



# RISK ALERT

ISSUE 69 APR 2023

A Risk Management Newsletter for Hospital Authority Healthcare Professionals

## IN THIS ISSUE

### Sentinel Events (SEs) (4Q 2022)

- ❖ Retained Instruments / Material
- ❖ In-Patient Suicide

### Serious Untoward Events (SUEs) (4Q 2022) Local Sharing

- \* Innovative practices and measures to enhance safety of Pharmaceutical service in HA
- \* Allopurinol Safety



## Opening Message

### *Staying Committed to Transparency and Learning*

At HA, we are committed to providing the highest level of care to our patients. To uphold these high standards, we need to be open towards clinical incidents, and take steps to learn to prevent similar events from happening in the future.

The success of open disclosure and Root Cause Analysis (RCA) investigation hinges on a blame-free culture. In order to build a robust safety system within healthcare, it is important to have an environment where incident reporting and investigation are conducted openly, without fear of retribution or legal repercussions. While it is a fine juggle between creating a blame-free culture and having effective regulations to safeguard clinical practices, that ensures fairness to both the public and the professionals, we must ourselves not waver in our commitment to transparency and obligation to improve care.

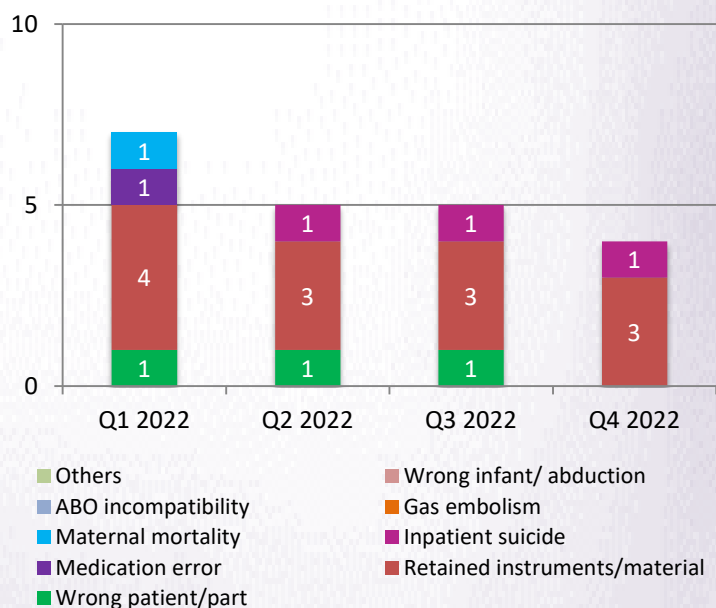
Navigating this moral and professional dilemma is not easy. We will actively explore ways to conduct RCA in a manner that protects the legal rights of our staff while maintaining transparency and promoting learning.

Accountability and “just culture” are our core values in handling clinical incidents. We should be steadfast to these values for us to continuously provide high-quality care for our patients and rewarding experience for our own practice.

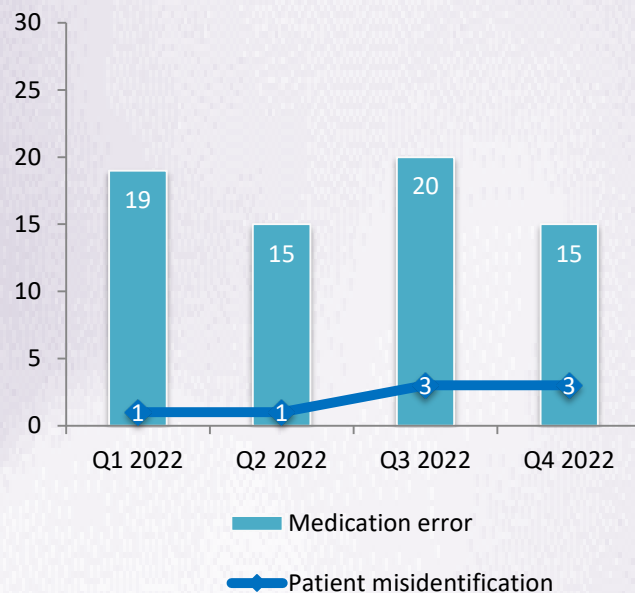


**Dr Michael WONG**  
Director (Quality & Safety), HAHO

## Distribution of SE in the last four quarters



## Distribution of SUE in the last four quarters



## Sentinel Events

### Retained Material

#### Rubber Tube of Tension Stitch

A patient underwent emergency surgery for an umbilical hernia with obstruction in 2020. Post-operatively, the laparotomy wound was opposed by tension stitches at interval. The written and graphical documentation of the wound was not consistent, and the exact number of stitches and rubber tubes used were not written down in patient's notes.

