

Guidance document for processing PM-JAY packages

Parent vessel occlusion

Procedures covered: 1

Specialty: Interventional Neuroradiology

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Parent vessel occlusion - Basic	Parent vessel occlusion - Basic	S900008	IN009A	30,000

ALOS: 5-7 Days

Minimum qualification of the treating doctor:

Essential: DM/Equivalent (in Interventional Neuroradiology), MCH/DNB/Equivalent (in Neurosurgery)

Special empanelment criteria/linkage to empanelment module: Care at Tertiary Hospital with facilities for interventional neuroradiology

Disclaimer:

For monitoring and administering the claim management process of **Parent vessel occlusion**, 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:

- Parent vessel occlusion (PVO) is a traditional method for treating aneurysms that are not amenable to direct coiling/clipping.
- PVO has been supplemented with a bypass in situations where the collateral circulation is deemed inadequate.
- PVO remains a viable solution in select ruptured and unruptured intracranial aneurysms.



- Parent artery occlusion with revascularization remains an important treatment of complex intracranial aneurysms.
- Techniques for vessel occlusion vary depending on anatomy and operator, with proximal flow arrest and coils being the main tenants of the procedure.
- Endovascular parent vessel occlusion is an established treatment option for a variety of neurovascular pathologies

Indications

- Intracranial aneurysms, such as:
 - Giant aneurysms
 - Complex saccular or fusiform aneurysms
 - Dissecting aneurysms (eg: Vertebral artery dissection)
 - Blood blister-like aneurysms
- Carotid endarterectomy
- Direct revascularization (Superficial temporal artery – Middle cerebral artery (STA-MCA) bypass)
- Carotid-cavernous fistula
- Tumor infiltration

Diagnostic testing

- Preoperative testing and angiography are essential tools in patient selection, particularly in understanding collateral circulation to maintain preservation of flow to important structures after PVO.
- To avoid distal cerebral ischemia, preoperative assessment of the symptoms and history of the patients, the anatomy, and the dynamics of the cerebral circulation is essential.
- There are many well-established diagnostic modalities to determine feasibility of PVO, including intra-operative monitoring, balloon test occlusion (BTO), and Wada testing.

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	Parent vessel occlusion
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i. At the time of Pre-authorization	
Clinical notes including evaluation findings, indication for procedure, and planned line of treatment	Yes
Digital Subtraction Angiography (DSA)	Yes
CT/MRI Brain	Yes
Balloon test occlusion (BTO)	Yes
Optional Wada/Amytal test	Yes
ii. At the time of claim submission	
Detailed Indoor case papers (ICPs)	Yes
Detailed Procedure / operative notes	Yes
Intra-procedure photograph stills (optional)	Yes
Clinical Evaluation of the brain function during the procedure (Intra-operative monitoring documentation)	Yes
EEG (Electroencephalogram) monitoring during the procedure	Yes
Intraoperative angiography report	Yes
Emboloc agent details (invoice/barcode)	Yes
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:

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

- Clinical notes - detailed history, signs & symptoms, evaluation findings, indication for procedure, planned lined of treatment, and advice for admission?
- Did Digital Subtraction Angiography (DSA) confirm diagnosis and indicative of surgery?

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

- Are the detailed ICPs with daily vitals and treatment details?
- Are the detailed procedure / Operative Notes available?



- c. Was the diagnosis indicative of procedure to determine the course of therapy?
- d. Invoice/barcode of embolic agents used submitted?
- e. Was intra-operative monitoring (neurological assessment) documented and imaging submitted?
- f. Is the Discharge summary with follow-up advise at the time of discharge?

PART III: GUIDELINES FOR IT

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 diagnosis and imaging indicative of performing the surgery? Yes

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

References

1. Pandey P. Parent vessel occlusion and revascularization: A dying art?. *Neurol India* 2018;66:657-60
2. Kumar, N., T. Ladner, I. S. Kahn, S. Zuckerman and R. Ecker. "Parent vessel occlusion for treatment of cerebral aneurysms: Is there still an indication? A series of 17 patients." *Journal of the Neurological Sciences* 372 (2017): 250-255.
3. Glauser G, Walcott BP, Choudhri OA. Parent vessel occlusion via the balloon-assisted, dual microcatheter technique. *Asian J Neurosurg* 2020;15:726-9