RISK ALERT

ISSUE 74 Jul 2024

A Risk Management Newsletter for Hospital Authority Healthcare Professionals

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OPENING MESSAGE

Promoting Patient Empowerment in Patient Safety & Risk Management

According to the information of patient safety provided by the World Health Organization (WHO) on 11th September 2023, around 1 in every 10 patients is harmed in health care and more than 3 million deaths occur annually due to unsafe care. More importantly, above 50% of harm is preventable; half of this harm is attributed to medications. Promoting Medication Safety in health care can protect patients from avoidable harm and lower risks of factors leading to patient harm.

There are multiple factors that can lead to patient harm caused by medication incidents. Very often, more than one factor is involved in any single medication incident. The contributing factors may include system and organizational factors, technological factors, human factors and behavior, patient-related factors and external factors.

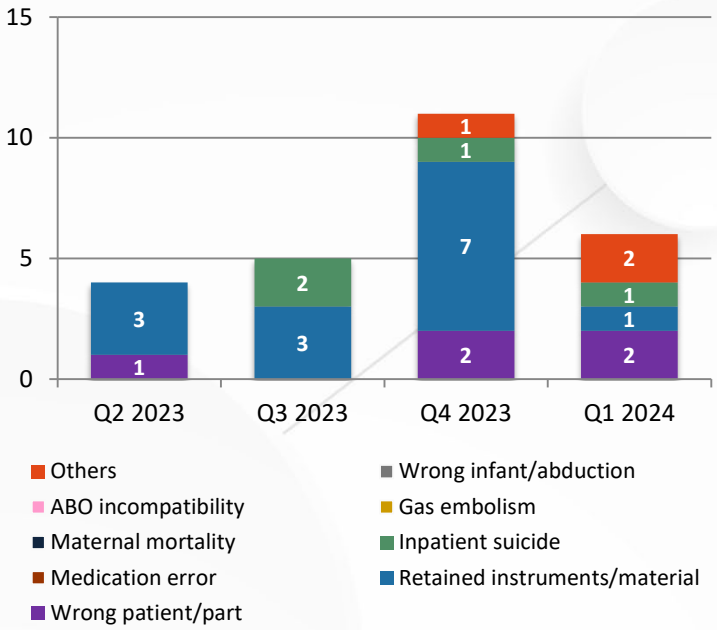
For promoting medication safety strategies, I strongly believe that "**Patient Empowerment**" positively affects medication safety and reduces health care risks. Drug information is fundamental to the process of patient empowerment and improving health literacy. Open and transparent communication and access to a patient's own drug related information is a key driver of patient empowerment. A partnership approach should be adopted to balance healthcare professional expertise and patient preference.

The empowerment process is almost sharing both information and knowledge to set new treatment plan and learn from each other. It is the time to take action towards change and better outcomes for all patients.

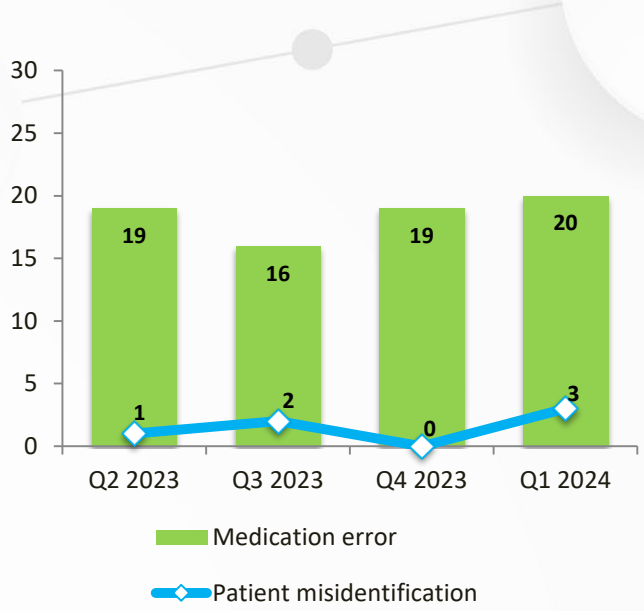
Mr CHUI, Chun Ming William
Chief Pharmacist, HAHO

