

# Unspecified Package Utilization under AB PM-JAY

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PM-JAY Policy Brief **10**

## Introduction

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) aims at providing health cover to eligible beneficiaries for secondary and tertiary care hospitalization on a cashless basis. To ensure that the hospitals do not overcharge, and rates do not vary across hospitals, empaneled health care providers (EHCP) are paid based on specified package rates defined in the Health Benefit Packages (HBP). The HBPs have a clearly outlined list of packages/procedures with defined costs which can be booked by empaneled hospitals on a case by case basis. Most of the procedures performed under the scheme get covered in this list.

The first package master (HBP 1.0) was rolled out along with the scheme in September 2018 and contained 1,393 packages. This was revised to HBP 2.0 in December 2019 which contains 874 packages with 1,592 procedures. The packages/procedures are spread across 25 different specialties from General Medicine and General Surgery to Interventional Neuroradiology and Radiation Oncology. The distribution of packages/procedures across specialties in HBP 2.0 can be seen in *Annexure 1*.

The States have been given some flexibility to add/modify the packages in the HBP to suit their specific needs. The States can also reserve some of these packages for use by public hospitals only. The 'Unspecified Surgical Package' has been listed under

## HIGHLIGHTS

- **Unspecified Package account for less than 1% of overall AB PM-JAY utilization since the launch of the scheme**
- **78% of all unspecified admissions, which amount to 54% of the total amount booked, have been serviced at public hospitals.**
- **Five states contribute to over 83% of all Unspecified Package usage: Punjab-41%, Kerala-29%, Chhattisgarh-7%, Assam-3% and Jharkhand-3%**
- **Delivery-related services account for 32% of overall unspecified case utilization followed by Chemotherapy-related services (11%), Implant-related (1.5%), Stent-related (1.5%) and Angiography-related services (1.4%)**
- **Over 74% of unspecified admissions from Punjab are for Delivery-related services. This is due to the absence of package for Normal Delivery in the state's master-list of packages**
- **Similarly, over 37% of all Unspecified Package admissions from Kerala are for Chemotherapy-related services. This is due to missing packages for chemo-therapeutic agents and drugs in HBP 1.0**
- **Basis the analysis presented, unconventional use of Unspecified Packages by States like Punjab and Kerala was identified and addressed**
- **Revision of Health Benefit Package-list (HBP 2.0) was initiated to include missing packages**
- **Overall, this study did not find any prominent patterns of potential misuse in Unspecified Packages**

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both HBP 1.0 and HBP 2.0. Presently, a total of 21 States/UTs have transitioned from HBP 1.0 to HBP 2.0, 9 States/UTs are in the process of transitioning and 2 States/UTs continue to use HBP 1.0.

### Unspecified Surgical Package

Various government schemes have taken different approaches towards service delivery. Some are positive-list schemes that define a concrete scope of services offered while others are negative-list schemes which define services that are out of their scope. AB PM-JAY has chosen a middle path. Unspecified Surgical Package stands as a prime example of this approach. The Unspecified Packages were also a part of Rashtriya Swasthya Bima Yojana (RSBY).

‘Unspecified Surgical Package’, hereafter referred to as ‘Unspecified Package’ is a special provision made under AB PM-JAY to ensure that no beneficiary is denied care because they need an intervention which does not feature in the list of Health Benefit Packages. An Unspecified Package can be booked only for surgical treatment which is not listed in the Health Benefit Package of the concerned State/UT. It is envisaged that as more experience is gained in implementing AB PM-JAY, the procedures being conducted under Unspecified Packages will be reviewed on a regular basis and the most booked procedures will be assessed for codifying into listed packages.

The Unspecified Package is a good concept and provides the necessary flexibility to the scheme. However, it also opens the possibility for misuse. Some of the ways this misuse can happen are-

- Booking of fraudulent procedures

- Booking existing packages at a higher rate under Unspecified Packages
- Booking packages that are reserved for public healthcare providers by private hospitals
- These packages may also be booked simply because there was a capacity or training issue and the Arogya Mitra could not locate the correct package in the list

To prevent misuse, adequate safeguards have been introduced which include guidelines for regulating use of Unspecified Packages, additional scrutiny at the time of claims adjudication and codifying of commonly used procedures during revision of packages.

Guidelines for Unspecified Packages- For guiding the use of Unspecified Packages appropriate guidelines have been disseminated from time to time. The guidelines state that Unspecified Packages cannot be used for conducting procedures that fall in the exclusion list of AB PM-JAY. This list includes procedures like out-patient care, drug rehabilitation, cosmetic/aesthetic treatments, vaccination, hormone replacement therapy etc. The guidelines allow for booking of procedures which cost less than Rs. 1 lakh. However, an unspecified procedure costing more than Rs. 1 lakh may be approved under exceptional circumstances. This would require going through additional scrutiny including approval from CEO of State Health Authority in case of a public hospital and additionally from Executive Director (HNW&QA) of National Health Authority in case of a private hospital. Also, the guidelines prohibit the use of government reserved packages by private hospitals using this route.

