

## Guidance document for PM JAY packages

### Mitral Valvotomy

**Procedures covered/ procedure count: 2**

**Specialty:** Cardiology/ CTVS

Package/ procedure name	HBP 1.0 code	HBP 2.0 code	Package price	ALOS
Balloon Mitral Valvotomy	S1200003	MC005A	35,700+ Cost of balloon	2 days
Closed Mitral Valvotomy including Thoracotomy	S1300009	SV008A	57,000	7 Days

**Minimum qualification of the treating doctor:**

**Essential:** DM/DNB/ equivalent (Cardiology)/M.Ch. or DNB/ equivalent (cardiovascular thoracic surgery)

**Special empanelment criteria/linkage to empanelment module:**

Package/ Procedure name	Cardiac Catheterization lab	CCU/ ICCU	Qualified cardiologist (DM/ DNB cardiology)	Qualified cardiothoracic surgeon (MCh/ DNB cardiovascular thoracic surgery)
i. Balloon Mitral Valvotomy	Yes	Yes	Yes	No
ii. Closed Mitral Valvotomy including Thoracotomy	No	Yes	No	Yes

#### Disclaimer:

“For monitoring and administering the claim management process of **Balloon Mitral Valvotomy/ Closed Mitral Valvotomy including thoracotomy**, 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:**

Treatment of mitral stenosis ranges from conservative medical management to closed mitral valvotomy and the more recent balloon mitral valvoplasty. Closed mitral valvotomy is a well-established method for treatment of rheumatic mitral stenosis. A number of large series have reported successful long-term relief of symptoms after operation. Substantial long-term improvement in the mitral valve area following closed valvotomy has been demonstrated.

Percutaneous mitral balloon valvuloplasty (PMBV) is an invasive procedure used to manage mitral stenosis. PMBV improves symptoms by increasing the mitral valve area and reduce mitral valve gradient. PMBV is indicated in symptomatic patients (New York Heart Association functional class greater than II), or asymptomatic patients with pulmonary hypertension with moderate or severe stenosis, and favorable valve morphology in the absence of left atrial thrombus, or moderate to severe mitral regurgitation. Balloon mitral valvotomy is now the treatment of choice for many patients with symptomatic mitral stenosis.

Common Signs and Symptoms of Mitral Stenosis are:

#### **a. Symptoms**

- Orthopnea
- Paroxysmal nocturnal dyspnea
- Palpitations
- Chest pain
- Hemoptysis

#### **b. Signs**

- Loud first heart sound
- Opening snap (OS) may be heard after the A2 component of the second heart sound

- Mid-diastolic low pitch rumbling murmur with presystolic accentuation is heard after the opening snap. It is best heard with the bell of the stethoscope at the apex.
- Atrial fibrillation
- Left parasternal heave
- Tapping apical beat

### Classification of Severity of Mitral Valve Stenosis

#### Mild

- Mean gradient (mmHg) less than 5
- Pulmonary artery systolic pressure (mmHg) less than 30
- Valve area (cm<sup>2</sup>) less than 1.5

#### Moderate

- Mean gradient (mmHg) 5 to 10
- Pulmonary artery systolic pressure (mmHg) 30 to 50
- Valve area (cm<sup>2</sup>) 1.0 to 1.5

#### Severe

- Mean gradient (mmHg) more than 10
- Pulmonary artery systolic pressure (mmHg) greater than 50
- Valve area (cm<sup>2</sup>) less than 1.0

### 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	Balloon Mitral valvotomy	Closed Mitral Valvotomy including Thoracotomy
<b>i. At the time of Pre-authorization</b>		
a. Clinical notes with planned line of treatment	Yes	Yes
b. Detailed Echo /Doppler report	Yes	Yes
<b>ii. At the time of claim submission</b>		
a. Procedure / Operative notes	Yes	Yes
b. Post procedure stills of ECHO with report	Yes	Yes

c. Detailed Discharge Summary	Yes	Yes
d. Invoice/ barcode of balloon used	Yes	No

## **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>	<b>Balloon Mitral Valvotomy</b>	<b>Closed Mitral Valvotomy including Thoracotomy</b>
<b>i. Pre-auth processing Doctor (PPD)</b>		
a. <i>Clinical notes</i> - detailed history, signs & symptoms, indication for procedure	Yes	Yes
b. Was the Echo report suggestive of mitral valve stenosis?	Yes	Yes
<b>ii. Claims processing Doctor (CPD)</b>		
a. Are the detailed Procedure / Operative notes submitted?	Yes	Yes
b. Does the Post procedure still of ECHO show improvement of Mitral valve area?	Yes	Yes
c. Is there a Detailed Discharge Summary mentioning date of follow-up submitted?	Yes	Yes
d. Is the Invoice of blade/balloon used submitted?	Yes	No

## **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:**

1. Was patient Echo report showing mitral valve stenosis? Yes

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

### **References**

1. Shah SN, Sharma S. Mitral Stenosis. [Updated 2019 Dec 7]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020
2. Sahu K. Closed Mitral Valvotomy Versus Balloon Valvoplasty: A Prospective Comparative Study Of 100 Cases. Health Sci J. 2016, 10:1.