggest reform in ESIC. This will be good for primary care, otherwise, nobody is worried about it."
>
> - Former ESI medical doctor

We have found that some dispensaries lack basic services such as testing facilities, thus pushing patients to crowded public hospitals or seeking private healthcare leading to out-of-pocket spending on primary care.

Insurance Medical Practitioners (IMPs) serve as an alternative healthcare delivery mechanism within the ESI structure, ensuring that insured persons (IPs) and their families receive outpatient medical care even in regions lacking direct ESIC infrastructure. As per Section 58(1) of the ESI Act, state governments, with ESIC's approval, may arrange for outpatient medical care through approved registered medical practitioners designated as IMPs. If widely adopted, IMPs could effectively improve accessibility and efficacy of the scheme, allowing workers to register with any empanelled IMPs and eliminating dispensary bottlenecks. However, some respondents also noted that in the context of primary care, prioritising the Insurance Medical Practitioner (IMP) system over strengthening the existing dispensary network could undermine system integration and lead to greater provider fragmentation within the ESI ecosystem.

GRIEVANCE REDRESSAL GAPS

ESI's grievance ecosystem combines expanding digital tools with in-person forums, but structural and behavioural barriers limit their effectiveness. Digital platforms and a 24×7 IT cell create better records and potential accountability, and a new online system with 'presumption of approval' is meant to speed up responses. However, outcomes still hinge on officers' discretion, hospitals' compliance, and insured persons' digital literacy, so the promised gains in timeliness and fairness remain uncertain.

ESI's grievance mechanisms remain largely symbolic despite visible platforms like *Suvidha Samagam* meetings which yield only minor improvements and lack sustained follow-up or enforcement. Public Grievance Officers are limited to acknowledging complaints, reducing serious cases to procedural filings. Bureaucratic inertia, blame-shifting, and weak accountability discourage thorough investigation. On the ground, negligent and insensitive hospital practices—rushed examinations, poor communication, and long delays—push patients toward private care. Employer disputes and chronic reimbursement delays expose insured persons to financial risks, with resolution often dependent on collective pressure rather than institutional responsiveness.

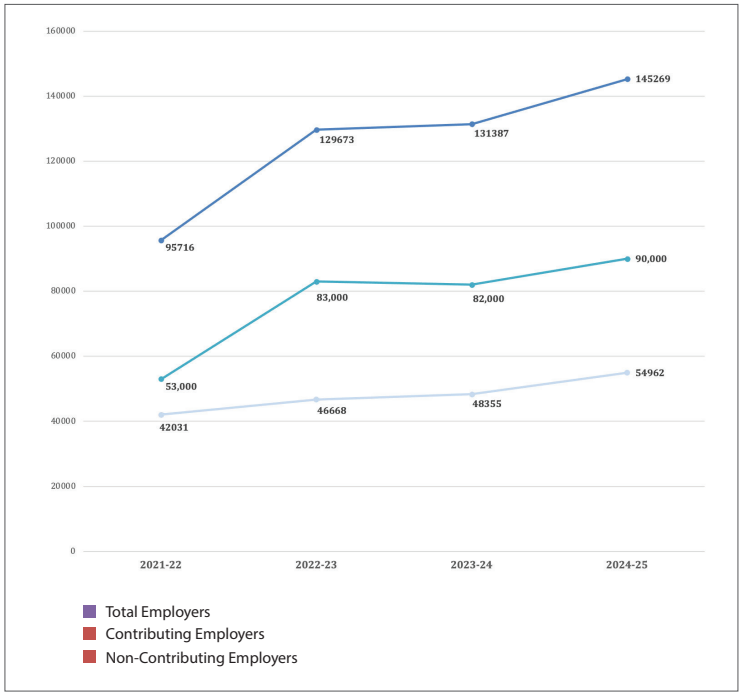
Current grievance mechanisms mirror systematic fragmentation and slow service, hindered by staff negligence, bureaucratic inertia, and weak accountability. Digital initiatives and outreach drives in 2025 improved tracking but did not offset low literacy or officer discretion. Persistent service failures and delayed reimbursements push insured persons toward private care, resulting in the possibility of weakening trust in the scheme.

