

Guidance document for processing PM-JAY packages

Acute asthma attack & Status Asthmaticus

Procedures covered/ procedure count: 2

Specialty: General medicine

| Procedure name | HBP 1.0 code | HBP 2.0 code | Procedure price |
|---------------------------|--------------|--------------|--|
| i. Acute asthmatic attack | M100045 | MG039A | 1,800/day (General ward) 2,700/ day (HDU) |
| ii. Status asthmaticus | M100066 | MG039B | 3,600/ day (ICU without ventilator) 4,500/ day (ICU with ventilator) |

ALOS: 3-5 days/5-7 days (In case of Status Asthmaticus)

Minimum qualification of the treating doctor:

Essential: MBBS; **Desirable:** MD/ DNB/ equivalent (Medicine)/MD/ DNB/ equivalent (Pulmonology)/ Diploma in Tuberculosis and Chest Diseases (DTCD) or equivalent

Special empanelment criteria/linkage to empanelment module:

- Acute asthmatic attack: HDU/ICU with BiPAP
- Status asthmaticus: HDU/ICU with BiPAP and Ventilator

Disclaimer:

ICMR has issued clinical guidelines for **Management of Asthma** to be followed in country. For monitoring and administering the claim management process of **Acute asthmatic attack and Status asthmaticus**, 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 ICMR guidelines are also included in the document for better understanding of the SHA teams, Insurance companies and TPAs. 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 the ICMR poster and other relevant material as per the extant professional norms.

PART I: Guidelines for Clinicians and Healthcare Providers

1.1 Objective:

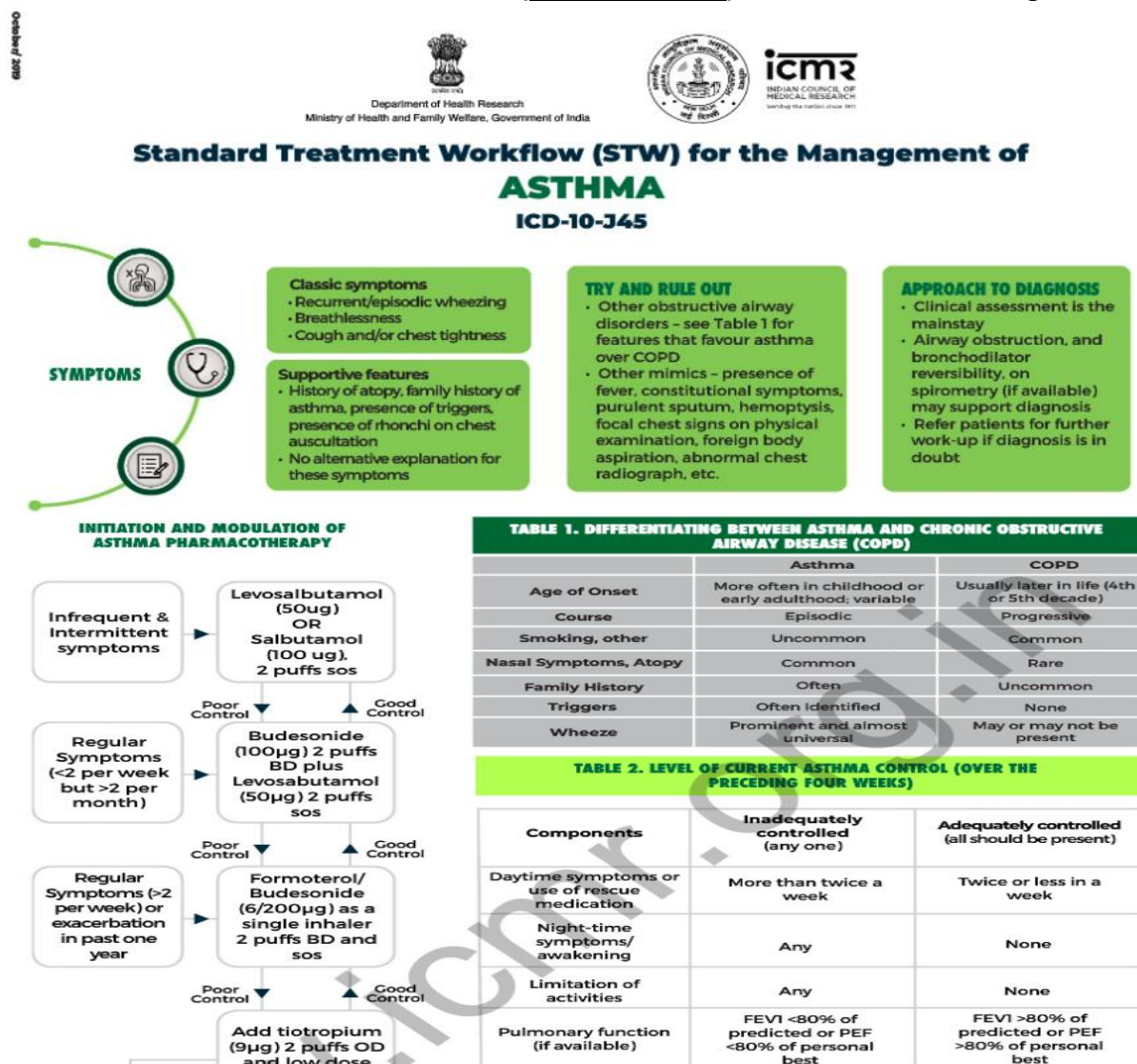
The purpose of this section is to act as a guidance & a clinical decision support tool for the clinicians in deciding the line of treatment, plan clinical management of patient and decide referral of cases to the appropriate level of care (as required) for treatment of patients under PMJAY and selection 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 admission for management of Acute asthmatic attack/ Status Asthmaticus only if indicated
- Rule out other obstructive airway disorders- like COPD/ other mimics (like presence of fever, constitutional symptoms, purulent sputum, hemoptysis, focal chest signs on physical examination, foreign body aspiration, abnormal chest radiographs, etc.)
- Refer the patient for further work-up if diagnosis is in doubt

