



Guidance document for processing PM-JAY packages

Short stature

Procedures covered: 1

Specialty: Pediatric Medical Management

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Short stature	Short stature	M200022	MP033A	Routine Ward - 1800 HDU - 2700 ICU (without Ventilator) - 3600 ICU (with Ventilator) - 4500

ALOS: 1 day (Once diagnosis is established the case can be booked in the relevant package, further stay/admission should be decided based on the level of complications of the disease)

Minimum qualification of the treating doctor:

Essential: MD/DNB/DCH/ equivalent (Pediatric Medicine), DM/DNB/ equivalent (Endocrinology)

Special empanelment criteria/linkage to empanelment module: Care at Tertiary Hospital

Disclaimer:

For monitoring and administering the claim management process of **Short stature**, 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:

Short stature is a term applied to a child whose height is 2 standard deviations (SD) or more below the mean for children of that sex and chronologic age. Short stature may be either a variant of normal growth or caused by a disease.

The most common causes of short stature beyond the first year or two of life are familial (genetic) short stature and delayed (constitutional) growth, which are normal, non-pathologic variants of growth. The goal of the evaluation of a child with short stature is to identify the subset of children with pathologic causes (such as Turner syndrome, inflammatory bowel disease or other underlying systemic disease, or growth hormone deficiency). The evaluation also should assess the severity of the short stature and likely growth trajectory, to facilitate decisions about intervention, if appropriate.

Proceed with Short stature only if diagnosis made is backed by clinical manifestation:

- a. The diagnosis made should be backed by clinical signs, symptoms, physical examination, investigations
- b. Look for underlying causes

Presenting complaint:

- Inability to gain height (delay of growth)

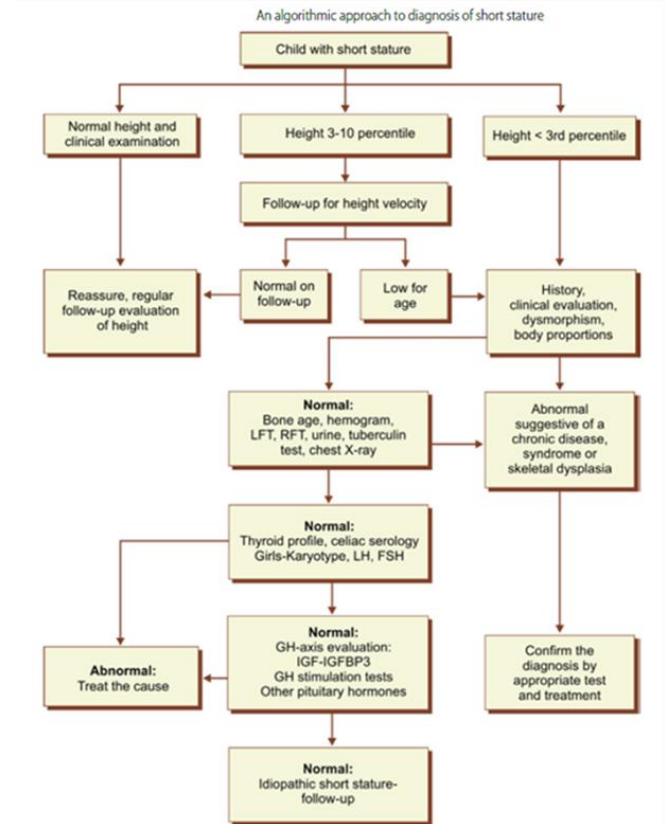
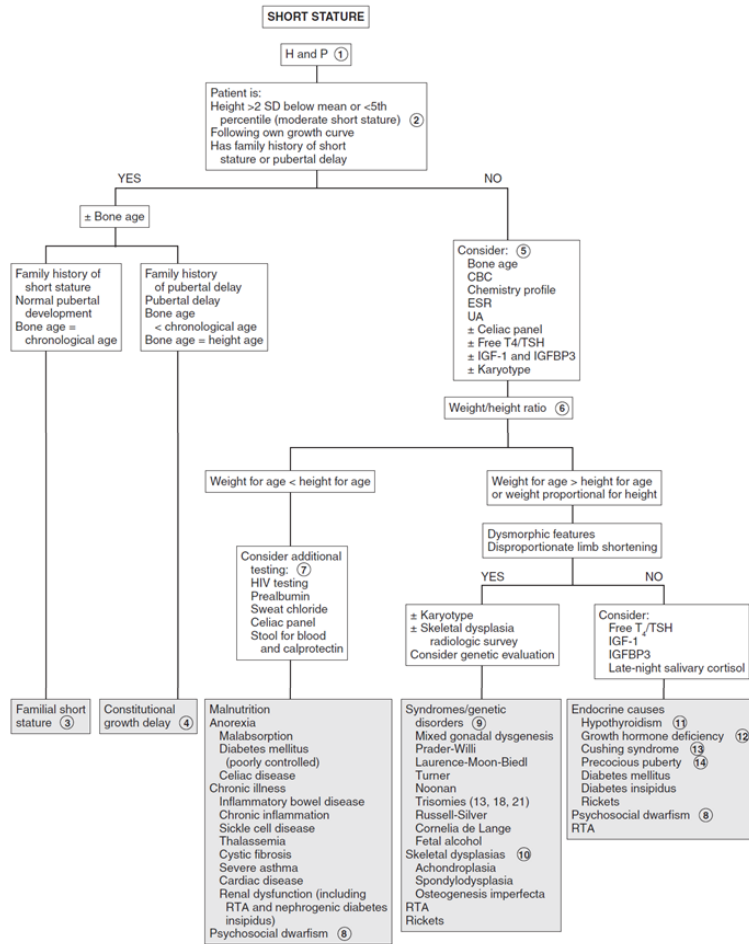
Associated symptoms:

