

Guidance document for processing PM-JAY packages

Glaucoma Surgery

Packages covered: 5

Specialty: Ophthalmology

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)	ALOS (In days)
Glaucoma Surgery	Cyclocryotherapy/ Cyclophotocoagulation	S300006	SE027A	3,700	1
Glaucoma Surgery	Glaucoma Surgery (Trabeculectomy only) with or without Mitomycin C, including postoperative medications for 12 weeks (and wherever surgical or laser procedures required for bleb augmentation and anterior chamber maintenance)	S300012	SE027B	11,000	1
Glaucoma Surgery	Glaucoma Shunt Surgery	New Package	SE027C	13,000	3
Glaucoma Surgery	Pediatric Glaucoma Surgery	New Package	SE027D	15,000	4
Glaucoma Surgery	EUA for Confirmation of Pediatric Glaucoma	New Package	SE028A	3,000	1

Minimum qualification of the treating doctor:

Essential: MD/MS/ DNB/ PG Diploma/ equivalent (in Ophthalmology)

Special empanelment criteria/linkage to empanelment module: None

Disclaimer:

For monitoring and administering the claim management process of **Glaucoma Surgeries (Cyclocryotherapy / Cyclophotocoagulation; Glaucoma Surgery (Trabeculectomy only); Glaucoma Shunt Surgery; Pediatric Glaucoma Surgery; EUA for Confirmation of Pediatric Glaucoma)**, 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 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:

Proceed for Glaucoma Surgery only if diagnosis made is backed by clinical signs, symptoms, ophthalmic examination and does not respond to conservative medical therapy.

Glaucoma is one of the leading causes of Blindness after Cataract. Glaucoma refers to a group of diseases in which optic nerve damage is the primary pathology leading to vision loss. The most common forms of Glaucoma are- Open angle and Closed angle Glaucoma. In East Asia vision loss from Closed angle Glaucoma is more common, in western world Open angle Glaucoma is more common.

Risk factor: Raised Intra-ocular pressure (IOP) is a major risk factor for loss of sight from open and closed angle Glaucoma. Raised IOP leads to damage of optic nerve

The management of Glaucoma depends upon correct diagnosis as Open / Closed angle Glaucoma. The characteristic features of the two types of Glaucoma is as follows:

Open angle Glaucoma	Closed angle Glaucoma
Open angle with no identifying pathology	Anatomic block of the anterior chamber angle by the iris
Optic nerve damage	+/- Optic nerve damage
+/- Elevated IOP	+/- Elevated IOP
+/- Visual field damage	+/- Visual field damage
Risk factors include elevated intraocular pressure, increasing age, positive family history, racial background, myopia, thin corneas, hypertension, and diabetes.	Risk factors include racial background, increasing age, female gender, positive family history, and hyperopia

Initial clinical assessment:

History including chief complaints such as vision loss, pain, redness, and halos around lights. The onset, duration, location, severity of symptoms, family h/o glaucoma, if any, and any other co-morbidity/ medical complaint such as Lung/ Heart disease, drug history should be noted.

Physical examination:

International recommendations for Glaucoma assessment and equipment needed include:

Clinical Assessment	Minimal Equipment (Low Resource Settings)	Optional Equipment (Intermediate / High Resource Settings)
Visual Acuity	Near reading card or distance chart with 5 standard letters or symbols Pinhole	3- or 4-meter visual acuity lane with high contrast visual acuity chart
Refraction	Trial frame and lenses Retinoscope, Jackson cross-cylinder	Phoropter Autorefractor
Pupils	Pen light or torch	
Anterior Segment	Slit lamp biomicroscope Keratometer	Corneal pachymeter
Intraocular Pressure	Goldmann applanation tonometer Portable handheld applanation tonometer Schiotz tonometer	Tonopen Pneumotonometer
Angle Structures	Slit lamp gonioscopy Goldmann, Zeiss/Posner goniolescopes	Anterior segment optical coherence tomography Ultrasound biomicroscopy
Optic Nerve (dilated if angle open)	Direct ophthalmoscope Slit lamp biomicroscopy with hand held 78 or 90 diopter lens	Fundus photography Optic nerve image analyzers Confocal scanning laser ophthalmoscopy Optical coherence tomography Scanning laser polarimetry
Fundus	Direct ophthalmoscope Head mounted indirect ophthalmoscope with 20 or 25 diopter lens Slit lamp biomicroscopy with 78 diopter lens	12 and 30 diopter lenses 60 and 90 diopter lenses
Visual Field	Manual perimetry or automated white on white perimetry	Frequency doubling technology Short wave automated perimetry

