Guidance document for processing PM-JAY packages

Electrolyte Imbalance

Procedures covered: 4

Specialty: General Medicine, Pediatric Medical Management

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Electrolyte Imbalance	Hypercalcemia	New Package	MG060A	General Ward- 1,800 HDU – 2,700 ICU without ventilator– 3,600 ICU with Ventilator– 4,500
Electrolyte Imbalance	Hypocalcemia	New Package	MG060B	General Ward- 1,800 HDU – 2,700 ICU without ventilator– 3,600 ICU with Ventilator– 4,500
Electrolyte Imbalance	Hyponatremia	New Package	MG060C	General Ward- 1,800 HDU – 2,700 ICU without ventilator– 3,600 ICU with Ventilator– 4,500
Electrolyte Imbalance	Hypernatremia	New Package	MG060D	General Ward- 1,800 HDU – 2,700 ICU without ventilator– 3,600 ICU with Ventilator– 4,500

Minimum qualification of the treating doctor:
Essential: MBBS
Desirable: DNB / MD (General Medicine / Pediatric Medicine/Endocrinology and Metabolism)

Special empanelment criteria/linkage to empanelment module: None

Disclaimer:

For monitoring and administering the claim management process of **Electrolyte Imbalance**, 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:

Electrolytes are essential for basic life functioning such as maintaining electrical neutrality in the cells, generation, and conduction of action potentials in the nerves and muscles. Sodium, potassium, and chloride are the significant electrolytes along with magnesium, calcium, phosphate, and bicarbonates. Electrolytes come from our food and fluids.

These electrolytes can have an imbalance, leading to either high or low levels. A high or a low level of electrolytes disrupts the normal bodily functions and can lead to even life-threatening complications.

Among the electrolyte disorders, hyponatremia is the most frequent. It is diagnosed when the serum sodium level less than 135 mmol/L. Hyponatremia has neurological manifestations. Patients may present with headache, confusion, nausea, deliriums. Hypernatremia presents when the serum sodium levels greater than145 mmol/L. Symptoms of hypernatremia include tachypnea, sleeping difficulty, and feeling restless. Rapid sodium corrections can have serious consequences like cerebral edema and osmotic demyelination syndrome.

Hypocalcemia diagnosis requires checking the serum albumin level to correct for total calcium, and the diagnosis is when the corrected serum total calcium levels are less than 8.8 mg/dl, as in vitamin D deficiency or hypoparathyroidism. CHecking serum calcium levels is a recommended test in post-thyroidectomy patients. Hypercalcemia is when corrected serum total calcium levels exceed 10.7 mg/dl, as seen with primary hyperparathyroidism. Humoral hypercalcemia presents in malignancy, primarily due to PTHrP secretion.

Laboratory Values:

Serum Sodium:

Normal Range: 135 to 145 mmol/L

Mild-moderate Hyponatremia: 125 to 135 mmol/L, Severe: less than 125 mmol/L

Hypernatremia: Mild-moderate: 145 to 160 mmol/L, Severe: over 160 mmol/L

Serum Calcium:

Normal Range: 8.8 to 10.7 mg/dl

Hypercalcemia: greater than 10.7 mg/dl , Severe: over 11.5 mg/dl

Hypocalcemia: less than 8.8 mg/dl

Some of the common causes of electrolyte disorders seen in clinical practices are:

- Hyponatremia: low dietary sodium intake, primary polydipsia, SIADH, congestive heart failure, hepatic cirrhosis, failure of adrenal glands, hyperglycemia, dyslipidemia
- Hypernatremia: unreplaced fluid loss through the skin and gastrointestinal tract, osmotic diuresis, hypertonic saline administration
- Hypercalcemia: malignancy, hyperparathyroidism, chronic granulomatous disease
- Hypocalcemia: acute pancreatitis, parathyroid hormone deficiency after thyroidectomy, neck dissection, resistance to parathormone, hypomagnesemia, sepsis

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	Hypercalcemia/ Hypocalcemia	Hyponatremia/ Hypernatremia
i. At the time of Pre-authorization		
a. Clinical Notes including evaluation findings, indications for the procedure, and planned line of treatment	Yes	Yes
b. Serum Calcium report	Yes	No
c. Other Serum Electrolytes	No	Yes
ii. At the time of claim submission		
a. Detailed Indoor case papers with treatment details	Yes	Yes
b. Post treatment serum calcium	Yes	No
c. Post treatment serum electrolytes	No	Yes
d. Detailed Discharge Summary	Yes	Yes

PART II: GUIDELINES FOR PROCESSING TEAM

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 the patient's blood report suggestive of electrolyte imbalance? Yes
2. Was the clinical notes and serum calcium report indicative of the procedure? Yes

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

References

1. Shrimanker I, Bhattarai S. Electrolytes. [Updated 2020 Jan 20]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-
2. Cooper MS, Gittoes NJ. Diagnosis and management of hypocalcaemia. BMJ. 2008 Jun 07;336(7656):1298-302.
3. Turner JJO. Hypercalcaemia - presentation and management Clin Med (Lond). 2017 Jun;17(3):270-273.