An assessment of the trust and insurance models of AB PM-JAY implementation in six states
Policy brief: An assessment of the trust and insurance models of AB PM-JAY implementation in six states

ISBN: 978-92-9020-998-0

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Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

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This policy brief presents key findings from a study carried out on the ‘Assessment of the trust and insurance model of PMJAY implementation in six states’. It provides a detailed analysis of the comparative performance of these two models vis-à-vis different aspects of their operational and purchasing functions across these states.

The WHO study team would like to acknowledge the Goa Institute of Management for their contribution to the execution of this study. The study team would also like to express their gratitude to the concerned officials/experts at the NHA and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) for their inputs at the inception phase of the project. Additionally, the study team would like to thank NHA, State Health Agencies (SHAs), and functionaries of insurance companies and third-party administrators, as well as empanelled hospitals, for their support in carrying out the primary data collection.

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Health systems research for PM-JAY: comparative assessment of the trust and insurance implementation models

Key takeaways

- While there are some overall differences between the performance outputs of the two implementation models, variations in performance between States within either model persist. These variations when explored, indicate the importance of other contextual implementation factors in states that drive performance on purchasing functions, going beyond the type of model adopted.

- Hospitalization rates were comparable in the two models. Insurance states reported higher overall scheme utilization, however these States also reported higher scheme eligibility and registration rates, availability of additional treatment packages and a greater proportion of NABH accredited hospitals empaneled under the scheme.

- Both, Haryana (trust) and Meghalaya (insurance) operated without an implementation support or third-party agency; both states also reported better performance on claim management, in terms of faster claim processing times and lower claim rejection rates, as compared to other states with the same model.

- Insurance states processed claims faster as compared to Trust states. Despite this, there was no difference between insurance and trust states with regard to satisfaction with the timeliness of their payments.

- Premium rates charged by insurance companies were important for the smooth implementation of the scheme in insurance states. Proper actuarial calculations are needed in this regard. ICs could not use claim rejections as a means to control claims ratio; contract terms and SHA oversight were effective in this regard. However, when premium rates were inadequate to meet scheme utilization rates, it affected relationships between hospitals and implementing agencies, creating challenges for the scheme.

- The cost implications of the two models need to be closely monitored with complete costing data- to further inform policy, going ahead.

- The capacities of public hospitals need to be built across states to submit claims appropriately, in order to reduce inactivity, improve claim processing efficiencies and reduce claim rejections.
Introduction to trust and insurance models

The Pradhan Mantri Jan Arogya Yojana (PM-JAY) is a publicly financed health insurance scheme with shared financing by the central and state governments. Pooling of these funds takes place at the level of the State Health Authorities (SHA), formed specifically for the implementation of the scheme. However, flexibility has been provided to SHAs to purchase services through one of two existing models, i.e. the Insurance model or the Trust (Assurance) model, and a mixed model, which encompasses both designs.

Under the Insurance model, the SHA can contract an insurance company (IC) through annual payments of fixed premiums per family covered. In turn, the IC covers beneficiaries for the pre-defined benefits package. Insurance companies retain a defined proportion of the premium as administrative costs and return the unspent balance to the state. The IC bears financial risk; however, if claims ratios exceed 120%, the excess amounts are shared by the State and the IC. In this model, the SHAs retain responsibility for overseeing functions contracted to the IC. Currently, 6 States/Union Territories (UTs) implement the scheme in an Insurance mode. In the Trust model, the SHA is registered as a society or a trust and purchases services directly from empanelled healthcare providers. The SHA may contact implementation support agencies (ISAs) to augment its capacities for carrying out purchasing functions. Most States/UTs (24) is implementing the scheme in a Trust mode. It is hypothesised that scheme implementation experiences and outcomes would vary across the two models due to differences in the motivations and incentives of insurance companies and trusts and the capacities of SHAs to oversee the ICs and ISAs.

Table 1 summarises the differences in the distribution of the key purchasing actions across agencies in the two models.

<table>
<thead>
<tr>
<th>Purchasing function</th>
<th>INSURANCE</th>
<th>TRUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary identification</td>
<td>IC to verify beneficiary data and approve or recommend applications for rejection, where appropriate. All decisions on rejection lie with the SHA.</td>
<td>SHA to verify beneficiary data and approve or reject applications. In the case of ISAs, beneficiary verification may be done by ISA, and final decisions on rejections lie with the SHA.</td>
</tr>
<tr>
<td>Hospital empanelment</td>
<td>DEC to conduct on-site verifications of hospital data, based on which applications are accepted or rejected by the SEC on the application portal. IC representative is a member of the DEC and SEC.</td>
<td>DEC to conduct on-site verifications of hospital data, based on which applications are accepted or rejected by the SEC on the application portal.</td>
</tr>
<tr>
<td>Claims management</td>
<td>IC processes pre-authorisations and claims and is responsible for these decisions. SHAs review all rejected pre-authorisations and claims and may re-open these for consideration, where necessary.</td>
<td>The ISA (if in place) processes pre-authorisations and claims; the SHA reviews rejected pre-authorisations and provide the final decision on all claims.</td>
</tr>
<tr>
<td>Audit and Fraud Management</td>
<td>A minimum sample of audits and investigations are to be conducted by IC as per contract specifications; SHAs monitor the audit reports and conduct their audits.</td>
<td>A minimum sample of audits and investigations are to be conducted by the ISA as per contract specifications; SHAs monitor the audit reports and conduct their audits.</td>
</tr>
</tbody>
</table>

