Literature Review–Based Study on Health Insurance in India

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Abstract: This study provides a comprehensive literature-based examination of the present status of the health insurance industry in India, with a focus on key reforms, program performance, financial protection, and systemic challenges. Drawing on evidence from peer-reviewed research, government reports, and national datasets, the review synthesises findings across public schemes (such as RSBY and PM-JAY), private health insurance markets, and mixed public–private models. The analysis shows that while public health insurance has improved access to inpatient services for low-income households, its ability to reduce out-of-pocket expenditure remains limited due to exclusions, inadequate coverage of outpatient care, and provider-related inefficiencies. Private health insurance has expanded rapidly but continues to serve predominantly urban, higher-income groups, with persistent issues of affordability, claim settlement delays, and product complexity. Cross-scheme comparisons highlight fragmentation, low awareness, inequitable coverage, and significant gaps in regulation. The study identifies critical research gaps, including the need for longitudinal assessments of PM-JAY, evaluations of digital claims and TPAs, comparative state-level analyses, and behavioural studies on enrolment and retention. Overall, the findings suggest that India's health insurance ecosystem is expanding but remains structurally fragmented, requiring strengthened governance, improved benefit design, strategic purchasing, and integrated risk pooling to advance towards Universal Health Coverage.

Keywords: Health insurance, India, PM-JAY, financial risk protection, out-of-pocket expenditure, private health insurance, public schemes, universal health coverage, healthcare financing, policy review.

BACKGROUND AND CONTEXT

The health insurance landscape in India has undergone a significant transformation over the past several decades, shaped by economic reforms, regulatory evolution, and the country's pursuit of Universal Health Coverage (UHC). Historically, prior to the economic liberalisation of the 1990s, health insurance in India remained limited in both reach and scope. Coverage was largely restricted to social security programs such as the Employees' State Insurance Scheme (ESIC) and the Central Government Health Scheme (CGHS), which primarily catered to formal sector workers and government employees. The general population, particularly those in rural and informal sectors, relied heavily on out-of-pocket payments for healthcare needs, with minimal financial risk protection.

A major shift occurred post-2000 with the liberalisation of the insurance sector and the establishment of the Insurance Regulatory and Development Authority of India (IRDAI) in 1999. IRDAI introduced systematic regulation, opened the market to private insurers, and formalised processes such as product approval, pricing oversight, and grievance redressal. These reforms encouraged the entry of numerous private health insurance companies and Third-Party Administrators (TPAs), significantly expanding the range of insurance products available to consumers. In parallel, government-sponsored health insurance schemes (GSHIS) gained momentum—starting with the Rashtriya Swasthya Bima Yojana (RSBY) and expanding to large-scale initiatives such as the Ayushman Bharat–Pradhan Mantri Jan Arogya Yojana (PM-JAY), which together sought to provide financial protection to economically vulnerable populations.

India's current health system operates through a mixed public–private model, characterised by substantial private-sector dominance in outpatient and inpatient care. Public healthcare infrastructure, although extensive, faces persistent challenges such as inadequate funding, workforce shortages, and uneven distribution across states. As a result, households often rely on private providers, which are perceived as offering better accessibility and service responsiveness. However, this dependence on private healthcare contributes significantly to the financial burden on households. India's out-of-pocket expenditure (OOPE) remains among the highest globally, accounting for nearly half of total health expenditure. High OOPE frequently results in catastrophic health spending and drives millions of households into poverty each year, underscoring the urgent need for effective health financing mechanisms.

The expansion of health insurance, both public and private, is therefore essential to achieving financial protection, improving healthcare access, and progressing toward Universal Health Coverage (UHC). UHC emphasises equitable access to quality healthcare services without financial hardship. Health insurance plays a critical role in risk pooling and resource mobilisation—key components of a resilient health system. While India has made substantial progress in expanding coverage, significant gaps remain in terms of depth (benefit packages), breadth (population coverage), and height (financial protection level). Moreover, variations across states, socio-economic groups, and rural–urban populations highlight the need for tailored policy interventions.