Management: International Recommendations for Management of Glaucoma include the following:

Open angle Glaucoma:

Glaucoma Severity	Findings	Suggested IOP Reduction	Treatment Considerations
Early	Optic Nerve Damage ± Visual Field Loss	Lower IOP ≥25%	Medication <i>or</i> Laser trabeculoplasty
Moderate/ Advanced	Optic Nerve Damage + Visual Field Loss	Lower IOP ≥25 – 50%	Medication <i>or</i> Laser trabeculoplasty <i>or</i> Trabeculectomy ± Mitomycin C <i>or</i> Tube (± cataract removal and intraocular lens [IOL]) <i>and/or</i> Cyclophotocoagulation (<i>or</i> cryotherapy)
End-stage (Refractory glaucoma)	Blind Eye ± Pain	Lower IOP ≥25 – 50% (If painful)	Medication <i>and/or</i> Cyclophotocoagulation (<i>or</i> cryotherapy) <i>and</i> Rehabilitation Services

Eye Drops	Essential Medicines (Low Resource Settings)	Optional Medicines (Intermediate / High Resource Settings)
Anesthetic	Tetracaine 0.5%	
Diagnostic	Fluorescein 1% Tropicamide 0.5%	
Pupil Constricting	Pilocarpine 2% or 4%	
Pupil Dilating	Atropine 0.1, 0.5, or 1% Homatropine or cyclopentolate	
Anti-Inflammatory	Prednisolone 0.5% or 1%	
Anti-Infectives	Ofloxacin 0.3%, gentamycin 0.3% or azithromycin 1.5%	
Intraocular Pressure Lowering (Topical)	Latanoprost 50µg/mL Timolol 0.25% or 0.5%	Prostaglandin analogs Other beta blockers Carbonic anhydrase inhibitors Alpha agonists Fixed combination drops
Intraocular Pressure Lowering (Systemic)	Oral and IV acetazolamide IV mannitol 10% or 20%	Methazolamide Glycerol

Medications include: As per the 19th WHO model list of Essential medicines (April 2015):

Closed angle Glaucoma- International recommendations:

Diagnosis	Clinical Findings	Essential Treatment	Surgical Options
Acute or Chronic Closed Angle (Pupil Block)	Iris-trabecular contact Iris bowing	Constrict pupil and lower IOP Laser iridotomy (desirable) or Surgical iridectomy (laser to fellow eye)	Lens extraction/IOL ± Trabeculectomy ± Mitomycin C
Closed Angle (Plateau Iris)	Iris-trabecular contact Flat Iris	Constrict pupil and lower IOP Laser iridotomy (desirable) or Surgical iridectomy (laser to fellow eye) and Laser iridoplasty	Lens extraction/IOL ± Trabeculectomy ± Mitomycin C

Before referring the patient, consider repeating visual field assessment and IOP measurement on another occasion to confirm a visual field defect or IOP of 24 mmHg or more, unless clinical circumstances indicate urgent or emergency referral is needed.