SE & SUE STATISTICS

Distribution of SE in the last four quarters



Distribution of SUE in the last four quarters



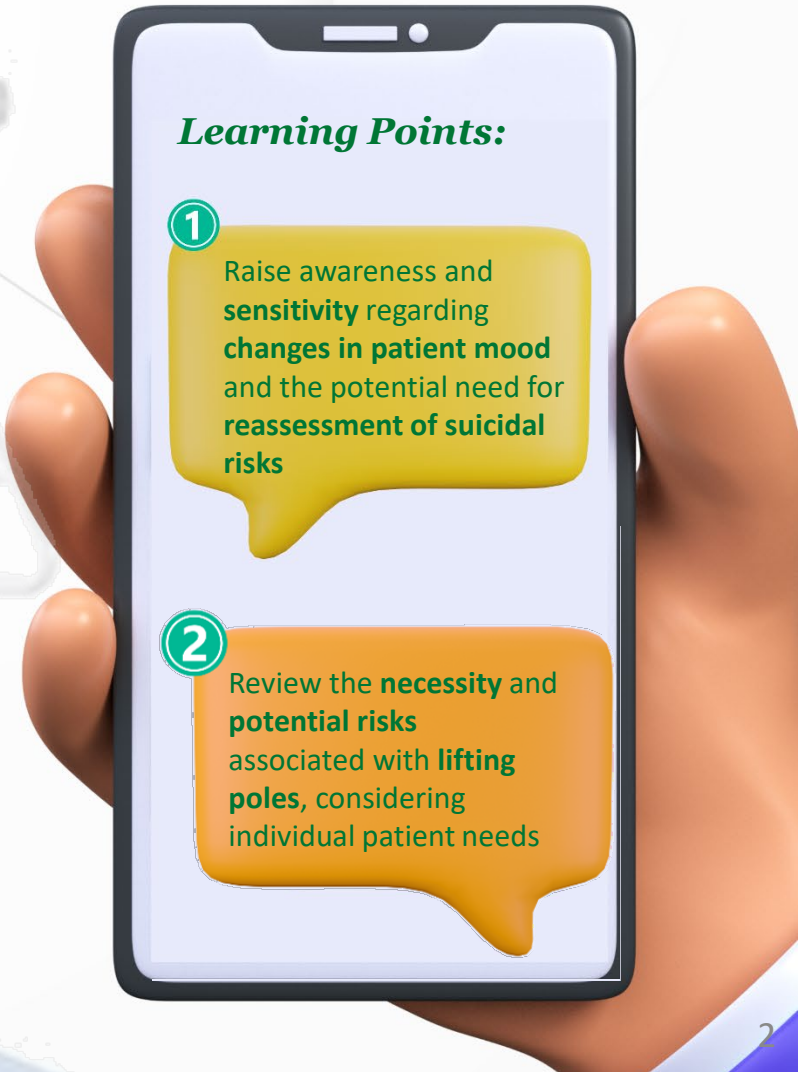
SENTINEL EVENTS

In-Patient Suicide

A patient with newly diagnosed stage 3 myeloma was admitted for chemotherapy. The patient had no previous history of psychiatric illness, and his emotional state was assessed as stable upon admission. Suicidal assessment indicated no risk. No signs of depression were observed and psychological support was provided by the cancer case nurse.

During the stay, the patient experienced moderate pain from myeloma. A multidisciplinary team was involved in the patient's care and pain management.

A week after admission, the patient requested clothes and privacy for a bed bath. The curtains were closed for privacy. Shortly afterwards, the patient was found hanging using a strap of his own handbag from the lifting pole on his bed. Resuscitation attempt was unsuccessful.



Retained Material

Drill Bit

A patient underwent open reduction and internal fixation for right coronoid process fracture with subluxation.

An on-loan instrument set containing drill bits was used. A 1.6mm drill bit was installed without inspecting the tip. Intraoperative X-rays initially did not reveal any foreign bodies.

An instrument count was performed without cross-checking, verifying the quantity without assessing integrity.

Upon review, a metallic spiral strip was found retained in the medullary cavity of the coronoid process. The patient opted for conservative treatment.

Learning Points

1. Explore feasibility of using single-use drill bits, particularly those **with small diameters (≤2.5mm)** to prevent risk of breakage
2. Enforce strict compliance with **instrument integrity checks** during operations, followed by clinical supervision and audit
3. Enhance alertness on **reviewing intraoperative X-ray images** in identification of possible foreign bodies

Wrong Patient/ Body Part

Lignocaine & Talc were injected to wrong side

A patient with metastatic prostate cancer was admitted for dyspnea. Bilateral chest drains were inserted.