Against this backdrop, understanding the evolution, current status, and performance of the health insurance system is crucial. A comprehensive review of India's health insurance

landscape not only highlights existing challenges but also sheds light on opportunities for strengthening coverage, improving equity, and ensuring sustainable health financing as the country advances toward UHC.

significance of the study

This study holds considerable significance for policymakers, researchers, healthcare practitioners, insurers, and citizens, as it provides a consolidated understanding of the evolving health insurance landscape in India. Its key contributions include:

Existing research on health insurance in India is dispersed across multiple domains—public schemes, private insurance markets, utilisation patterns, financial protection, and regulatory frameworks. By synthesising these strands, the study creates a unified evidence base that can inform future decision-making. India continues to face high out-of-pocket expenditure (OOPE)**,** leading to financial hardship and medical impoverishment. The study analyses how different insurance models have performed in addressing these issues, providing evidence-backed insights for designing more effective and equitable insurance policies. Achieving UHC requires expanding coverage, improving quality, and ensuring protection against catastrophic healthcare spending. This study highlights the opportunities and barriers within India's current insurance system, helping stakeholders align reforms with UHC goals. Government schemes such as PM-JAY and state-level programmes have expanded rapidly. The study evaluates their limitations related to targeting, awareness, provider participation, and claim settlement, offering critical directions for improving scheme efficiency**.** By reviewing methodological approaches used in existing studies, the research identifies areas needing further investigation—such as long-term impact evaluations, equity analyses, digital health insurance, and behavioural factors influencing uptake. The study enriches academic discourse by providing a systematic, updated, and analytical narrative of health insurance research in India, serving as a valuable reference for scholars, students, and research institutions.

METHODOLOGY

The present study adopts a systematic literature review design, integrating elements of descriptive, analytical, and interpretive research. The design aims to collect, evaluate, synthesise, and interpret scholarly work on health insurance in India to understand its evolution, performance, challenges, and future directions. The review follows structured procedures to ensure transparency, replicability, and academic rigor. A qualitative, document-based research

approach is employed. The study critically examines peer-reviewed journal articles, policy documents, government reports, and institutional publications. Where applicable, quantitative findings reported in the literature (e.g., enrolment trends, OOPE changes, utilisation rates) are summarised to support analytical insights.

The study relies entirely on secondary data, drawn from the following sources *Academic Databases* such as Scopus, Web of Science, PubMed, JSTOR, Google Scholar and ResearchGate. *Institutional & Government Sources* such as IRDAI Annual Reports and Health Insurance Handbooks, NITI Aayog policy reports, National Health Accounts (NHA)**,** National Sample Survey Office (NSSO) rounds, National Family Health Survey (NFHS) datasets, PM-JAY and **ABDM** dashboards, State health insurance scheme reports**.**

To ensure relevance and quality, the following criteria are applied: Studies published between 2005 and 2025, Research focusing on health insurance in India (public, private, or mixed systems), Peer-reviewed articles, systematic reviews, empirical studies, and policy analyses. Studies addressing utilisation, awareness, coverage, claims, financial protection, equity, or regulatory frameworks and Articles written in English.

Exclusion Criteria involves Non-academic blogs, news articles, and opinion pieces, Studies unrelated to insurance or focusing exclusively on global comparisons, Duplicated publications and Articles lacking methodological clarity.

A structured keyword search is conducted using Boolean operators. Sample string: (“health insurance” AND India) OR (“public health insurance” OR “private health insurance”) AND (utilisation OR coverage OR awareness OR claim settlement OR financial protection OR UHC). Additional keywords include:

PM-JAY, RSBY, IRDAI reforms, out-of-pocket expenditure, insurance utilisation, insurance literacy, provider empanelment, risk pooling. Backward and forward snowballing methods are also used to identify additional relevant studies.

Selected studies are systematically reviewed and coded based on: Publication year and type, Research objectives, Methodology (quantitative/qualitative/mixed), Population and sample characteristics, Key variables studied, Findings related to coverage, awareness, utilisation, OOPE, claims, and satisfaction, Policy and regulatory implications. A coding matrix is used to summarise recurring themes and trends.

