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What Drives Health Insurance Adoption Among Urban Indian Households? The Role of Cost, Trust, Financial Literacy and Claim Experience

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Abstract

India has expanded health insurance and publicly financed health-protection coverage rapidly, but policy ownership does not necessarily imply adequate, understandable, or continuously usable protection.

This paper examines the determinants of health insurance adoption among urban Indian households, concentrating on cost, trust, financial literacy, and claim experience.

It uses a structured narrative review and descriptive secondary-data analysis; no original survey results are invented or reported. Evidence is drawn from National Family Health Survey data, National Health Accounts, government and regulatory releases, and peer-reviewed research on enrolment, purchase intention, and renewal.

Household coverage under a health insurance or financing scheme increased from 28.7% in NFHS-4 to 41.0% in NFHS-5 and 60.2% in NFHS-6. Nevertheless, NFHS-6 records lower coverage among urban than rural households, demonstrating that proximity to insurers and hospitals does not by itself ensure adoption.

The review finds that affordability establishes whether purchase and renewal are feasible, while perceived value determines whether households are willing to exchange current income for a contingent future benefit. Financial and insurance literacy affect the ability to compare waiting periods, co-payments, sub-limits, exclusions, network access, and portability.

Trust determines whether households believe insurers, intermediaries, hospitals, and public institutions will honour their promises.

Keywords: health insurance, urban households, affordability, trust, financial literacy, claims, India

1. Introduction

Health insurance transforms an uncertain and potentially catastrophic medical expense into a smaller payment made before illness occurs. The economic rationale is risk pooling: many households contribute so that the relatively few experiencing expensive hospital treatment can receive financial support. For a risk-averse household, paying a predictable premium may be preferable to facing a small probability of a bill that requires asset sales, high-cost borrowing, or delayed treatment.

Yet the household decision is behaviourally difficult. The premium is immediate and visible, whereas the benefit is contingent on an event the buyer hopes will never occur. Insurance also competes with rent, education, debt repayment, food, savings, and other urgent uses of income. Consequently, objective medical risk does not automatically produce purchase.

Health insurance is additionally a complex promise rather than a tangible product. Its value depends on exclusions, waiting periods, deductibles, co-payments, sub-limits, hospital networks, disclosure obligations, renewal rules, and the conduct of multiple institutions during a stressful medical episode. The buyer usually has less information than the insurer, intermediary, and hospital, while none of the parties can predict future illness perfectly (Arrow, 1963).

A household may therefore remain uninsured because it cannot afford the premium. It does not understand the contract, because it distrusts the institutions involved, or because its own or another person's claim experience suggests that the promised benefit may not materialise.

These barriers can reinforce one another. The urban Indian setting makes the problem especially significant. Cities include salaried workers with employer-sponsored coverage, self-employed professionals, informal workers, migrants, gig workers, retirees, and multi-generational households with very different resources and health risks. Urban residents generally have greater access to private hospitals, agents, banks, and digital comparison platforms than rural residents.

They also face high private-sector treatment costs, expensive housing, job mobility, uneven employment benefits, and substantial outpatient spending that many hospitalisation policies do not cover. Urban residence therefore increases both exposure to insurance markets and the complexity of deciding what constitutes adequate protection.

This paper asks four questions:

- How do price, household resources, and perceived value affect purchase and renewal?

- How does trust in insurers, intermediaries, providers, and public institutions shape willingness to prepay?
- How do financial and insurance literacy influence product comparison and confidence?
- How does claim experience affect renewal, recommendations, and the social reputation of insurance?

Adoption is defined as a lifecycle rather than a single transaction. It includes initial enrolment or retail purchase, renewal, addition of dependants, upgrading the sum insured, purchase of a top-up, and continuation after a job change.

2. Health Insurance and the Urban Indian Context

India's recent expansion in household coverage provides the starting point. The proportion of households with at least one usual member covered under a health insurance or financing scheme rose from 28.7% in NFHS-4 (2015–16) to 41.0% in NFHS-5 (2019–21), and to 60.2% in NFHS-6 (2023–24) (International Institute for Population Sciences [IIPS] & ICF, 2017, 2021; Ministry of Health and Family Welfare, 2026b).

This increase reflects major growth in publicly financed schemes as well as employer and private arrangements. However, the indicator records whether any usual household member is covered. It does not reveal whether all family members are included, the available sum insured, benefit exclusions, continuity, network quality, or the amount the household would still pay during a claim. Coverage is therefore a necessary but incomplete measure of financial security.

The latest residence pattern complicates the assumption that cities naturally have higher adoption. NFHS-6 reports coverage for 56.4% of urban households, compared with 62.0% of rural households and 60.2% nationally (IIPS, 2026).

This does not imply that rural households possess more comprehensive commercial insurance. Public schemes have extended reach among targeted groups, while urban India includes a large heterogeneous population situated between poverty-targeted subsidy and stable formal employment. NITI Aayog (2021) described a “missing middle” consisting of people who were not poor enough to receive comprehensive subsidy, not enrolled in social insurance, and not adequately protected through voluntary private insurance. At the time of the report, this group was estimated at at least 30% of the population, or roughly 40 crore people.