SHA State Health Agency, IC Insurance Company, ISA Implementation Support Agency, DEC District Empanelment Committee, SEC State Empanelment Committee

Beneficiary identification: IC to verify beneficiary data and approve or recommend applications for rejection, where appropriate. All decisions on rejection lie with the SHA. SHA to verify beneficiary data and approve or reject applications. In the case of ISAs, beneficiary verification may be done by ISA, and final decisions on rejections lie with the SHA.

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An assessment of the trust and insurance models of PMJAY implementation in six states

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Audit and Fraud Management A minimum sample of audits and investigations are to be conducted by IC as per contract specifications; SHAs monitor the audit reports and conduct their audits. A minimum sample of audits and investigations are to be conducted by the ISA as per contract specifications; SHAs monitor the audit reports and conduct their audits.

SHA State Health Agency, IC Insurance Company, ISA Implementation Support Agency, DEC District Empanelment Committee, SEC State Empanelment Committee

Earlier experiences in publicly financed health protection schemes suggest that since Trusts reflect the objectives of the State government, i.e. to improve access to hospital-based care for eligible beneficiaries, they are likely to undertake fewer rejections of claims and empanel a higher number of hospitals. On the other hand, Trusts may lack the level of expertise of an IC in dealing with complex tasks, specifically related to claims management. They could potentially be lenient with providers and settle claims without adequate audits. The limitations of experience in a Trust could also cause inefficiencies, which may make it burdensome for the providers to receive claim reimbursement on time. (1,2) On the flip side, it may be argued that an inherent trait of insurance companies is profit maximisation, leading to swift escalation of premium prices over the years. Thus, ICs may be incentivised to restrict empanelment of hospitals and refuse claims for insignificant reasons, severely impacting access to beneficiaries and scheme costs. (1,3,4)

These inherent motivations of the Trust and Insurance company are expected to influence their purchasing behaviour under PM-JAY, which would further affect scheme outputs and outcomes. An early insight was obtained into this aspect through a study of two States with either model, based on the first six months of PM-JAY implementation. (5) Contrary to expectations, it was observed that although utilisation was higher in the Insurance model, both models showed similar efficiencies concerning claim management. The trust appeared to be vigilant to fraud, as evident through higher claim rejection rates and fraud investigations. However, since the study was limited to two States and conducted very early in the PM-JAY implementation journey, several other factors could have influenced the observations.

It is imperative, therefore, to understand these two models across a larger sample of States and later in the implementation period to have allowed for stabilisation of implementation processes.

We, therefore, sought to understand the comparative performance of states adopting either the Insurance or Trust model of PM-JAY implementation and provide insights into the implications of adopting either model.

Objectives
1. To assess the performance of purchasing actions, including beneficiary enrolment, pre-authorisation and claims management, audits and fraud management, and empanelled hospital management in both models.
2. To understand the institutional structure, human resource composition of the purchasing agencies and costs associated with both models.

Methods
This was a mixed-methods study of six States, viz. Trust mode: Haryana, Uttar Pradesh (UP), Himachal Pradesh (HP); Insurance mode: Jammu & Kashmir (J&K), Punjab and Meghalaya. States were selected purposively in consultation with the National Health Authority (NHA) from among those without changes in the model adopted since the start of the scheme. Uttar Pradesh did not consent to participate in interviews and to provide data on the human resource composition and scheme costs. These data are therefore missing in the analysis. Fig. 1 provides an overview of the data sources and analysis methods.
Results

1. Beneficiary identification and registration

Insurance states showed higher overall registration rates among eligible beneficiaries than Trust states (Fig. 2). Although registration can be obtained at the time of hospital care utilisation, States aim to identify and register eligible beneficiaries through the provision of cards (golden cards or e-cards) to increase awareness and outreach of the scheme. In States where PM-JAY eligibility is universal (i.e. J&K and Meghalaya), registration of eligible beneficiaries was the highest, indicating the efficiency of the universal approach as compared to targeted programmes. Yet, all States, irrespective of the model, have much to be achieved to reach the entirety of their target population. Challenges associated with using the SECC 2011 database persist, and low registration rates are also attributable to difficulties in correctly identifying beneficiaries.