EMPLOYERS COMPLIANCES GAPS

From 2021-22 to 2024-25, the total ESI-registered employers in West Bengal rose from about 95,000 to 1,45,000, an overall increase of roughly 53%, while contributing employers grew from about 42,000 to 55,000, an increase of around 31%. However, ESI exhibits a critical compliance deficit with only an average of 39% registered employers actively contributing across West Bengal. Compliance rates deteriorated from 44% in 2021-22 to 38% in 2024-25, a decline of 6 percentage points over four years, while non-compliance rates rose from 56% to 62%, meaning that by 2024-25, nearly two out of every three registered employers were not contributing. The steepest fall in compliance occurred between 2021-22 and 2022-23, when the rate dropped by 8 percentage points despite a surge of 35,000 new registrations, showing that most new entrants were not becoming active contributors.

Although compliance has since stabilised at around 38% in 2023-24 and 2024-25, this stability masks a persistently low level of adherence, indicating that recent growth in registrations is only just keeping pace with proportional increases in contributors and that overall compliance remains a serious concern.

Figure 25: ESI Registered Employers in West Bengal



Source: Authors calculations based on annual report 2024-2025

Taken together, these patterns of gaps suggest that although formal mechanisms exist both on paper and in practice, weak enforcement, bureaucratic risk aversion, and poor service quality significantly erode the scheme's promise of financial and procedural protection for insured workers.

In an attempt to address many of these gaps, the scheme has increasingly relied on partnerships with private providers through tie-up arrangements. The following section examines the challenges associated with this growing engagement with the private sector.

ESI AND PRIVATE HOSPITALS

ESIC has over 300 empanelled or tie-up hospitals across India. Exact nationwide totals fluctuate due to ongoing empanelments and renewals managed regionally. Private empanelment within the ESI system was never intended to replace core ESI infrastructure but rather to fill critical service gaps temporarily. According to the ESI officials we spoke to, private hospitals are meant to be a 'backup' option—activated only when an ESI hospital lacks beds, facilities, or specialised services. The system thus reflects a supplementary design rather than a partnership model, with private institutions occupying a fringe rather than a foundational role in service delivery (Siddiqi et al., 2023).

Quality of Care Differences

In services like dialysis, private hospitals often prioritise cash-paying patients over scheme beneficiaries, sometimes compromising service quality. Insured Persons (IPs) under the ESI scheme generally receive more reliable and standardised treatment at ESI-owned hospitals than at private tie-up facilities. Cases of patients being charged informally for medicines or diagnostics, despite entitlement to free care, highlight the uneven quality and oversight in private settings. Overall, the quality gap between ESI and private hospitals reveals structural imbalances in accountability and incentives.

Referral Process and Regulation

The referral process within ESIC is heavily regulated, requiring that all referrals come through ESI dispensaries or hospitals. IPs cannot approach private hospitals directly. However, due to limited in-house capacity, staff shortages, and infrastructure constraints, the number of referrals—

> "The private empanelment system is never supposed to be the first choice... only a fringe part of the scheme."
>
> – ESIS Official, WB

especially for super-speciality treatments—has been rising. In practice, referrals sometimes extend beyond genuine super-speciality needs, covering instances like unavailable labs or full-bed occupancy, indicating systemic strain and limited flexibility in service management.

Private Sector Reluctance

Private hospitals' participation in ESI is shaped primarily by financial viability. Many join the scheme when reimbursements seem profitable and withdraw when margins shrink. Large corporate hospitals, such as Apollo, have exited the panel citing payment delays and restrictive government-set rates. Others meanwhile, leverage ESI affiliation as a marketing tool to attract more patients. This pattern exposes how market incentives dominate participation, revealing the limits of relying on private providers for sustained coverage.

> "Workers can access hospitals only via dispensaries (except non-emergency and no ESI facility in 10km area). Just referral sometimes can be a difficulty for IPs, but it's understandable from system side, since overload of patients will be there if not."
>
> – ESI Employer

Financial and Ethical Concerns

Referred patients frequently face additional costs despite supposed cashless coverage. Out-of-pocket expenditures stem from partial reimbursements, informal fees, and demands for repeated tests by private hospitals that disregard ESI diagnostic results. Some hospitals even withhold discharge until reimbursement from ESI is received, transferring financial risk to patients. Reports also suggest unethical practices, such as doctors being incentivised to recommend certain facilities, further eroding patient trust and financial protection.

Super-speciality Care

In examining the nominal expenditure on secondary and supers-pecialty care by ESIC, it is seen that across the entire period (2013-24):

- Super-speciality care consistently accounts for the dominant share of spending,
- While secondary care remains a relatively small component.