The analysis follows a thematic synthesis approach consisting of: Descriptive Analysis**:** **Trends in publication year, themes, geographic focus, and methodological patterns.** Thematic/Content Analysis Identifying recurring themes such as: Coverage and enrolment, Utilisation patterns, Financial protection impacts, Consumer awareness and satisfaction, Public vs private insurance performance and Provider behaviour and regulatory challenges

DISCUSSION

Overview of the Health Insurance Landscape in India

The health insurance sector in India has undergone a significant transformation over the past two decades, driven by policy reforms, liberalisation, government-sponsored schemes, and rising healthcare costs. Historically, India functioned with a fragmented and limited insurance framework dominated by employer-based and social protection schemes such as the Employees' State Insurance Scheme (ESIC) and the Central Government Health Scheme (CGHS). ESIC, established in 1952, provided social security and medical benefits to industrial workers, whereas CGHS catered primarily to central government employees, both operating under a contributory model. However, the coverage of these schemes remained restricted to the organised sector, leaving the large informal workforce uninsured.

A landmark shift occurred with the introduction of the Rashtriya Swasthya Bima Yojana (RSBY) in 2008, designed for below-poverty-line (BPL) households using a public–private partnership model. Research indicates that RSBY marked the beginning of large-scale government-financed health insurance in India, significantly accelerating enrolment among vulnerable groups (Karan et al., 2017). Nevertheless, issues of awareness, utilisation, portability, and hospital empanelment dampened its overall impact.

Building on learning from earlier schemes, the Government of India launched the Pradhan Mantri Jan Arogya Yojana (PM-JAY) in 2018, which is currently one of the world's largest publicly funded health insurance programs. PM-JAY provides an annual coverage of ₹5 lakh per family, emphasising cashless treatment, digital claim management, and extensive hospital empanelment. Studies highlight that the program has improved financial protection and increased inpatient utilisation, though challenges remain in claim settlement processes, uneven hospital participation, and regional disparities (NITI Aayog, 2021; Prinja et al., 2020).

Parallel to state-sponsored initiatives, state-specific schemes such as Tamil Nadu's CMCHIS, Andhra Pradesh's Aarogyasri, Karnataka's Vajpayee Arogyashree, and Haryana's CHIRAYU

scheme have further expanded public health insurance penetration. Many states have integrated their schemes into PM-JAY to achieve administrative and financial synergy.

The post-2000 period also witnessed the rapid expansion of private health insurance following the establishment of the Insurance Regulatory and Development Authority of India (IRDAI) in 1999. Liberalisation allowed private insurers to enter the market, resulting in increased competition, product diversification, and improved customer-centric services. Private health insurance grew steadily, especially among middle- and upper-income groups, driven by rising incomes, increased disease burden, greater health consciousness, and the growth of third-party administrators (TPAs). Recent research shows that private insurers account for a substantial portion of the market in terms of premium collection, although penetration remains significantly lower in rural and low-income populations (IRDAI, 2023).

Despite the proliferation of schemes, health insurance penetration in India is still uneven. NFHS-5 (2019–21) revealed that approximately 41% of Indian households reported having at least one member covered by health insurance, indicating improvement but also highlighting persistent gaps. Rural coverage continues to lag behind urban regions, and states with robust state-sponsored schemes generally exhibit higher penetration. Demographic patterns indicate that insurance coverage is higher among educated, economically secure households, and lower among informal workers, women, and migrant populations.

A recurring challenge in the literature is the persistence of high out-of-pocket expenditure (OOPE), which accounts for nearly 48% of total health spending despite increased insurance penetration (National Health Accounts, 2022). This suggests that insurance has not yet achieved full financial protection due to exclusions, limited outpatient coverage, co-payments, and inadequate awareness of benefits.

Overall, the literature indicates that while India has made substantial progress in expanding both public and private insurance, structural gaps remain in terms of affordability, accessibility, service quality, and equity. The health insurance landscape is thus characterised by rapid expansion but the need for continued reforms to achieve Universal Health Coverage (UHC).

Public Health Insurance Schemes

Publicly financed health insurance in India has expanded from small pilot schemes to large-scale national programmes. Major schemes include the Rashtriya Swasthya Bima Yojana

(RSBY) (initiated 2008), several state-level programs (e.g., Yeshasvini**,** Aarogyasri**,** Karunya), and the centrally sponsored Pradhan Mantri Jan Arogya Yojana (PM-JAY) (launched 2018). These schemes differ in target populations, benefit packages, purchasing arrangements, and provider empanelment models (Fan, Karan, & Mahal, 2012; Rao et al., 2011; Prinja et al., 2012).