“The topography is not like that; it is a mountainous area over there, and people cannot register themselves or get to the nearest service centre. But because of the data fidelity issues, we cannot find the families. Families that are there in this database we are not able to locate. So these kinds of things have also been raised by the district administration. They have also raised these things ki; we cannot locate the families, so data fidelity is there. So that is the challenge that we are facing since the inception of this scheme” (sic)

SHA official #1, Insurance state #1

Awareness of the scheme is an important determinant of registrations. Although we did not collect this data in our study, available data indicates higher awareness levels are observed in States that report higher utilisation (Punjab, Haryana and Meghalaya). This factor was also a possible confounder to our further findings on the utilisation of the scheme.

Across States, the volumes of applications processed showed a decreasing trend each year, despite a high proportion of eligible beneficiaries without golden cards. As per the workload distribution each year (data not shown), thus decreasing registrations also indicated that there is under-utilised capacity within states to process beneficiary registration applications, irrespective of the model. Rejection of registration applications was higher in Trust states than in Insurance states (17.5% vs 7.9%, p <0.05), however, reasons for rejections of applications were related to incorrect documentation, name mismatches and poor quality of scanned documents.
2. Empanelled hospital management

The process of empanelment is undertaken in the same way in both models, and the role of the insurance companies is reportedly limited to empanelment. However, they are represented in district and state empanelment committees. However, the availability of empanelled hospitals and their management is important to understand scheme utilisation and claim processing findings.

Higher availability of empanelled hospital beds was reported in Trust states compared to Insurance states (Table 2). Private sector hospitals contributed the major proportion of empanelled hospitals in Punjab, Haryana and Uttar Pradesh, while public hospitals were predominant in the other States. However, we found that a large proportion of empanelled public hospitals in Trust states were reportedly inactive, with no pre-authorisations being generated (16.7%). Trust states also reported a higher empanelment rejection rate and a higher de-empanelment rate. Reasons for de-empanelment related to inactivity and instances of fraud.

Insurance states could empanel a higher proportion of available NABH (National Accreditation Board for Hospitals & Healthcare Providers) accredited hospitals (entry-level and full accreditation), compared to Trust states. Reliable data on all private sector hospitals were unavailable to ascertain the effectiveness of States in empanelling available private sector resources. Additional data may be useful to ascertain whether there was a greater sense of trust or willingness to participate in the scheme among good-quality private hospitals, based on whether the state adopted a Trust or Insurance model.
As laid out by the National Health Authority, empanelment criteria are followed in States. However, although the need for relaxation or leniency in some criteria was expressed in states like J&K due to limited private hospital resources, explicit relaxations in criteria are not yet recorded.

“J&K is having very limited penetration of private sector in the health care, it’s important that some relaxations may be given in the empanelment criteria for attracting more private hospitals. We have small towns and good enough hospitals like the standard Delhi are not there. But they are ok as per the standards here; they are clean, their (operation) theatres are very good, and their faculty is very good. So we can empanel such hospitals too.” (sic)

SHA official #2, Insurance state #1

Table 2 Hospital empanelment and management

<table>
<thead>
<tr>
<th></th>
<th>INSURANCE</th>
<th>TRUST</th>
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<tbody>
<tr>
<td></td>
<td>Jammu &amp; Kashmir</td>
<td>Punjab</td>
</tr>
<tr>
<td>Hospital capacity: available beds per 10 000 eligible beneficiaries*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total beds available per 10 000 eligible beneficiaries</td>
<td>11.2</td>
<td>18.3</td>
</tr>
<tr>
<td>Public beds available per 10 000 eligible beneficiaries</td>
<td>9.6</td>
<td>6.7</td>
</tr>
<tr>
<td>Private beds available per 10 000 eligible beneficiaries</td>
<td>1.6</td>
<td>11.5</td>
</tr>
<tr>
<td>Inactive hospitals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public hospitals N (%)</td>
<td>12 (9.6)</td>
<td>1 (0.5)</td>
</tr>
<tr>
<td>Private hospitals N (%)</td>
<td>0</td>
<td>68</td>
</tr>
<tr>
<td>NABH accredited hospitals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NABH (Entry-level or Full) accredited private hospitals N (%)</td>
<td>2 (5.6)</td>
<td>224 (35.6)</td>
</tr>
<tr>
<td>Empanelment rejection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public hospitals rejected N (%)</td>
<td>19 (13.2)</td>
<td>9 (4.1)</td>
</tr>
<tr>
<td>Private hospitals rejected N (%)</td>
<td>12 (25)</td>
<td>59 (8.6)</td>
</tr>
<tr>
<td>Hospital de-empanelment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public hospitals de-empanelled N (%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Private hospitals de-empanelled N (%)</td>
<td>0</td>
<td>17 (2.7)</td>
</tr>
</tbody>
</table>

*Missing data on bed strength from 365 hospitals in UP, 6 in HP, 5 in J&K, and 4 in Haryana among public hospitals and 12 in UP, 1 each in HP, Haryana and Punjab among private hospitals