Referral criteria:

Immediate referral on presentation if there is,

- Acute primary angle closure with uncontrolled IOP on maximum therapy and facilities for laser peripheral iridotomy are not available
- Facilities for cataract surgery not available in lens induced glaucomas (phacomorphic)
- Children (acute intraocular pressure lowering measures initiated prior to referral; laser or surgical therapy to be done at higher centres)

Referral following initial treatment if,

- Secondary glaucomas without facilities to treat the underlying cause (for example laser iridotomy for pupil block/ surgery (ex. in microspherophakia or lensectomy for subluxated crystalline lens)
- Nanophthalmos requiring surgery
- Previous failed trabeculectomy uncontrolled on maximum antiglaucoma therapy
- Patients requiring tube implants
- Only seeing eye
- Post congenital cataract surgery with uncontrolled IOP on therapy

- Complications of filtration surgery requiring surgical intervention, Failing bleb, Large choroidal haemorrhage/ effusions, Bleb leaks, Blebitis and endophthalmitis

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	Cyclocryotherapy / Cyclophotocoagulation	Glaucoma Surgery (Trabeculectomy only)	Glaucoma Shunt Surgery	Pediatric Glaucoma Surgery	EUA for Confirmation of Pediatric Glaucoma
i. At the time of Pre-authorization					
a. Clinical notes	Yes	Yes	Yes	Yes	Yes
b. Indication	Open angle Glaucoma: Moderate/ advanced Glaucoma/ end stage refractory Glaucoma	Open angle Glaucoma: Moderate/ Advanced Glaucoma; Closed angle Glaucoma	Open angle Glaucoma: Moderate/ Advanced Glaucoma	Pediatric Glaucoma	Pediatric Glaucoma
c. Documentation of recent field of vision (Perimetry examination)	Yes	Yes	Yes	Yes	No
d. Intra-ocular pressure measurement	No	Yes	Yes	Yes	No
e. Evidence of failed Trabeculectomy	No	Yes	Yes	No	No
f. Admission Notes	Yes	Yes	Yes	Yes	Yes
g. Clinical Photograph	Yes	Yes	Yes	Yes	Yes
ii. At the time of claim submission					
a. Detailed	Yes	Yes	Yes	Yes	Yes

Discharge summary with Intraocular pressure, Fundus and corneal diameter					
b. Procedure/operative notes	Yes	Yes	Yes	Yes	Yes
c. Pre-anesthesia check-up	No	No	No	Yes	Yes
d. Documentation of Examination Under Anesthesia (EUA)	No	No	No	Yes	Yes
e. Intraoperative photograph with patient ID, time and date (optional)	Yes	Yes	Yes	Yes	Yes

PART II: GUIDELINES FOR PROCESSING TEAM

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:**

- Is there optic nerve damage? Yes
- Is the Intra-ocular pressure ≥ 24 mmHg? Yes
- Raised Intra-ocular pressure not controlled by medication? Yes
- For pediatric glaucoma surgery/ EUA for confirmation of pediatric glaucoma is the patient age ≤ 16 years? Yes

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

References:



- i. IOC Guidelines for Glaucoma Eye Care, International Council of Ophthalmology, 2015, <http://www.icoph.org/downloads/ICOGlaucomaGuidelines.pdf>
- ii. National Institute for Health & Care Excellence (NICE) guideline [NG81], Glaucoma: Diagnosis and Management, November 2017, <https://www.nice.org.uk/guidance/ng81/chapter/Recommendations>
- iii. Standard Treatment Guidelines, Ophthalmology, Ministry of Health & Family Welfare, Government of India, <http://clinicalestablishments.gov.in/WriteReadData/6251.pdf>
- iv. Standard Treatment Guidelines for Eye Diseases, MukhyamantriAmrutum Yojana, Government of Gujarat, <http://www.magujarat.com/>
- v. Operational Guidelines, Clinical Protocol Guidelines, Ophthalmology Surgery, Mahatma Jyotiba Phule Jan Arogya Yojana, Government of Maharashtra, <https://www.jeevandayee.gov.in/>