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Financial Stratification in Indian Healthcare: An Analysis of Out-of-Pocket Expenditure and Utilization Patterns

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Abstract: *Universal Health Coverage (UHC) aims to provide quality health services without financial hardship. In India, despite landmark health policies, high Out-of-Pocket Expenditure (OOPE) remains a primary barrier to equitable access, often driving vulnerable socio-economic groups into a "medical poverty trap." Utilizing unit-level data from the National Sample Survey Office (NSSO) 80th Round (2025), this study analyses healthcare utilization and expenditure patterns across geographic sectors, consumption quintiles, and morbidity profiles. The findings reveal sharp financial stratification: private inpatient care costs 6.9 times and 9.1 times more than public alternatives in rural and urban areas, respectively. Furthermore, rural patients using public facilities face an unexpected financial penalty driven by pharmaceutical stock-outs. The study highlights the urgent need to bridge structural gaps, regulate private pricing, and reinforce supply chains to achieve meaningful financial protection.*
Keywords: *Out-of-Pocket Expenditure, Universal Health Coverage, Financial Stratification, Inpatient Care, Outpatient Care, NSSO.*

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I. Introduction

Universal Health Coverage (UHC) ensures that all individuals have access to the full spectrum of quality health services they need, when and where they need them, without facing financial hardship (World Health Organization [WHO], 2025). In alignment with this global mandate, India has instituted several landmark health policies aimed at achieving UHC. However, despite sustained policy assertions by successive governments, progress remains constrained (Kalita et al., 2023).

A primary impediment to equitable healthcare accessibility in India is the high prevalence of Out-of-Pocket Expenditure (OOPE). Excessive OOPE severely undermines the financial stability and health outcomes of households, disproportionately burdening vulnerable and low-income populations (Kamath et al., 2025). This reliance on direct financing exacerbates income inequality and drives vulnerable socio-economic segments into a "medical poverty trap," where healthcare costs deepen impoverishment (Whitehead et al., 2001).

As India grapples with a dual burden of communicable and chronic non-communicable diseases, a comprehensive, updated analysis of healthcare utilization and expenditure patterns is critically required. This paper addresses this need by exploring the stark economic realities faced by patients across the country. Specifically, it maps the severe financial stratification across diverse healthcare providers, shedding light on the systemic inequities within the Indian healthcare ecosystem.

II. Methods

To evaluate the current landscape of healthcare expenditure, this study utilizes unit-level data from the National Sample Survey Office (NSSO) 80th Round (2025) on packaged health expenditures. The analytical framework accounts for the sharp structural dichotomy in Indian healthcare, where public and private providers operate concurrently.

To provide a granular understanding of financial burdens, healthcare expenditure and utilization patterns are disaggregated across several key dimensions:

- **Geographic Location:** Categorized by rural and urban sectors to capture regional disparities.
- **Socio-Economic Strata:** Measured using monthly household consumer expenditure quintiles to assess equity.
- **Morbidity Profiles:** Segmented by specific ailment categories to identify high-cost diseases.

Furthermore, direct medical costs are broken down into distinct components—including consultation fees, medicines, diagnostics, and hospitalization charges—to isolate the primary drivers of healthcare-induced financial stress.

III. Results

3.1. OOPE per Hospitalisation

The data demonstrates a distinct financial stratification based on the type of medical institution utilized, highlighting a massive gap between public and private healthcare delivery. Public health facilities, encompassing Ayushman Arogya Mandirs (AAMs), Health Sub-Centres (HSC), Primary Health Centres (PHC), and Community Health Centres (CHC), present the lowest financial barrier, with an average out-of-pocket medical expenditure (OOPE) of ₹6,905 in rural sectors and ₹6,032 in urban sectors.

