



Guidance document for processing PM-JAY packages

Operations for Acquired Arteriovenous Fistula

Procedures covered: 1 Specialty: CTVS/Cardiology/Radiology

Package name	Procedure name	HBP 2.0 code	HBP 2.1 code	Package price (INR)
Peripheral Arterial Surgeries	Operations for Acquired Arteriovenous Fistula	New Package	SV019U	70,000

ALOS (In days): 7 Days

Minimum qualification of the treating doctor:

Essential: MCh/ or equivalent (in Cardiothoracic Surgery, Vascular Surgery),DM/DNB/ equivalent in Cardiology or Radiology.

Special empanelment criteria/linkage to empanelment module: Tertiary Care Facilities with the availability of Cath Lab.

Disclaimer:

For monitoring and administering the claim management process of **Operations for Acquired Arteriovenous Fistula** 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:

Arteriovenous fistulas are abnormal connections between arteries and veins. Acquired arteriovenous fistulas can be either 'traumatic' caused by penetrating trauma, blunt

trauma and fractures or ‘iatrogenic’ caused as a result of percutaneous intervention or invasive procedures.

Signs & Symptoms:

- Fistulas of the extremities, may present with signs of venous hypertension, including varicosities, pain, and swelling—if a long-standing fistula, there may be significant size discrepancy between the two limbs.
- Patients with brain arteriovenous malformations (AVM) can present with headache, neurologic deficits, seizures, or a combination. These patients can also be at risk for hemorrhage or ischemia to the parenchyma surrounding the AVM/AVF due to steal syndrome
- Arterio Venous Fistulas (AVFs) can also lead to systemic complications like high-output heart failure and pulmonary hypertension.

Diagnosis: Duplex ultrasound scan, Angiography, Computed tomography angiography (CTA), and Magnetic resonance angiography (MRA)

Indications:

- Hemodynamic instability, injury to adjacent tissue, and unsuccessful endovascular repair are all indications for open surgical intervention on a fistula.
- In traumatic fistulas, failure of spontaneous regression within two weeks indicates repair.
- Hemodialysis fistulas that are no longer functioning, no longer needed, have endured multiple attempts at salvage, or fail to mature should be considered for ligation

Management

- Repair of arteriovenous fistula (AVF) can be done by endovascular or open surgical procedures
- Endovascular management includes the use of coils, stent-grafts, covered stents and cyanoacrylate glue for closing the fistula.
- Open Surgical Repair can be made via autogenous (usually saphenous vein) grafts, synthetic grafts, venous ligation (diameter dependent), bypass, or complex reconstruction involving one or more of the above.

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	Operations for Acquired Arteriovenous Fistula
i. At the time of Pre-authorization	
a. Clinical notes with detailed history, indications for the procedure and admission notes.	Yes
b. Relevant investigations - Duplex ultrasound scan/Angiography/ CT Angiography (CTA)/ MRA reports	Yes
ii. At the time of claim submission	
a. Detailed Indoor case papers (ICPs)	Yes
b. Detailed procedure/ operative notes	Yes
c. Barcode of the implant or the graft if used (optional)	Yes
d. Detailed 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:

Mandatory document	Operations for Acquired Arteriovenous Fistula
i. At the time of pre-authorization processing- For pre-authorization processing doctor (PPD)	
a. Are the Clinical notes with detailed history, indications for the procedure and admission notes submitted?	Yes
b. Were the investigations reports - Duplex ultrasound scan/Angiography/ CT Angiography (CTA)/ MRAsubmitted?	Yes
ii. At the time of claim processing- For claims processing doctor (CPD)	
a. Are the detailed Indoor case papers (ICPs) submitted?	Yes
b. Are the detailed procedure/ operative notes submitted?	Yes
c. Is the barcode of the implant or the graft if used submitted?	Yes
d. Is a detailed discharge summary submitted?	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. Are the clinical notes detailing history of trauma or intervention that may cause arteriovenous fistula? Yes
- II. Were the patient's investigation reports Duplex ultrasound scan/Angiography/ CT Angiography (CTA)/ MRA suggestive of the procedure? Yes

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

References:

1. Nagpal, K., Ahmed, K., & Cuschieri, R. (2008). Diagnosis and management of acute traumatic arteriovenous fistula. The International journal of angiology : official publication of the International College of Angiology, Inc, 17(4), 214–216. <https://doi.org/10.1055/s-0031-1278313>
2. Nasser Eldine, R., Dehaini, H., Hoballah, J. et al. Management of dual traumatic arterial-venous fistula from a single shotgun injury: a case report and literature review. BMC Surg 20, 177 (2020). <https://doi.org/10.1186/s12893-020-00833-5>
3. Jayroe H, Foley K. Arteriovenous Fistula. [Updated 2020 Aug 10]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK559213/>