GENERAL PAEDIATRICS INPATIENT SCREENING TOOL

For paediatric patients, the Humpty-Dumpty Falls Risk Assessment Scale Chart (for facilities with licensing permission) or the Paediatric Falls Risk Assessment (PFRA) will be used as the screening tool.

Paediatric Falls Risk Assessment (PFRA)

Risk assessment using the Paediatric Falls Risk Assessment Scale (PFRA) will be done for all children** admitted to the wards:

- Between the age of more than 36 months and less than 18 years of age.
- On admission (at minimum), preferably following a significant change of neurological status or conscious level and following a fall.

**Patients attending outpatient appointments will not be assessed as the majority of patients will have a caregiver in attendance at all times.
Refer to **Appendix 3** for Paediatric Falls Risk Assessment Scale (PFRA).

HOW TO USE THE PAEDIATRIC FALLS RISK ASSESSMENT (PFRA) SCALE

Scoring for the **Paediatric Falls Risk Assessment (PFRA) Scale Chart consists of 7 parameters:**

1. Age (4 Marks)
2. Gender (2 Marks)
3. Diagnosis (3 Marks)
4. Fall History (3 Marks)
5. Environmental Factors (2 Marks)
6. Surgery / Sedation / Anaesthesia (3 Marks)
7. Medication Usage (3 Marks)

The range of scores is 7–20 (minimum score of 7 and maximum score of 20) and fall risk will be graded into 2 categories which are:

1. **Low Fall Risk (total of 7 to 11 marks)**
2. **High Fall Risk (total of 12 and above marks)**

Table below explains the details of each parameter.

Parameter	Definition
Age	The chronological or developmental age of the patient.
Gender	A choice of male or female. For gender which does not fall in the aforementioned categories, 1 mark will be given.
Diagnosis	Symptoms or diagnosis that increase the likelihood of fall for the patient. If a patient with multiple comorbid and diagnosis, score will be given according to the diagnosis with highest marks for the patient. For example, if the child admitted for epilepsy/seizure with underlying behavioural disorder, the scoring will be 3 (according to neurological diagnosis). Examples of diagnosis for the parameter (not limited to examples given): • **Neurological Diagnosis:** seizure, head trauma, hydrocephalus, cerebral palsy, etc. This includes patients being worked up for neurological diagnosis. • **Psychiatric/ Behavioural disorders:** includes impulse control disorders, attention-deficit/hyperactivity disorder and mood disorders (Major Depression Disorder, Bipolar Disorder). • **Other Disease:** anything that doesn't fall into the previous categories for example acute bacterial tonsilitis.
Fall History	**History of Falls** within the past 3month prior assessment. Non-injurious developmental fall are excluded.
Environmental Factors	**Using aids:** patient uses assistive devices, which includes but not limited to crutches, walkers, canes, splints (such as leg splint or ankle brace) and or any devices that limits the patient movements such as IV line and stand.
Surgery / Sedation / Anaesthesia	The parameter assesses the child risk according to recent surgery / sedation/anaesthesia that the child received within a certain period of time. Highest mark (3 marks) is given if patient undergone such procedure within 24 hours, 2 mark is given if it is between 24-48 hour and the rest is 1 mark. This does not include bedside procedures without anaesthesia.

Parameter	Definition
Medication Usages	The parameter assesses the child risk according to medication usage that might cause an alteration level of consciousness or affect cognitive awareness of the child. Risk is higher with multiple usage of such medications. Example of medication: sedatives (excluding ICU patients that are sedated and paralyzed), hypnotics, barbiturates, phenothiazines, laxatives, diuretics, hypoglycaemic agents and antihistamine.

Table 1: Paediatric Falls Risk Assessment parameters descriptions

5.3 INPATIENT PEDIATRICS PREVENTION AND INTERVENTION FOR PATIENT FALL

PREVENTION

In general, falls in children can be managed according to adult population guidelines, with special considerations. An inpatient paediatric falls prevention program is divided into 3 categories:

- **Primary prevention (general prevention)**

  All children admitted in a healthcare facility are at risk of falls. To prevent such incidents, a primary prevention approach should be taken to minimize risk for every patient admitted to the facility and will follow the *low-risk standard protocol*. Actions to minimize the risk and hazards of falls will be the same as that of the adult population.