In sharp contrast, private hospitals demand substantially higher resources. Hospitalization in a private facility incurs an average OOPE of ₹47,710 for rural patients and climbs to ₹54,999 for urban patients. This places private inpatient care at approximately 6.9 times and 9.1 times the cost of public alternatives for rural and urban populations, respectively. Charitable, trust, and NGO-run institutions represent a high-cost intermediate category, requiring an average OOPE of ₹40,203 in rural areas and ₹38,419 in urban settings.

Table 1: Out-of-Pocket Medical Expenditure per Hospitalization Case (Excluding Childbirth) During the Last 365-Day Period: All-India

Medical Institution	Average Rural OOPE (₹)	Average Urban OOPE (₹)
Govt. Hospital / Public Health Facilities	6,905	6,032
Charitable / Trust / NGO Run Hospital	40,203	38,419
Private Hospital (incl. Govt. Empanelled)	47,710	54,999
All Providers	**31,484**	**38,688**

Note: Government hospitals/Public health facilities include AAMs/HSC/PHC/CHC etc. Private hospitals empanelled under Government health financing schemes/insurance (viz. AB-PMJAY, CGHS/ECHS, State Health Insurance Schemes, ESIS/ESIC, etc.) are aggregated within the "Private hospital" category.

Source: NSO, 80th Round (2026).

The distribution of expenditures across geographic sectors reveals further structural variation within these institutional categories. For private institutions, urban expenditures exceed rural expenditures by ₹7,289 per case. Conversely, an inverse relationship is visible within public health facilities, where rural out-of-pocket costs (₹6,905) are higher than urban public costs (₹6,032). When all institutional categories are aggregated, the nationwide average out-of-pocket medical expenditure per hospitalization case stands at ₹31,484 for rural areas and ₹38,688 for urban areas, establishing a higher overall financial baseline for urban inpatient care.

3.2. OOPE by Consumption Expenditure Quintiles

The data demonstrates a clear positive correlation between household economic status—measured via monthly per capita consumption expenditure quintiles—and the average out-of-pocket medical expenditure (OOPE) per hospitalization case.

In urban areas, this upward gradient is strictly linear across all economic brackets. Urban households in the 1st quintile (bottom 20%) incur an average OOPE of ₹25,178. This expenditure increases progressively through the 2nd (₹29,513), 3rd (₹35,513), and 4th quintiles (₹42,633), culminating at ₹53,531 for the 5th quintile (top 20%). The absolute financial difference between the wealthiest and poorest urban quintiles stands at ₹28,353, meaning the top 20% spend roughly 2.13 times more per hospitalization case than the bottom 20%.

Table 2: Out-of-Pocket Medical Expenditure by Consumption Expenditure Quintiles

Quintile Class of Household Consumption Expenditure	Average Rural OOPE (₹)	Average Urban OOPE (₹)
1st Quintile (Bottom 20%)	25,704	25,178
2nd Quintile	24,627	29,513
3rd Quintile	27,979	35,513

Quintile Class of Household Consumption Expenditure	Average Rural OOPE (₹)	Average Urban OOPE (₹)
4th Quintile	31,451	42,633
5th Quintile (Top 20%)	39,582	53,531
All Quintiles	**31,484**	**38,688**

Source: NSO, 80th Round (2026).

In rural areas, a similar upward trend is observable, though it experiences a minor deviation in the lower brackets. The average OOPE starts at ₹25,704 for the 1st quintile, drops slightly to ₹24,627 for the 2nd quintile, and then rises continuously across the 3rd (₹27,979) and 4th quintiles (₹31,451), reaching a peak of ₹39,582 in the 5th quintile. The absolute expenditure gap between the highest and lowest rural economic groups is ₹13,878, with the top 20% spending 1.54 times more than the bottom 20%.