This pattern reflects the fact that super-speciality services fall squarely within the Corporation's direct mandate and purchasing responsibility, whereas secondary care is more limited in scale and scope. Since these figures in Annual Accounts only (*Figure 21*) represent all-India ESIC spending, they conceal important sub-national variation.

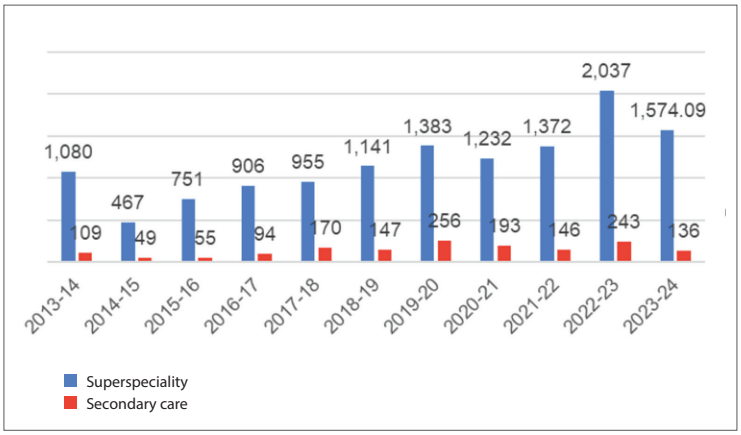
A state-wise breakdown of super-speciality expenditure would be necessary to identify which states account for the bulk of this spending, whether higher outlays are driven by concentration of empanelled facilities, greater beneficiary load, or differences in referral practices, and to assess if spending patterns align with regional disease burden and service availability.

GOVERNANCE AND ORGANISATIONAL STRUCTURE

Policy and Structural Fragmentation

Sections 95-96 of the ESI Act divide rule-making powers between the Centre and States—assigning the Centre responsibility for uniform implementation and States for local procedures and courts. This fragmented design produces wide variation in eligibility norms, empanelments, and service quality across states. States remain responsible for service delivery through their Labour and Health Departments but lack authority over centrally-controlled funds, infrastructure, and key decisions, leaving them accountable without adequate resources. The imbalance is reflected in spending disparities—Haryana's ESIS spends only ` 1,514 per capita compared to West Bengal's ` 3,089, while ESIC's own spending pattern reverses this (` 3,239 in Haryana versus ` 1,784 in West Bengal).

Figure 26: Expenditure on Secondary and Superspeciality Care by ESIC



Source: ESIC Annual Accounts 2013-2024

This misalignment reflects a broader centre-state disconnect in ESI governance, reinforced by the constitutional arrangement under the Seventh Schedule, which assigns health primarily as a state subject. The ESIC operates as a centrally-dominated corporate body chaired by the Union Labour Minister, where state and hospital-level representatives have limited influence over agenda-setting. Key policy decisions—such as mandatory Jan Aushadhi sourcing or directives on tie-ups for super-speciality care—are often issued in a top-down manner with little consultation. Consequently, rigid central control coexists with fragmented state delivery, embedding inequities, delays, and accountability gaps across the ESI system.

The division of roles between ESIC and ESIS produces a fragmented architecture: ESIC directly manages a limited number of hospitals (including some Model Hospitals) and plays a major role as a financial intermediary, while states are responsible for medical benefits under ESIS except for super-speciality care. In most states, ESIS functions under the Health or Labour ministries, adding further variation to lines of command and accountability.

> "There is a trust here, all three stakeholders have got trust here, in private insurance scenario, all the stakeholders, do not have trust with each other, there is a trust deficit. So, India should march towards, ESIC-like schemes."
>
> – ESIC Official, WB

This structural split between who holds financial authority (ESIC) and who delivers services (states, ESIS hospitals) generates misalignment, delays, and weak ownership at the implementation level.

Administrative Hierarchies and Coordination Failures

Within this structure, administrative hierarchies further erode ESIC's field-level influence. According to managerial level officials, generally, IAS officers with their high level of experience and capacities, outrank non-gazetted ESIC staff, weakening the latter's ability to shape key decisions affecting service delivery. These power asymmetries, combined with centrally-driven agendas, undermine coordination between ESIC, ESIS hospitals, and state departments, and reduce the practical impact of state representation on ESIC bodies. Irregular or weakly enforced Regional Board meetings aggravate the problem by limiting predictable forums for collective problem-solving and course correction.