- **High risk populations**

  All admitted infants and toddlers up to 36 months of age are considered at high risk for falls. Screening is not required and the *high-risk standard protocol* should be instituted**.**

Designated high risk areas

Children who are receiving care in certain in-patient and outpatient areas which are deemed to be at higher risk of fall include the:

- Paediatric Intensive Care Unit (PICU)
- Emergency Department
- Surgical wards
- Occupational and physical therapy treatment areas
- Ambulatory clinics
- Play area or play room

These are defined as locations whereby the majority of children receiving care in these areas would be scored into the high-risk category or the equipment, environment and procedures carried out in these areas contribute to a high risk of falls.

PAEDIATRIC FALLS SCALE RISK AND ACTION PLAN

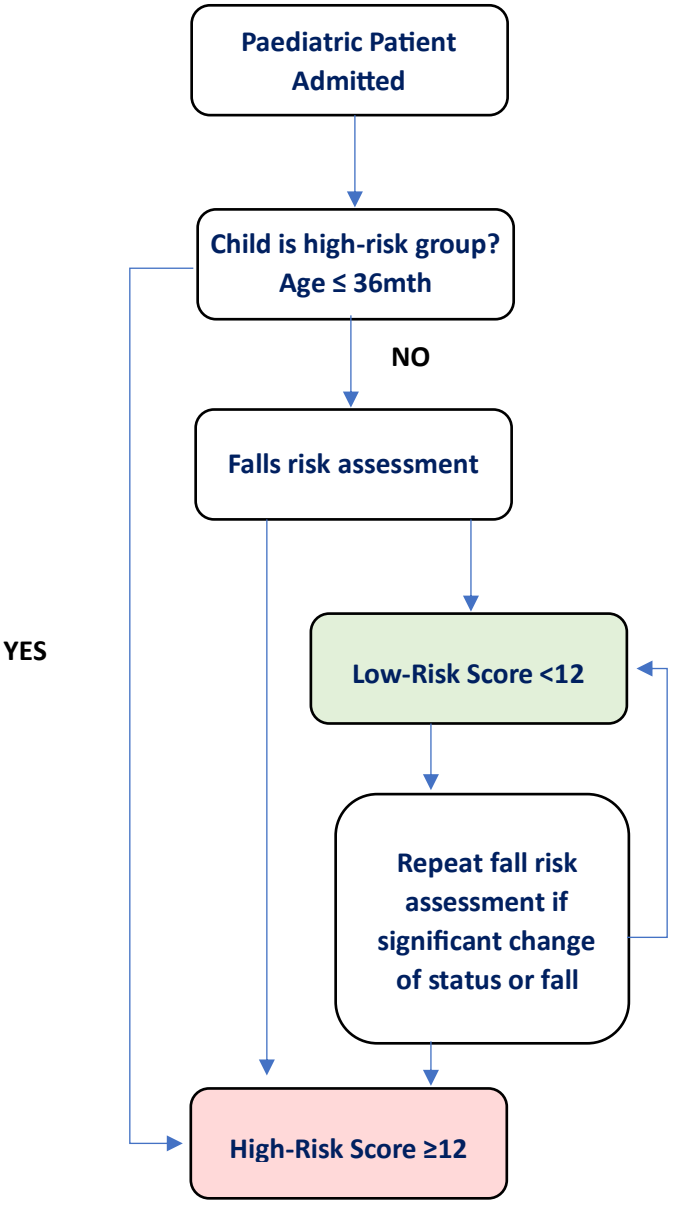
RISK	ACTION
Low risk standard protocol (score 7-11)	1. Identify patient using a wrist band and sticker, signage at cot/ bed and in patient chart. 2. Orientate the caregiver and/or patient to the ward and cubicle 3. Educate the caregiver and/or patient on falls and falls prevention protocols 4. Place the bed in a low position with the brakes on 5. Raise the side rails especially if the child is left alone on the cot 6. Assess large gaps that would allow an extremity of the patient to slip through or become entrapped as this may necessitate the use of additional safety measures 7. Ensure that the call bell is within reach and educate the caregiver and/or patient on its function. 8. Clear the environment of unused equipment. Other non-medical equipment should be hazard-free. 9. Assess for adequate lighting. A night light should be left on at night 10. Preferably use non-skid footwear for ambulating children. Use appropriate-sized clothing to prevent tripping 11. Ensure that caregivers supervise their children at all times. Caregivers must inform the nurse on duty if he or she is leaving the patient alone, even if it is for a few minutes. 12. Document falls prevention education and include in the nursing plan
High risk standard protocol (score ≥12)	1. Identify patient with an ID band on the patient (sticker) and signage on the bed and in patient chart 2. Educate the caregiver and/or patient on falls and falls prevention protocols 3. Monitor the high-risk patient closely 4. Place the patient in a developmentally-appropriate bed 5. Consider moving the patient closer to the nurses' station 6. Keep the bed in the lowest position with the brakes on, unless patient is directly attended 7. Raise the side rails at all times 8. Make sure that protective barriers are available to close off spaces and gaps in bed and railings. 9. Remove all unused equipment around the patient's bed. 10. Always keep the door open unless there is a specific isolation precaution in place 11. Ensure that the patient is accompanied during ambulation 12. Ensure that caregivers supervise their children at all times. Caregivers must inform the nurse on duty if he or she is leaving the patient alone, even if it is for a few minutes. 13. Review the medication administration schedule 14. Document in nursing plan