A sector-wise comparison reveals that the rural-urban expenditure gap widens progressively as household consumption levels increase. In the lowest consumption bracket (1st quintile), rural households actually report a higher average OOPE (₹25,704) than their urban counterparts (₹25,178)—a difference of ₹526. However, from the 2nd quintile onward, urban expenditures consistently outpace rural expenditures. This urban premium grows from ₹4,886 in the 2nd quintile to ₹7,534 in the 3rd, ₹11,182 in the 4th, and reaches its maximum divergence in the 5th quintile, where urban households spend ₹13,949 more per case than rural households.

3.3. Break-up of Average Medical Expenditure by Components

The granular itemization of inpatient medical expenditures reveals distinct cost structures across public, charitable, and private health institutions in both rural and urban sectors.

Table 3: Break-up of Average Medical Expenditure (₹) per Hospitalization Case by Component Across Institutions

Sector and Medical Institution	Package (₹)	Doctor Fee (₹)	Medicine (₹)	Diagnostic (₹)	Bed Charges (₹)	Other (₹)	Total Medical Exp. (₹)
RURAL							
Govt. hospital/Public facilities	2,141	363	2,603	1,183	187	853	**7,330**
Charitable/Trust /NGO hospital	24,956	3,834	6,372	2,784	2,025	2,396	**42,367**
Private hospital (incl. empanelled)	21,290	7,580	8,921	4,203	5,245	2,495	**49,734**
All Rural	*13,884*	*4,640*	*6,368*	*2,977*	*3,167*	*1,848*	***32,884***
URBAN							

Sector and Medical Institution	**Package (₹)**	**Doctor Fee (₹)**	**Medicine (₹)**	**Diagnostic (₹)**	**Bed Charges (₹)**	**Other (₹)**	**Total Medical Exp. (₹)**
Govt. hospital/Public facilities	1,692	246	2,241	1,170	199	865	**6,413**
Charitable/Trust /NGO hospital	17,718	7,251	9,148	3,434	6,397	2,038	**45,985**
Private hospital (incl. empanelled)	35,128	9,130	9,189	4,914	5,656	2,939	**66,955**
All Urban	*23,799*	*6,206*	*6,948*	*3,660*	*3,920*	*2,242*	***46,774***

Note: Data excludes childbirth cases.
Source: NSO, 80th Round (2026).

In the rural sector, total medical expenditures range from a low of ₹7,330 in public facilities to a peak of ₹49,734 in private hospitals. Within government hospitals, medicine constitutes the highest independent cost component at ₹2,603, representing 35.5% of the total public expenditure, followed by the package component at ₹2,141 (29.2%). Conversely, private and charitable institutions in rural areas are heavily dominated by the package component, which stands at ₹21,290 for private facilities (42.8% of total) and ₹24,956 for charitable facilities (58.9% of total). For non-package items in rural private hospitals, medicine costs (₹8,921), doctor's fees (₹7,580), and bed charges (₹5,245) form the most substantial remaining financial outlays.

In the urban sector, total expenditures scale higher, driven primarily by private hospitalizations which average ₹66,955 per case, compared to ₹45,985 in charitable settings and ₹6,413 in public facilities. Urban private care is heavily weighted toward the package component at ₹35,128, which accounts for 52.5% of the total private expenditure. Non-package components in urban private care show that medicine (₹9,189) and doctor's/surgeon's fees (₹9,130) are almost equal, followed by bed charges (₹5,656) and diagnostic tests (₹4,914). Similar to the rural trend, urban public facilities see their highest proportional out-of-pocket expenditure allocated to medicine at ₹2,241 (34.9% of total public costs) and the package component at ₹1,692 (26.4%).

3.4. Average Medical Expenditure per Hospitalization by Ailment Type

The disaggregated dataset outlines the variances in average medical expenditure per hospitalization case across different clinical ailment categories, cross-referenced by hospital type and geographic sector.