Additional scrutiny- Initiation of an Unspecified Package booking by hospitals, like any other hospitalization request under AB PM-JAY, is followed by a thorough screening and approval mechanism. This approval mechanism involves a panel of doctors designated to cross-check the patient's documentation, medical history and demographic information before approving the request. This check may involve a conversation between the approving panel doctor and the treating hospital with subsequent requests raised for specific documents. Only after an approval from the panel doctor can a hospital begin treatment. Also, for deciding on the approval amount during pre-authorization, the panel doctor is to consider the rate of the procedure that is the closest match in the listed AB PM-JAY packages to the requested procedure.

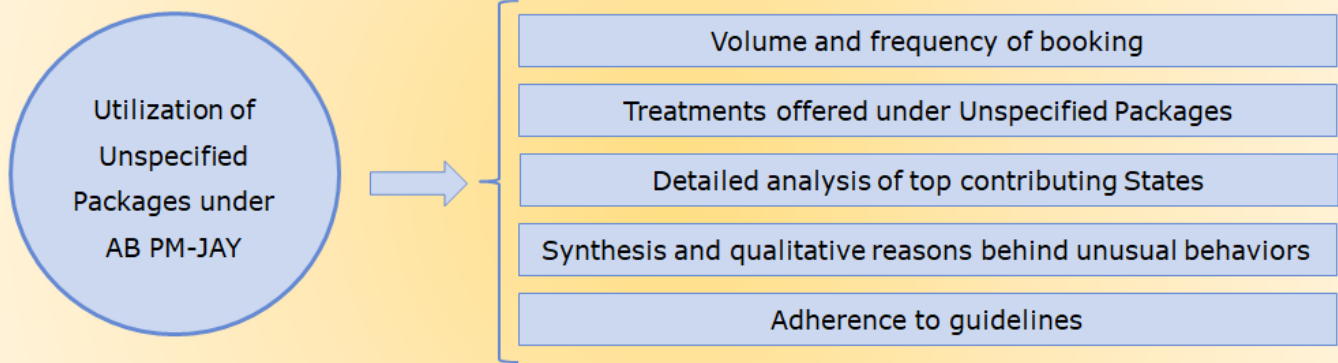
Codifying procedures- While transitioning from HBP 1.0 to HBP 2.0, 237 new packages were introduced while taking into account the Unspecified Packages booked under HBP 1.0.

Overall, this study did not find any prominent indicators of potential misuse. Also, the treatment data shows that the actual utilization of this package varies greatly across States. The booking of Unspecified Packages is more in brownfield states than greenfield states. This may be due to presence of generic, Unspecified Packages under RSBY or other state-specific schemes which shaped the behavior of functionaries in these states in favor of booking the Unspecified Package under AB PM-JAY.

## Methodology

AB PM-JAY implementation is supported by its state-of-the-art IT system which captures real-time data across various aspects of the scheme like Hospital Empanelment, Beneficiary Identification and Claim Processing among others. Each of these aspects are correlated and exchange information digitally with each other through this IT system. Information processing and storage across this system is completely digitalized. This enables regular transfer and storage of data to a database repository called the National Data Warehouse. This repository is the source of information for this analysis.

Data captured through the Hospitalization and Claims Processing system, also known as the Transaction Management System (TMS) is the focus area for this policy brief. AB PM-JAY TMS captures information related to patients' demographic details along with specifics of treatment offered and claim processing for all the packages that were booked. This study aims to understand the uptake of Unspecified Package and analyze its utilization since the launch of the scheme to November 2020.



**Figure 1 – Study Framework**

To facilitate this study, various aspects of unspecified package utilization were analyzed. As summarized in figure 1, volume and frequency of booking, treatment offered (based on comments mentioned by hospitals), geographic distribution and subsequent utilization patterns were analyzed. Qualitative inputs were gathered from the state officials to supplement data-based findings, strengthen insights and synthesize actionable policy reforms from the study.