The patient was discharged with daily wound care but later developed enterocutaneous fistula with communication to small bowel. The patient underwent surgery for incisional hernia repair, and a rubber tube (Figure 1), from previous tension stitch, was found within the fistula.



Figure 1. Rubber tube

#### Areas for Improvement Identified:

1. Remove all tension stitches once tension of wound is relieved
2. Clearly document the number of tension stitches and rubber tubes used especially if they are not removed before discharge
3. Take clinical photo for effective communication and documentation
4. Enhance staff awareness and training on tension stitches and closed-loop communication

## Metallic Fragment

In October 2022, a patient underwent closed reduction and intramedullary nailing for a right hip fracture. Five days later, the patient had another injury, this time with left hip fracture. The operation proceeded on the left hip without any complication. An X-ray taken intra-operatively showed no abnormality. All instruments used during the procedure were checked and found to be intact.

In an X-ray taken on postoperative Day 2, a 1.3mm metallic fragment was discovered at the nail-blade junction (Figure 1). The fragment did not require surgical removal. The patient's post-operative recovery was well.

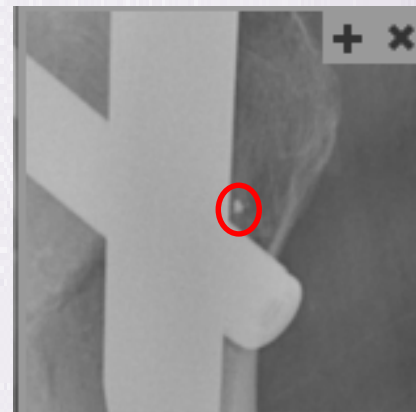


Figure 1. Metallic fragment on X-ray taken on Day 2

### Learning Point

- X-ray taken in the operating theatre was mainly used to confirm alignment. It might not be easy to identify tiny metal fragments at this stage.

## Femoral Sheath for Temporary Pacemaker

In October 2022, a pacemaker-dependent patient was admitted for pacemaker replacement. Temporary trans-venous pacing was performed through the right femoral site. The permanent pacemaker replacement was successfully carried out, the temporary pacing was switched off with removal of the temporary pacing wire. Circulating nurses secured the femoral site wire sheath, intended for later removal, with Tegaderm. The removal of the patient's right femoral sheath was then handed over to a cardiac catheterisation laboratory (CCL) nurse.

The CCL nurse next handed over care of the patient to a ward nurse along with the postoperative order and a CCL procedure checklist. The scrub nurse indicated "No" for "Sheath in-situ" on the postoperative checklist (Figure 2).

The patient was subsequently discharged to an Old Age Home (OAH). An OAH staff noticed a "tube" in the patient's right groin area. Back to the hospital, it was discovered that the femoral sheath was still at the right groin. The sheath was removed uneventfully.

### Areas for Improvement Identified:

1. Document the location and plan of care for the sheath on the operation record and pre-printed post-permanent device implementation order
2. Assign a leader and specify roles among nursing staff during the procedure in CCL to ensure continuity of care and communication
3. Remove venous sheaths early in the CCL recovery area if possible
4. Enhance communication and documentation within the care team, including doctors, nurses, and supporting staff

| <b>Part III SIGN OUT (Please indicate with <input checked="" type="checkbox"/> on items checked &amp; verified)</b> |  |  |   |
|---|--|--|---|
| Patient Identification  |  | <input type="checkbox"/>                     |   |
| Correct counting of instrument, needles, and gauze / sponge   | <input type="checkbox"/> Yes           | <input type="checkbox"/> NA                  |   |
| Integrity of the equipment and instrument   | <input type="checkbox"/> Yes           | <input type="checkbox"/> NA                  |   |
| Correct labelling and sending out of specimen   | <input type="checkbox"/> Yes           | <input type="checkbox"/> NA                  |   |
| Pressure dressing to wound  | Rt / Lt                                | <input type="checkbox"/> wrist               | <input type="checkbox"/> groin <input type="checkbox"/> upper chest |
| Upper / Lower Limbs' pulse  |  | <input type="checkbox"/> Rt present / absent | <input type="checkbox"/> Lt present / absent                        |
| Haematoma   | <input type="checkbox"/> Yes           | <input type="checkbox"/> No                  |   |
| Size _____ Sheath in-situ   | <input type="checkbox"/> Yes           | <input type="checkbox"/> No                  |   |
| Post intervention management plan written   | <input type="checkbox"/> Yes           | <input type="checkbox"/> No                  |   |
| Post-operation transfer to  | <input type="checkbox"/> Original ward | <input type="checkbox"/> CCU                 | <input type="checkbox"/> Other _____                                |
| Hospital notes / X-ray / ECG to ward  | <input type="checkbox"/> Yes           | <input type="checkbox"/> No                  |   |