LEFT side Pleurodesis was planned for the patient to be carried out at bedside. 1% Lignocaine (10mg/ml) 10ml intrapleural and Talc 2 grams intrapleural cavity over the **LEFT** side was prescribed on IPMOE. A consent form indicating the **LEFT** side was signed, and subsequently, the medications were injected into the patient's **RIGHT** chest drain at the patient's bedside. The patient remained stable.

Learning Points

Reinforce the practice of using **Bedside Procedure Safety Checklist** for pleurodesis procedure

Cervical plexus block was performed on wrong side

A patient with **LEFT** clavicle fracture underwent open reduction and internal fixation under general anesthesia (GA). In the operation theatre, the "SIGN IN" and "TIME OUT" checking procedure were performed with the confirmation of patient identity, consent form and surgical site marking.

The anesthetist draped at **RIGHT** side of patient's neck while an injection trolley and an ultrasound machine were also placed near the **RIGHT** side of the patient. After completion of the injection, the surgeon discovered that the regional block was performed to the **RIGHT** instead of **LEFT** side of patient's neck. **LEFT** cervical plexus block was immediately performed. The patient underwent the operation uneventfully.

1. Reinforce the **practice "Stop before you Block":** Anesthetist initiates checking process with another assistant
2. Include **"TIME OUT" of regional block** in Surgical Safety Checklist

Disconnected ventilator

A patient with history of pulmonary tuberculosis was admitted for shortness of breath. He was later transferred to Intensive Care Unit (ICU) due to septic shock and required mechanical ventilation. After treatment, the patient was transferred to an isolation ward due to the infectious risk. The patient was conscious and upper limbs were restrained to prevent body movement from causing disconnection with the ventilator tubing and intravenous lines. Staff left the room after checking vital signs and ventilator functions.

Around 40 minutes later, the patient was found unconscious with ventilator tubing detached. The tubing was immediately reconnected. The patient subsequently returned to spontaneous circulation after resuscitated.

How did it happen	How can we prevent
1. Alarm detection: Visual and audible alarms from ventilator and bedside monitor could not be detected by staff outside the isolation room due to closed double doors	Improve alarm systems for ventilators and monitors
2. Cross-checking: Lack of clear cross-checking mechanism to ensure normal functioning of monitoring equipment	Develop a **cross-checking mechanism** for life-supporting equipment and monitoring systems to ensure effective continuous patient monitoring
3. Monitoring Challenges: The distance between the central monitoring system and the nurse station, along with the system displaying multiple data sets from life-supporting equipment, made it difficult for staff to notice real-time changes and disconnections	Improve **design of user interface and location of the central monitoring system** Consider **capnography** monitoring for ventilated patients both at the bedside and in the **central monitoring system**

Specimen Contamination

Patient A had endometrial sampling for post-menopausal bleeding, while **Patient B**, diagnosed with endometrial cancer, had a vaginal biopsy on the same day. Both specimens were sent to the same laboratory.

During the processing of **Patient B**'s biopsies, a piece of tissue was unintentionally thrown off and landed on an unused mould. This mould was subsequently used to hold **Patient A**'s biopsy, leading to contamination.

Laboratory staff suspected there might have been a discrepancy between the biopsy fragments and the recorded gross description, the apparent discrepancy was considered within an acceptable range and the procedure was continued with further follow-up.

Patient A's biopsy report indicated carcinoma leading to a total hysterectomy with bilateral salpingo-oophorectomy and pelvic lymph node sampling. Following surgery, no carcinoma was found in the pathological examination. Genetic testing further confirmed the specimen contamination.