**Time Period:** 23<sup>rd</sup> September 2018 to 30<sup>th</sup> November 2020

**Data Source:** AB PM-JAY TMS system and National Data Warehouse

**Indicators used and their definitions:**

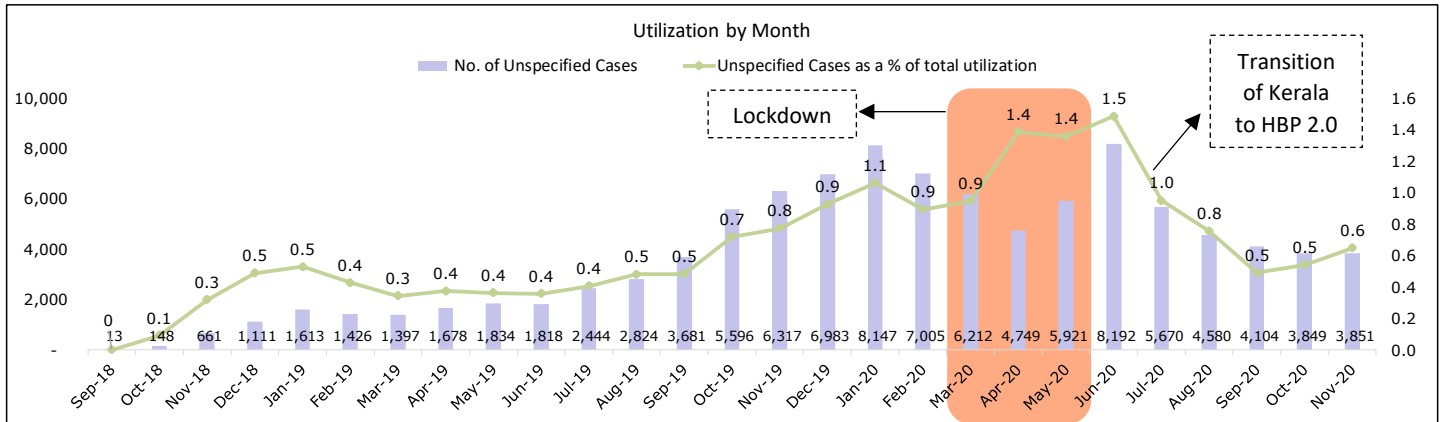
- **Number of Hospital Admissions:**  
Number of hospitalization requests raised by hospitals
- **Amount for Hospital Admissions:**  
Amount requested by hospitals for hospitalization requests
- **Unspecified Package Utilization:**  
Number of Hospital Admissions booked under Unspecified Package in the TMS system
- **% Unspecified Utilization:**  
Hospital Admissions for Unspecified Packages as a percentage of all Hospital Admissions

**Data Limitations:**

- This analysis is based on information captured in the National Data Warehouse through AB PM-JAY IT system or information gathered via APIs from implementing states
- Data for scheme of Rajasthan was unavailable and that for Gujarat was not available for most period under this study in the national data warehouse at the time of this analysis, therefore both these states have been excluded
- Data present in the warehouse is subject to change or modifications in scenarios like emergency admissions, internet connectivity issues at the hospital or other technical difficulties. Basis necessary approvals from the respective states, historical data may therefore be updated at a later time

## Key findings

### Volume and frequency of Unspecified Package utilization



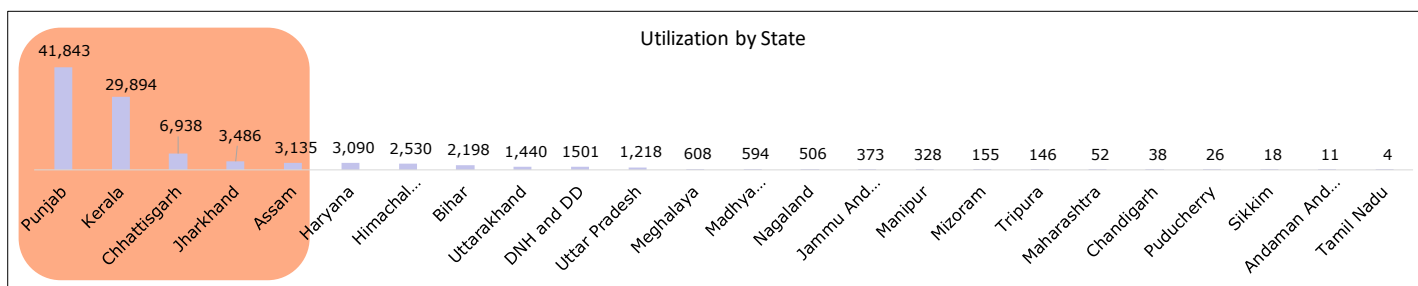
**Figure 2: Month-on-Month Comparison of Unspecified Package Utilization**

Unspecified Package utilization accounts for less than 1% of the overall utilization under AB PM-JAY since its launch in September 2018. A month-on-month comparison as shown in figure 2, indicates a gradual increase in this metric to over 1.1% in January 2020. During the period starting from last week of March to May 2020, a pan India lockdown was imposed owing to which the number of unspecified cases decreased, however, as a percentage of overall hospital admissions they increased to 1.4%. This was because of the significant decrease in overall hospital admissions under AB PM-JAY during this period. Also, the figure shows a spike in unspecified cases in June 2020 followed by a gradual decline. This may be because of the fulfillment of pent up demand for elective procedures that was built during the lockdown in June 2020.