Table 4: Average Medical Expenditure per Hospitalization Case by Broad Nature of Ailment

Category of Reported Ailment	**Public Facilities (₹)**	**Charitable/Trust (₹)**	**Private Hospital (₹)**	**All Institutions (₹)**
RURAL				
Infection	2,329	15,303	24,650	14,397
Cancers	22,616	81,042	87,339	62,588
Blood diseases	7,816	52,588	32,784	19,963

Category of Reported Ailment	**Public Facilities (₹)**	**Charitable/Trust (₹)**	**Private Hospital (₹)**	**All Institutions (₹)**
Endocrine, Metabolic, Nutritional	6,452	37,959	46,283	29,179
Psychiatric & Neurological	10,937	42,862	66,137	43,155
Eye	2,699	4,222	22,156	12,659
Ear	5,804	27,434	38,233	30,227
Cardio-vascular	10,207	87,063	66,387	47,135
Respiratory	6,486	26,236	34,281	22,881
Gastro-intestinal	5,162	86,407	49,492	34,451
Skin	6,534	11,966	38,207	21,647
Musculo-skeletal	16,074	31,603	64,525	45,264
Genito-Urinary	6,832	25,103	45,725	34,998
Obstetric	2,583	29,231	29,910	18,101
Injuries	9,505	28,427	70,503	46,801
Kidney Failure	18,124	54,474	120,708	76,004
Other	9,345	45,425	47,196	33,820
All Rural	*7,330*	*42,367*	*49,734*	*32,884*
URBAN				
Infection	2,186	13,300	26,833	17,879
Cancers	21,802	98,675	147,220	104,424
Blood diseases	4,730	19,637	40,947	23,565
Endocrine, Metabolic, Nutritional	5,395	26,618	58,671	37,166
Psychiatric & Neurological	7,297	61,944	92,253	62,751
Eye	2,495	9,069	33,276	23,207

Category of Reported Ailment	**Public Facilities (₹)**	**Charitable/Trust (₹)**	**Private Hospital (₹)**	**All Institutions (₹)**
Ear	17,671	0	39,403	34,021
Cardio-vascular	10,666	49,286	101,099	69,451
Respiratory	4,246	45,231	60,217	42,520
Gastro-intestinal	6,081	35,025	55,833	40,409
Skin	4,199	29,349	52,535	32,158
Musculo-skeletal	6,832	106,267	93,413	76,106
Genito-Urinary	5,557	25,202	51,709	40,027
Obstetric	3,677	99,572	96,806	63,391
Injuries	7,783	65,171	84,305	57,371
Kidney Failure	10,956	69,240	93,267	71,246
Other	5,476	47,589	72,379	49,540
All Urban	*6,413*	*45,985*	*66,955*	*46,774*

Source: NSO, 80th Round (2026).

In the rural sector, the average medical expenditure across all combined institutional types is highest for kidney failure (₹76,004) and cancers (₹62,588), while the lowest average costs are recorded for eye ailments (₹12,659) and infections (₹14,397). Government health facilities maintain the lowest financial outlays across almost all classifications, with the lowest costs observed in infections (₹2,329) and obstetric conditions (₹2,583), and the highest public outlays occurring in cases of cancer (₹22,616) and kidney failure (₹18,124).

Private hospitals present the steepest expenditures for rural patients, peaking substantially for kidney failure at ₹120,708. In certain categories within the rural sector, charitable/trust-run hospitals report average costs that surpass private hospitals; this is visible in cardio-vascular conditions (Charitable: ₹87,063 vs. Private: ₹66,387), blood diseases (Charitable: ₹52,588 vs. Private: ₹32,784), and gastro-intestinal ailments (Charitable: ₹86,407 vs. Private: ₹49,492).

In the urban sector, the aggregate expenditure across all hospital types peaks for cancer treatment at an average of ₹104,424 per case, followed by musculo-skeletal ailments (₹76,106) and kidney failure (₹71,246). Urban public health infrastructure keeps average costs consistently under ₹11,000 for nearly all conditions, with the single exception of ear conditions, which stand at ₹17,671. Conversely, private facilities in urban areas record the highest absolute medical expenditures across nearly all reported ailments. The most substantial private hospital outlays are documented for cancers (₹147,220), cardio-vascular conditions (₹101,099), obstetric care (₹96,806), and musculo-skeletal conditions (₹93,413).

