A Secondary Data Analysis of the Effectiveness of PM-JAY in Reducing Out-of-Pocket Healthcare Expenditure in India

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Mentor Approval

Request ID 550

Status Approved

Created By Ashna K Varghese

Created
May 24, 2026 10:52 pm

Mentor — Approved
May 24, 2026 10:52 pm — May 27, 2026 02:58 pm

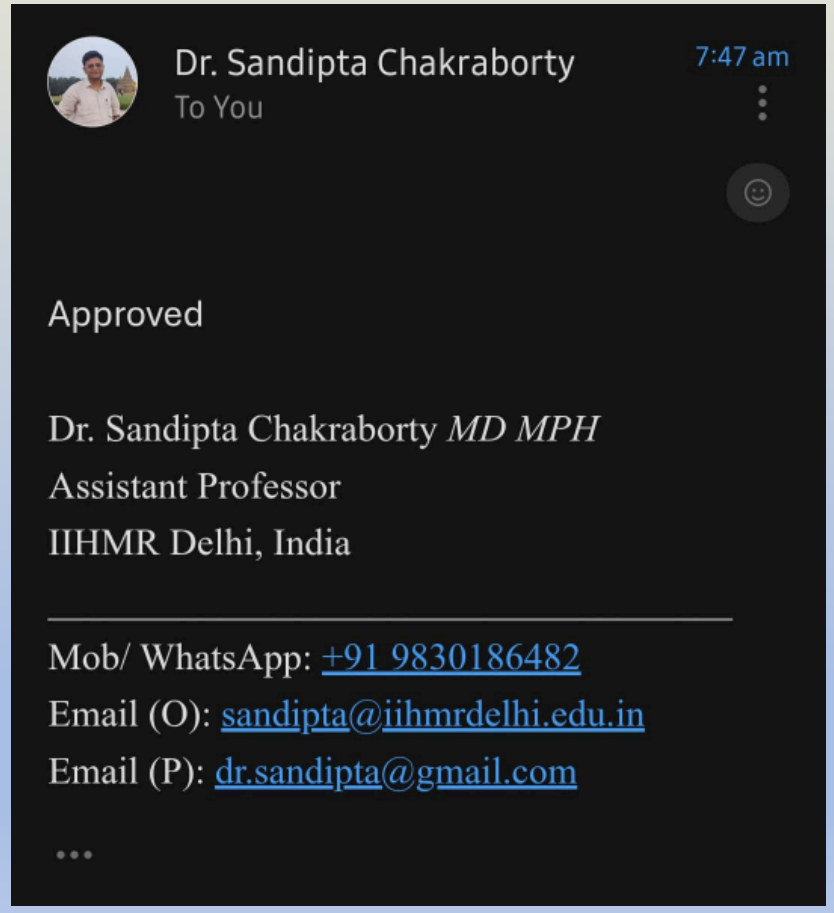
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May 27, 2026 02:58 pm — Jun 03, 2026 10:44 am

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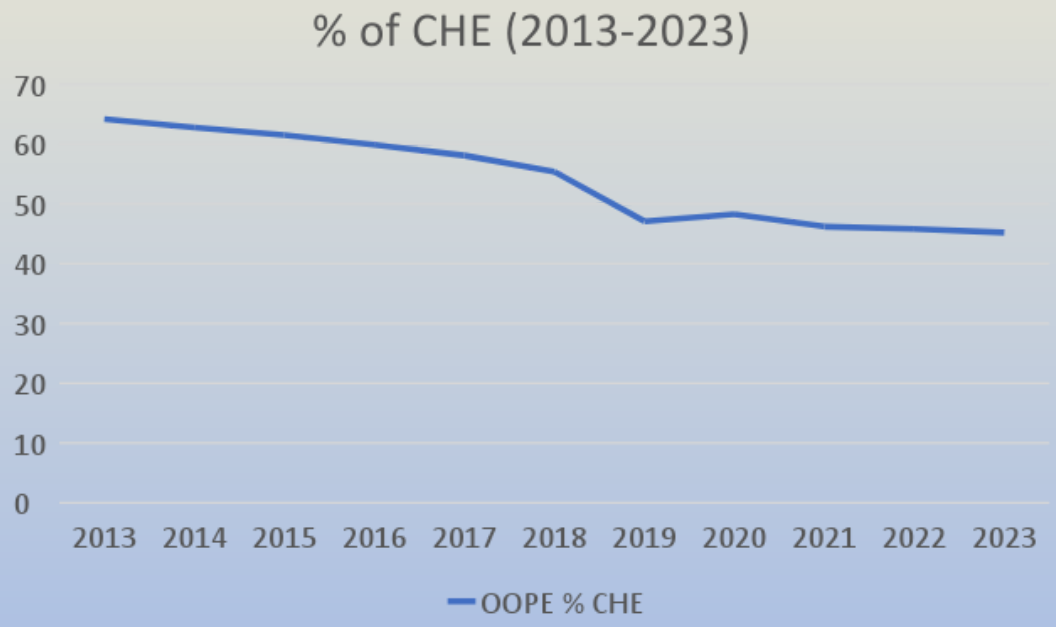
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Jun 03, 2026 10:44 am — Jun 03, 2026 10:59 am