Table 2: Paediatric Falls Scale Risk and Action Plans

The risk assessment and action plan must be communicated to the parents, passed over at every shift and documented in the nursing plan.

FLOWCHART FOR PAEDIATRIC INPATIENT FALLS PREVENTION

CONDITIONS	ACTIONS
Primary Prevention (General Prevention)	• Ensure steps to mitigate the risk and hazards of falls are undertaken (e.g., safety of the environment/ward) • Implement primary prevention strategies (low-risk standard protocol) • Provide falls prevention information (e.g., brochures, leaflets) for patients and their families.



- Orientate and educate the child and their family regarding the falls prevention programme. Use audio-visual aids if available.
- Use the Paediatric Falls Risk Assessment Scale (PFRA).
- Continue implementing primary prevention strategies (low-risk standard protocol)
- Implement high-risk standard protocol.
- Communicate high falls risk assessment at each shift change or transfer of care to other healthcare providers.

Figure 1: Flowchart for Paediatric Inpatient Falls Prevention

Appendix 3: Paediatric Fall Risk Assessment (PFRA) Chart

KEMENTERIAN KESIHATAN MALAYSIA

PAEDIATRIC FALL RISK ASSESSMENT (PFRA)

MINISTRY OF HEALTH MALAYSIA

Name : Age :

RN No. : Ward :

PARAMETER	DATE							
	TIME							
AGE	SCORE	SCORE	SCORE	SCORE	SCORE	SCORE	SCORE	SCORE
<2 years old	4							
2 to 5 years old	3							
5 to <12 years old	2							
≥ 12 years old	1							
GENDER								
Male	2							
Female / Others	1							
DIAGNOSIS								
Neurological Diagnosis	3							
Behavioural Disorder	2							
Other Disease	1							
FALL HISTORY								
≥3 Falls over past 3mth	3							
1 – 2 Falls over past 3mth	2							
No Fall	1							
ENVIRONMENTAL FACTORS								
Using aids (e.g., IV Line, wheelchair and IV Stand)	2							
Not using aids (e.g., IV Line, wheelchair and IV Stand)	1							
SURGERY / SEDATION / ANAESTHESIA								
< 24 Hours	3							
24 – 48 Hours	2							
≥ 48 Hours or none	1							
MEDICATION USE SUCH AS : SEDATIVES , BARBITURATES , HYPNOTICS , PHENOTHIAZINE , LAXATIVES , DIURETICS , HYPOGLYCEMIC AGENTS , ANTIHISTAMINES								
≥ 2 of the medications	3							
One of the medication	2							
None of the medication	1							
TOTAL SCORE								
NAME & SIGNATURE								

* Low Fall Risk = 7 – 11 (initiate low risk standard protocol)
* High Fall Risk ≥ 12 (initiate high risk standard protocol)