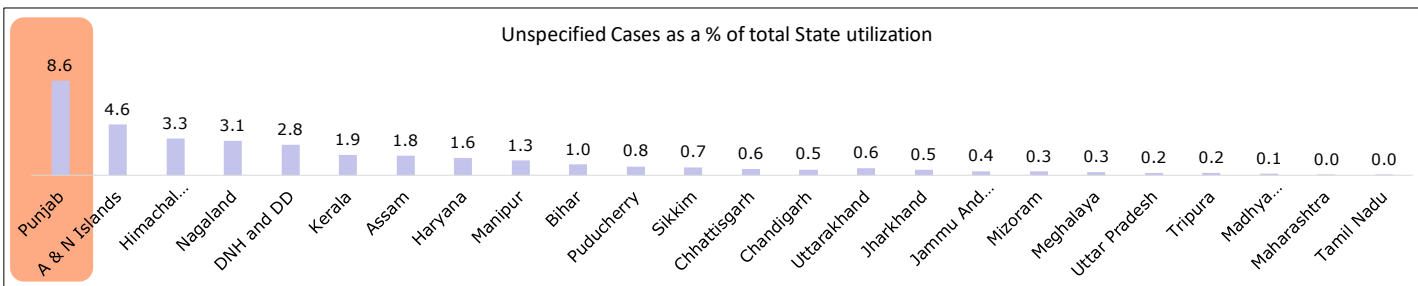
As AB PM-JAY evolved, several states utilized the unspecified package more than others. Figure 3 depicts how Punjab, Kerala, Chhattisgarh, Jharkhand and Assam have contributed to over 83% of all unspecified package related hospital admissions.

Relatively high usage of this package in some of the above-mentioned states indicates distinctive behavior in their day-to-day operations that separates them from other states. Dissemination of guidelines, training of staff at empaneled hospitals along with their historical experience of implementing the RSBY may be considered as important factors influencing hospitals' behavior and reason behind usage of unspecified package.

Figure 4 compares the volume of Unspecified Package related admissions in comparison to the overall admissions in State. This shows clear outliers like Punjab where Unspecified Package usage accounts for 8.6% of all hospital admissions. This is just 2% in Kerala despite having a significant chunk of of unspecified cases because of the very high number of overall hospital admissions in the State. States like Himachal Pradesh, Nagaland, Assam show unspecified package uptake at ~2% or higher with considerable volume. Union territories like Dadra & Nagar Haveli and Andaman & Nicobar Islands show high uptake as well but with lower volume of cases.



**Figure 3: Number of hospital admissions for Unspecified Package – State wise**



**Figure 4: Unspecified package utilization as % of total utilization in States**

All the above-mentioned states except Nagaland have had experience of running a health insurance scheme in the past. These schemes, as a part of RSBY, offered generic packages, especially for initial diagnostics, general ward and ICU admissions thus shaping hospitals' behavior, familiarity and ease of using the Unspecified Package instead of more accurate alternatives.

### Procedures booked under Unspecified Package

Every Unspecified Package booking requires the hospital to fill out comments mentioning details of the prescribed treatment. This is a free-text field available in TMS system where the hospital may enter these details. For the purpose of this analysis, the relevant keywords from these details were bucketed to identify constituents of treatment given to beneficiaries. Based on this bucketing, the data was further analyzed in two ways:

1. Analyzing the procedures performed with

regards to the guidelines issued by NHA

2. Analyzing the distribution and trends of procedures across States, specialties etc. and the possible reasons for the same

### 1. Adherence to Guidelines

The guidelines for Unspecified Packages were released in July 2019 and thereafter revised in November 2020. This analysis found the following deviations from the guidelines:

- **Booking of diagnostics:** The guideline states that "Individual drugs or diagnostics cannot be availed under this code". However, at least 126 high end radio-diagnostic procedures like CT Scan and MRI were booked under Unspecified Packages. Most of these procedures were booked in Kerala (116). Other States like Jharkhand, Chhattisgarh, Punjab, Haryana and J&K accounted for the remaining 10 cases. It is to be noted that 'High end radiological diagnostic (CT, MRI, Imaging including nuclear imaging)' are listed in both HBP



A broad array of all keywords entered by hospitals may be seen in the word-cloud (figure 7) which displays the most frequently used words in a relatively larger font.