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Introduction

- In FY2013–14, out-of-pocket expenditure (OOPE) was 64.2% of India's current health expenditure (CHE).
- High OOPE drives catastrophic spending and impoverishment.
- PM-JAY (launched Sept 2018) offers ₹5 lakh/family/year for secondary & tertiary hospitalization.



Despite this decline, India's OOPE remains among the highest in South Asia, well above the WHO benchmark.

Research Objectives

Research Questions

- Has PM-JAY reduced out-of-pocket hospitalization expenditure since 2018?
- To what extent has it lowered catastrophic health expenditure (CHE)?
- What implementation gaps limit its financial protection?

Objectives

- **Analyse** national OOPE/CHE trends (2013–2023).
- **Synthesize** peer-reviewed impact evidence on OOPE & CHE.
- **Compare** state-level performance across purchasing models.
- **Recommend** policy measures to strengthen financial protection.

Methodology: Rationale & Data Sources

Rationale for Secondary Analysis:

- Provides a robust, verified data landscape across a longitudinal timeframe (pre-PM-JAY 2014-17 to post-PM-JAY 2018-24).
- Allows synthesis of micro-level surveys and macro-level systemic trends.

Key Data Sources:

- **Macro-Data:** National Health Accounts (MoHFW NHAE 2017–20) & WHO Global Health Expenditure Database (GHED).
- **Program Data:** PM-JAY Dashboards & Annual Reports (2018–25).
- **Micro-Data/Literature:** NSSO & NFHS health rounds (2014–22); Peer-reviewed studies on state-level impacts.

Methodology: Literature Search Criteria

Databases Searched: PubMed, Scopus, Google Scholar, and official portals (NHA, MoHFW, NHA-PMJAY).

Keywords/phrases:
"Pradhan Mantri Jan Arogya Yojana" or "PM-JAY" or "Ayushman Bharat PM-JAY"

AND "out-of-pocket expenditure" or "OOPE" or "catastrophic health expenditure" or "CHE"

AND "India"

Inclusion Criteria:

- Published 2014-2024 (covers pre- and post-PM-JAY periods)
- Peer-reviewed articles, government reports, WHO/ World Bank data
- Studies reporting quantitative OOPE/CHE outcomes.
- India-specific or India-comparative studies

Exclusion Criteria:

- Grey literature without institutional authorship
- Studies not measuring OOPE or CHE directly
- Duplicate or overlapping datasets from same survey

Methodology: Framework & Analytical Approach

Conceptual Framework:



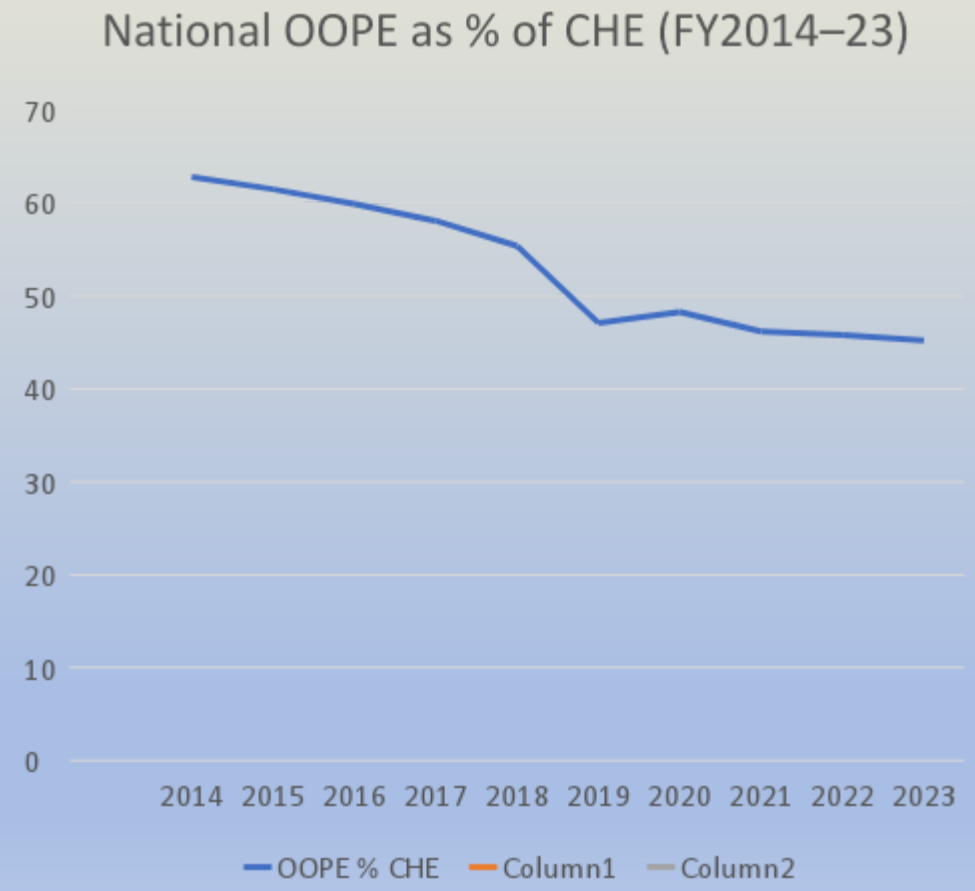
- **Moderators:** Outpatient exclusions, balance-billing, purchasing models, hospital capacity.

Analytical Techniques:

- **Trend Analysis:** Comparing national OOPE as % of CHE pre- vs. post-2018.
- **Comparative Assessment:** State performance metrics by purchasing model.
- **Thematic & Effect-size Synthesis:** Extracting implementation gaps and beneficiary financial outcomes from literature.

Results:

National OOPE Trend (FY2014–23)