Figure 2. CCL procedure checklist

## In-Patient Suicide

A patient with metastatic breast cancer was admitted for symptomatic anaemia. Due to her immunocompromised state, she was placed in reverse isolation. Palliative care team was referred. "Do Not Attempt Cardiopulmonary Resuscitation" (DNACPR) order was agreed upon by both the patient and her relative. The following day, a medical social worker (MSW) assessed the patient. She appeared calm and showed no signs of suicidal ideation but expressed concern about her daughter's care. Three days later, the patient was found hanging from an electric cable in her isolation room (Figure 1 & 2) and had passed away.

### Areas for Improvement Identified:

- ❖ Environmental safety enhancement
  - Explore installation of anti-ligature / concealed door drums / closers in isolation rooms to minimise ligature points
  - Minimise use of long cables in isolation rooms and secure them where possible
  
- ❖ Timely clinical handover among disciplines
  - Facilitate communication of assessment findings or suggested interventions through timely handover and documentation
  - For patients assessed to be at high risk of suicide, immediate verbal communication with ward nurse is recommended



Figure 1. Door drum/ closer in the isolation room

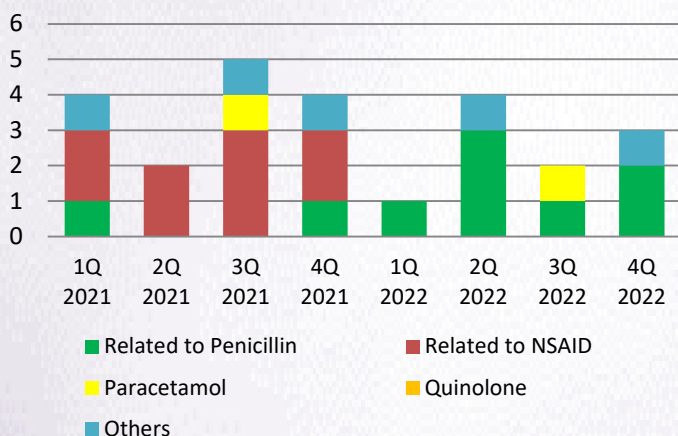


Figure 2. Electric cable from the blood pressure monitor

## 🩺 Serious Untoward Events

Of the 18 SUE cases reported in 4Q 2022, 15 cases were related to medication errors, including known drug allergy (KDA) (3), dangerous drugs (2), vasopressors and inotropes (1), anticoagulants (3), insulin (1) and others (5).

**Number of KDA cases (1Q 2021 - 4Q 2022)**



| Known Allergy    | Allergen prescribed |
|------------------|---------------------|
| Norvasc          | Norvasc             |
| Amoxicillin      | Augmentin           |
| Benzylpenicillin | Augmentin           |

# Patient Misidentification

To enhance staff awareness, this issue shall highlight some incidents related to patient misidentification.

## Case 1

A pack of discharge medication intended for Patient B was given to Patient A upon hospital discharge.

A nurse inadvertently placed Patient B's medication pack in Patient A's personal belongings without verifying her identity. The error was reported by a relative of Patient A and Patient A was subsequently readmitted to the hospital. Fortunately, her physical condition remained stable and she was discharged with a referral for community nursing services to supervise her drug regimen.

## Case 2

A laboratory report indicating low serum potassium level for Patient X was mistakenly placed in the medical record folder of Patient Y by a nurse. Based on this report, a doctor prescribed potassium supplements to Patient Y. The nurse failed to notice the error and administered the first two doses to Patient Y.

During handover to the night-shift nurse, the mistake was discovered and the third dose was withheld. Patient Y's blood potassium level rose to above normal level but her condition remained stable.

## Case 3

Patient C (Bed 11) was admitted to the hospital for over-warfarinization, and Patient D (Bed 10) was admitted for chest pain. Patient D was prescribed with Clexane subcutaneous (SC) injection of 50mg Q12H for 8 doses.

Without verifying the patient's correct identity and acknowledging the "not matched" alert on UPI device after scanning patient's wristband, a nurse mistakenly administered the Clexane injection to Patient C instead of Patient D. The error was discovered after the injection was given. Patient C's condition was assessed and closely monitored while the correct Clexane was administered to Patient D afterwards.