1.3 STANDARD TREATMENT WORKFLOW (DHR-ICMR STW)ⁱ- For clinicians/ treating doctor



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graph TD
    A[oral methylxanthine] --> B[Poor Control]
    B --> C[Add low dose oral corticosteroids]
    C --> D[Refer]
    D --> A
        
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FEV1 Forced Expiratory Volume in first second, PEF Peak Expiratory Flow

GUIDING PRINCIPLES

- Mainstay of pharmacotherapy: Inhaled drugs
- Frequency of symptoms determine treatment initiation (see figure 1 for details)
- Reassess at 3-4 weeks – good response : in favour of asthma diagnosis
- Patient education for compliance, warning signs, triggers, inhaler technique, PEF monitoring
- Inhaler technique to be monitored
- Follow-up at 4-12 weeks, assess diseases control by clinical parameters (see Table 2)
- Step-up or step-down treatment as per level of asthma control (see figure 1)
- Follow up three-monthly and modulate treatment as needed
- Refer for further evaluation and management if asthma remains poorly controlled

DISEASE EXACERBATION

WHEN TO SUSPECT EXACERBATION

- Suspect if acute symptomatic worsening, or reduction in PEF to below 80% of personal best, while on continued treatment
- Take two additional puffs of the inhaler used if symptoms persist, and repeat if needed
- If no response after 24 hours, or symptomatic worsening, or further reduction in PEF, contact physician
- Physician to assess severity of exacerbation and manage accordingly

SEVERE ACUTE ASTHMA (PATIENT TO BE ADMITTED)

- Inability to complete sentences, agitation, use of accessory muscles, respiratory rate >30/min, heart rate >110/min, pulsus paradoxus >25 mm Hg, silent chest, and/or room air sPo2 <92%
- Oxygen supplementation to maintain spO2 92-95%
- Nebulized levalbutamol/ipratropium (1.25 mg/0.5 mg) three doses at 20-minute interval, then 4-6 hourly or as needed
- Injection hydrocortisone 200 mg intravenously, then oral prednisolone 0.5 mg/kg daily for five days
- Refer if no improvement
- Discharge only when symptoms improve, wheezing absent or significantly reduced, heart rate <100 bpm, respiratory rate <30/min, room air sPo2 >94%
- Schedule follow-up outpatient visit at one week

LIFE-THREATENING EXACERBATION
Altered sensorium, orthopnea, cyanosis, paradoxical breathing, hypotension, and/or bradycardia (heart rate <60 bpm) – Immediately refer to higher centre with ICU facility

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES

REFERENCES

1. Agarwal R, et al. Guidelines for diagnosis and management of bronchial asthma: Joint ICS/NCCP(I) recommendations. Lung India 2015;32(Suppl 1):S3-S42.
2. Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention. 2018.
3. National Institute for Health and Care Excellence (NICE). Asthma: diagnosis, monitoring and chronic asthma management. 2017.

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit our web portal (stw.icmr.org.in) for more information.
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1.4 Mandatory documents- For healthcare providers

Following documents should be uploaded by the concerned hospital staff at the time of pre-authorisation and claims submission:

| Mandatory documents | Acute asthmatic attack | Status asthmaticus |
|--|------------------------|--------------------|
| i. At the time of Pre-authorisation | | |
| a. Clinical notes | Yes | Yes |
| b. Investigation reports | | |
| i. Chest X-ray | Yes | Yes |
| ii. Spirometry/ PFT (if available) | Yes | Yes |
| iii. Routine Biochemistry (incl. Haemogram, IgE) | Yes | Yes |
| c. On bed Clinical photograph of the patient | Yes | Yes |
| ii. At the time of claim submission | | |
| a. Detailed Indoor case papers having treatment and management including | Yes | Yes |

| | | |
|--|-----|-----|
| Respiratory rate, Heart Rate, Blood Pressure, SpO2 monitoring | | |
| b. All investigations reports including CBC , Serial ABGs (where indicated & if available)/ Spirometry/ PFT (if available) | Yes | Yes |
| c. Detailed discharge summary | Yes | Yes |