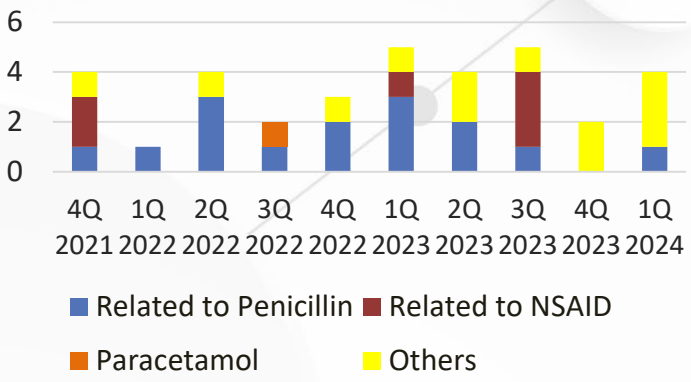
Learning Points

1. **Minimise Contamination:** Cover the chamber housing unused moulds and place unused moulds **bottom-up** to minimise contamination
2. **"One Case, One Mould" Practice:** Ensure only one new mould is on the platform at a time during embedding procedure
3. **Training and supervision:** Conduct audits on embedding Standard Operating Procedures, emphasising on checking specimen descriptions against actual specimens before embedding
4. **Risk Mitigation Guidelines:** Establish specific guidelines on risk mitigation in managing laboratory events, including handling suspected contamination; and managing discrepancies in tissue samples
5. **Macroscopic Description System:** Improve the current system for macroscopic description of sampling with well-defined parameter to enhance traceability of specimen size
6. **Effective Communication:** Ensure explicit descriptions of possible abnormal situations in the laboratory to facilitate effective communication between staff and escalation of follow-up actions when necessary

SERIOUS UNTOWARD EVENTS

Of the 23 SUE cases reported in 1Q 2024, 20 cases were related to medication errors, including known drug allergy (KDA) (4), anticoagulants (3), chemotherapy agents (1), dangerous drugs (2), vasopressors and inotropes (3), insulin (1) and others (6).

Number of KDA cases (4Q 2021 – 1Q 2024)



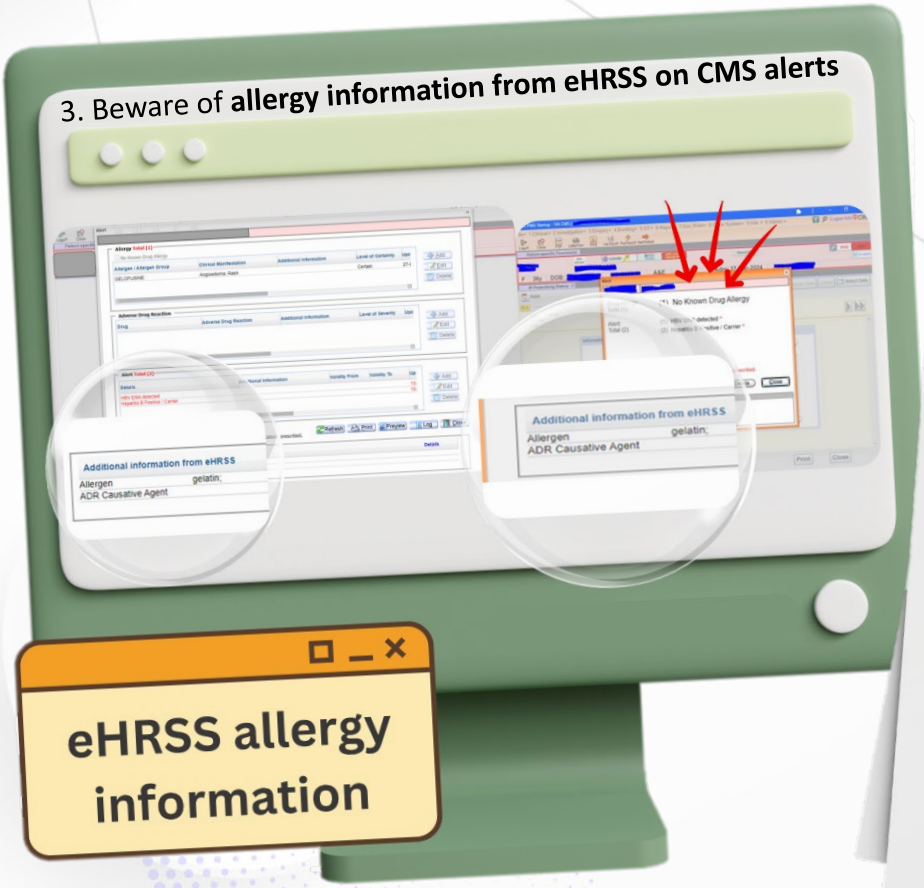
Known Allergy	Allergen prescribed
Gelofusine	Gelofusine
Ampicillin and Cloxacillin	Tazocin
Mydrin P	Mydrin P
IV Fluorescein Dye	Fluorescein sodium ophthalmic strips

Special reminders on preventing medication incidents related to **Known Drug Allergy**