- Presence of multiple systemic congenital abnormalities (dysmorphic features)
- Failure to thrive
- Chronic illness/ Malnutrition
- Recurrent respiratory infections
- Diarrhea/dysentery
- Joint pains and rash
- Recurrent hospital admission
- History of psychological abnormalities

There are two approaches for detection of short stature:

1. **Single Point Measurement:** SS is defined as height below -2 standard deviation (SD) for age and gender for the population or height below 2 SD of mid parental height (MPH).
2. **Serial Growth Monitoring:** Growth faltering is defined as downward crossing of two centiles on a growth curve.

Thus, all children with height below 3rd centile on the gender and population specific growth curve or who fail to grow appropriately shall need to be evaluated. At any given time, a poor growth velocity is a better indicator of growth disturbance than a single point measurement.



Investigations:

Full blood count	Anemia in inflammatory bowel disease, Celiac disease, renal failure and chronic illness
ESR	Inflammatory bowel disease and juvenile rheumatoid arthritis
Urea, creatinine, electrolytes and blood gas analysis	Occult renal failure, Bartter syndrome and renal tubular disorders
Calcium, phosphate and alkaline phosphatase	Metabolic bone disease, hypocalcemia in Celiac disease
Liver function test	Liver disease
Urine analysis	Occult UTI, diabetes
Stool analysis	Steatorrhea (malabsorption), parasites, occult blood, reducing substances
X-rays	Skeletal age
Skeletal survey	Disproportionate SS
Chromosome analysis/ karyotype	Turner syndrome
Antigliadin/antiendomysial or tissue transglutaminase antibody	Celiac disease
Thyroid function tests	Hypothyroidism
Growth hormone provocation test	Growth hormone deficiency
Early morning testosterone	Impending puberty in male
MRI brain	Pituitary/ hypothalamic lesion

Management

Medical care depends on the etiology of the short stature. A multidisciplinary approach with long-term monitoring should be considered

- Diet - Optimize nutrition with supplementation
- Celiac disease – gluten free diet with nutrient supplementation
- Endocrinological and genetic disorders - human recombinant growth hormone
- Insulin-like growth factor-I – indicated for long-term treatment of severe, primary insulin-like growth factor-I (IGF-I) due to mutations of the growth hormone receptor (GH-R) or GH-R downstream signaling pathways
- Constitutional growth delay – testosterone
- Tuberculosis - Antitubercular treatment along with nutrition
- Rickets – Vitamin D and C and phosphorus supplements
- Surgical care - Surgical care depends on the underlying cause of short stature. Brain tumors may require neurosurgical intervention, depending on the tumor type and location

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	Short stature
i. At the time of Pre-authorization	
Clinical notes showing vitals, examination findings, planned line of treatment and advice for admission	Yes
Investigations: Complete blood count, Erythrocyte sedimentation rate, Serum electrolytes, Liver function test, Kidney function test, Urine analysis, Stool analysis X-ray of left hand and wrist/X-ray elbow AP	Yes
Optional based on Etiology and availability Tuberculin test and chest X-ray, thyroid hormones (T4 and TSH), blood gas analysis, tests for celiac disease (anti-endomysial and transglutaminase antibodies), Serum IGF-1, Chromosome analysis and karyotype, growth hormone provocation test, MRI brain	Yes
ii. At the time of claim submission	
Detailed Indoor case papers (ICPs) with treatment details including Establishing diagnosis/clinical improvement	Yes

Detailed discharge summary	Yes
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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:

- I. Is the height documented less than 2 standard deviations below the mean for age? Yes
- II. Is there a h/o decreasing growth velocity documented in clinical notes? Yes

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

References

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3. Cohen P, Rogol AD, Deal CL, et al. Consensus statement on the diagnosis and treatment of children with idiopathic short stature: a summary of the Growth Hormone Research Society, the Lawson Wilkins Pediatric Endocrine Society, and the European Society for Paediatric Endocrinology Workshop. *J Clin Endocrinol Metab.* 2008;93(11):4210-4217. doi:10.1210/jc.2008-0509
4. BMJ Best practice. Assessment of short stature (last updated: Oct 05, 2018)
5. Albert J. Pomeranz, MD, et al. Pediatric Decision-Making Strategies. Second Edition (Elsevier Saunders). Chapter 67. Short Stature. Pg: 256
6. A Parthasarathy (Editor-in-chief). IAP Textbook of Pediatrics, Fifth Edition. Section 13: Endocrinology – 13.1: Disorders of growth: Pg 782