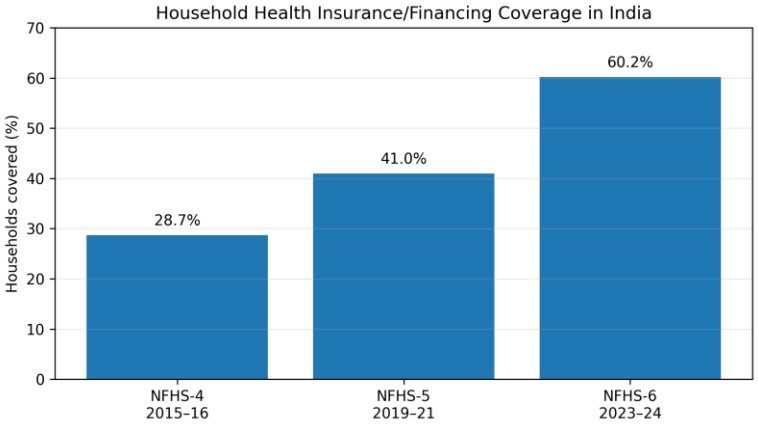

Figure 1: *Growth in household health insurance or financing coverage in India*
Note. Values are the percentage of households with at least one usual member covered. Sources: IIPS & ICF (2017, 2021) and Ministry of Health and Family Welfare (2026b).

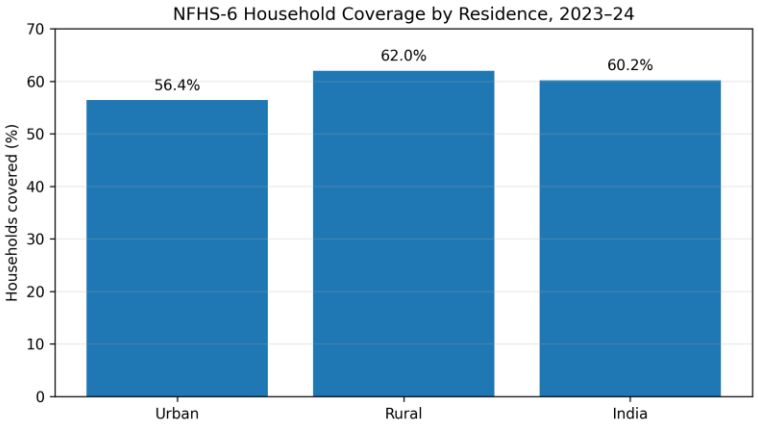

Figure 2: *NFHS-6 household coverage by urban–rural residence*
Note. NFHS-6 India fact-sheet values for 2023–24. Source: IIPS (2026). The indicator does not measure benefit adequacy or whether every household member is covered.

Health-financing data explain why insurance remains relevant even as public expenditure rises. Government health expenditure increased from 28.6% of total health expenditure in 2013–14 to 43.7% in 2022–23. Over the same period, out-of-pocket expenditure declined from 64.2% to 43.4%, while social security expenditure rose from 6.0% to 9.9% (Ministry of Health and Family Welfare, 2026a). The direction is favourable, but households still finance a large share of care directly. An expenditure-share decline also does not mean that financial risk is evenly distributed. A single episode involving cancer, cardiac surgery, neonatal care, trauma, or prolonged critical care can impose a severe burden even when national averages improve.

The commercial health-insurance market is expanding as well. Premiums exceeded ₹1.2 lakh crore in 2024–25, representing growth of approximately 9% (Ministry of Finance, 2026). Premium volume, however, is not a direct measure of affordable household protection. It may rise because more people are covered, but also because medical inflation, ageing, higher sums insured, or premium revisions increase price. Similarly, a policy count does not show whether households retain coverage, understand it, or receive satisfactory service. Market expansion should therefore be interpreted alongside lapse, claim, grievance, and adequacy indicators.

Urban households should not be treated as one market segment. Employer enrolment may remove the initial price barrier but create underinsurance or dependence on the job. Self-employed households may understand the need for protection yet struggle with annual premiums or age-rated parent cover. Informal and gig workers may have sufficient annual income but irregular monthly cash flow.

Young adults may display optimism bias, while older adults face higher premiums and waiting periods when their need is greatest. Migrants may lack continuity across cities, and retirees may lose group benefits. The determinants of adoption therefore differ by age, employment, household structure, health history, and existing coverage.

Table 1

Selected indicators describing India's health-insurance and financing context

Indicator	Earlier observation	Latest observation	Analytical significance
Household with at least one member covered	28.7% (NFHS-4, 2015–16)	60.2% (NFHS-6, 2023–24)	Reach has expanded, but the measure does not establish adequacy or continuity.
Urban–rural coverage, NFHS-6	Not applicable	Urban 56.4%; rural 62.0%	Urban market access does not automatically translate into higher household coverage.
Government health expenditure as share of THE	28.6% (2013–14)	43.7% (2022–23)	Public financing has increased substantially.
Out-of-pocket expenditure as share of THE	64.2% (2013–14)	43.4% (2022–23)	Direct household spending remains a major health-financing source.
Claims paid ratio by number	85.66% (2022–23)	87.50% (2024–25)	Ratios should be read with partial settlement, timing, and grievance information.

Indicator	Earlier observation	Latest observation	Analytical significance
Health-insurance premium volume	Not reported here	More than ₹1.2 lakh crore (2024–25)	Growth may reflect both wider coverage and higher prices or sums insured.

Note. THE = total health expenditure. Sources: IIPS & ICF (2017, 2021); IIPS (2026); Ministry of Finance (2026); Ministry of Health and Family Welfare (2026a, 2026b). Data years differ and should not be interpreted as one continuous series.