## Learning Points

- Ensure staff compliance with established procedures for correct patient identification
- Reinforce attention to detail and avoid assumption in all aspects of work
- Provide sufficient supervision and support to less experienced staff members



💡 確認病人身份 - IPMOE派藥篇 💡

IPMOE可以協助同事核對病人身份，確保藥物派俾正確病人✅。如果同事唔跟程序去scan咗手帶先派藥，又無核對清楚，就有機會派錯藥畀第二個病人! 😞

一齊重溫用IPMOE時確認病人身份嘅要點:

- 1 用開放式問題問病人身份，如「你叫咩名呀？」
- 2 核對手帶上嘅病人資料ID
- 3 用scanner"嗶"手帶
- 4 見到scanner顯示"Patient Match!"✅先好派藥👍
- 5 唔可以派咗藥先核對病人身份同scan手帶🚫

#CorrectPatientIdentification #CPI  
#你對咗病人身份未  
#MedicationSafety

17:42

(Credit to NTWC Q&S office)

## Case 4

Two patients were admitted to the breast centre for breast biopsies. The biopsies from both patients were processed into stained slides and sent to the pathologist for analysis.

Two sets of slides were likely placed in the same slide folder without proper patient identification during reporting. Subsequently, Patient A's slides were reported as "invasive carcinoma" instead of "no evidence of malignancy", while Patient B's slides were reported as "no evidence of malignancy" instead of "invasive carcinoma".

The incident was discovered when the surgeons noted discrepancy of the biopsy findings of the two patients.



Figure 1. Slide folder

### Areas for Improvement Identified:

1. Reinforce the importance of patient identification and cross checking the accession number printed on patients' laboratory request forms, slides and profiles during the reporting procedure
2. Develop a standard equipment list including barcode scanner and reporting computer for setting up a reporting workstation in the department

## Look-alike-sound-alike Drugs

An outpatient with a prolactin-secreting macroadenoma has been on **bromocriptine** with good compliance since 2015. In August 2022, the patient attended her regular endocrine clinic follow-up and was prescribed **bromocriptine** until her next follow-up. In December 2022, she developed amenorrhea and headache. It was then discovered that she had been dispensed the wrong drug - **bromhexine** instead of **bromocriptine**. The correct drug was resumed and the patient's condition stable upon review by an endocrinologist.

### Areas for Improvement Identified:

1. Reinforce the current procedures of drug dispensing with emphasis on verifying the identity of the picked drug
2. Relocate look-alike and sound-alike medications to distinct locations
3. Review the workflow and manpower arrangement especially during meal time and peak hours



## Innovative Practices and Measures to Enhance Safety of Pharmaceutical Service in HA

To cope with upcoming challenges in drug management, various corporate and local initiatives are ongoing to enhance the pharmaceutical service in HA, and to raise the standards in safety, efficiency and patient care.

### Development of Smart Pharmacy

Interfaced with the Inpatient Medication Order Entry System (IPMOE), the Automatic Medication Unit Dose Dispensing System (AMUDDS) allows multiple solid medicines of individual patients to be machine-packed into unit-dose bags for each time of administration. The unit doses are also automatically arranged in the order of administration time, thereby enhancing the speed and accuracy of drug administration.



The AMUDDS also generates ward stock oral solid medicines in the form of unit pack (one tablet/capsule per pack), which can be placed inside Smart Cabinets. Equipped with a biometric identification system, Smart Cabinets are fully automated dispensing machines providing controlled access to stock medications at any time in the clinical settings. An electronic platform was also developed to streamline drug requisition by ward staff.



Pharmacy logistics will also go paperless and automated for processes such as auto-storage and retrieval systems for dispensed medicines, Radio Frequency Identification (RFID)-based automated picking systems, and automated inventory management systems that can trace drug inventory in real-time to support supply chain logistics. Autonomous mobile robots (AMRs) are also being explored for effective store management as well as delivering drugs from pharmacy to ward in a secure and timely fashion.

### Clinical Pharmacy Services Development

Clinical Pharmacist is an integral member of the inter-professional healthcare team. Ward pharmacists actively participate in the review of patients' medications to optimise their drug regimen, facilitating discharge prescriptions, and provision of comprehensive medication management patient counselling. Clinical Ward Pharmacy service has already been implemented in medical wards of 13 acute hospitals. The service would continue expansion with a view to enhancing safe and effective medicine use, improving patient experience, and streamlining the medication use processes.