** p < 0.05 for comparison between Insurance and Trust models
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3. Utilisation of scheme

All three Insurance states have achieved high levels of utilisation of the scheme compared to the three Trust States. The difference in Year 3 (since the start of the scheme) was most pronounced, with 493 pre-authorisations per 10,000 golden cards in Insurance states taken together, as compared to 281 pre-authorisations per 10,000 golden cards in Trust states (a 1.8-fold higher count (Fig. 3). This is despite the higher overall density of empanelled hospital beds available in Trust states compared to the Insurance states. Possible contributors to these observations on higher utilisation were the higher eligibility and registration rates in Insurance states (J&K, Meghalaya- universal eligibility; eligibility in Punjab is also relatively high at 72%), as reported in the earlier section. The number of packages available under PM-JAY was also higher in Meghalaya and included out-patient care and diagnostics.

Fig. 3. Trend in scheme utilisation and volumes of pre-authorisations since the start of the scheme among registered beneficiaries

These differences in scheme utilisation were reduced to negligible levels when estimated hospitalisation rates were compared between models, with the exclusion of out-patient and day-care packages, as well as admissions due to child-birth (2.8% in insurance and 2.5% in trust states, p <0.05, Cohen’s h=0.02). (Fig. 4).

We compared individual State hospitalisation rates to National Sample Survey 75th round data, and found that Punjab, Meghalaya, Haryana and Uttar Pradesh have achieved higher hospitalisation rates under PM-JAY for those registered under the scheme, indicating improved access for these populations. The other States are yet to achieve population-level hospitalisation rates. It is, however, important to reiterate that all States are yet to reach all eligible beneficiaries through their registration processes to achieve the actual utilisation potential of the scheme.
4. Pre-authorization and claim processing

4.1. Timeliness of claim processing

Following the trends in utilisation, claims volumes are higher in the Insurance states than in the Trust states (475 and 274 claims per 10,000 registrations, respectively, p<0.05). Consequently, claim payouts incurred by Insurance states are higher than those incurred by Trust states, except for Haryana among Trust states. The yearly average value per claim processed was similar between the two models (~INR 9,500 in 2020-21). However, state-level variations occurred across all the states studied.

In terms of efficiency, claim processing turnaround times (TAT) were significantly longer for all Trust states as compared to the Insurance states (48 days vs 14 days, p<0.05) (Fig. 5). However, once claims were approved, payments were made by all States on time, irrespective of the model, and within 0 to 4 days. Hospitals in Trust states reported that payments took time but did not report dissatisfaction with the processing times.

“See as soon (as long as) as they (payments) are coming in three to four weeks, we don’t bother at all” (sic)

Private hospital doctor, Trust state #2

Among Trust states, Haryana reported a significantly lower TAT for processing claims than UP and HP. Haryana reported that the workload was manageable at the current utilisation level but claimed processing teams needed to work six days a week (they officially have a five-day work week) to maintain an acceptable TAT. In the absence of an ISA, the single level of processing appeared to contribute to faster processing times in Haryana. Meghalaya, where the insurance company processed claims without a TPA, reported a lower proportion of delayed payments (14% compared to an average of 39% for insurance states).

The claim teams of Insurance states were processing a higher daily volume of claims, as well as maintaining lower TATs, as per guidelines and contracts. Despite TAT delays in HP, no financial penalties had been levied on the ISA so far, as processing delays were seen to be genuine and multi-factorial in the state (hospital capacities, internet connectivity and response of the IT system, and occasional manpower constraints of the ISA).

Pre-authorisations were processed within the recommended guideline of 6 hours in both models across States, except for J&K. These reasons, when explored, appear to relate to public hospital capacities, which are further discussed below in the context of claim rejections.
4.2 Claim rejection rates

Trust states reported a higher rate of claim rejections than insurance states (4.8% vs 2.3%, p<0.05). However, in either model, there was an exception in J&K and Haryana (Table 3).

The high rejection rates in J&K (12.3% in 2020-21, aggregate for three years 6.4%) were reportedly due to limited capacities within the public hospitals to submit claims correctly and promptly, which resulted in some amendments to guidelines for public hospitals. Public hospitals faced several challenges in following guidelines for claim processing while managing high patient volumes with limited staff. These are reflected in the higher claim rejection rates in public hospitals in several States. The SHA in J&K had also reported that many claim rejection decisions had been revoked due to ‘wrongful rejections’, and penalties had been imposed on the IC in this regard, consequently bringing down rejection rates.

“There were some mistakes done by some hospitals, particularly those where the footfall of the patients is very high… like we have public tertiary care hospitals where footfall is very high. So in these hospitals, to maintain each and every… you know to monitor each and every patient… because this is an IT-based platform PMJAY. So you to cater the services and simultaneously you have to maintain the record. So there were mistakes made by the hospitals. Like they were not following the turnaround time guidelines. If you are aware of those guidelines, we have to submit a particular claim or we have to discharge the discharge of patient within that turnaround time. So there were the cases where hospitals violated those guidelines, and that’s why the rejections are high.” (sic)

SHA official #1, Insurance state #1

“You understand, every admitted patient doesn’t need an IV line, he needs observation, he needs other things, so the cases got rejected on that, but then we took it over, and they were also reverted. We got the case revocations also. We got case revocations.”