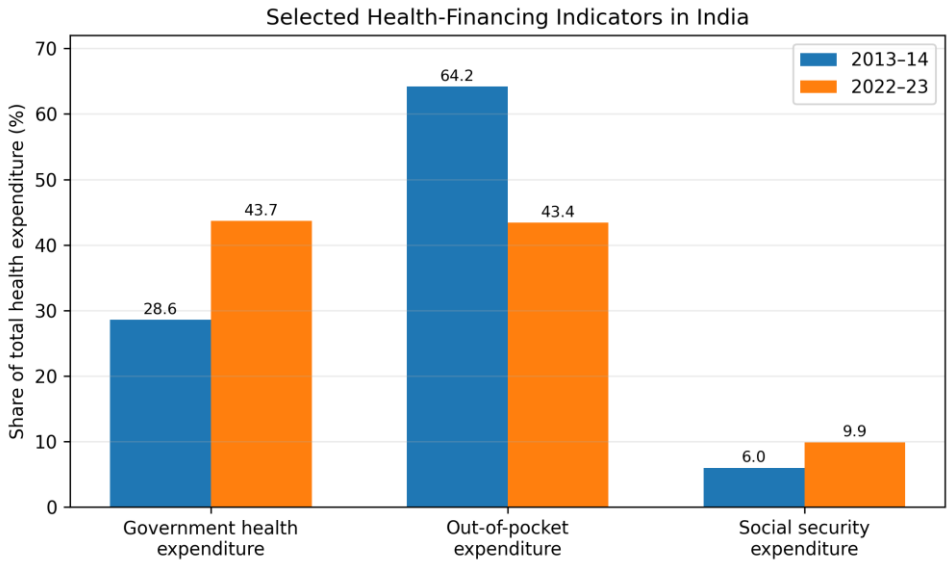

Figure 3: *Change in selected health-financing shares, 2013–14 to 2022–23*
Note. Figures are shares of total health expenditure. Source: Ministry of Health and Family Welfare (2026a). Categories are shown for comparison and are not a complete decomposition of all financing sources.

3. Literature Review and Conceptual Framework

The economic foundation of insurance is expected utility. Risk-averse households may prefer a certain premium to an uncertain loss, but willingness to pay depends on perceived probability and severity, disposable income, and confidence that the product will respond. Medical care is characterised by uncertainty and information asymmetry (Arrow, 1963). Insurers use underwriting, waiting periods, exclusions, deductibles, and co-payments to manage adverse selection and moral hazard. These tools may improve actuarial sustainability, yet they also increase complexity and can reduce consumer confidence. From the household perspective, the issue is not only whether insurance is theoretically valuable but whether a specific contract appears understandable, affordable, and credible.

Behavioural theory helps explain why households with similar income and risk make different decisions. The theory of planned behaviour proposes that intention is influenced by attitudes, subjective norms, and perceived behavioural control (Ajzen, 1991). Applied to health insurance, adoption is more likely when the household believes insurance is useful, trusted people recommend it, and the decision maker feels capable of comparing and completing the purchase. Mishra et al. (2024), studying 420 Indian tobacco and alcohol consumers, found that subjective norms, perceived behavioural control, and perceived product risk significantly influenced purchase intention. Their findings support the inclusion of social learning and decision confidence alongside price.

Financial literacy supplies a second theoretical bridge. It affects the ability to process probabilities, compare intertemporal costs and benefits, and evaluate financial contracts (Lusardi & Mitchell, 2014). Insurance literacy is more specific: it includes understanding risk pooling, covered events, exclusions, waiting periods, co-payments, deductibles, sub-limits, network conditions, disclosure duties, and renewal. Education and wealth can support enrolment, but their effects vary across scheme types. Ambade et al. (2023), using NFHS-4 data, found that assets and education were associated with health-insurance enrolment and that determinants differed between public, private, and community-based coverage. This variation cautions against a single explanation for all insurance forms. Experience introduces a dynamic element. Households revise beliefs after observing their own claims or the experiences of relatives, colleagues, and online communities. Bhat and Jain (2007) found that renewal determinants differed from initial purchase determinants and highlighted satisfaction as an important influence. Savitha and Banerjee (2021) similarly showed that previous illness and burdensome borrowing could matter more than formal education alone for new microinsurance purchase. Cross-country reviews of community-based insurance identify income, trust, awareness, service quality, and institutional design as recurring influences on voluntary uptake and renewal (Adebayo et al., 2015; Dror et al., 2016).

The framework adopted here therefore treats health-insurance adoption as a sequence: awareness, perceived need, search, comparison, enrolment or purchase, use of the provider network, claim, renewal, and recommendation. The four principal determinants operate throughout this lifecycle but with different weights. Cost is especially visible at purchase and renewal. Literacy is critical during comparison, disclosure, and claim preparation. Trust is required before prepayment and is updated after every interaction. Claim experience has its strongest direct effect after

hospitalisation, but shared stories shape the trust of non-claimants before they buy. Household and employment characteristics moderate all four relationships.

Table 2

Conceptual model of determinants of urban household adoption

Determinant	Mechanism	Illustrative measures	Expected relationship
Cost and perceived value	Determines whether present payment is feasible and benefits appear worth the price.	Premium-to-income burden; payment frequency; uncovered costs; sum insured.	Negative when unaffordable or low-value; positive when price and benefit fit needs.
Trust	Determines whether a contingent promise is believed and institutions are seen as fair.	Reputation; intermediary credibility; network reliability; grievance recourse.	Positive when procedures and institutions appear reliable and transparent.
Financial and insurance literacy	Enables comparison, disclosure, and correct use of benefits and claims.	Knowledge of exclusions, waiting periods, co-payments, sub-limits, and claim steps.	Generally positive, but may expose poor-value products and lead to informed non-purchase.
Claim experience	Updates expectations through authorisation, settlement, deductions, and grievance handling.	Turnaround; settlement completeness; explanation quality; satisfaction; renewal.	Positive after fair, timely service; negative after delay, surprise, or perceived unfairness.
Household and employment context	Shapes risk, eligibility, resources, and continuity.	Age; dependants; illness; occupation; employer cover; income volatility.	Moderates all four principal determinants.