Access and utilisation. Empirical evaluations show public insurance increases hospital utilisation especially for inpatient tertiary care among targeted groups. RSBY and state schemes raised institutional admissions for covered procedures and improved financial access for BPL households (Nandi, Ashok, & Laxminarayan, 2013; Fan et al., 2012). Early PM-JAY evidence indicates increased authorised admissions and utilisation among eligible families, though utilisation gains vary considerably across states and districts (Pandey, Vaidyanathan, & Sengupta, 2018; Vellakkal et al., 2017).

Reduction in OOPE. Findings are mixed. Several studies report reductions in catastrophic expenditure for some beneficiaries, but overall out-of-pocket expenditure (OOPE) often remains high because many schemes focus on inpatient care and exclude outpatient visits, diagnostics, and medicines—components that constitute a large share of household health spending (Garg & Karan, 2005; Karan, Selvaraj, & Mahal, 2014; Fan et al., 2012). Moreover, "informal" patient payments and uncovered charges at private hospitals reduce the net financial protection (Prinja et al., 2012; Nandi et al., 2013).

Social equity outcomes. Public schemes have improved access for some vulnerable groups but uneven implementation and enrolment gaps limit equity gains. RSBY and PM-JAY target the poor, but state-level variation in outreach, documentation requirements, and hospital empanelment means benefits are not uniformly realised (Keshri, Gupta, & Prasad, 2012; Nandi et al., 2013). Studies emphasise that coverage breadth (who is covered) improved, but depth (benefit comprehensiveness) and effective financial protection remain insufficient for many low-income households (Karan et al., 2014).

Provider incentives & empanelment issues. A recurring pattern in scheme evaluations is the predominance of private hospitals among empanelled facilities, particularly for tertiary care (Rao et al., 2011; Prinja et al., 2012; Pandey et al., 2018). While private provider participation increases capacity and access, it raises concerns about supplier-induced demand and cost escalation under case-based payments. Public hospitals often lack infrastructure, managerial autonomy, and digital readiness to capture claims revenue effectively, which contributes to

private-sector capture of public funds (Prinja et al., 2012; Nandi & Schneider, 2016). Payment delays and disputes between hospitals and payers are noted operational failures that occasionally led to service suspensions (Pandey et al., 2018).

Key findings & challenges. In sum, public insurance schemes substantially increased nominal coverage and inpatient utilisation for targeted groups, but evidence suggests limited and uneven reductions in OOPE, potential for cost escalation via private provider behaviour, and operational challenges in claims processing and provider engagement (Fan et al., 2012; Prinja et al., 2012; Vellakkal et al., 2017). Research recommends strategic purchasing, stronger provider payment design, public hospital capacity building, and inclusion of outpatient and medicine costs to improve financial protection (Lagomarsino et al., 2012; Prinja et al., 2017).

Private Health Insurance (PHI)

The post-liberalisation era produced rapid growth of the private health insurance market in India. Private insurers diversified product offerings (family floaters, critical illness, top-ups), expanded corporate coverage and direct retail products, and relied increasingly on third-party administrators (TPAs) to manage cashless networks and claims (Bhat & Jain, 2006; IRDAI reports).

Market growth, TPAs, product complexity. Private insurance penetration remains relatively low at the household level but has grown in premium volumes and product variety. TPAs play a central role in operationalising cashless claims and hospital coordination, but their emergence also introduced complexity in tri-partite coordination (insurer–TPA–hospital) and occasional disputes over tariffs and documentation (Bhat & Balasubramanian, 2006; Reddy et al., 2011).

Penetration by income/occupation. Empirical work shows PHI is concentrated among urban, higher-income, and formally employed populations (Ghosh, 2014; Keshri et al., 2012). Employer-sponsored group insurance and corporate health programmes account for a large share of private coverage, while individual retail uptake remains limited among lower-income groups.