Words like ‘Normal’, ‘Delivery’, ‘Chemo’, ‘Chemotherapy’ stand out distinctively. This raises concern because AB PM-JAY package master-list has packages dedicated to high risk/caesarian delivery and many chemotherapy packages. States are also given the flexibility to introduce customized packages based on demand for certain treatments that may not exist in the master-list. The above-shown analysis of keywords was replicated based on amount blocked by hospitals against unspecified treatments and showed similar results. This prompts a deep dive into delivery and chemotherapy-related buckets to understand the source of such skewed utilization of the Unspecified Package.

### Delivery-related Unspecified Package utilization

When delivery related hospital admissions under Unspecified Packages were further bucketed based on the amount for which the pre-authorization request was placed a distinct pattern emerged. Over 92% of all Unspecified Package admissions tagged under the delivery-related treatment bucket have been booked within a range of INR 7,000-8,000

(figure 8). Also, almost all these admissions (99.98%) are from Punjab. 210 empaneled hospitals across the State have booked these admissions.

Over 99% of these admissions in Punjab are from public hospitals thus reinforcing the systemic nature of this activity. Majority of these bookings were made using the term ‘NORMAL DELIVERY’ in the comments section of TMS system, across different hospitals as shown in figure 9. Other buckets show incomplete comments like ‘delivery’ or ‘NORMAL DELEVERY’ or ‘NORMAL’.

This clarifies the fact that Punjab has been consistently utilizing Unspecified Packages for delivery related treatments. A deep dive into the State’s utilization of Unspecified Package and a qualitative analysis of mandates rolled out by the SHA were done to strengthen the insights gathered so far in this analysis.

PROCEDURE DETAILS (Top 5)	#	INR (Cr)
NORMAL DELIVERY	23,740	17.8
delivery	1,363	1
NORMAL DELEVERY	875	0.7
NORMAL	715	0.5
NORMAL DELEIVERY	612	0.5

Figure 9 – Delivery-related comments mentioned by hospitals

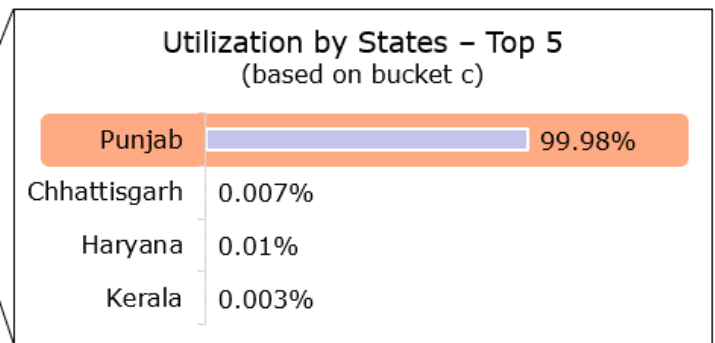
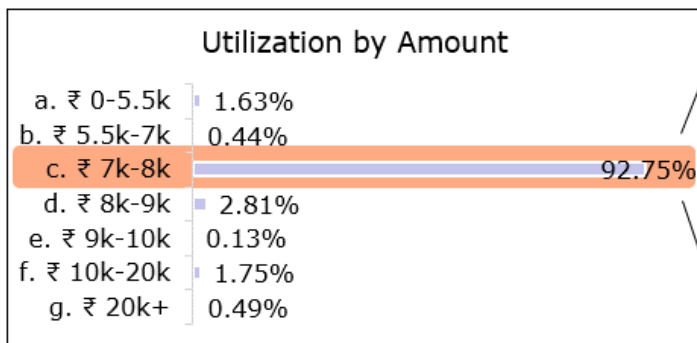
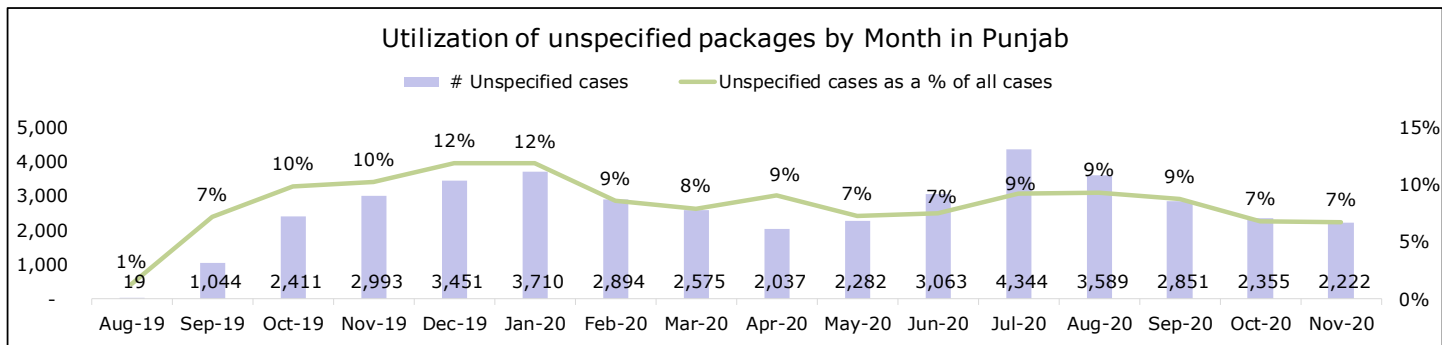