3.5. OOPE for Outpatient Care

The data outlines the short-term economic metrics for outpatient care across India, capturing the average and median out-of-pocket medical expenditure (OOPE) incurred by households during a reference period of 15 days.

Table 5: Average and Median Out-of-Pocket Medical Expenditure for Outpatient Care During the Last 15-Day Period: All-India

Sector	Average Expenditure (₹)	Median Expenditure (₹)
Rural	847	395
Urban	884	420
Rural + Urban	**861**	**400**

Source: NSO, 80th Round (2026).

In the rural sector, the average out-of-pocket medical expenditure per outpatient episode is recorded at ₹847, while the median expenditure stands at ₹395. This substantial divergence between the mean and the median indicates a right-skewed distribution, demonstrating that while half of the rural population incurs an outpatient expense of ₹395 or less, a segment of high-cost cases raises the overall statistical average.

In the urban sector, outpatient costs follow a comparable structural pattern but at a slightly higher financial baseline. The average urban OOPE stands at ₹884 per outpatient care event, exceeding the rural average by ₹37. The median expenditure in urban areas is documented at ₹420, representing an absolute increase of ₹25 over the rural median baseline.

3.6. OOPE for Outpatient Care by Provider

The data quantifies the financial outlays for outpatient treatments across India, detailing the average and median out-of-pocket medical expenditure (OOPE) per treated spell of ailment over a 15-day reference period across various healthcare providers.

Table 6: Average Out-of-Pocket Medical Expenditure per Treated Spell of Ailments by Healthcare Service Provider: All-India

Healthcare Service Provider	Rural (₹)	Urban (₹)
Govt. Hospital / Public Health Facilities	304	257
Charitable / Trust / NGO Run Hospital	1,130	1,692
Private Hospital	1,541	1,343
Private Doctor / Clinic	981	925
Informal Health Care Provider	432	557
All Providers	**847**	**884**

Source: NSO, 80th Round (2026).

In the public healthcare subsystem outpatient costs represent the lowest financial baseline. For rural areas, the average OOPE per treated spell stands at ₹304, while in urban centres, it is recorded at ₹257. This inverse geographic trend indicates that rural outpatients encounter higher average out-of-pocket expenses within public infrastructure than urban outpatients.

Conversely, institutionalized private healthcare options reflect the highest expenditures per treated spell. Private hospitals record an average rural OOPE of ₹1,541 and an urban average of ₹1,343, making them the most expensive source of outpatient care in rural environments. For urban environments, charitable, trust, and NGO-run hospitals register the highest average cost at ₹1,692 per spell, compared to ₹1,130 in the rural sector. Non-hospital private care, classified under private doctors or clinics, demonstrates a more uniform expenditure profile between the two sectors, averaging ₹981 for rural patients and ₹925 for urban patients.

IV. Discussion

The empirical findings from the NSS 80th Round highlight a major gap in financial protection across India, moving the focus away from isolated numbers and toward the structural realities of healthcare spending. The massive cost difference between public and private hospitalization shows that even with public insurance programs like AB-PMJAY, patients still face heavy out-of-pocket medical expenditure (OOPE) (Singh & Singh, 2026). This issue is largely driven by institutionalized "package fees" in private facilities, which frequently bundle clinical costs and pass unexpected residual liabilities down to the patient (*Healthcare in India*, 2015). Consequently, what is structurally designed as a universal health coverage safety net often functions in practice as a site of significant financial risk.