- ***Constrained Fiscal and Managerial Autonomy***
  The current ceiling of ` 3,000 per insured person, unchanged since 2018, has not kept pace with costs and needs revision upward (for instance, to around ` 4,100+ when inflation is considered in WB). Low ceilings, coupled with cumbersome procedures and tight central controls, restrict state and district officials' ability to maintain ESIS hospitals, upgrade infrastructure, and respond to local priorities. Without clearer assignment of maintenance responsibility to state governments and greater spending discretion at local levels, funds remain under-utilised or poorly aligned with front-line needs.

  Over-centralised, bureaucratic procedures for equipment repair and maintenance can delay essential services and ultimately harm patients. It implies that instead of routinely pushing every technical or financial decision up to ESIC headquarters, hospitals should have clearer, decentralised and faster processes (such as empowered local committees and direct coordination with OEMs) so that critical equipment like ventilators are repaired in days rather than months and insured persons do not suffer due to avoidable administrative bottlenecks.

> "During COVID, we received around 25 ventilators and the 5-year warranty was over. Now that we need ventilator maintenance service, our finance officer immediately forwarded the case to the headquarters. Once a file goes there, it effectively disappears; it gets stuck at their end and at ours, and in the meantime the patient is the one who suffers. The repair itself might take 15 days, but routing the file through the full bureaucratic chain can easily take 15 months -in the end it is the patient who pays the price."
>
> – ESIC Official, WB

- ***Incentives that Risk Widening Disparities***
  Performance-linked incentive funds, such as West Bengal's ` 200 per insured person tied to bed occupancy, provide some marginal relief for operating costs but do not address underlying capital gaps (infrastructure, equipment, HR). Because these incentives tend to accrue to already better-performing or higher-occupancy facilities, they risk reinforcing existing inequalities: stronger hospitals gain more resources to improve further, while weaker performers receive less, making it harder for them to catch up. In the absence of a complementary, equity-oriented investment strategy for lagging facilities, such incentive designs can deepen, rather than narrow, performance differentials.

- ***Central Planning: Benefits with Significant Trade-offs***
  Centralised ESIC planning does provide uniformity of benefits, consistency of rules, and coordinated national expansion of the scheme—all important for a social insurance programme. However, these same features limit state-level innovation and flexibility, making it harder to tailor benefit design, purchasing arrangements, and service models to local labour markets, epidemiological profiles, and health-system capacities.

Centralised planning and decision-making pose significant challenges for the implementation of the ESI Scheme in India due to several factors:

- ***Core governance deficits***
  Centralised decision making stifles local autonomy, as health remains a state subject yet ESIC controls funds, recruitment, and infrastructure with limited state input. Disproportionate spending limit of ESIS officials (eg. ESIS Medical superintendent with spending limit of ` 5,000 per equipment compared to ` 50 lakh for ESIC superintendent) severely handicaps service delivery happening at the state level. Hospitals exceed capacities (e.g., 130% occupancy in 500-bed facilities), eroding care quality, while dual oversight by Labour Departments and ESIC creates confusion over collections and reporting.

ESIC's current governance reflects a set of interlinked problems: overcentralised authority, weak state-level autonomy, blurred accountability for care, and inequitable incentives that risk widening performance gaps.

- ***Policy Ambiguity Around Super-Speciality Care***
  Frequent shifts in ESIC policy on private empanelment and super-speciality (SST) treatment reimbursement create uncertainty for providers and insured persons, making long-term planning difficult. Conceptual and operational ambiguities around what constitutes SST, and when a case transitions from 'routine' to 'superspeciality', blur financial responsibility between ESIC and ESIS. When ESIS facilities are technically capable of providing super-speciality care, insufficient earmarked funding from ESIC can leave them unable to deliver on that potential, further confusing patients and managers about who pays for what. The policy ambiguity also lies in the areas of claims and reimbursement of medical expenditure, which are decided on a case-by-case basis.

Overall, the scheme's architecture reflects a structural imbalance—marked by strong centralised control and limited state-level autonomy in implementation. While the Centre retains authority over funds, infrastructure, and key policy decisions, state governments bear responsibility for daily service delivery through their Labour and Health Departments, often without commensurate financial or administrative capacity. This results in fragmented accountability, uneven service quality, and wide spending disparities across states.

In effect, the ESI system exhibits a 'command without capacity' dynamic: decisions are taken at the top, but execution falters on the ground due to rigid hierarchies, resource constraints, and inadequate local feedback mechanisms. Strengthening ESI governance therefore requires a shift toward inclusive, decentralised, and data-driven coordination, where state authorities and frontline institutions have both greater voice and operational flexibility. Regular performance monitoring, transparent fund flows, and real-time data sharing between ESIC and state bodies would help align accountability with authority, ultimately improving both service delivery and equity under the scheme.

