# RISK ALERT

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A Risk Management Newsletter for Hospital Authority Healthcare Professionals

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## Opening Message

### "Experience is a master teacher, even when it's not our own"

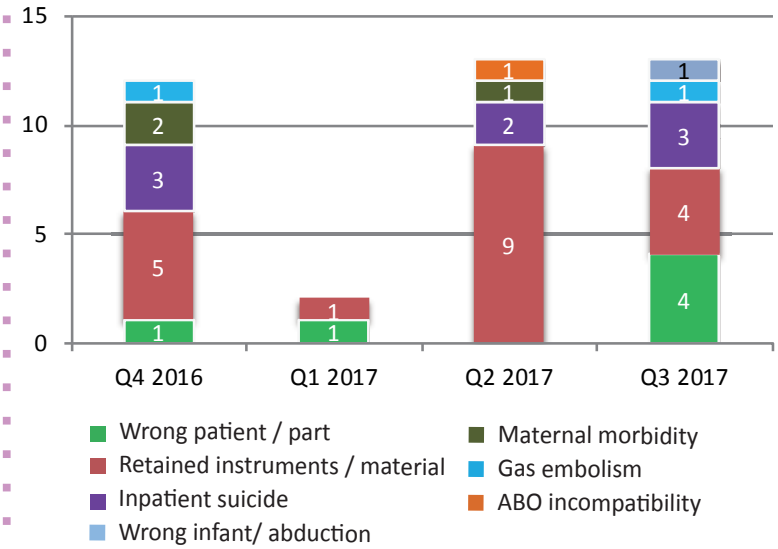
"Experience is a master teacher, even when it's not on our own" is a famous quote from an American author, Gina Greenlee. Being a medical practitioner, I believe that we should keep learning from experience so that we can prevent the occurrence of clinical incident. Although managing clinical incident or any adverse event is stressful and undesirable, the experience gained in the process will help to improve ourselves as well as our service provided to patient.

In HA, we have various platforms to learn and share. Staff can participate in incident sharing forum to share their experience and learn practical tips from others. Besides, the Hospital Authority Risk Alert (HARA) also provides useful information for us to learn. I trust that these platforms will help to cultivate the learning and sharing culture in HA with the ultimate aim of improving the quality and safety of our healthcare services.

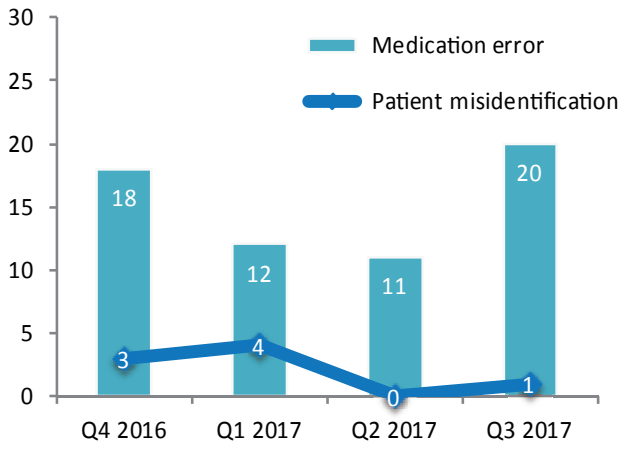
**Dr Simon TANG**
**Deputizing Cluster Chief Executive**
**New Territories West Cluster**

## SE & SUE Statistics

### Distribution of SE in the last four quarters




### Distribution of SUE in the last four quarters



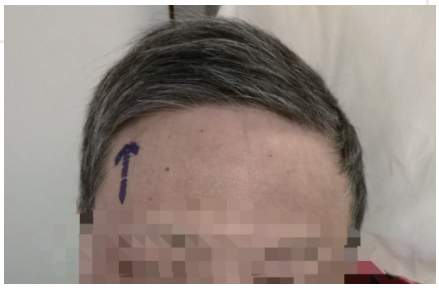
## Wrong patient / part

### Wrong sided burr hole operation

- A patient with history of bilateral chronic subdural haematoma on conservative management was admitted for lower limb weakness. Computerised tomography (CT) scan on admission revealed an enlarged LEFT subdural haematoma with mass effect.
- The patient was arranged for LEFT burr hole operation with the procedural laterality marked on the patient's LEFT ear lobe. The patient was then transferred to the operating theatre with "SIGN IN" and "TIME OUT" performed simultaneously.
- An emergency RIGHT burr hole was performed instead of an intended LEFT burr hole operation. Minimal subdural collection was noted. The wrong-sided procedure was noticed. The RIGHT scalp wound was sutured and a LEFT sided burr hole was performed with satisfactory drainage of the haematoma.
- The patient recovered with good progress and was discharged 2 weeks later.

**Key contributing factors**

1. The operation site was marked on patient's LEFT ear lobe. It was not easily visible once the surgeon stood at the vertex of the patient.
2. The "SIGN IN" and "TIME OUT" procedures were done simultaneously.