“So these were the things you know which gave high rejection, but it was taken eventually to SHA, and in writing, we had given the case numbers. And the cases were revoked.” (sic)

Public hospital doctor, Insurance state #1

In Haryana, the ‘customisation’ of claim processing by the experienced, regular medical doctors of the State Health department who form the SHA reportedly led to lower rejection rates in the state. The state reported that the pre-authorisation and claim processing doctors have a good understanding of the medical management of cases and hence didn’t reject cases as frequently or need to query cases as much as Trust states with ISAs. Among reasons for claim rejections across States, delayed pre-authorisations, inability to submit the required documentation and delayed responses to queries appeared to be the main reasons for rejection. The variations are seen in J&K and Haryana, as compared to other States with the same model, further reflect that even within models, other factors may contribute to the rates of rejections of claims.

Meghalaya reported the lowest claim rejection rate among all States (0.3%). The IC did not have a contracted TPA and worked itself in close coordination with hospitals and the SHA. Standardisation of documentation for claim approvals has been implemented by the state. Errors were corrected at the pre-authorisation stage rather than at the claim stage; a higher pre-authorisation cancellation rate is observed in Meghalaya. The IC reported that in many cases, hospitals might block the wrong package at the pre-authorisation stage or block a package that is actually not admissible under PM-JAY (under an existing package category). At this stage, the IC interacts with the hospitals and advises them to cancel the pre-authorisation request and advises on the correct package to be blocked, where applicable. In this way, the further claim rejection rate is also kept at a minimum.

“But I think primarily because we are a small state, and we don’t have that many hospitals, so the interaction between doctors and the state nodal agency and the insurance company is a very, it’s a close-knit thing. Because there is a discussion, an email even before it goes on the TMS also so that everybody is aware and we say ok this is… And in most cases, the decision that we take at the state nodal agency is taken as per the final decision.” (sic)

SHA official #1, Insurance state #2

In contrast to Meghalaya, the relationship between hospitals and the IC was observed to be different in Punjab. When hospitals were unsatisfied with a claim decision in Punjab, they approached grievance committees for resolution. However, all grievances had not been resolved, and there were pending
cases of unpaid claims still awaiting decisions from these committees. It appeared that resolutions of issues between the IC and hospitals were more challenging in the state. SHA intervention usually occurred in the form of grievance redressal processes which were reportedly time-consuming. In the cases of suspected frauds, the IC worked with the State Anti-Fraud Unit, but decision notifications to hospitals would go through the IC. We observed that these processes contributed to a slightly negative perception of the IC among hospitals. However, Punjab reported a comparable claim rejection rate to other states for the study period.

<table>
<thead>
<tr>
<th>Table 3 Pre-authorisation and claim rejection rates</th>
</tr>
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<tbody>
<tr>
<td><strong>INSURANCE</strong></td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
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<tr>
<td>Pre-authorization rejection rate (%)</td>
</tr>
<tr>
<td>Public hospitals*</td>
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<tr>
<td>Private hospitals*</td>
</tr>
<tr>
<td>Claim rejection rate (%)</td>
</tr>
<tr>
<td>Public hospitals*</td>
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<td>Private hospitals*</td>
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</tbody>
</table>

*Calculations for the public and private hospitals are based on a sample of pre-authorisations and claims dataset from January 2021 – March 2021.

** p < 0.05 for comparison between Insurance and Trust models

5. Audits and fraud management

We did not obtain sufficient data on audits and fraud management to determine whether insurance companies or Trusts were more effective in detecting fraud. Trusts reported higher claim rejection rates, hospital de-empanelment rates, beneficiary registration rejection rates, and empanelment rejection rates. These data indicated stringency on the part of Trusts. However, whether this was due to baseline conditions in those States (i.e. a higher occurrence of deviations from guidelines or instances of fraud), or reflected better capacities or alertness to detect these incidents, could not be ascertained.

Our analysis of unspecified package utilisation and the average length of stay did not indicate differences in the effectiveness of the agencies specifically with respect to this function. Across States, audits were being conducted, and frauds had been detected. The National Anti-Fraud Unit also appeared to play a significant role in detecting and sharing fraud triggers with States. A deeper analysis of this function through alternate data sources and methods is merited.