Figure 8 – In-depth analysis of delivery-related unspecified admissions



## Unspecified Package utilization in Punjab



**Figure 10 -- Utilization of unspecified packages in Punjab**

Punjab accounts for over 40% of all Unspecified Package admissions under PM-JAY even though it joined the scheme only in August 2019. The State saw consistently high utilization of Unspecified Packages ranging from 7%-12% of its overall monthly utilization since inception to Jan. 2020. However, as shown in figure 10 the number of Unspecified Packages booked per month started decreasing in Feb. 2020 and hit the lowest point in April 2020 after which they recovered to the earlier levels in June 2020. This trend was probably due to the Covid 19 situation which resulted in a pan India lockdown imposed in late March 2020.

During the lockdown, there could have been an increase in home deliveries and postponement of elective procedures leading to lower utilization. The lockdown was later relaxed in phases starting in June 2020. A corresponding spike in unspecified cases can be seen during this (June - Aug 2020) period. This pattern of unspecified cases in Punjab follows the all India trend for hospital admissions under PM-JAY during this period. Further, we see a decrease in the number of unspecified cases post Aug. 2020. This may be because Punjab transitioned from HBP 1.0 to HBP 2.0 on 20<sup>th</sup> August 2020.

Over 70% of all unspecified cases booked by hospitals in Punjab are for delivery related treatments. This evidence, when shared with the State Health Authority and relevant stakeholders revealed information to support the hypothesis drawn through this analysis:

- Punjab does not have a dedicated delivery package added to the master-list of Health Benefit Packages. Since it runs PM-JAY in tandem with an insurance company, addition of a new treatment package would incur an additional cost. Therefore, the state resorted to using Unspecified Packages to cater to these cases
- Given that the use of Unspecified Packages was approved in-principle till the ongoing contract with the insurance company ends, hospitals were permitted to utilize the Unspecified Package for delivery cases

Punjab was one of the RSBY implementing states before joining AB PM-JAY. Its network of public hospitals is habituated to booking generic packages at the initial stage of admission and then including add on packages at a later stage as needed instead of looking for the closest fitting package in the list.

This behavioral inertia coupled with lack of specific training to up-skill the hospital staff and lack of incentives for the staff to put in additional efforts and share the relevant information on the TMS may also be contributing to a high systemic utilization of the Unspecified Packages in Punjab.

### Chemotherapy-related Unspecified Package Utilization

Chemotherapy-related admissions constitute 11% of all Unspecified Package utilization under PM-JAY, making it the second largest bucket after delivery-related treatments. Granular analysis of these admissions shows ‘CHEMO’, ‘CHEMOTHERAPY’, ‘CHEMO THERAPY’, ‘CHEMO MEDICINE’ as the most abundantly used comments for these admissions (figure 12). This indicates booking of chemotherapy related treatments and drugs using the Unspecified Package.

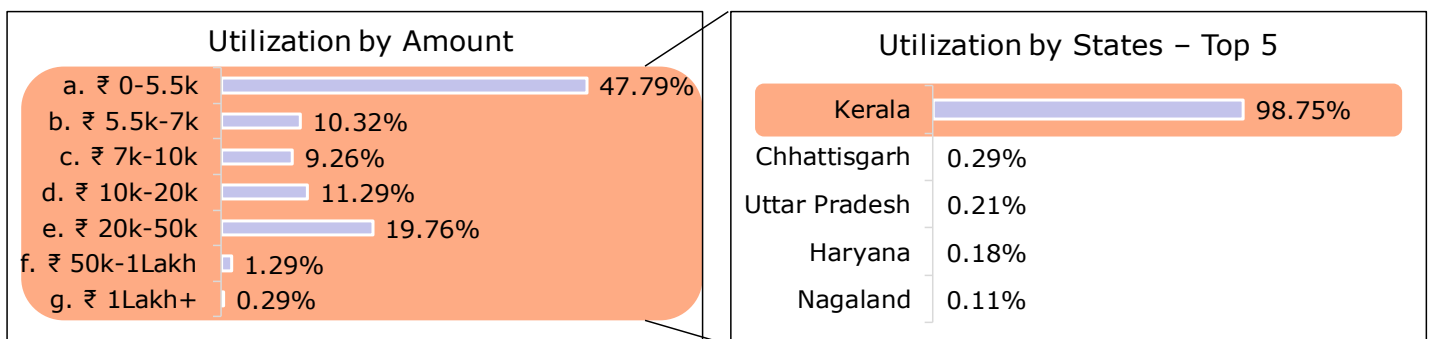
98.75% of chemotherapy-related admissions, booked under Unspecified Packages are from Kerala (figure 11). Basis an exceptional approval that was granted to the state, Kerala has been utilizing Unspecified Package for non-surgical packages,

