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Background

PM-JAY is a centrally-sponsored scheme being implemented across more than 30 states and union territories. There is enormous variation across India’s state health systems in nearly all respects, from expenditures to human resources to health outcomes. Government health spending per capita in Himachal Pradesh is about five times higher than in Bihar. Punjab has nearly four times more doctors per capita than Nagaland. Women in Kerala live more than 10 years longer than those in Uttar Pradesh. A key challenge for any federal scheme is to provide adequate flexibility for tailoring implementation to local circumstances, while at the same time promoting convergence in key outcomes across India’s diverse health system landscape.

This policy brief provides an overview of differences in PM-JAY utilization across India’s states during the early stages of implementation, and how these relate to state needs and capacity through simple associations. Several factors are proposed to help explain the patterns observed, and some policy implications are briefly considered. Analysis covers less than one full year of claims data, including the launch phase when beneficiary identification and hospital empanelment were at a nascent stage in greenfield states, and therefore findings should be considered as preliminary. However, early evidence on state-wise performance can help identify key challenges for PM-JAY implementation going forward.

Findings and Implications

Which states need PM-JAY the most?

The goal of health coverage programs such as PM-JAY is to provide financial risk protection against high out-of-pocket payments for medical care, and to improve population health outcomes. With these objectives in mind, where is the need for PM-JAY the greatest? Financial protection is typically measured by the share of households incurring “catastrophic” out-of-pocket (OOP) payments (i.e., exceeding a significant threshold of total consumption, such as 10 percent) or “impoverishing” OOP (i.e., pushing a household below the poverty line due to medical expenses). However, if financial barriers deter a patient from seeking care in the first place, no OOP is incurred. An alternative proxy for a state population’s need for financial protection is the poverty headcount, as shown in Figure 1. It ranges from 5% in Goa to 40% in Chhattisgarh. Of course, the need for financial protection extends far beyond just the poor. But poverty levels nevertheless provide a useful ranking of states.

Highlights

• States with a greater need for PM-JAY – measured either as poverty rates or disease burden – are thus far not utilizing the scheme as much as those states with comparatively lesser need.
• There are several potential weak links in the chain between need and utilization, including eligibility criteria, beneficiary validation processes, availability of empanelled hospitals, and non-financial barriers to population demand for care.
• Implementation capacity is a cross-cutting factor, and multi-dimensional indices for state capacity suggest that higher-performing states are also utilizing PM-JAY more.
• PMJAY’s early experience in this regard is similar to findings for other centrally-sponsored schemes.
If the goal is to improve health outcomes, a more fitting metric to help rank states in terms of their need for PM-JAY is disease burden. Figure 2 shows how India’s states compare based on the recent India State-Level Disease Burden Initiative, ranging from the healthiest state (Kerala) to the least healthy (Assam). Alternative proxies for population health, such as self-reported morbidity or hospitalization rates prior to PM-JAY (both captured in National Sample Survey 71st round), do not correlate well with disease burden, because these are positively associated with socioeconomic status. Of course, only a small portion of any population’s disease burden requires hospitalization, but it can still serve as a useful indicator of health needs.

It is noteworthy that there is a significant correlation between a state’s poverty headcount and its disease burden, as shown in Figure 3. Thus, a state ranking of “PM-JAY need” will be quite consistent regardless of which of these two indicators is chosen. Below we rely mostly, but not exclusively, on poverty levels.

**Box 1: METHODOLOGY**

**Time period:** The analysis draws on PM-JAY claims data from April 1 to July 31, 2019. Empanelment data is as of August 2019.

**Data source:** PM-JAY’s Transaction Management System (TMS) claims database and Hospital Empanelment Module (HEM). Not all states are presently integrated (e.g., Andhra Pradesh, Rajasthan). Other data sources are as noted.

**Definition of PM-JAY population:** All families with 5 lakh coverage. This includes those covered by PM-JAY (co-financed by Govt of India and states) and all additional “extension” families fully funded by states under their own expanded coverage initiatives. Scheme utilization is normalized on a “per lakh beneficiary” basis. Scatterplots use population weights for lines of best fit.
Which states are utilizing PM-JAY the most?

