



## Guidance document for processing PM-JAY packages

### Thoracic / Lumbar Corpectomy with fusion

**Procedures covered: 2**

**Specialty: Neurosurgery, Orthopedics**

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Procedure price (INR)
Thoracic / Lumbar Corpectomy with fusion	Thoracic Corpectomy with fusion	S800069	SN032A	60,000 + Price of Implant
Thoracic / Lumbar Corpectomy with fusion	Lumbar Corpectomy with fusion	S800069	SN032B	60,000 + Price of Implant

**ALOS (In days): 7 days**

**Minimum qualification of the treating doctor:**

**Essential:** Diploma in Orthopedics with 10 years of experience; MCh/DNB/Equivalent in Neurosurgery

**Desirable:** MS/DNB/Equivalent in Orthopedics

**Special empanelment criteria/linkage to empanelment module:** None

**Disclaimer:**

For monitoring and administering the claim management process of **Thoracic / Lumbar Corpectomy** with fusion NHA shall be following these guidelines. This document has been prepared for guidance of PROCESSING TEAM and TRANSACTION MANAGEMENT SYSTEM of AB PM-JAY for the claims of procedures mentioned above. The hospitals can also refer to this document so that they have the insight on how the claims will be processed. However, this document doesn't provide any guidance on clinical and therapeutic management of patient. In that respect the hospitals and physicians may refer to any other relevant material as per the extant professional norms.

### **PART I: Guidelines for Clinicians and Healthcare Providers**

#### **1.1 Objective:**

The purpose of this section is to act as a guidance & a clinical decision support tool for the clinicians in deciding the line of treatment, plan clinical management of patient and decide referral of cases to the appropriate level of care (as required) for treatment of patients under PMJAY and selection of corresponding Health Benefit Package.

It will also serve as a tool for hospitals to determine and submit the mandatory documents required for claiming reimbursement of health benefit package under PMJAY.

#### **1.2 Clinical key pointers:**

**Thoracic corpectomy:** The most common pathologies in the thoracic spine requiring corpectomy are tumors, trauma, and infection.

- Obtaining adequate exposure for corpectomy is critical due to the relative intolerance of the thoracic spinal cord to manipulation and mobilization.
- Additionally, the numerous comorbidities usually present in these patients often preclude the systemic stress of open surgery.

**Table 1**

Advantages and limitations of various minimally invasive approaches.

MIS approach	Selected authors	Advantages	Limitations
Anterior (thoracoscopic)	Dickman et al.	Complete decompression of canal	Pleural entry/chest tube
	Mack et al.	Easy graft insertion	Ventral to dorsal working pattern
	Ragel et al.	Anterolateral screw-plate fixation	High complication rates
Anterolateral (retropleural)	Uribe et al.	Complete decompression of canal	Extensive retropleural dissection
	Scheufler et al.	Anterolateral screw-plate fixation	Difficult working angle
	Kasliwal et al.	Extra-coelomic working corridor	High rate of pleural violation
Posterolateral (lateral extracavitary)	Kim et al.	Clear visualization of thecal sac	Significant blood loss/OR time
	Khoo et al.	Anterior stabilization	Unilateral decompression
	Mussachio et al.	Preservation of posterior tension band	Second incision for percutaneous stabilization
Posterior (transpedicular)	Chou et al.	Single incision	Difficult to place interbody graft
	Deutsch et al.	Circumferential decompression	Thecal sac between surgeon and body
		Decreased blood loss/pain	Dorsal to ventral working pattern (aorta, etc.)

### Lumbar corpectomy:

- Conventional posterior open approaches for lumbar corpectomy have many drawbacks; complete facetectomy, extensive paraspinal muscle dissection, prolonged retraction resulting in ischemia, and muscle injury. These contribute to significant postoperative pain, infection risk, and disability.
- Minimally invasive (MI) techniques have lower approach-related complication rates in some studies, while others demonstrate greater risks attributed to inadequate visualization, which can be reduced by moving the expandable tubular retractor in cranial or caudal and medial or lateral direction allowing for adequate visualization
- Potential benefits of MI include reduced soft tissue trauma, intraoperative blood loss, postoperative pain, along with faster mobilization, shorter hospital length of stay, and health-care costs.

### 1.3 Mandatory documents- For healthcare providers

Following documents should be uploaded by the concerned hospital staff at the time of pre-authorization and claims submission

<b>Mandatory document</b>	Thoracic corpectomy with fusion / Lumbar corpectomy with fusion
<b>i. At the time of Pre-authorization</b>	
a. Clinical notes with history, signs, symptoms, evaluation findings, indication for procedure, planned line of management and advice for admission	Yes
b. MRI labelled with patient ID, date and side (Left/ Right) - affected part	Yes
<b>ii. At the time of claim submission</b>	
a. Detailed Indoor case papers (ICPs)	Yes
b. Procedure / operation notes	Yes
c. Post procedure Imaging with film (X ray) showing the implants	Yes
d. Post procedure Clinical photograph showing scar	Yes
e. Invoice/barcode of implant	Yes
f. Discharge Summary	Yes

## **PART II: GUIDELINES FOR PROCESSING TEAM**

**2.1 Objective:** To provide guidance to the pre-authorization and claims processing team in ascertaining the medical necessity of procedure carried out vis a vis the patient's medical condition as evidenced by supporting documents/investigation reports etc., in deciding the admissibility and quantum of claim and compliance with mandatory documents by the hospital.

**2.2 Following mandatory documents to be diligently reviewed by the pre-auth / claims processing personnel:**

<b>Mandatory document</b>	Thoracic corpectomy with fusion, Lumbar corpectomy with fusion
<b>i. At the time of pre-authorization processing- For pre-authorization processing doctor (PPD)</b>	
a. Clinical notes with history, signs, symptoms, evaluation findings, indication for procedure, planned line of management and advice for admission	Yes
b. MRI labelled with patient ID, date and side (Left/ Right) - affected part	Yes
<b>ii. At the time of claim processing- For claims processing doctor (CPD)</b>	
a. Detailed Indoor case papers (ICPs)	Yes

b. Procedure / operation notes	Yes
c. Post procedure Imaging with film (X ray) showing the implants	Yes
d. Post procedure Clinical photograph	Yes
e. Invoice/barcode of implant	Yes
f. Discharge Summary	Yes

### **PART III: GUIDELINES FOR TRANSACTION MANAGEMENT SYSTEM (TMS)**

**3.1 Objective:** To enable setting up of cross check mechanisms/rule engines within the IT platform (TMS) to ensure compliance with STGs and to prevent fraud / abuse of the Health Benefit Package.

**3.2 Below mentioned are the scenarios where a provision would be built in TMS for pop-ups:**

I. Does the Post procedure X ray show the implant? Yes

Till the time the functionality is being developed, the processing doctors shall check the above manually.

#### **References:**

1. Lall, Rohan R., et al. "Minimally invasive thoracic corpectomy: surgical strategies for malignancy, trauma, and complex spinal pathologies." Minimally invasive surgery 2012 (2012).
2. Srikantha, Umesh, et al. "Minimally invasive lateral transpsoas approach for lumbar corpectomy and stabilization." Surgical Neurology International 10 (2019).