Premium affordability. Affordability is a key constraint. Premiums for comprehensive policies are often unaffordable for informal-sector households, contributing to a skewed enrolment profile (Sekhri & Savedoff, 2005). Studies also note issues with rising premium trends and product fragmentation that confuse consumers (Reddy et al., 2011).

Claim settlement issues. Private insurers generally report faster claim processing relative to many public schemes, owing in part to digital platforms and TPA facilitation. Nevertheless, private PHI faces complaints regarding exclusions, pre-existing condition (PEC) clauses, waiting periods, and claim denials—practices that erode consumer trust (Bhat & Jain, 2006; Das & Hammer, 2014).

Service quality & customer satisfaction. On measures of service orientation (responsiveness, customer service), private insurers often outperform public schemes because of market incentives to retain customers (Dixit & Sambasivan, 2018). Private networks typically provide a smoother cashless experience, though satisfaction is tempered when claim disputes arise or uncovered costs are charged by hospitals.

Regulatory challenges (adverse selection, mis-selling, high exclusions). The literature highlights classic market failures—adverse selection and moral hazard—that can distort voluntary PHI markets (Van de Ven & Ellis, 2000; Sekhri & Savedoff, 2005). Mis-selling, opaque exclusions, and aggressive marketing of add-on products are documented regulatory concerns requiring IRDAI oversight and consumer protection measures (IRDAI reports; Reddy et al., 2011).

Public vs. Private: Comparative Evidence

Comparative studies underscore that **ownership alone does not determine performance**; institutional arrangements (pooling, purchasing, regulation) and incentives matter greatly (Basu et al., 2012; Mossialos & Thomson, 2002).

Efficiency, cost, financial protection, equity. Private insurers can deliver administrative efficiency and customer service, but their administrative overheads are often higher than in large pooled public schemes, and private provision can contribute to overall cost escalation when payment systems reward high-volume, high-cost procedures (Colombo & Tapay, 2004; Prinja et al., 2017). Public schemes perform better on breadth of coverage and equity objectives when well-funded and administratively sound, but weaknesses in service delivery can limit realised benefits (Lagomarsino et al., 2012; Karan et al., 2014).

Provider behaviour, cream-skimming, hospital incentives. Evidence from India and other LMICs indicates that private insurers and providers may engage in **cream-skimming**—preferring low-risk enrollees and profitable procedures—if regulatory and risk-adjustment mechanisms are weak (Van de Ven & Ellis, 2000; Preker et al., 2007). Under case-based

payments used by many government-sponsored schemes, hospitals may increase procedural volumes or select profitable cases, contributing to cost escalation (Prinja et al., 2012; Nandi et al., 2013).

Differences in service quality and access pathways. Private insurance typically affords faster, more comfortable access through cashless networks and larger private hospital participation. Public insurance often channels beneficiaries into a mixed network where private hospitals dominate tertiary care; thus public funds frequently subsidise private provision, raising questions about equity and system sustainability (Rao et al., 2011; Pandey et al., 2018).

Health Financing and Financial Risk Protection

A central question is whether insurance expansions reduce OOPE and catastrophic spending. Cross-sectional and quasi-experimental studies suggest **partial protection**: insurance reduces the probability of catastrophic expenditure in some contexts but does not eliminate OOPE (Xu et al., 2003; Wagstaff & Pradhan, 2005; Karan et al., 2014).

Catastrophic expenditure trends. Catastrophic health spending remains a pressing issue in India; design limitations—exclusion of outpatient care and medicines, low package rates, and exclusions—mean that insured households can still incur high OOPE, especially for chronic and outpatient needs (Garg & Karan, 2005; Fan et al., 2012).

Inpatient-only coverage vs. comprehensive benefit packages. Evidence indicates that inpatient-only coverage (the dominant design) provides limited financial risk protection because large shares of household health spending are outpatient and pharmaceutical costs. Comprehensive packages that include outpatient and medicines offer better protection but are more expensive and administratively complex (Wagstaff & Pradhan, 2005; Sekhri & Savedoff, 2005). Policy debates emphasise the trade-off between depth of cover and fiscal sustainability.

Awareness, Enrolment, and Behavioural Factors

Non-financial barriers to effective insurance uptake and utilisation are significant.