6. Costs

6.1 Insurance company premiums, claims ratios and effects on implementation

In Punjab and J&K, premiums paid to the insurance company had been increased from one year to the next due to high actual and expected claims ratios (Table 4). In the former, premium rates increased when claims ratios exceeded 100% in the initial consecutive two years of the scheme. In J&K, premium rates were initially increased due to the expansion in the number of families covered when the scheme was universalised. Although the final claim settlement process in J&K was ongoing at the time of conducting the study, it was reported that following the universalisation of the scheme in December 2020, claims ratios had exceeded 120%. However, Meghalaya contrasted significantly with these states, despite adopting the same model. Meghalaya reported a much higher premium charged since the scheme’s start and a lower claims ratio up to 70%, despite high scheme utilisation. The SHA in Meghalaya appeared satisfied with the performance of the IC over the years, and we found a close working relationship between the SHA, IC and hospitals (See Section 4.2).

Based on experiences in earlier government-sponsored health insurance schemes, it is expected that Insurance companies are likely to control their risk and maximise gains through low claims ratios,
achieved through stringency in claim management and reflected by high claim rejection rates. While we found some indication of this in J&K, the observations were not consistent across Insurance states. Even in J&K, on probing high claim rejection rates reported in 2020-21, we found that the SHA intervened to bring down rejection rates, either through revoking wrongfully rejected claims or by making certain allowances in the guidelines to allow public hospitals more time to respond to queries and meet IC requirements. The SHA oversight, therefore, remains of vital significance in Insurance states. When probed, insurance companies reportedly derive benefit from the investment profits that they are able to make through government-sponsored insurance schemes rather than any underwriting profit. These large group schemes provide a total premium amount that cannot be compared to any other type of scheme offered by these health insurance companies.

The terms of the PM-JAY contract between SHAs and ICs ensure that undue profits are not made by keeping a cap on administrative costs and requiring the return of unspent balances to the SHAs. There appears to be neither any significant incentive nor the possibility for insurance companies to reject large numbers of claims without their actions being checked. However, we observed that the premium rate quoted is of more significance in ensuring a smooth implementation of the scheme in the Insurance model. This is reflected in the differences in experiences among Insurance states.

Despite the high utilisation of the scheme, premium rates quoted in Punjab remained consistently low. It was observed that Punjab reported very high claims ratios in the first and second years of the scheme, resulting in losses to the IC. Although the premium was increased by the IC from the first to second year to circumvent this, it appeared to be lower than what would be required to meet the demand of the scheme among beneficiaries. The premium was also much lower than the ceiling premium indicated by NHA (Rs 1052). Although our study covered the period up to March 2021, it was reported that the IC in place for the next policy period had bid an even lower premium than the earlier IC in place during the study period. There were reportedly problems related to claim rejections and pending payments when conducting our interviews. This was reflected in our conversations with hospitals, which were dissatisfied with the new IC. The lack of a properly calculated and quoted premium, and selection of ICs, despite this understanding, appears to be affecting the scheme’s implementation in the state.

Table 4 Premiums and claims ratios in Insurance states

<table>
<thead>
<tr>
<th>Policy period</th>
<th>Jammu &amp; Kashmir</th>
<th>Punjab</th>
<th>Meghalaya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of families covered</td>
<td>6,13,648</td>
<td>6,13,648</td>
<td>5,97,801</td>
</tr>
<tr>
<td>Premium rate per family (in Indian Rupees)</td>
<td>775</td>
<td>193</td>
<td>592</td>
</tr>
<tr>
<td>Claims ratio per year</td>
<td>52.57%</td>
<td>76.06%</td>
<td>33.10%</td>
</tr>
<tr>
<td>% of premium returned</td>
<td>35.42%</td>
<td>3.93%</td>
<td>54.85%</td>
</tr>
<tr>
<td>Administrative costs as % of premium</td>
<td>12%</td>
<td>20%</td>
<td>12%</td>
</tr>
</tbody>
</table>

6.2 Cost implications of the models

Our data on costs were not sufficient to draw conclusions on model comparisons. We could not obtain data on the cost of government resources allocated to institutional structures in the States (specifically within SHAs and district implementation units). We also did not obtain complete data for Punjab, J&K & UP to compare costs across States and models. However, due to the lack of any earlier reports on the cost implications of implementing PM-JAY, we present our data here to highlight some important preliminary indications from these data.
The administrative cost per beneficiary family in Meghalaya was much higher (~10 times) than in the Trust states of Haryana and HP. However, due to high utilisation levels in Meghalaya, these differences decreased significantly when comparing total costs incurred by SHAs per claim. Further, in terms of total cost per claim, Haryana reported a higher cost than Meghalaya. This is possibly attributable to the high claim volume and relatively lower claim value (Rs 7,500) in Meghalaya. Haryana, on the other hand, reports the highest utilisation among Trust states and an average claim value of Rs 10,458. These claim values reflect the package utilisation in these two States.

It is important to note that going ahead in the scheme and as utilisation continues to increase, the Insurance states of J&K and Punjab are likely to have significantly higher costs, as ICs will not be able to continue providing services at the current levels of premiums being offered, with claims ratios persistently exceeding 100%. SHA resources would also have to be increased in J&K to meet the increasing scheme demand following universalisation, implying higher SHA costs. Therefore, the cost implications of the two models need to be closely monitored to further inform policy going ahead.