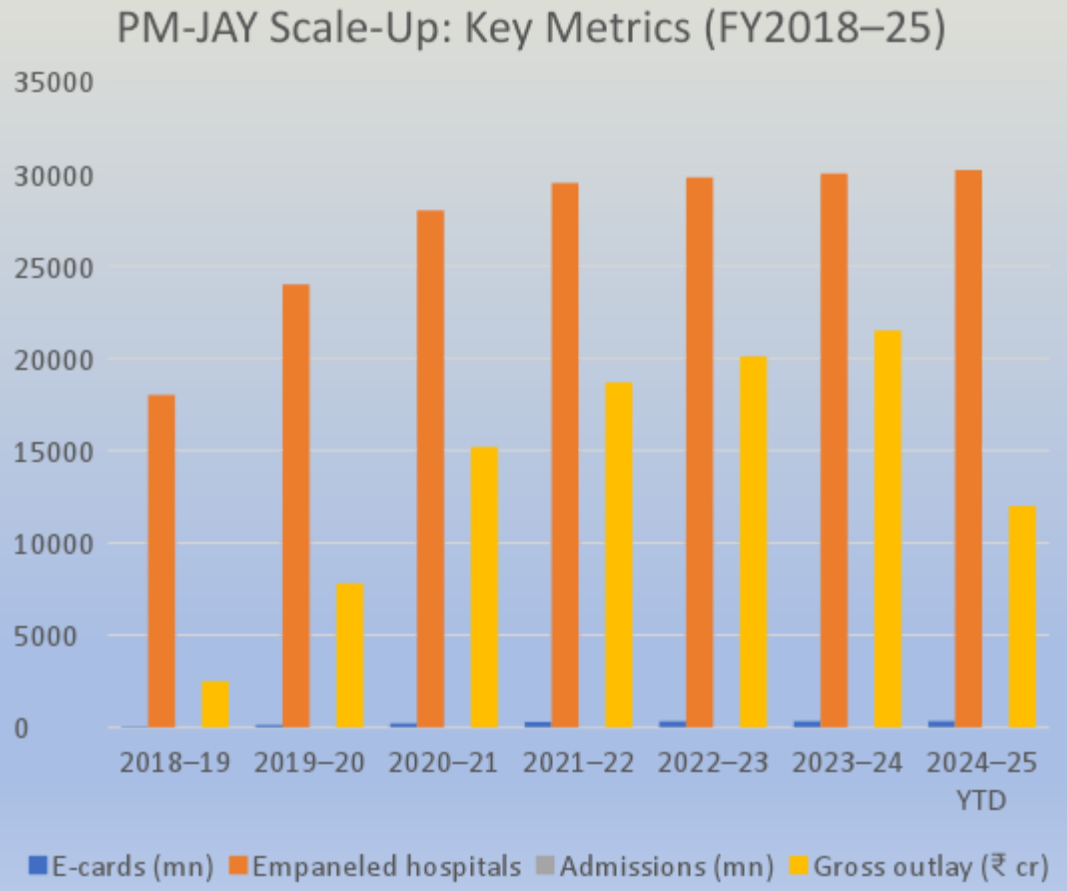


Period Comparison
Pre PM-JAY (FY14–18): Avg. 60.2% of CHE
Post PM-JAY (FY19-23): Avg. 48.5% of CHE
Δ Change − 11.7 percentage points

- **Steep Decline:** National OOPE fell from 64.2% (FY14) to 45.2% (FY23).
- **PM-JAY Context:** The scheme launched mid-trend (2018).
- **Observation:** The downward trajectory is confirmed, but is multi-causal (driven by PM-JAY alongside other state reforms, free drug programs, and COVID-19 shocks).

Results:
PM-JAY Utilization & Scale-Up

- Rapid growth in population coverage (340 million e-cards by 2024).
- Steady increase in hospital empanelment (currently >30,000 facilities).
- Significant financial commitment, with gross outlay scaling to ₹21,500 crore in FY24.



Results:
Beneficiary Impact & State Variations

Episode-Level Impact

Indicator	Finding	Source
Overall OOPE reduction	~13% among PM-JAY users	Parmar et al., 2023
CHE reduction	~21% among PM-JAY users	Parmar et al., 2023
OOPE- private hospitals		Garg et al., 2020
CHE- Private Hospitals		Garg et al., 2020
CHE burden (pre PM- JAY)	17.3% households affected	Sriram & Albadrani, 2022

State-Level Model Variations (FY23)

- **Hybrid (e.g., Gujarat):** Higher private share (65%), 45-day claim TAT.
- **Trust Model (e.g., Tamil Nadu/ Assam):** Lower private share (25-40%), varying TAT (30-60 days).
- Uptake and financial protection rely heavily on the state's private capacity and model efficiency.
- **Rajasthan's Mukhyamantri Chiranjeevi Yojana** complements PM-JAY by expanding coverage to non-BPL households

Discussion: Key Implementation Challenges

- **Exclusions Limit Protection:** Outpatient care and medicines are excluded, which traditionally form the bulk of household healthcare costs.
- **Provider Behaviour:** Persistent balance-billing and informal out-of-pocket payments at empanelled hospitals.
- **Systemic Frictions:**
  i. Low benefit awareness among the poorest deciles.
  ii. Heterogeneity in purchasing models causing disparities in claim Turnaround Times (TAT) and rejection rates.
  iii. Supply-side constraints in rural/underserved districts.

- Claims rejection rate of ~15–20% nationally (NHA, 2023) further limits financial protection.

Discussion: Future Research & Implications

Policy Implications:

- **Broaden Scope:** Integrate outpatient/NCD drug bundles into the PM-JAY package.
- **Enforce Compliance:** Implement mystery audits and penalties to curb balance-billing.
- **Optimize Models:** Hybridize trust-model controls with insurance-model audit capacities.
- Strengthen linkage between PM-JAY beneficiaries and Jan Aushadhi generic medicine stores to address the outpatient medicine gap.

Future Research Needs:

- Linked household-claims panel studies for stronger causal inference.
- Field audits quantifying the exact burden of informal balance-billing.
- Cost-effectiveness evaluations of outpatient packages vs. free drug programs.

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Conclusion

- PM-JAY has successfully achieved modest inpatient OOPE (–13%) and CHE (–21%) relief among its users.
- While the national OOPE share fell significantly from 64.2% to 45.2% over a decade, this is a multi-causal achievement.
- Core systemic gaps—specifically outpatient/medicine exclusions, balance-billing, and model variation—continue to limit system-wide financial protection.
- For comprehensive financial risk protection, PM-JAY must be paired with complementary structural and primary care reforms.

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Thank You

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Any Questions