Determinants: education, income, rural–urban divide, gender. Studies consistently find higher enrolment and better comprehension among educated, higher-income, urban households; women, informal workers, and rural residents are less likely to be covered or aware of benefits (Ghosh, 2014; Keshri et al., 2012; Thakur, Shahnawaz, & Sinha, 2023).

Role of health literacy and trust. Lack of policy literacy undermines effective claims use; misconceptions about entitlements, complex claim procedures, and distrust of insurers/hospitals reduce utilisation (Dixit & Sambasivan, 2018; Thakur et al., 2023).

Barriers to enrolment and retention. Administrative hurdles (documentation, lack of identity proof), perceived low value of benefits, premium unaffordability, and poor provider networks deter enrolment and renewal—especially for voluntary private products (Sekhri & Savedoff, 2005; Reddy et al., 2011).

Administrative and Operational Challenges

The interplay of insurers, TPAs, hospitals, and beneficiaries gives rise to operational frictions.

Claim delays and TPAs. While TPAs accelerate cashless authorisations, coordination failures and documentation errors cause delays and rejections. Studies document frequent disputes over tariffs and documentation between hospitals, TPAs, and payers (Bhat & Balasubramanian, 2006; Prinja et al., 2012).

Digital platforms and empanelment. Digital portals (PM-JAY, insurer/TPA platforms) have improved claim tracking but face integration, interoperability, and data-quality issues. Uneven digital literacy among providers and beneficiaries limits benefits (Pandey et al., 2018).

Fraud control. Fraud and upcoding are concerns in case-based purchasing systems; monitoring and audit capacity are essential but often weak (Preker et al., 2007; Prinja et al., 2012).

Hospital behaviour under cashless schemes. Empanelment often favours private tertiary hospitals; public hospitals with limited autonomy struggle to compete. Private hospitals may upcode or provide unnecessary interventions if payment systems are poorly designed (Rao et al., 2011; Nandi & Schneider, 2016).

The literature on India's health insurance shows clear progress in scaling coverage—both public and private—yet consistent challenges persist: incomplete financial protection (largely due to inpatient-focused benefits and medicine/outpatient exclusions), uneven awareness and enrolment, provider-induced cost pressures, and operational bottlenecks in claim processing and governance. Comparative evidence underscores that institutional design (pooling, purchasing, regulatory frameworks, and provider payment mechanisms) matters more than ownership alone in shaping outcomes. Policy and research priorities include strengthening

strategic purchasing, expanding benefit depth (especially for outpatient and medicines), improving public hospital capacity, enhancing digital integration and grievance redressal, and targeted IEC to raise awareness among underserved populations.

SYNTHESIS AND DISCUSSION

The review of empirical literature on health insurance in India reveals several consistent patterns across public and private schemes.

1. **Public health insurance schemes, particularly PM-JAY and earlier RSBY, have increased access to inpatient care** among low-income households. Studies show positive effects on utilisation but **limited reduction in out-of-pocket expenditure (OOPE)** due to exclusions, non-cashless episodes, and high outpatient spending.

2. **Private Health Insurance (PHI) remains concentrated among urban, higher-income, and formally employed groups.** Despite growth post-liberalisation, PHI coverage is constrained by affordability issues, product complexity, and poor penetration among rural and informal sectors.

3. **Provider-related challenges are significant.** Literature documents **supplier-induced demand, overtreatment, unnecessary diagnostics**, and variation in package-cost alignment. Empanelment issues, hospital dominance, and weak regulatory oversight can dilute scheme objectives.

4. **Awareness, trust, and health literacy remain major barriers** across states. Many studies cite low enrolment and high dropout from public schemes due to misinformation, lack of understanding of benefits, and procedural challenges.

5. **Financial protection remains inadequate**, as India still witnesses high catastrophic health expenditure, especially for chronic diseases and outpatient care—areas where most insurance schemes provide limited coverage.

Overall, findings highlight a **fragmented but rapidly evolving insurance ecosystem** that is expanding coverage without achieving full financial risk protection.