PM-JAY launched in September 2018, but some states did not start implementation until the first quarter of 2019. To assess PM-JAY utilization, we therefore examine claims volumes and value across states during April to July 2019. Figure 4 shows that states with higher poverty headcounts have lower claims volumes. Bihar, Madhya Pradesh and Uttar Pradesh all have high poverty and low utilization. Better off Kerala has the highest number of claims in India. A major outlier with high poverty and high utilization is Chhattisgarh, while Sikkim and to a lesser extent Nagaland have lower poverty and claims volumes. Figure 5 reveals a similar pattern for the total value of PM-JAY claims. It also shows that Gujarat, with relatively low poverty, has by far the highest spending per beneficiary thus far.
Figures 6 & 7 show the relationship between the estimated disease burden of each state and their PM-JAY claims. States with higher disease burdens have lower utilization under the scheme. Many of the outliers, especially in terms of the number of claims, are smaller Northeastern states. Overall, higher need as measured by disease burden does not result in higher uptake. In principle, high uptake could cause lower disease burdens in the long-term, but in the early stages this is not plausible. In brief, both in terms of relative need for financial risk protection and improved health, PM-JAY uptake among the neediest states is falling short during the first year of implementation.

**From need to utilization: Weak links in the chain**

The reasons for the mismatch between states’ need for PM-JAY and scheme uptake could be many, as illustrated in the stylized framework of Figure 8. There is evidence of some shortfall at each stage.

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**Figure 8: A cascade from need to utilization**

- **Need**
  - Health/disease burden
  - Financial protection/poverty

- **Eligibility**
  - SECC as a proxy means test

- **Registration**
  - Beneficiary awareness
  - Reach & proficiency of BIS centers

- **Supply availability**
  - Public/private hospitals
  - Specialties

- **Utilization/demand**
  - Empowered to seek care

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**Figure 9: Moderate correlation between state poverty rates and SECC eligibility rates**

**Figure 10: States with higher poverty rates have verified somewhat fewer beneficiaries**
First, the SECC deprivation criteria and occupational categories which are used to determine PM-JAY eligibility represent a "proxy means test". This can be operationalized in the field to identify poor and vulnerable households but does not perfectly capture welfare. Figure 9 shows how this translates at the state level. There is significant correlation between state poverty headcounts and PM-JAY eligibility as determined by SECC criteria, but there are also outliers and anomalies. For example, Meghalaya and Tripura have low poverty but high SECC eligibility. More significantly, Tamil Nadu has higher SECC eligibility than Uttar Pradesh, although the poverty headcount is about three times higher in the latter. This could reflect, inter alia, much higher land-holding in UP (over twice as high as TN), since landlessness is among the key deprivation criteria that qualify households for scheme participation.

Second, even if households are eligible, ensuring that they are informed of the program and validated using the beneficiary identification system (BIS) is a complex process. Awareness campaigns using a variety of mediums have been rolled out, and in principle households can confirm their eligibility at empanelled public or private hospitals, over 2 lakh common service centers nationwide, by phone or online. However, states with higher poverty (and disease burden) have on average managed to verify a somewhat smaller share of their total eligible population than other states. Figure 10 illustrates this relationship. It only shows so-called greenfield states – those that did not have an active insurance scheme when PM-JAY was launched – since beneficiary validation was not a significant task in brownfield states with pre-existing schemes.

Third, even if households are eligible for PM-JAY and obtain a golden card upon verification, there may also be supply-side constraints in the form of fewer hospitals in their vicinity at which to access care. Figures 11 and 12 show that there are only slightly fewer public and private hospitals empanelled per lakh eligible population in states with higher poverty and disease burden. In the case of government hospitals, this may reflect a weaker network in poorer states, or possibly fewer facilities due to higher population density in large states such as Bihar and UP. In the case of private hospitals, poorer states would offer a weaker business proposition due to fewer patients who can self-pay. However, there is wide variation among empanelled private hospitals, ranging from large multi-specialty facilities to simple nursing homes, and a more thorough analysis would look not only at the number of hospitals but also their size and composition. The negative correlation between state poverty levels and hospital empanelment as shown in Figures 11 and 12 is much stronger if the focus is narrowed to tertiary care specializations such as cardiology, cardio-surgery, medical or surgical oncology.