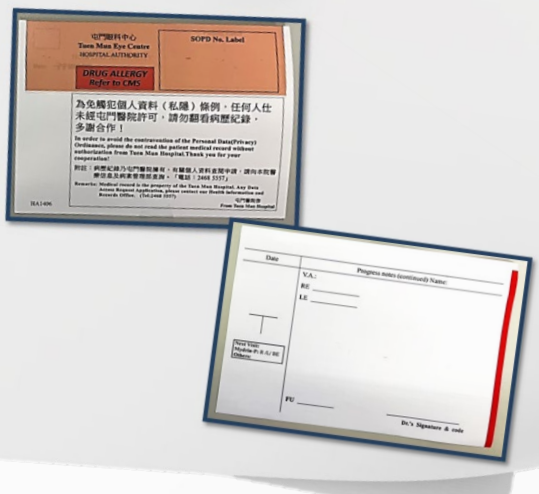
1. **Avoid free-text allergen entry** on Clinical Management System (CMS)

2. Promulgate **Electronic Health Record Sharing System (eHRSS) integration in CMS** for drug allergy information and emphasise medication decision support checks

3. Beware of **allergy information from eHRSS on CMS alerts**



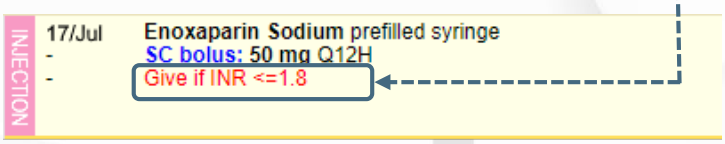
4. For paper records:
Modify the existing design of patient's paper patient record into allergy and non-allergy version, e.g. use cover with red colour borders for patients with drug allergy



Medication Errors - Enoxaparin & Insulin

An unnecessary dose of **Enoxaparin** was administered

- A patient with chronic rheumatic heart disease was prescribed **Enoxaparin** on IPMOE with **free text reminder**:



- A nurse administered Enoxaparin **without checking the patient's INR**. When the **patient inquired about the latest INR level**, the nurse proceeded with injection without confirmation. It was later found the patient's INR was **3.0**. The patient remained stable.

Learning Points

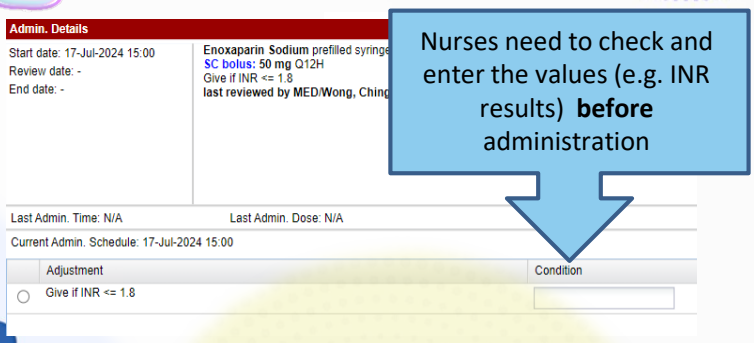
1

Prescribe medication using **CONDITION** function on IPMOE if applicable

IPMOE Feature
Prescribe/Administer Drugs with CONDITION

2

Reinforce the importance of complying with the Guidelines on Administration of Medication:



Nurses need to check and enter the values (e.g. INR results) **before** administration

3

Patient is a team member on safe use of medication.

Double check if patients enquire / raise any doubt about the drugs to be administered

A dose of incorrect **insulin** was administered

- A diabetic patient was prescribed insulins Tresiba Flextouch and Novorapid
- A nurse prepared Novorapid administration alone
- The nurse checked the medication name "Novorapid" displayed on the In-patient Medication Order Entry (IPMOE) system against the label on the **drug bag**, which **coincidentally contained a misplaced Tresiba insulin pen**
- When the **patient inquired about the insulin being prepared**, the nurse proceeded with injection without addressing the enquiry
- The incident was discovered when the patient informed case nurse that incorrect insulin had been administered. The patient remained stable.

1

Verify the medication by **checking the actual physical drug item and its printed information**, rather than relying solely on the dispensing label on the storage bag

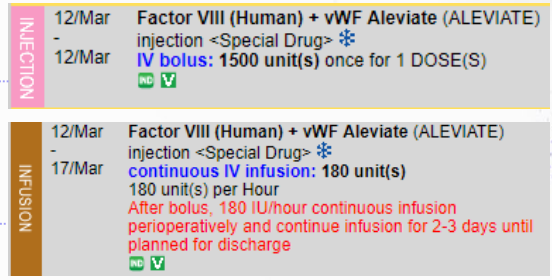
2

Strengthen the practice of **independent double checks** during medication administration, especially for high-alert medications

Medication Errors – Factor VIII (FVIII) -Von Willebrand Factor (VWF) Combination Product (Aleviate®)