especially to book chemo-therapeutic drugs and treatments. These admissions are from 25 empaneled public hospitals in the state. Some of these hospitals are major cancer-care centers like *Government Medical College Kottayam*, *Regional Cancer Centre Thiruvananthapuram* and *Malabar Cancer Centre Thalassery*.

Qualitative feedback and information sought from the state indicated that these hospitals were using the Unspecified Package in absence of stand-alone packages for chemo-therapeutic agents or drugs in the master-list of packages under HBP 1.0

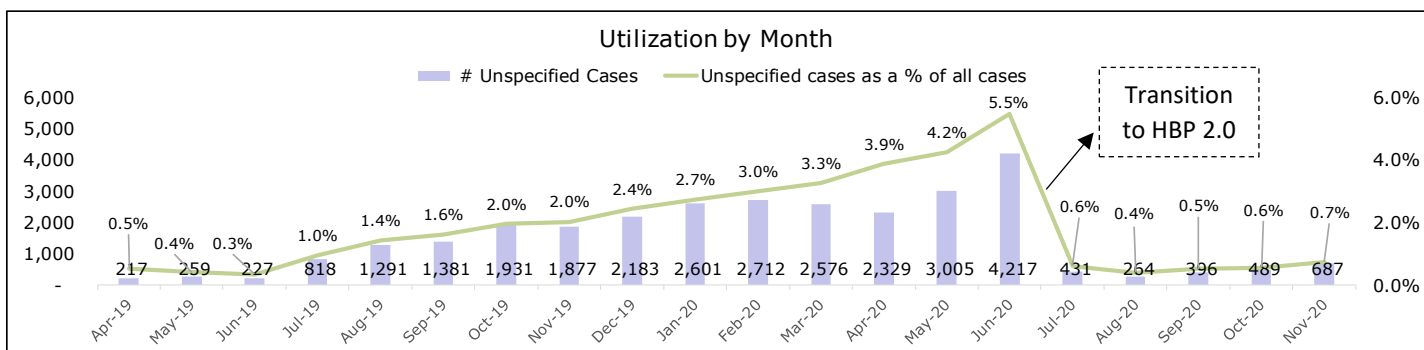
PROCEDURE DETAILS (Top 5)	#	INR (Cr)
CHEMO	4,565	4.3
CHEMOTHERAPY	3,920	5.4
CHEMO THERAPY	590	0.8
CHEMO MEDICINE	438	0.2
ORAL CHEMO MEDICINE	397	0.2

**Figure 12 – Chemotherapy-related comments mentioned by hospitals**



**Figure 11 – In-depth analysis of chemotherapy-related unspecified admissions**

## Unspecified Package utilization in Kerala



**Figure 13 – In-depth analysis of Unspecified Package admissions in Kerala**

Kerala accounts for 29% of all unspecified admissions under PM-JAY thus making it the second most Unspecified Package utilizing state after Punjab. It has shown a consistent increase in its utilization of Unspecified Packages, starting with 0.5% of total utilization in April'2019 to 5.5% in June 2020 (as shown in Figure 13). The number of unspecified cases per month decreased during the lockdown period and recovered after that in June 2020. This decrease was relatively less than in Punjab possibly because a good number of these cases were for serious ailments like cancer.

Figure 13 shows a marked and consistent decrease in unspecified admissions from July 2020 onwards. This is because Kerala shifted to using HBP 2.0 from 1<sup>st</sup> July 2020. HBP 2.0 contain many new packages, especially for chemotherapy when compared to the earlier master list of packages (HBP 1.0).

As per the bucketing done based on comments, over 37% of Kerala's unspecified admissions are for chemotherapy related treatments. A 100% of them being performed in public hospitals. However, when we compare the average number of unspecified admissions for 5 months before (Feb. – June 2020)

with the 5 months after (July – Nov. 2020) the transition to HBP 2.0, we see a decrease of 85%. This suggests that a majority of cases being booked under Unspecified Packages in Kerala were for those packages which have been newly added in HBP 2.0.