Another case is of Ramesh, who was commuting back from work. Met with accident and his wife now gets dependent benefit. While Ramesh receives ESI benefit, because he was drunk, insurance amount was rejected. Policy here is a bit unclear, but ESI includes commute time for such cases.

– Steel Factory Employer, WB

"Expansion of the ESI Scheme is socially desirable and aligns with universal welfare objectives. However, without strengthening existing systems, infrastructure, and financial clarity, expansion risks becoming symbolic rather than substantive."

– ESIC Official

"For expansion of benefits within the scheme to the unorganised workers, providing provident fund benefits is easy. For other benefits, apart from employee contribution, it is not clear who will contribute the employer contributions for these workers where there is no fixed employer. The state government might have to pay in this case."

– ESIC Official

CONVERGENCE, EXPANSION, AND INCLUSION

Discussions around expanding the Employees' State Insurance (ESI) Scheme have intensified with the implementation of the new Social Security Code. Plans to extend coverage to sectors such as tea plantations, unorganised workers, and gig economy participants reflect the government's ambition to strengthen social protection. However, significant operational, financial, and administrative challenges remain unresolved.

> "ESI has its own database and SS has its own. There is no common field to cross-check or bring the data together."
>
> – ESIS Official

> "PMJAY, we had received from headquarters that 20% of the beds you must keep once it gets enrolled. So that bed is an earning bed for our organisation. So, when we do a good number of convergence projects with the state government or other health related sectors, there is a better utilisation of our resources."
>
> – ESIC Official, WB

Administrative Gaps

Administrative bottlenecks (e.g. hospital handovers like Asansol) and lack of timely orders have stalled expansion plans.

Capacity and Infrastructure Constraints

Shortage of staff and uneven facility utilisation (some hospitals are overloaded and others underutilised) limit service delivery and readiness for expansion.

Financial and Data Gaps

Respondents confirmed that the unorganised sector is described as vast and essentially undefined, with no reliable information on key parameters such as the total number of workers, their wages or salaries, who their employers are, and the duration of their employment over a year.

- Existing data is said to cover only those unorganised workers whose employers already comply with PF and ESIC requirements, while information on the rest of the workforce is largely voluntary and incomplete. *Because of this lack of systematic, mandatory data, some officials conclude that if ESIC moves into this space, it will be 'lurking into an area of undefined darkness,' implying very high uncertainty and implementation risk.*
- In terms of convergence, the main hurdle is the lack of a single unique identifier across the two schemes (ESI and Swasthya Sathi). Without a common Aadhaar-based or other shared ID field, ESIC and Swasthya Sathi cannot reliably match beneficiaries or merge their databases, thus blocking convergence.
- Unclear funding mechanisms of contributions and contributors for unorganised and gig workers and the precarity of their wages hinder effective inclusion.

Legal and Governance Challenges

Overlaps between existing Acts and lack of accountability create confusion over coverage responsibilities. For example: tea plantations fall under different Acts; overlapping jurisdictions complicate inclusion under ESIC.

New Developments and Policy Implications

The recent increase in the ESI salary ceiling from ` 21,000 to ` 30,000 is expected to expand beneficiary coverage by around one crore workers. This expansion however, amplifies pressure on already-stretched ESI infrastructure. Government announcements allowing referrals to well-known private hospitals may bring short-term relief but risk deepening dependence on a profit-driven private sector. The absence of systematic referral data—possibly retrievable through RTI requests—limits evidence-based reform and monitoring.

> "Tea plantations, the tea owners have the mandate of providing the healthcare. That is why tea garden workers are currently not covered by ESIC but by a separate Act. If Labour Code is implement, there is a possibility that they will come within the purview of ESI Act, and that would mean influx of another 3-4 lakh IPs in Jalpaiguri, Kalimpong, Darjeeling."
>
> – ESIS Official

There is a broad consensus that expansion is necessary for social protection, but capacity gaps, financial constraints, and definitional ambiguities pose serious obstacles.

KEY FINDINGS

Coverage, Utilisation and Protection

- ESI coverage has expanded nationally (3.84 crore IPs in 2025), with West Bengal achieving full district coverage and relatively high per-capita medical spending, indicating strong but operationally-uneven scheme utilisation and access.
- ESI offers better financial protection than Swasthya Sathi, especially in private hospitals, yet avoidable OOPE persists due to service gaps, referral practices and behaviour in both public and private facilities.