Theoretical Implications

The literature affirms several theoretical concepts in health financing and insurance economics:

- **Market failures in health insurance**—adverse selection, moral hazard, and information asymmetry—are central to India's insurance landscape, especially given product complexity and low awareness.
- **Pooling and purchasing functions remain weak**, limiting efficiency gains. Fragmented risk pools across states and insurers hinder equitable redistribution.
- **Lessons from LMICs (e.g., Thailand, Vietnam) and OECD countries (UK, Germany)** indicate the need for consolidated risk pooling, strategic purchasing of services, and strong regulatory frameworks to align provider incentives with public welfare.

These insights support the idea that India's insurance sector operates within a mixed health system requiring coordinated reforms rather than isolated policy interventions.

Policy Implications

Based on the reviewed evidence, several policy-level interventions are required:

1. **Strengthen Benefit Packages-** Expand coverage to include **outpatient care**, diagnostics, and chronic disease management. Revise package rates to ensure cost alignment and reduce balance billing by hospitals.
2. **Improve Governance and Regulation-** Enhance IRDAI and state-level regulatory oversight on mis-selling, exclusions, and claim practices. Promote **risk pooling mechanisms** to reduce inequities between states and socioeconomic groups.
3. **Enhance Digital Infrastructure-** Improve digital claim processing systems to reduce delays and fraud. Expand use of real-time dashboards, patient verification, and hospital audits.
4. **Encourage Strategic Purchasing-** Adopt **value-based care models**, linking hospital incentives to outcomes rather than volume. Strengthen empanelment criteria to ensure equitable distribution of providers.

Research Gaps Identified

The literature review highlights several underexplored areas requiring scholarly attention:

1. **Limited comparative studies** evaluating public vs. private insurance impact on utilisation, costs, and health outcomes.
2. **Insufficient long-term evidence on PM-JAY**, particularly regarding OOPE, provider behaviour, and financial sustainability.
3. **Gaps in outpatient insurance research**, especially for chronic disease management.
4. **Under-representation of rural, tribal, and marginalised communities** in insurance-effectiveness studies.
5. **Little research on TPAs**, digital claims, fraud detection, and administrative efficiency.
6. **Scarce multi-state comparative studies** assessing variations in scheme performance.
7. **Limited behavioural economics research** exploring trust, enrolment decisions, renewal behaviour, and insurance literacy.
8. **Few hospital-level incentive studies**, especially on treatment patterns under different schemes.

CONCLUSION

The Indian health insurance sector has expanded significantly, driven by public schemes like PM-JAY and the steady growth of private insurance. However, fragmentation, inequity, and limited financial protection persist**.** Public insurance improves access but falls short in protecting households from catastrophic expenditure. Private insurance, while offering choice and flexibility, remains inaccessible to vulnerable groups and requires stronger regulation.

Achieving Universal Health Coverage requires coordinated reforms across benefit design, risk pooling, provider incentives, and technological innovation. Strengthening governance and reducing fragmentation will be critical to improving efficiency and equity.

IMPLICATIONS

For Policymakers

- Reform benefit packages to include OPD and chronic care.
- Consolidate risk pools to enhance financial sustainability.
- Implement stronger regulatory mechanisms for both insurers and providers.

For Insurers

- Simplify policy structures and reduce exclusions.
- Improve transparency in claim settlement.
- Introduce digital innovations (AI-assisted claim adjudication, paperless onboarding).

For Hospitals

- Adopt standardised treatment protocols.
- Enhance transparency in billing and pre-authorisation.
- Engage in outcome-based contracting under public schemes.

For Researchers

- Conduct interdisciplinary studies combining health economics, behavioural science, and health systems research.
- Undertake cost-effectiveness and comparative efficiency analyses.
- Explore emerging areas like digital health insurance platforms and AI-driven fraud detection.

FUTURE RESEARCH DIRECTIONS

- **Longitudinal studies** on the impact of PM-JAY on health outcomes and financial risk protection.
- **Evaluation of digital claim processes**, including the role of TPAs and fraud-control mechanisms.

- **Comparative cost–benefit studies** of public vs. private insurance models.
- **Modelling studies** on designing universal health insurance for India.
- **Behavioural research** on insurance literacy, renewal patterns, and trust-building strategies.
- **Regional comparative studies** across high-performing and low-performing states to understand variations.

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