Table 5 Direct administrative costs and total costs incurred by the SHAs for PM-JAY in 2020-21

<table>
<thead>
<tr>
<th>Cost component</th>
<th>Jammu &amp; Kashmir*</th>
<th>Punjab</th>
<th>Meghalaya</th>
<th>Haryana</th>
<th>Himachal Pradesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative costs for implementing agencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHA administrative cost per beneficiary family unit</td>
<td>27.0</td>
<td>Data not available</td>
<td>23.8</td>
<td>36.6</td>
<td>26.1</td>
</tr>
<tr>
<td>IC administrative cost per beneficiary family unit</td>
<td>93.0</td>
<td>0</td>
<td>326.0</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Total administrative cost per beneficiary family unit</td>
<td>120.0</td>
<td>Data not available</td>
<td>349.8</td>
<td>36.6</td>
<td>32.4</td>
</tr>
<tr>
<td>Total administrative cost per claim submitted</td>
<td>1,765.4</td>
<td>Data not available</td>
<td>2,286.7</td>
<td>417.1</td>
<td>373.0</td>
</tr>
</tbody>
</table>

Total cost for SHA in Insurance / Trust model1

<table>
<thead>
<tr>
<th>Cost component</th>
<th>INSURANCE</th>
<th>TRUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cost per beneficiary family</td>
<td>527.4</td>
<td>734.8**</td>
</tr>
<tr>
<td>Total cost per claim submitted</td>
<td>7,761.6</td>
<td>6,840.6**</td>
</tr>
</tbody>
</table>

*For Jammu & Kashmir, the administrative costs calculated are for FY 2019-20 since it is the financial year nearest to the policy period for which data was provided.

**These costs are an underestimate since the costs of the SHA have not been included due to missing data.

7. Institutional arrangements and workforce

The workforce density was higher across all Trust states compared to Insurance states; in terms of the workforce serving eligible beneficiaries (Table 6). While there were variations in the extent to which States met the workforce norm recommended by NHA for their SHAs, they compensated through the support agencies to meet their requirements. J&K was found to be functioning with a smaller SHA as compared to the other States. Haryana, although functioning without an ISA, had a large SHA, with about half of its staff comprising contractual staff. In this way, Haryana was able to meet the demands of the scheme through its workforce and reported a higher claim-to-staff ratio than the other Trust states and J&K. Meghalaya and Haryana were each structurally different within their respective models, and this may have influenced their performance.

1 For the calculation of total costs, for Trusts we included the SHA operating costs, the ISA contract value and the claim payout incurred. For ICs, we included the SHA operating costs along with the total premium paid to the IC; and subtracted any unspent balance returned to the SHA by the IC. Punjab did not provide data on the operating costs of the SHA, hence only the costs of the IC are included in the calculations. J&K did not provide data on the complete insurance policy period covering 2020-21, hence older data provided for a complete policy period was used. None of the costs of regular government resources in the agencies were included, as these were not provided by the States.
Table 6 Human resource composition of implementing agencies

<table>
<thead>
<tr>
<th>Human resources</th>
<th>Jammu and Kashmir</th>
<th>Punjab</th>
<th>Meghalaya</th>
<th>Haryana</th>
<th>Himachal Pradesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHA workforce (% of NHA recommendation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total SHA staff at State level</td>
<td>13 (72.2%)</td>
<td>40 (133.3%)</td>
<td>13 (72.2%)</td>
<td>152 (506.7%)</td>
<td>14 (77.8%)</td>
</tr>
<tr>
<td>Total SHA staff at district level</td>
<td>20 (20.0%)</td>
<td>66 (60.0%)</td>
<td>22 (40.0%)</td>
<td>88 (66.7%)</td>
<td>48 (80.0%)</td>
</tr>
<tr>
<td>Total SHA staff (State + Districts)</td>
<td>33 (28.0%)</td>
<td>106 (75.7%)</td>
<td>35 (47.9%)</td>
<td>240 (148.1%)</td>
<td>62 (79.5%)</td>
</tr>
<tr>
<td>Proportion of contractual staff in SHA</td>
<td>15.1%</td>
<td>Data not available</td>
<td>60%</td>
<td>50.4%</td>
<td>58.7%</td>
</tr>
<tr>
<td>Support agency workforce</td>
<td>1 IC and 1 TPA</td>
<td>1 IC and 3 TPAs</td>
<td>1 IC</td>
<td>-</td>
<td>1 ISA</td>
</tr>
<tr>
<td>Total workforce for PM-JAY</td>
<td>147</td>
<td>295</td>
<td>82</td>
<td>240</td>
<td>106</td>
</tr>
<tr>
<td>Eligible families served per staff of PM-JAY</td>
<td>13,975</td>
<td>13,414</td>
<td>10,217</td>
<td>6,441</td>
<td>4,519</td>
</tr>
<tr>
<td>Claims to PM-JAY staff ratio (claims from start of scheme till 31 March 2021)</td>
<td>867:1</td>
<td>2034:1</td>
<td>3022:1</td>
<td>996:1</td>
<td>754:1</td>
</tr>
</tbody>
</table>