Note. The model treats enrolment, purchase, renewal, and upgrading as related stages rather than a one-time binary outcome.

4. Methodology

This study uses a structured narrative review and descriptive secondary-data analysis. It does not claim to estimate causal effects and does not report an original household survey. Sources were selected for relevance to Indian health-insurance enrolment, purchase intention, renewal, affordability, trust, literacy, claims, and financial protection. Priority was given to nationally representative household surveys, official health-financing and sector information, peer-reviewed empirical research, systematic reviews, and established institutional working papers. Evidence from lower- and middle-income settings was included where it clarified mechanisms that are likely to operate in India.

The quantitative context is drawn from NFHS-4, NFHS-5, NFHS-6, National Health Accounts 2022–23, and the Ministry of Finance's 2026 sector release. The literature synthesis includes national household analysis, behavioural consumer research, microinsurance studies, renewal research, and systematic reviews. Findings were organised into four determinant categories—cost, trust, financial literacy, and claim experience—and then examined for interactions and urban heterogeneity. Because studies use different populations, periods, insurance products, and outcome definitions, results are synthesised thematically rather than pooled statistically.

The study has three safeguards against overstatement. First, reported numerical values are reproduced only from cited sources. Second, figures and tables are original presentations of those values rather than new observations. Third, descriptive relationships are not presented as proof of causation. No people were recruited, contacted, or surveyed; therefore, primary-research ethics approval was not required. A future causal study would need a stratified urban sample, verified policy details, claim histories, and multivariate analysis.

Table 3

Representative empirical evidence included in the synthesis

Source	Design or setting	Relevant finding	Contribution
Ambade et al. (2023)	NFHS-4 national household analysis	Assets and education were associated with enrolment; determinants differed by scheme type.	Economic capacity, education, and segmentation.
Chakrabarti & Shankar (2015)	Empirical analysis of Indian insurance penetration	Socioeconomic status, education, employment, and information access helped explain penetration.	Affordability and information.
Savitha & Banerjee (2021)	Survey in three Karnataka districts	Past illness and experience of costly borrowing could matter more than education for new purchase.	Risk salience and lived experience.
Mishra et al. (2024)	Survey of 420 Indian tobacco and alcohol consumers	Subjective norms, control, and perceived product risk influenced purchase intention.	Trust, social influence, and confidence.
Bhat & Jain (2007)	Indian renewal analysis	Renewal determinants differed from purchase; satisfaction was important.	Claim and service experience.
Adebayo et al. (2015); Dror et al. (2016)	Systematic reviews in low- and middle-income countries	Income, trust, awareness, service quality, and design affected uptake and renewal.	Broader interaction evidence.

Note. This is a thematic synthesis, not a pooled effect-size analysis. The studies use different populations, insurance arrangements, and outcomes.

5. Findings and Discussion

5.1 Cost, affordability, and perceived value

Cost is the first gatekeeper because premiums must be paid before benefits are known. For low- and middle-income urban households, an annual family premium can compete with school fees, rent, loan instalments, and precautionary savings. NITI Aayog (2021) observed that available voluntary products for the missing middle could cost two to three times the level considered affordable and discussed an indicative hospitalisation premium range of approximately ₹4,000–₹6,000 per family per year for mass-market designs. The exact affordable amount varies by household, age, benefit, and city, but the principle is clear: a technically sound product will not achieve broad adoption when payment is misaligned with disposable income.

Affordability is not equivalent to income alone. Cash-flow timing matters for gig workers, small-business owners, and informal employees whose earnings fluctuate. A household may be able to pay the premium over a year but not as one annual instalment. Monthly or quarterly payments can improve access, although instalment administration must not create hidden finance charges or unintended lapse. Family composition also matters. Adding older parents can increase premium sharply, while a family floater may create concern that one major claim will exhaust the shared amount. Households therefore respond to the total expected burden, not simply the advertised entry premium.

Price is interpreted through perceived value. Insurance may appear expensive when the household expects to remain healthy, believes public hospitals will be sufficient, or views savings as more flexible. Conversely, a recent hospitalisation, chronic diagnosis, or experience of high-cost borrowing can increase perceived need. Savitha and Banerjee (2021) found that prior illness and burdensome borrowing were important in microinsurance enrolment, illustrating how lived experience changes willingness to pay. This creates a policy dilemma: purchase often occurs after risk becomes salient, when waiting periods or underwriting may limit immediate value. Education must therefore make risk visible before crisis without relying on fear.

Cost also affects product quality. A household focused on the lowest premium may select a small sum insured, high co-payment, restrictive room-rent limit, or narrow network without understanding the trade-off. The result is nominal adoption but substantial residual liability. Older relatives may be excluded to preserve affordability, leaving precisely the highest-risk members

unprotected. A low-cost product can be appropriate when its limitations are understood, but low price alone is not consumer value. The relevant comparison is between the premium and the expected financial protection after exclusions, deductibles, and likely non-covered expenses.

Broad group enrolment can lower acquisition costs and reduce adverse selection. Employer groups, professional associations, cooperatives, digital-work platforms, and other affinity groups can create a larger risk pool and simpler distribution (NITI Aayog, 2021). Portability and continuity are essential, however. A household should not lose affordable protection merely because a person changes employer, shifts from salaried to self-employment, or retires. Cost policy must therefore address both the entry price and the long-run ability to renew.