PART II: GUIDELINES FOR PROCESSING TEAM

2.1 Objective: To provide guidance to the pre-authorisation 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 (A) At the time of pre-authorization processing- For pre-authorisation processing doctor (PPD):

| Mandatory documents | Acute asthmatic attack | Status asthmaticus |
|---|------------------------|--------------------|
| At the time of Pre-authorisation | | |
| a. Clinical notes | | |
| i. History of asthma | Yes | Yes |
| ii. Cyanosis present | No | Yes |
| iii. Paradoxical breathing/ Orthopnea | No | Yes |
| iv. Chest -On examination | Wheeze +/- Silent | Silent |
| b. Vitals | | |
| i. Respiratory rate > 30/ min | Yes | Yes |
| ii. SpO2 (on air) < 90% | Yes | Yes |
| iii. Heart rate | Yes (>110 bpm) | Yes (<60 bpm) |
| iv. BP <90/60 mm Hg | No | Yes |
| v. Peak expiratory flow (PEF) < /=80% or < /=50% of predicted or best | < /=80% | < /=50% |
| vi. Pulsus paradoxus >25 mm Hg | Yes | Yes |
| c. Investigation reports | | |
| i. Chest X-ray | Yes | Yes |
| ii. Spirometry/ PFT (if available) | Yes | Yes |

| | | |
|---|-----|-----|
| i. Routine Biochemistry (incl. Haemogram, IgE) | Yes | Yes |
| iv. Serial Arterial Blood Gas (ABGs) (where indicated & if available) | Yes | Yes |
| d. On bed Clinical photograph of the patient (Routine ward/ HDU/ ICU) | Yes | Yes |

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

i. Acute asthmatic attack

- Do the documents (clinical notes and physical examination reports) available detail the need for admission?
- Was there documentary evidence of record & monitoring of vitals- SpO₂; Heart rate; Respiratory rate, Blood pressure, Chest examination- abnormal breath sounds; Chest X-ray?
- Is medication/ treatment chart available? Was the patient given Steroids, Inhalers/ nebulization & supplemental oxygen?
- Do the discharge documents provide reason for discharge - improvement in symptoms, on chest examination- wheezing absent or significantly reduced, PEF improved to >80% of personal best or predicted, room air SpO₂ > 92%, heart rate <100 bpm, respiratory rate < 30/ min) / referral criteria; post discharge treatment advise including follow-up in OPD after discharge (preferably within 1 week after discharge)?
- If the patient is in HDU/ ICU +/- BIPAP/ ventilator following additional questions may be referred:
 - Do the documents show a need for admission to HDU/ ICU (+/- BIPAP/ ventilator)
 - Is there a documentary evidence to show monitoring in HDU/ ICU (+/- BIPAP/ ventilator)

ii. Status asthmaticus

- Do the documents (clinical notes and physical examination reports) available detail the need for admission?
- Was there documentary evidence of record & monitoring of vitals and Investigations- SpO₂; Heart rate; Respiratory rate, Blood pressure, Chest examination; CBC, Serial Arterial Blood Gas (ABGs) (where indicated & if available), Chest x-ray?
- Is medication/ treatment chart available? Was the patient given Steroids, Inhalers/ nebulization & supplemental oxygen?
- Do the discharge documents show the discharge details -improvement in symptoms, on Chest examination- air entry present, wheezing absent or significantly reduced,, heart rate >60 bpm, respiratory rate < 30/ min, room air SpO₂ > 92%) / referral criteria; post discharge treatment advise including follow-up in OPD after discharge (preferably within 1 week after discharge)?
- If the patient is in HDU/ ICU +/- BIPAP/ ventilator following additional questions may be referred:

- iii. Do the documents show a need for admission to HDU/ ICU (+/- BIPAP/ ventilator)
- iv. Is there a documentary evidence to show monitoring in HDU/ ICU (+/- BIPAP/ ventilator)

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. **Acute asthmatic attack**
 - a. History of asthma - Yes
 - b. Family history of asthma &/ or atopy- Yes
 - c. Respiratory rate > 30/ min- Yes
 - d. SpO₂ (on air) < 92%- Yes
 - e. Heart rate > 110 bpm- Yes
 - f. Is PFT available- Yes, then, FEV₁ < 80% of predicted or PEF < 80% of personal best
- ii. **Status asthmaticus**
 - a. History of asthma - Yes
 - b. Family history of asthma &/ or atopy- Yes
 - c. Respiratory rate > 30/ min- Yes
 - d. SpO₂ (on air) < 90%- Yes
 - e. Cyanosis- Yes
 - f. Heart rate < 60 bpm- Yes
 - g. Blood Pressure < 90/60 mm Hg- Yes
 - h. Is PFT available- Yes, then, FEV₁ < 50% of predicted or PEF < 50% of personal best

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

Acknowledgment:

ⁱ Standard Treatment Workflows of India. 2019 Edition, vol. 1, New Delhi, Indian council of Medical Research, Department of Health Research, Ministry of Health and Family Welfare, Government of India. These STWs have been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the web portal (stw.icmr.org.in) for more information. © Indian Council of Medical Research and Department of Health Research, Ministry of Health & Family Welfare, Government of India.

(ii) Global Initiative for Asthma, Guidelines for Asthma Management and Prevention, 2019