Inequities in Access and Service Delivery

- Awareness, access and utilisation are sharply unequal by gender, caste, religion and geography, with the scheme functioning as de facto urban-centric and Kolkata-centric for specialised services.
- HR shortages, rigid recruitment, overcrowding, uneven primary care implementation and weak maintenance/ procurement systems undermine service quality and drive under-utilisation despite formal coverage.

Governance, Compliance and Grievance Gaps

- A structurally-fragmented governance model—central financial control with state-level service responsibility, tight spending limits and weak local autonomy—creates 'command without capacity', reinforcing delays, inequities, and limited frontline ownership.

- Employer registration has risen but active contribution remains low and declining, and grievance mechanisms, though more digital, largely provide procedural acknowledgement rather than effective resolution, eroding trust.

Role & Limits of Private Sector Tie-ups

- Private empanelment (tie-ups) is designed as a supplementary 'backup', not a core delivery model, yet capacity gaps have expanded referrals, especially for super-speciality care, often beyond genuine SST needs.
- Quality, financial, and ethical concerns in private tie-ups—prioritising cash patients, informal charges, repeat tests, delayed reimbursements, and incentive-driven referrals—dilute ESI's promise of cashless, accountable care.

Expansion, Convergence and Future Risks

- Super-speciality care dominates ESIC's higher-level spending, but state-level patterns and alignment with disease burden remain unclear, underscoring the need for granular expenditure analysis.
- Ambitious expansion to tea, unorganised and gig workers, higher wage ceilings, and proposed convergence with state schemes face major obstacles: data and definitional gaps, unclear contribution models, legal overlaps and lack of interoperable IDs, risking over-stretch of already fragile governance and infrastructure.

> "ESI funds itself from workers… If properly implemented, it will lighten the public health burden and reinforce social security."
>
> – Senior labour expert

Acronyms

ANM	Auxiliary Nurse Midwife
ATET	Average Treatment Effect on Treated
CHC	Community Health Centre
CHE	Catastrophic Health Expenditure
CHO	Community Health Officer
CTP	Capacity-to-pay
DH	District Hospital
ESI	Employees' State Insurance
ESIC	Employees' State Insurance Corporation
ESIS	Employees' State Insurance Scheme
FRI	Facility Readiness Index
GHE	Government Health Expenditure
HCES	Household Consumption Expenditure Survey
HF	Health Financing
HFF	Health Financing Fragmentation
HWC	Health and Wellness Centre
IPHS	Indian Public Health Standards
IPW	Inverse Probability Weighting
JAS	Jan Aarogya Samiti
KII	Key Informant Interviews
LMIC	Low- or Middle-Income Country
MPI	Multidimensional Poverty Index
NCD	Non-Communicable Diseases
NSS	National Sample Survey
OBC	Other Backward Classes
OOP	Out-of-pocket
OOPE	Out-of-pocket Expenditure
OPD	Outpatient Department
PCA	Principal Component Analysis
PFHI	Publicly-Funded Health Insurance Scheme
PHC	Primary Healthcare Centre
PMJAY	Pradhan Mantri Jan Arogya Yojana
PSM	Propensity Score Matching
RTI	Right to Information
RSBY	Rashtriya Swasthya Bima Yojana
SARA	Service Availability and Readiness Assessment
SC	Scheduled Castes
SS	Swasthya Sathi
ST	Scheduled Tribes
THE	Total Health Expenditure
UHC	Universal health Coverage
WB	West Bengal
WHO	World Health Organization
AIIMS	All India Institute of Medical Sciences
CGDMO	Contractual General Duty Medical Officer
CSMO	Central Secretariat Manual of Office Procedure
FY	Financial Year
GDMO	General Duty Medical Officer
HR	Human Resources
IAS	Indian Administrative Service
ICU	Intensive Care Unit
IMP	Insurance Medical Practitioners
IP	Insured Person
IT	Information Technology
NICU	Neonatal Intensive Care Unit
OEM	Original Equipment Manufacture
PICU	Pediatric Intensive Care Unit
PIP	Performance Improvement Plan
RGSKY	Rajiv Gandhi Shramik Kalyan Yojana
SST	Super Specialty Treatment
UT	Union Territory
VR	Vacancy Rate
WBPSC	West Bengal Public Service Commission

Annexure 1:

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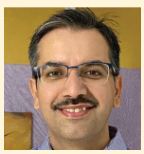

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