5.2 Trust in insurers, intermediaries, providers, and institutions

Insurance requires trust because the buyer prepays for a promise whose performance may be tested years later. Trust is distributed across an ecosystem: the insurer must interpret the contract fairly, the intermediary must explain it accurately, the hospital must follow network procedures, the third-party administrator must process information, and the grievance system must provide credible recourse. Failure by any participant may be attributed to "the insurance company" as a whole. For urban households facing many products and sales channels, reputation and recommendations often function as shortcuts when technical comparison is difficult.

Information asymmetry intensifies mistrust. Insurers and hospitals understand contract and billing rules better than consumers, who often confront them while a family member is ill. A clause may have been legally disclosed yet never meaningfully understood. Surprise deductions can therefore be experienced as unfair even when they follow the wording of the policy. Cross-country evidence repeatedly identifies trust in scheme managers, providers, and service quality as a determinant of voluntary enrolment and renewal (Adebayo et al., 2015; Dror et al., 2016). Mishra et al. (2024) found that subjective norms influenced purchase intention, confirming that households use the judgements and experiences of others when institutional information is difficult to evaluate.

Trust also changes the meaning of price. A low premium from an unfamiliar insurer may signal value to one consumer and unreliable service to another. A higher premium may be accepted when the household expects a strong hospital network, responsive support, and fair claims. Consequently, price competition cannot substitute for credible service evidence. Comparable reporting of claim turnaround, partial settlements, grievance outcomes, and network availability

would provide stronger signals than promotional claims. Transparency should extend to intermediary incentives so that buyers can distinguish advice from sales pressure.

Public and employer arrangements have different trust problems. In a public scheme, the beneficiary may be uncertain about eligibility, empanelled hospitals, or whether cashless treatment will actually be available. In employer insurance, the employee may assume that benefits are comprehensive or permanent without knowing the sum insured, parent contribution, or exit rules. Trust must therefore be linked to the specific stage at which confidence fails: enrolment, hospital access, authorisation, settlement, renewal, or grievance redress. A general awareness campaign cannot repair a process that continues to produce surprise and delay.

5.3 Financial and insurance literacy

Financial literacy refers to the knowledge and skills required to make effective financial decisions, while insurance literacy concerns the meaning and use of a particular risk contract. A consumer may be highly educated yet misunderstand a room-rent cap, restoration benefit, cumulative bonus, or deductible. Insurance literacy includes knowing that "cashless" does not mean every hospital expense is payable, that pre-existing conditions may have waiting periods, that non-disclosure can affect claims, and that a top-up may activate only after a specified threshold. These concepts determine whether adoption is informed or merely formal.

Research suggests that education, assets, media access, and knowledge affect enrolment, although the relationship differs across products and populations. Ambade et al. (2023) found that educational attainment was positively associated with private insurance in urban settings, while determinants varied for public and community-based coverage. Chakrabarti and Shankar (2015) likewise linked insurance penetration with socioeconomic and information variables. However, Savitha and Banerjee (2021) showed that experience with illness and costly borrowing may be more influential than education alone. Formal schooling improves capacity, but personal experience makes risk salient.

Literacy affects the quality as well as the probability of purchase. Common errors include choosing only on premium, understating medical history, overlooking disease-specific limits, assuming employer cover will continue indefinitely, failing to add a dependant within the permitted period, or purchasing a top-up without understanding its deductible. These mistakes can later become claim disputes and reinforce distrust. The relationship is therefore circular: weak literacy produces

unsuitable purchase, unsuitable purchase produces disappointment, and disappointment reduces future willingness to insure.

Digital comparison platforms have reduced search costs but may increase cognitive load. Dozens of products can be displayed with technical labels that are difficult to translate into realistic outcomes. Reviews reveal service experiences but may not indicate whether a product is actuarially appropriate for a particular family. Standardised one-page key-facts statements should therefore use consistent terminology and worked rupee examples. They should show what happens under a common hospital bill, a room upgrade, a waiting-period condition, a co-payment, and a partial network claim. The objective is not to remove every contractual detail but to make material trade-offs comparable.

Literacy interventions are most effective when linked to decisions. Employers can explain benefits during onboarding and annual review. Banks and tax-filing platforms can prompt households to assess family protection. Hospitals can provide neutral claim-navigation support. Schools and universities can teach risk pooling and medical-cost uncertainty as part of financial education. Because perceived behavioural control influences intention (Ajzen, 1991; Mishra et al., 2024), education should leave consumers able to act—not merely aware that insurance exists.

5.4 Claim experience, renewal, and word-of-mouth

Claim experience is the moment at which an abstract promise becomes observable service. For cashless hospitalisation, households judge the speed of pre-authorisation, the hospital's cooperation, communication during treatment, final approval, and the amount they must pay. For reimbursement, they judge documentation, repeated queries, turnaround, deductions, and the clarity of reasons. A technically valid settlement can still produce dissatisfaction when the process is opaque or stressful. Conversely, a clear explanation and predictable timeline can preserve trust even when some expenses are excluded.

Official sector information shows both progress and interpretive limits. The claims-paid ratio by number was 85.66% in 2022–23, 82.46% in 2023–24, and 87.50% in 2024–25 (Ministry of Finance, 2026). The same release noted standards of one hour for cashless pre-authorisation and three hours for final authorisation and reported 137,361 general and health-insurance grievances in 2024–25, of which 93% were disposed. These indicators are useful but incomplete. A claim counted as paid may be paid only partly; disposal of a grievance does not necessarily imply

satisfaction; and aggregate ratios conceal variation across insurers, products, hospitals, and claim types.