Discussion of this evidence with state health authority and other stakeholders revealed that Kerala did not have stand-alone packages in the master-list (HBP 1.0) for chemo-therapeutic agents and drugs that were required for specific treatments. Therefore, the genuine need for these stand-alone packages was being fulfilled through Unspecified Packages. Also, Kerala was running AB PM-JAY with an insurance company, so addition of new treatment packages would have incurred additional costs.

In addition to this, Kerala was also an RSBY implementing state and therefore may be having a tendency for booking generic packages, especially in public facilities. This may be said as the number of packages being booked after transitioning to HBP 2.0. is still more than many other States. Eventual training and enforcement of guidelines could show a considerable transformation in this regard.

## Recommendations

Unspecified Package under AB PM-JAY is the safety valve that ensures treatment is not denied to a patient while making sure that this package is not prone to misuse. With this objective in mind, following recommendations have been synthesized –

State-specific recommendations:

- The State of Punjab should consider introducing a state-specific package for Normal Delivery and ensure that the Unspecified Package is not used for unintended purposes
- States/UTs should accelerate their shift to HBP 2.0 which will make many new packages available to them
- Relevant training sessions be conducted across hospitals, especially in erstwhile RSBY States to ensure that the appropriate package from the HBP master list gets selected thereby preventing unnecessary usage of Unspecified Packages

Other recommendations:

- All the packages/procedures under PM-JAY should be mapped with the International Classification of Health Interventions (ICHI) system and all the Unspecified Packages should be booked using ICHI coding. This will enable the PM-JAY TMS system to identify if a package available in the master list is being booked as Unspecified Package and redirect the user at source. This will also enable easy identification of commonly used unspecified procedures for inclusion in the package master. At a later stage, specific triggers be put in place to ensure flagging of unusual

procedures booked under Unspecified Packages based on the ICHI codes

- The unspecified cases should be regularly screened, and the commonly booked procedures should be codified and included in the master list of packages
- Guidelines for Unspecified Packages to mandate clearly specifying the procedure being performed in the comments section before receiving approval

## Conclusion

The Unspecified Package reinforces the mission and vision of AB PM-JAY by providing the flexibility to ensure provision of treatment to all beneficiaries. Systems in place for AB PM-JAY implementation must therefore ensure justified and genuine use of this package. Through this policy brief and the underlying analysis, existing patterns of utilization and avenues for strengthening these systems and processes were highlighted. No prominent indicators of potential misuse or rampant violation of guidelines were found. However, a more detailed case wise analysis would be needed to shed more light on this. Going forward, it has been recommended to book Unspecified Packages using ICHI codes to increase transparency and decrease the vulnerability to potential misuse. Also, as more States shift to HBP 2.0 the use of Unspecified Packages would be streamlined further. In conclusion, AB PM-JAY has emerged as a flexible scheme which has evolved by improving upon the erstwhile programs to ensure provision of required treatments to the beneficiaries, thereby moving towards the larger goal of improving access to health across India.

## ANNEXURES

### Annexure I

S. No.	Specialty Name	Specialty Type (Surgical / Medical)	Package Count	Procedure Count
1	Burns Management	Surgical	6	20
2	Cardiology	Medical	20	26
3	Cardio-thoracic & Vascular surgery	Surgical	34	118
4	Emergency Room Packages (Care requiring less than 12 hrs stay)	Medical	3	4
5	General Medicine	Medical	76	98
6	General Surgery	Surgical	98	152
7	Infectious Diseases	Medical	2	3
8	Interventional Neuroradiology	Medical	10	15
9	Medical Oncology	Medical	71	263
10	Mental Disorders Packages	Medical	10	10
11	Neo-natal care Packages	Medical	10	10
12	Neurosurgery	Surgical	54	82
13	Obstetrics & Gynaecology	Surgical	59	77
14	Ophthalmology	Surgical	40	53
15	Oral and Maxillofacial Surgery	Surgical	7	9
16	Orthopaedics	Surgical	71	132
17	Otorhinolaryngology	Surgical	35	78
18	Paediatric Medical management	Medical	46	65
19	Paediatric surgery	Surgical	19	35
20	Plastic & reconstructive Surgery	Surgical	8	12
21	Polytrauma	Surgical	10	21
22	Radiation Oncology	Medical	14	46
23	Surgical Oncology	Surgical	76	120
24	Unspecified Surgical Package	Surgical	1	1
25	Urology	Surgical	94	142
		<b>Total</b>	<b>874</b>	<b>1592</b>