In the ambulatory care setting, integrated Pharmacist Clinic has been commenced since 2019. It is a protocol-driven, doctor-pharmacist collaborative practice to support management of specific chronic diseases or clinical conditions. Examples include management of patients on oral anti-coagulant therapy and oncology patients.

With the development of Tele-Health, Clinical Pharmacists can now interact with patients and their families on Tele-Pharmacy platform to assess patient's drug adherence and advise on proper drug use. In the near future, pharmacist consultation via tele-pharmacy will be further developed in enhancing patients' pharmacotherapy management.



This issue shall highlight the new system enhancements to improve medication decision support for allopurinol prescription and a newly developed patient information leaflet for patient education.

Allopurinol is a medication that works by reducing uric acid production. It is most commonly used to treat gout and prevent gouty attacks. It is also used to lower uric acid levels in cancer patients and treat certain kidney stones. While very safe to use under most circumstances, a very small number of patients may have allergic response to the drug and develop severe skin rash. Research has identified the HLA-B\*58:01 genetic marker as a risk factor of this allergy. Recent Expert Panel recommendation in HA suggest that patients undergo HLA-B\*58:01 testing before starting allopurinol treatment.

## 1 System Prompts Available in Prescribing Module

Following new recommendations in 2023, CMS system prompts are now implemented to enable doctors to verify a patient's HLA-B58:01 status prior to prescription. In the event that a patient is tested positive for HLA-B58:01, it is advised that clinical vigilance be exercised and alternative treatment options be considered. For new users of allopurinol whose HLA-B\*58:01 status is unknown, it is recommended that the test result be confirmed before proceeding with the prescription.

### HLA-B\*58:01 detected @ Corp Alert

Clinical Intervention  
**CAUTION for ALLOPURINOL TABLET**  
 Patient Specific Clinical Checking  
**HLA-B\*58:01 Contraindication Checking**  
 Positive HLA-B\*58:01 test result is detected in the system. This patient is at higher risk of developing severe cutaneous adverse reactions with use of **ALLOPURINOL TABLET** (e.g. Stevens-Johnson syndrome, toxic epidermal necrolysis). Please exercise clinical vigilance and consider alternative treatment.

Override alert    Do not prescribe

### Unknown HLA-B\*58:01 @ ePR + No Allopurinol Rx History / First Rx within 1 year

Clinical Intervention  
**CAUTION for ALLOPURINOL TABLET**  
 Drug Lab Checking  
**Drug Lab Checking**  
 This patient is a new patient of Allopurinol (i.e. on Allopurinol < 1 year) and the HLA-B\*58:01 status is UNKNOWN. It is recommended to check HLA-B\*58:01.

Proceed Prescription    Do not prescribe

## 2 Patient Information Leaflet

The leaflet contains the following sections:

- 別嘌醇 的作用** (Indication): Used for gout and kidney stones.
- 重要安全警告** (Important Safety Warning): Risk of severe skin reactions.
- 服用前請先閱讀** (Read before use): Instructions on how to take the medicine.
- 切勿服用藥房方法** (Do not use pharmacy method): Warning against self-medication.
- 切勿使用雙倍劑量** (Do not use double dose): Warning against doubling the dose.
- 貯存藥物須知** (Medication storage): Storage instructions.
- 藥物反應的徵候** (Signs of drug reaction): Symptoms to watch for.
- 如有疑問** (If you have questions): Contact information for healthcare providers.

The Chief Pharmacist's Office (CPO) has published a patient information leaflet on allopurinol. The goal is to enhance the safety of allopurinol use and improve patient outcomes. The leaflet serves to inform patients about the clinical value and risks associated with allopurinol use. It also educates them on the signs and symptoms of adverse reactions related to allopurinol and give advice to seek immediate medical attention should they occur.

The patient information leaflet can now be accessed via: <https://www.ha.org.hk/hadf/Portals/0/Docs/Leaflets/TC/Allopurinol.pdf>

### EDITORIAL BOARD

Editor-in-Chief: Dr Sara HO, CM(PS&RM), HAHO

Members: Dr K L NG, Deputizing SD(Q&S), KEC; Dr W M CHEUNG, SD(Q&S), KWC; Mr Brian CHING, P(CPO), HAHO; Dr Jackie CHEUNG, SM(PS&RM), HAHO; Dr Tom HO, M(PS&RM), HAHO; Ms Dabby CHU, EOII(PS&RM), HAHO.

Suggestion or feedback is most welcome. Please email us through HA intranet at address: [HO Patient Safety & Risk Management](#)