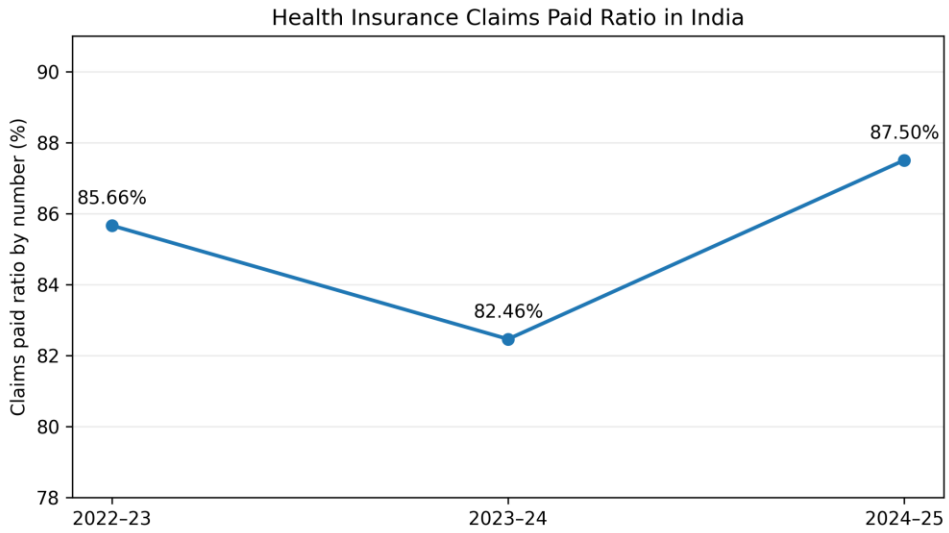

Figure 4: *Health insurance claims paid ratio by number, 2022–23 to 2024–25*

Note. Source: Ministry of Finance (2026). The ratio is based on number of claims and does not show claim value, partial settlements, turnaround, or variation across products and insurers.

Common reasons for a claim not being paid in full include exhausted sums insured, co-payments, disease or treatment sub-limits, deductibles, room-rent limits, proportionate deductions, and non-medical expenses (Ministry of Finance, 2026). Many of these are contract features rather than post-claim inventions. Nevertheless, they can feel like hidden barriers when not understood at purchase. Claim reform must therefore begin before the claim through clearer disclosure, suitable product design, and accurate sales. During the claim, every deduction should be itemised and linked to the relevant clause using plain language.

Claim experience has a particularly strong effect on renewal. Initial purchase may be motivated by fear, tax planning, an employer, or an agent, but renewal reflects actual service and updated beliefs. Bhat and Jain (2007) found that satisfaction mattered for renewal and that renewal determinants differed from purchase determinants. A smooth claim may make a household willing to accept a higher premium; a disputed claim may cause lapse despite a discount. The effect spreads through social networks. One positive hospital experience can generate recommendations, while one widely shared rejection can create scepticism among people who have never claimed.

A mature claims system should publish more than a single settlement ratio. Relevant measures include claims paid by number and value, median and high-percentile turnaround, partial-settlement frequency, reasons for deductions, pre-authorisation performance, grievance recurrence, and claimant renewal. Data should be reported by product category because group, retail, and publicly financed arrangements have different benefit structures. Consumer-facing tracking should show the current stage, required action, deadline, and escalation route. Claims transparency is not merely an operational reform; it is an adoption and retention strategy.

5.5 Interaction effects and coverage adequacy

The four drivers operate as a system. Cost without literacy can produce underinsurance because households choose the cheapest policy without recognising restrictive terms. Literacy without trust can produce informed non-adoption: the household understands the contract but doubts that the promise will be honoured. Trust without affordability creates willingness but no purchase. Positive claim experience can justify a higher renewal price, while negative experience can make even a discounted policy unattractive. These interactions explain why isolated awareness or price campaigns frequently produce weaker results than expected.

Employer coverage illustrates the interaction clearly. Automatic enrolment removes much of the initial price and effort barrier, but employees may not know the sum insured, exclusions, parent coverage, or portability rules. The plan can create false reassurance and delay purchase of personal cover until retirement, job loss, or illness. Employers can convert passive enrolment into informed protection through annual benefit statements, top-up options, claim education, and transition support when employment ends. This is especially relevant in urban labour markets characterised by mobility and self-employment.

A central measurement problem is that adoption is binary while protection is multidimensional. The NFHS indicator counts a household when at least one usual member is covered; it does not establish that every dependant is insured or that the benefit is sufficient (IIPS, 2026). A household may therefore be statistically covered while an elderly parent remains uninsured, the sum insured is low relative to local hospital prices, or substantial co-payments remain. Conversely, a publicly financed scheme may provide meaningful protection even though no retail purchase occurred. Enrolment, policy ownership, and effective protection should not be treated as identical outcomes.

An urban coverage-adequacy index should supplement the adoption rate. It could measure the proportion of members covered; continuity without lapse; the sum insured relative to local

treatment costs; network availability; major co-payments, deductibles, and sub-limits; protection after job change; and the share of an eligible claim ultimately borne by the household. Where consent is available, survey responses should be checked against benefit statements because perceived and contractual cover may differ. Households could then be classified as uninsured, nominally covered but underprotected, adequately covered, or tested through a claim. This would produce more useful evidence than a single yes-or-no question.