To evaluate whether this out-of-pocket expenditure is truly catastrophic, it must be mapped against household economic realities. According to the National Statistical Office (NSO), average estimated monthly per capita expenditure (MPCE) in 2022-23 has been ₹3,773 in rural India and ₹6,459 in urban India (NSSO, 2023). Comparing this baseline to the nationwide average for a single inpatient stay—which exceeds this monthly budget in both rural and urban sectors—reveals an alarming macroeconomic crisis. In health economics, an expense is considered "catastrophic" if it exceeds 10% to 25% of a household's monthly consumption (Getachew et al., 2023). Here, a single medical emergency requires an expenditure that is nearly ten times an average family's entire monthly resource envelope in rural areas and more than 6 times in urban areas, making the OOPE unequivocally catastrophic. For vulnerable households in the lowest consumption quintile, who survive on far less than the national average, these expenses completely wipe out their financial capacity. Lacking institutional safety nets, these families are forced into regressive coping mechanisms—such as high-interest informal borrowing or distressed asset liquidation—turning a temporary health shock into permanent poverty (Sriram & Albardani, 2022).

Crucially, the NSO figures only account for direct medical costs like packages, doctor fees, tests, and medicines. In reality, the true financial footprint of a hospital stay is far larger because of indirect, non-medical expenses (Weerasinghe et al., 2022). These inescapable overheads include emergency transportation and ambulance fees, food and lodging for accompanying family caregivers, and the severe opportunity cost of lost wages while the patient and their primary breadwinners cannot work. When these non-medical costs are added to the direct hospital bill, the total financial burden swells to a colossal scale. For rural families traveling long distances to urban tertiary centres, these hidden costs can easily rival the clinical bills, transforming even "free" or subsidized public sector hospitalizations into highly expensive and exclusionary events.

A critical feature of this healthcare market is revealed by comparing the average (mean) expenditure with the median expenditure. This comparison shows a highly right-skewed distribution across both inpatient and outpatient care. The national averages are pulled drastically upward, sitting several times higher than the public sector medians. This mathematical divergence proves that while more than half of the population relies on lower-cost public facilities, a segment of the population encounters hyper-inflated private sector bills that drag the national average up. We see a similar skewed pattern in 15-day outpatient care, where the average expenditure is more than double the median. While half of all outpatient visits remain relatively low-cost, a continuous stream of high-cost cases—such as chronic illness management—quietly drains family budgets. Because outpatient care is rarely covered by public insurance, this skewed distribution represents a chronic, uninsulated drain on household savings (Mukherjee & Chaudhuri, 2020; Pisu & Martin, 2022).

Finally, while private care predictably concentrates financial strain in urban centres, public health infrastructure presents an unexpected geographic paradox (Chaudhuri & Datta, 2020; Hooda, 2015). Rural patients navigating government hospitals incur a higher average out-of-pocket expenditure than their urban counterparts. This inverse rural penalty points directly to acute supply-side deficits and logistical friction in rural health systems (Weinhold & Gurtner, 2014). Component deconstruction reveals that this rural public penalty is driven almost entirely by out-of-pocket outlays for medicines. When rural public clinics suffer from systemic pharmaceutical stock-outs, poor patients are forced to purchase drugs from commercial pharmacies at market prices (Haakenstad et al., 2025). This creates an inequitable rural stressor, forcing marginalized and geographically isolated populations to pay a premium to access ostensibly free government care.

V. Conclusion

The real issue with healthcare in India is not just about getting to a doctor, but whether families can afford to survive the bill afterward. While government hospitals keep baseline costs low, they often run out of medicines, which forces poor rural families to pay out-of-pocket and damages the purpose of free healthcare. On the other hand, private hospitals operate at prices so high that a single emergency can force a family into deep, lasting debt. When we add hidden costs like travel, food, and lost working days, the financial burden becomes even heavier. Ultimately, this data proves that simply giving people health insurance cards is not enough; to truly protect citizens, the government must fix the shortage of medicines in rural clinics, control high private hospital charges, and bridge the massive gap between public and private care.

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