Underdose of Factor VIII was given to a patient

- A patient with a history of hemophilia A (FVIII 5%) presented with acute cholecystitis and cholangitis. Endoscopic Retrograde Cholangio-Pancreatography (ERCP) was urgently scheduled
- Hematology Dr A suggested "**Aleviate® -- 1500 units IV bolus once, then 180 units per hour IV infusion**"
- 1 vial of Aleviate® (500 units of FVIII and 1000 units of VWF) for IV bolus and 3 vials of the same preparation per day for infusion were dispensed and administered with wrong quantity

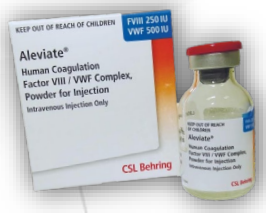


- After undergoing laparoscopic cholecystectomy, the patient was noted to have bleeding and hypotension
- Hematology Dr B identified only a third of intended FVIII dose had been administered
- A new Aleviate® dose (2000 units of FVIII IV bolus once, then 180 units of FVIII per hour IV infusion) was prescribed and correctly administered

Only a third of intended Aleviate® dose was dispensed and administered

Learning Points

- **Understand FVIII-VWF Combination Products in HA: Aleviate® and Biostate®**
  Currently, two types of FVIII-VWF combination products are available under HA Drug Formulary:



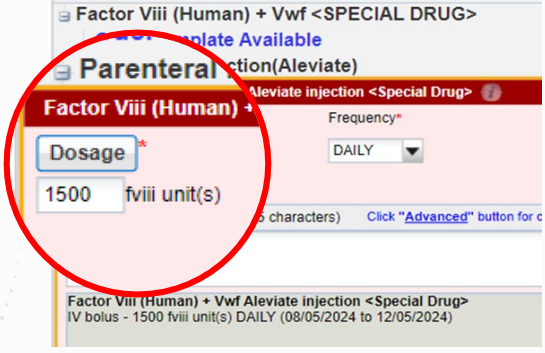
Product	Available strength(s)
1. Aleviate®	500 units of FVIII and 1000 units of VWF
	250 units of FVIII and 500 units of VWF
2. Biostate®	250 units of FVIII and 500 units of VWF

- **Prescribing Dosage**
  Prescriptions should clearly specify the **FVIII content** for accurate dosage dispensing and administration

- **Dispensing and Administration Quantity**
  For the prescription of "**Aleviate® -- 1500 units of FVIII IV bolus once, then 180 units of FVIII per hour IV infusion** ", the correct quantity to be dispensed and administered should be:
  - ✓ **3 vials of Aleviate®** (each containing 500 units of FVIII and 1000 units of VWF) **for IV bolus**; and
  - ✓ **9 vials** (same preparation) **per day** for **IV infusion**

- **System Enhancement (Effective from June 2024)**

For Aleviate & Biostate	Before	New System Behavior
Prescribing & Dispensing Unit	Unit(s) 單位	FVIII unit 凝血單位



LOCAL SHARING

Enhancing Bedside Procedure Safety for Paediatrics Patients

The HA has commissioned an Expert Review Panel (The Panel) to conduct a review of guidelines regarding the practice on Paediatrics bedside procedures. The Panel has provided a number of suggestions to enhance staff awareness.

These suggestions, drawn from our established clinical guidelines, aim to ensure that clinical teams consistently uphold the highest standards of care, safety, and support for all patients.

1 Communication & Consent

When performing bedside procedures for Paediatrics patients, clinical teams need to **explain the procedure to both the child and their parents in simple terms** and **obtain consent** from their parents, including the possible need to temporarily immobilize child's limbs or body parts for procedural safety.

2 Clinical Holding

If clinical holding is needed, **avoid airway obstruction or restriction of chest wall movement**. In some occasions, providing **information, encouragement, distraction, analgesia**, and, if necessary, **sedation** might help prevent the need for holding the child. The child's **head position and chest respiratory excursion need to be frequently checked** to ensure airway patency. The child should **never be left unattended** and it is important to implement **fall prevention measures** for high-risk patients.

3 Procedural Sedation & Monitoring

Staff should be alerted for **potential complications** such as impaired respiration and circulation, skin breakdown, or psychological distress. Enhanced **patient monitoring** during bedside procedures is key, and **procedural sedation with close monitoring** should be considered when appropriate.

4 Training

Strengthening staff training through methods such as **train-the-trainer simulation or e-learning modules** is valuable for improving the safety of performing bedside procedures in pediatric patients.