Lastly, even eligible, validated PM-JAY beneficiaries with access to hospitals may not seek care when required due to demand-side barriers. There were significant state-wise differences in hospitalization rates, including at government hospitals, prior to the introduction of any insurance schemes in India. These differences could arise from several factors beyond the financial constraints that PM-JAY is intended to remove, including social norms that may impede utilization. In sum, there are several weak links in the chain between PM-JAY need and actual demand.
The role of capacity

A cross-cutting issue that could affect a state’s utilization of PM-JAY at each step of Figure 8 is implementation capacity. Insurance is a more complex approach to health financing than the traditional input-financed, publicly-owned hospital model. The transaction-intensive tasks of raising beneficiary awareness, rolling out the BIS system, empaneling hospitals, managing claims, and empowering patients require strong government capacity to ensure fidelity to program design. Any implementation shortcomings will have implications for scheme utilization. Moreover, capacity can be strengthened by learning on the job, and states with greater need as shown above also have less experience managing insurance schemes prior to PM-JAY.

Do states with lower implementation capacity also have less PM-JAY uptake? Answering this question requires some metric which attempts to capture state governance capacity. This is not easy to do. Options include the PAI Governance Index, the NITI Aayog State Health Index, or recent data on budget execution in the health sector. Figures 13 to 16 show the relationship between these capacity indices and claims volumes and value under PM-JAY. In all cases, there is a positive relationship between state capacity and PM-JAY uptake. The same is true for health budget execution rates (not shown) and, to a lesser extent, the NITI State Health Index governance sub-component. Although difficult to define, state capacity does appear to matter for PM-JAY performance at the state level.
Box 2: A BRIEF LOOK AT OTHER CENTRALLY-SPONSORED SCHEMES

There are very large income differences across India’s states – Haryana is five times richer than Bihar on a per capita basis – making the task of using fiscal transfers to pursue equalization objectives very challenging. There are two broad types of transfers from the Government of India to states: (1) general purpose transfers from the divisible pool of tax revenues that are allocated among states by the Finance Commission and can be used for any expenditure priority; and (2) specific purpose transfers in the form of centrally sponsored schemes (CSS) that are managed by central ministries, and for which matching grants by the states are typically required. Recent research suggests that while general purpose transfers have been effective in achieving a modest degree of redistribution from richer states to poorer ones, CSS have a weak track record in this regard. The three largest CSS are the National Rural Employment Guarantee Act (NREGA) public works program, the Sarva Shiksha Abhiyan (SSA) elementary education scheme, and the National Health Mission (NHM). In recent years, person days employed per state under NREGA has been unrelated to rural poverty rates; grant release and grant allocation under SSA has been higher in richer states; and NHM grants have not been significantly higher in states with high infant mortality ratio (IMR) than in states with low IMR.

What might explain these patterns? Common explanations include cumbersome planning and operational requirements imposed by the Center that disproportionately affect poorer states, weaker capacity in low-income states to plan and execute scheme implementation, and insufficient fiscal resources to allocate the necessary matching funds from the state budget. Potential remedies could include simplifying procedures, more intense capacity-building efforts for states with weaker capacity, and possibly variable matching grant formulas that require less cost-sharing by low-income states (as is the case, for example, under the US Medicaid program).

Source: Rao (2019)

Summary

The recently launched PM-JAY scheme aims to extend financial risk protection and improve health outcomes for its 500 million beneficiaries. However, India’s diverse states differ widely in their need for PM-JAY benefits given their current starting points. As the scheme approaches one year of implementation, it appears that states with higher need – measured as poverty headcount or disease burden – are utilizing the scheme less. Factors underlying this trend include eligibility rules, progress on beneficiary validation, hospital empanelment, and long-standing demand-side barriers to seeking care. A cross-cutting issue is state implementation capacity. Moving forward, identifying solutions to help overcome the patterns described here will be important to help ensure that PM-JAY becomes a more equalizing force in India’s health system architecture.
References

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Acknowledgements
We acknowledge with gratitude the contribution and support provided by the Analytics team (Chirag Sidana, Lakshya Arora, Dhairya Thakker), Malti Jaswal, Parul Naib, Aastha Arora, and Ajay Tandon for their timely inputs. Special thanks to CEO and Deputy CEO at NHA for their overall strategic guidance and facilitating the necessary approvals.

List of PM-JAY Policy Briefs Published so far
1. Raising the Bar: Analysis of PM-JAY High-Value Claims (July 2019).
2. PM-JAY Across India’s States: Need and Utilization (September 2019).