The continuing out-of-pocket burden reinforces this distinction. Out-of-pocket expenditure still accounted for 43.4% of total health expenditure in 2022–23 (Ministry of Health and Family Welfare, 2026a). Insurance cannot remove every direct cost because outpatient medicines, diagnostics, transport, attendants, and uncovered services may remain. The objective of adequate coverage is not necessarily zero payment, but a predictable residual burden that does not force distress borrowing or asset depletion. Adoption policy should therefore aim for informed, continuous, and usable protection rather than the largest possible number of nominal policyholders.

5.6 Distinct adoption pathways within urban households

The adoption pathway differs across urban employment groups. For salaried households, insurance may begin as an automatic workplace benefit rather than a deliberate financial decision. This lowers the immediate cost and administrative burden, but it can also reduce engagement. Employees may know that they are "covered" without knowing the family sum insured, room eligibility, parent contribution, restoration rules, or what happens when employment ends. The most important intervention is therefore not initial persuasion but conversion of passive enrolment into active understanding. Annual benefit statements, examples of likely residual bills, optional top-ups, and notice of exit rights can help employees decide whether employer cover is sufficient or should be supplemented by a personal policy.

Self-employed, informal, and platform workers follow a different pathway. They may lack an employer group, face variable income, and hesitate to commit to an annual premium even when their total yearly earnings are adequate. For these households, affordability is partly a liquidity problem and trust is partly a continuity problem: consumers need confidence that instalment payment will not create accidental lapse and that coverage will remain valid when they change occupation or city. Profession-based associations, cooperatives, and platform groups can lower distribution costs, but group arrangements should provide transparent conversion to individual

cover. Otherwise, the same dependence on an employer is reproduced in another form (NITI Aayog, 2021).

Multi-generational and retired households face the sharpest tension between need and affordability. Older members are more likely to need hospital care, yet premiums, co-payments, and waiting periods may make their cover expensive or limited. Families may insure younger earners while leaving parents exposed, producing a household that appears covered but remains vulnerable to its most foreseeable risk. The decision also involves intergenerational fairness: a policyholder may accept a higher premium for parent protection only when the exclusions and likely out-of-pocket share are clearly explained. For retirees, continuity accumulated during healthier years is especially valuable. Regulation and employer transition programmes should therefore minimise breaks in cover and make migration from group to retail insurance understandable before retirement rather than after benefits have ended.

6. Policy and Industry Implications

The evidence supports an integrated policy strategy. First, affordability should be improved through broad risk pools, lower distribution costs, and payment schedules aligned with income. Employers, professional bodies, cooperatives, digital-work platforms, and other groups can facilitate enrolment, but members should retain continuity when they change jobs or leave the group. Monthly or quarterly payment options can help households with irregular cash flow, provided coverage rules and lapse consequences are transparent. Public subsidy should remain targeted, while market design should address the missing middle identified by NITI Aayog (2021).

Second, disclosure should be standardised around the decisions consumers actually face. A one-page key-facts statement should show the premium, renewal basis, sum insured, waiting periods, co-payments, deductibles, room-rent conditions, disease sub-limits, network rules, major exclusions, portability, and grievance route. Worked examples should show the household liability under common hospital scenarios. Terminology should be consistent across insurers so that comparison does not require expert interpretation. Sales records should document the needs identified and the reasons a product was recommended.

Third, claims transparency should be recognised as a demand-side reform. Public dashboards should report claim payment by number and value, partial settlements, turnaround distributions, common deduction codes, network performance, and grievance outcomes. Individual claim

statements should provide itemised calculations linked to clauses and a single escalation channel with enforceable deadlines. Hospitals and insurers should share real-time status information so that families are not forced to coordinate institutions while managing illness.

Fourth, education should occur at life and employment transitions. Young adults should learn that low current risk does not guarantee future insurability. Newly employed workers should understand the limits of group cover. People marrying, having children, supporting parents, changing jobs, or approaching retirement should be prompted to review coverage. Educational material should test comprehension and enable action rather than relying on slogans. Neutral counselling is particularly important for older households facing complex premiums and exclusions.

Fifth, government and industry should publish adequacy indicators in addition to enrolment. Measures should cover all members, benefit depth, continuity, local provider access, residual out-of-pocket liability, and protection after employment change. Finally, insurance reform and healthcare-cost management must advance together. Premiums cannot remain affordable if provider prices and medical inflation are uncontrolled. Transparent package rates, quality measurement, standard treatment pathways, fraud controls, and fair provider contracting can support both insurer sustainability and consumer confidence. The objective is a stable system in which households understand the contract, providers are paid fairly, and insurers can honour promises over time.

Table 4

Policy matrix linking adoption barriers to practical responses

Barrier	Recommended response	Primary actors	Outcome measure
Annual premium is unaffordable or poorly timed	Instalments, group pooling, and portable group-to-retail continuity.	Insurers, employers, associations, regulator	Enrolment, lapse, and premium-to-income burden.
Product complexity	Standard key-facts statement with worked rupee examples and consistent terms.	Regulator and insurers	Comprehension, complaints, and unsuitable-product cancellation.
Low institutional trust	Comparable service dashboards, verified network data, and intermediary accountability.	Regulator, insurers, hospitals	Trust, conversion, recommendation, and grievance recurrence.

Barrier	Recommended response	Primary actors	Outcome measure
Claim surprise or delay	Itemised deductions, reason codes, live tracking, and enforceable escalation.	Insurers, TPAs, hospitals, ombudsman	Turnaround, claimant satisfaction, and renewal.
Employer-cover complacency	Annual benefit statements, top-ups, and exit or retirement counselling.	Employers and group insurers	Employee knowledge and continuity after job change.
Nominal rather than adequate coverage	Publish measures covering all members, local costs, continuity, and residual liability.	Government, survey agencies, researchers	Adequate-cover rate and post-claim out-of-pocket spending.

