

## Guidance document for PM JAY package

### Aortic Aneurysm Repair

Procedures covered: 4

Specialty: CTVS, General Surgery

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)	ALOS
Aortic Aneurysm Repair	Aortic Aneurysm Repair using Cardiopulmonary bypass (CPB)	S1300042	SV016A	1,20,000 + graft cost	12 days
Aortic Aneurysm Repair	Aortic Aneurysm Repair using Left Heart Bypass	New Package	SV016B	1,20,000 + graft cost	10 days
Aortic Aneurysm Repair	Aortic Aneurysm Repair without using Cardiopulmonary bypass (CPB)	S1300043	SV016C	65,500 + graft cost	10 days
Aortic Aneurysm Repair	Aortic Aneurysm Repair without using Left Heart Bypass	New Package	SV016D	65,500 + graft cost	10 days

#### Minimum qualification of the treating doctor:

**Essential:** MCh/DNB/Equivalent (in Cardiothoracic Surgery, Vascular Surgery)

**Special empanelment criteria/linkage to empanelment module:** Care at a Tertiary Hospital with equipped facilities for cardiopulmonary bypass

#### Disclaimer:

For monitoring and administering the claim management process of **Aortic Aneurysm Repair**, 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:

An aneurysm is defined as a permanent localized dilatation of an artery by at least 50% compared to normal.

### Classifications of aortic aneurysm

- A *true aneurysm* involves all layers of the arterial wall.
- A *false or pseudoaneurysm* usually has an outer wall consisting of adventitia, organized thrombus, and surrounding structures.
- A *mycotic aneurysm* is any aneurysm caused as a result of infection.
- Aneurysms can be further classified by location: ascending, arch, descending, abdominal
- Aneurysms are classified according to shape (*fusiform or saccular*).
- Aneurysms may be classified according to complicating pathology: (*ruptured, dissecting*).

### Risk factors for aneurysm formation include:

- Age (up to 90% of patients are >60 years of age)
- Hypertension, atherosclerosis, smoking
- Connective tissue disorders (Ehlers–Danlos syndrome, Marfan syndrome, Turner syndrome, Loeys–Dietz syndrome)
- Cystic medial degeneration
- Aortitis (Takayasu’s arteritis most commonly involves the arch)
- Bacterial infection (most commonly *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Salmonella*, *Streptococcus*)
- Trauma is a rare cause of true aneurysms, but iatrogenic trauma (surgery or intervention) is a common cause of pseudoaneurysms

### Clinical features

- About 1/3 of patients are asymptomatic: the aneurysm is an incidental finding on CXR, or Transthoracic Echocardiogram (TTE) or cardiac catheterization
- About half of patients present with anterior chest pain
- Acute onset pain suggests dissection or impending rupture
- Hoarseness from arch aneurysms stretching recurrent laryngeal nerve
- Examination is frequently unremarkable but 10–20% of patients have associated abdominal aneurysms

### Diagnosis of aortic aneurysm

- The role of imaging in chronic aneurysms is to establish and monitor the size of the aneurysm, and define the anatomy and comorbidity
- CT is the most widely used modality, but MRI is a useful adjunct
- Additional assessment includes echocardiography and coronary angiography

### Indications for surgery

- Ascending aorta
  - Acute dissection (emergency)
  - Symptomatic aneurysms
  - Asymptomatic large aneurysms
- Aortic arch
  - Symptomatic aneurysms
  - Large Aneurysms
  - Documented progressive enlargement
  - Potential source of emboli in patient with embolic cerebral events
- Descending aorta
  - Symptomatic aneurysms
  - Asymptomatic large aneurysms
  - Documented progressive enlargement
  - Aneurysms associated with chronic type B dissection

### Contraindications to surgery

- Advanced age (>85 years)
- Incurable malignancy or other terminal illness

### 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

Mandatory document	Aortic Aneurysm Repair using Cardiopulmonary bypass (CPB)	Aortic Aneurysm Repair using left heart bypass	Aortic Aneurysm Repair without using Cardiopulmonary bypass (CPB)	Aortic Aneurysm Repair without using left heart bypass
<b>i. At the time of Pre-authorization</b>				
a. Clinical notes including evaluation findings, indication of graft requirement, and planned line of management	Yes	Yes	Yes	Yes
b. Electrocardiogram (ECG)	Yes	Yes	Yes	Yes

c. Chest X-ray	Yes	Yes	Yes	Yes
d. 2D ECHO	Yes	Yes	Yes	Yes
e. CT/MRI	Yes	Yes	Yes	Yes
<b>f. Optional based on Etiology</b> Transthoracic Echocardiogram (TTE) Coronary angiography Lung function test Serum Urea and creatinine Duplex scan Aortography	Yes	Yes	Yes	Yes
<b>ii. At the time of claim submission</b>				
a. Detailed Indoor case papers (ICPs)	Yes	Yes	Yes	Yes
b. Detailed Procedure / Operative notes	Yes	Yes	Yes	Yes
c. Graft details - barcode/invoice (if artificial graft used)	Yes	Yes	Yes	Yes
<b>d. Post-op investigations</b> - Chest X-ray / USG Chest/Abdomen - CT scan (optional)	Yes	Yes	Yes	Yes
e. Detailed Discharge Summary	Yes	Yes	Yes	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:**

**2.2.1 At the time of pre-authorization processing- For pre-authorization processing doctor (PPD):**

- Clinical notes – all vitals, symptoms, signs, physical examination, indication for procedure, and planned line of treatment
- Did the clinical condition and imaging confirm the diagnosis?

**2.2.2 At the time of claim processing- For claims processing doctor (CPD)**

- Are the detailed ICPs with daily vitals and treatment details provided?



- b. Are the detailed procedure / Operative Notes available?
- c. Was the imaging indicative of surgery?
- d. Was graft detail (barcode/invoice) available in case of artificial graft?
- e. Is the Discharge summary with follow-up advise at the time of discharge submitted?

### **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. Was the clinical condition, size of the aneurysm and imaging indicative of surgery? Yes

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

#### **References**

- 1. Joanne Chikwe, David Cooke, Aaron Weiss. Oxford specialist handbook of Cardiothoracic surgery. Second edition. 2013