IC Insurance Company, ISA Implementation Support Agency, TPA Third Party Administrator, SHA State Health Agency, NHA National Health Authority, PPD Pre-authorization Processing Doctor, CEX Claims Executive, CPD Claims Processing Doctor

Conclusions and recommendations

- Despite some overall differences in performance between Trusts and Insurance states, variations in performance between states with the same model exist, highlighting the importance of contextual factors beyond models.
- Both Haryana (trust) and Meghalaya (insurance) operated without implementation support or third-party agency; both states also reported better performance in claim management.
- Premium rates charged by insurance companies were important for the smooth implementation of the scheme in insurance states. Proper actuarial calculations are needed in this regard. ICs could not use claim rejections as a means to control claims ratio; contract terms and SHA oversight were effective in enabling this. However, when premium rates were inadequate to meet scheme utilisation rates, it affected relationships between hospitals and implementing agencies, creating challenges for the scheme.
- Close working relationships between SHAs, ICs/ISAs and hospitals ensured smoother implementation.
- Insurance states processed claims faster as compared to Trust states. Despite this, there was no difference between insurance and trust states with regard to satisfaction with the timeliness of their payments.
- The administrative cost per beneficiary family in Meghalaya (insurance) was much higher (~10 times) than in the Trust states of Haryana and HP. However, due to high utilisation levels in Meghalaya, these patterns changed when comparing total costs incurred by SHAs per claim; Haryana reported a higher cost than Meghalaya. The cost implications of the two models need to be closely monitored with complete costing data to inform policy further going ahead.

Based on our main observations, we provide specific recommendations for states adopting either model, as well as overall recommendations for improving implementation across States (Box 3).
Box 3: Recommendations for States based on models

For states adopting the Insurance model

- Actuarial calculations of premium rates need to be properly estimated by SHAs, as scheme utilization increases. These estimations may be factored into the technical criteria in the tenders for ICs, so that a disproportionately low L1 rate (lowest rate) quoted by ICs eager to participate in PM-JAY, does not adversely affect scheme implementation.

- SHA oversight and intervention through the maintenance of open and responsive communication channels, remains vital to ensure that implementation challenges faced by hospitals and ICs do not negatively affect scheme outcomes. Hospitals should be able to approach both, ICs and SHAs easily for resolution of queries and other issues, when required.

- Functions such as audits of IC rejected claims, needs to be completely and comprehensively carried out in a timely manner, to ensure that these are fair. In cases where public hospitals struggle to keep up with the requirements of claim processing guidelines, SHA intervention remains vital to adjust these guidelines, as appropriate.

For states adopting Trust model

- SHAs need to better leverage ISA resources to improve registration rates and claim processing efficiencies.

- The higher workforce density and lower output reported in UP & HP, as compared to Punjab & Meghalaya, merits a detailed exploration of ways to improve overall efficiency within Trusts.

- More efforts are required to empanel a higher number of NABH accredited hospitals, or encourage NABH accreditation among empanelled hospitals.

- The large proportion of inactive empanelled public hospitals needs to be explored and addressed in Trust states.

For both groups of states

- States may carry out an analysis of their overall scheme costs and estimate future financial requirements, in order to factor this into further considerations on the model adopted.

- Public hospital capacity building is required through joint actions of SHAs with ICs/ ISAs. Support in the form of additional human resources, standardized documentation processes (and adoption of standard treatment guidelines), creating awareness among treating doctors, nurses and support staff involved in PM-JAY beneficiary management of all PM-JAY processes, is essential in ensuring that claims from public hospitals are submitted in a way that they can be reimbursed without impediments.

- Medical doctors with clinical experience in hospital settings within ISAs/TPAs and SHAs are necessary, to improve claim processing efficiencies. SHAs must ensure that these staffing requirements are adhered to at all times within support agencies.

Scope for further work

Since performance on purchasing actions appears to be largely associated with implementation factors other than the models adopted, the implications of cost and cost-efficiency, will have implications for the sustainability of the models. The findings of this study indicate the need for a detailed costing exercise to be carried out for each of the implementation models. Hybrid models may also be included in such further work. An exploration of the reasons for higher proportions of NABH accredited hospitals having been empanelled in insurance states, along with the higher utilisation observations, would provide vital insights contributing to the success of the scheme.
References


Acknowledgements

TBD

Note: This study was carried out with funding support from the World Health Organization. The complete study report with detailed data and observations has been submitted to the National Health Authority.
This policy brief provides a comparative review of various institutional models deployed under Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY), a flagship programme of Government of India which provides financial protection to households against hospital related expenditure.