Note. TPA = third-party administrator. Measures should be reported by product category and household segment where feasible.

7. Limitations and Directions for Future Research

This review has limitations. The included studies examine different populations, periods, and insurance arrangements, so their findings cannot be assigned a single pooled effect. Rural microinsurance evidence may illuminate mechanisms without representing all urban households. National coverage indicators combine public schemes, employer arrangements, and private policies and do not identify the determinant of each form of adoption. The analysis is descriptive and cannot estimate the causal weight of cost, trust, literacy, or claim experience. Market rules also change over time. Future research should use a stratified sample across metropolitan, tier-two, and tier-three cities; verify policy documents; distinguish initial purchase from renewal; and combine regression analysis with interviews of claimants, non-claimants, and households that allowed policies to lapse.

8. Conclusion

Health-insurance adoption among urban Indian households cannot be explained by income or awareness alone. Affordability determines whether purchase and renewal are feasible, but perceived value determines whether a household chooses to commit current income. Financial literacy enables comparison and proper use. Trust converts a contractual promise into willingness to prepay. Claim experience then validates or overturns expectations and strongly influences renewal and recommendation.

India's increase from 28.7% household coverage in NFHS-4 to 60.2% in NFHS-6 represents substantial progress, yet the lower urban rate and continuing out-of-pocket burden show that the policy problem has shifted rather than disappeared. The next stage is not simply to issue more cards or sell more policies. It is to ensure that protection is adequate, understandable, continuous, and usable.

The strongest strategy is therefore integrated: reduce distribution and payment barriers, standardise plain-language information, make claim outcomes transparent, preserve coverage through employment transitions, and measure adequacy rather than ownership alone. When cost, literacy, trust, and service reinforce one another, health insurance becomes more than a product purchased after fear or persuasion. It becomes a credible household institution for managing medical risk.

References

- Adebayo, E. F., Uthman, O. A., Wiysonge, C. S., Stern, E. A., Lamont, K. T., & Ataguba, J. E. (2015). A systematic review of factors that affect uptake of community-based health insurance in low-income and middle-income countries. *BMC Health Services Research, 15*, Article 543. https://doi.org/10.1186/s12913-015-1179-3
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T
- Ambade, P. N., Gerald, J., & Rahman, T. (2023). Wealth status and health insurance enrollment in India: An empirical analysis. *Healthcare, 11*(9), Article 1343. https://doi.org/10.3390/healthcare11091343
- Arrow, K. J. (1963). Uncertainty and the welfare economics of medical care. *American Economic Review, 53*(5), 941–973.
- Bhat, R., & Jain, N. (2007). *A study of factors affecting the renewal of health insurance policy* (IIMA Working Paper No. 2007-01-02). Indian Institute of Management Ahmedabad. https://www.iima.ac.in/sites/default/files/rnpfiles/2007-01-02_rbhat.pdf
- Chakrabarti, A., & Shankar, A. (2015). Determinants of health insurance penetration in India: An empirical analysis. *Oxford Development Studies, 43*(3), 379–401. https://doi.org/10.1080/13600818.2015.1057116
- Dror, D. M., Hossain, S. A. S., Majumdar, A., Pérez Koehlmoos, T. L., John, D., & Panda, P. K. (2016). What factors affect voluntary uptake of community-based health insurance schemes in low- and middle-income countries? A systematic review and meta-analysis. *PLOS ONE, 11*(8), Article e0160479. https://doi.org/10.1371/journal.pone.0160479
- International Institute for Population Sciences. (2026). *National Family Health Survey (NFHS-6), 2023–24: India fact sheet*. Ministry of Health and Family Welfare, Government of India. https://www.nfhsiips.in/

- International Institute for Population Sciences, & ICF. (2017). *National Family Health Survey (NFHS-4), 2015–16: India*. International Institute for Population Sciences.
- International Institute for Population Sciences, & ICF. (2021). *National Family Health Survey (NFHS-5), 2019–21: India*. International Institute for Population Sciences. https://dhsprogram.com/pubs/pdf/FR375/FR375.pdf
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5
- Ministry of Finance. (2026, March 26). *Health insurance sector records strong growth momentum with premiums exceeding ₹1.2 lakh crore in 2024–25*. Press Information Bureau, Government of India. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2245575
- Ministry of Health and Family Welfare. (2026a, May 27). *Union Health Ministry releases the National Health Accounts estimates for India 2022–23*. Press Information Bureau, Government of India. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2265816
- Ministry of Health and Family Welfare. (2026b, May 29). *NFHS-6 reflects India's accelerated progress in maternal and child health, nutrition and financial protection*. Press Information Bureau, Government of India. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2266600
- Mishra, A., Jamshed, M., Ahmad, A., Garg, S., & Madsen, D. Ø. (2024). Factors influencing the intention to purchase health insurance: A study of Indian tobacco and alcohol consumers. *Frontiers in Public Health, 12*, Article 1332511. https://doi.org/10.3389/fpubh.2024.1332511
- NITI Aayog. (2021). *Health insurance for India's missing middle*. Government of India. https://www.niti.gov.in/node/352
- Savitha, B., & Banerjee, S. (2021). Education and experience as determinants of micro health insurance enrolment. *International Journal of Health Policy and Management, 10*(4), 192–200. https://doi.org/10.34172/ijhpm.2020.44