**Recommendations**

1. Perform the operation site marking on the patient's forehead to enhance visibility.
2. Perform the "SIGN IN" and "TIME OUT" separately and distinctively.

### Wrong sided nasal biopsy

- A patient who was diagnosed with brain stem death was worked up for cadaveric organ donation. CT scan of the brain showed a suspicious nasal lesion at the patient's RIGHT pterygomaxillary fissure.
- Nasal endoscopic biopsy was arranged without indicating laterality of the operative procedure. LEFT nasal endoscopic biopsy was performed instead of the intended RIGHT nasal endoscopic biopsy.
- The verbal report for the intraoperative frozen section of the LEFT nasal endoscopic biopsy revealed no malignancy. The patient's liver was then harvested for transplantation to another patient.
- On routine review of the case, the wrong-sided biopsy was noted.
- The donor's family was interviewed and agreed for a second biopsy. A RIGHT sided biopsy was performed which revealed a benign lesion.

**Key contributing factor**

The diagnosis and the laterality of the operative site were not indicated on the patient's consent form.

**Recommendation**

Indicate the patient's diagnosis and procedure laterality on the consent form.

## Wrong sided fine-needle aspiration (FNA)

- A patient with hearing impairment had Magnetic Resonance Imaging (MRI) performed and revealed a RIGHT parotid lesion. The patient then attended the hospital for an ultrasound (USG) guided percutaneous FNA of this RIGHT parotid lesion.
- USG scanning was performed on the LEFT parotid, which incidentally revealed a 4mm lesion. USG scanning was not performed on the RIGHT parotid. "TIME OUT" procedure was not performed. FNA was performed on the LEFT parotid lesion.
- The incident was noted on the same day during routine review of cases. The situation was explained to the patient and family and the patient underwent USG guided FNA of the RIGHT parotid lesion 6 days later.

**Key contributing factors**

1. "TIME OUT" procedure was not performed.
2. The patient had no localizing sign for the RIGHT parotid lesion and was an incidental finding on MRI. A LEFT sided FNA was performed for the patient for an incidental USG finding of a LEFT parotid lesion.

**Recommendations**

1. Review the workflow for interventional procedures in the department.
2. Reinforce the "TIME OUT" practice for all interventional procedures.
3. Perform site marking on all procedures with laterality.

## Wrong sided ilioinguinal nerve block

- A paediatric patient with RIGHT undescended testis was admitted for RIGHT orchidopexy under general anaesthesia.
- For better post-operative pain relief, an intraoperative RIGHT ilioinguinal nerve block before performing the orchidopexy procedure was offered to the patient at the receiving area of the operating theatre. Consent was obtained from the parent.
- However, a LEFT ilioinguinal nerve block was performed instead. The wrong-sided nerve block was spotted by the surgeon before orchidopexy. Orchidopexy was performed on the correct side uneventfully. Wound pain was well-controlled by local anaesthesia infiltration.
- The patient was discharged on the same day without complaint of pain.

**Key contributing factor**

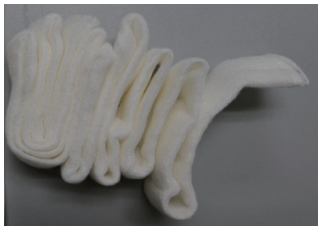
Unclear communication and documentation of the nerve block procedure.

**Recommendations**

1. Introduce "Stop Before You Block" for a "stop moment" to perform verification immediately before needle insertion for nerve block.
2. Enhance communication between anesthesiologists and nurses for the "SIGN IN" checking.


## Retained Instruments / Material

### Long gauze



- A patient with vaginal vault prolapse and stress incontinence underwent a corrective operation.
- A long gauze roll was completely packed into the patient's vagina for haemostasis at the end of operation and was intended to be removed on the next day but was not documented in the post-operative order. The patient was discharged 3 days after operation without removing the long gauze roll.
- The patient noticed a foreign body in the vagina at home. She returned to the hospital for removal of the gauze the next day. There was no wound infection or bleeding.

**Key contributing factors**

1. Incomplete information was given on the use of long gauze in the post-operative order and during handover.
2. The gauze was fully packed into the patient's vagina.

**Recommendations**

1. Document clearly all special post-operative care and necessary follow up actions on the patient's post-operative order.
2. Review the method of vaginal packing, such as leaving the gauze tail outside the vagina, to mitigate the risk of gauze retention.

### Metallic foreign body (FB)

- A patient was admitted for hip fracture with closed reduction and fixation with Proximal Femoral Nail Antirotation (PFNA) performed.
- Unlike the usual practice for this operation, drill bit was not used when entering the lateral cortex of femur. Nevertheless, the operation was performed "smoothly" with the integrity of all instruments checked before and after operation. Intraoperative X-ray showed no obvious metallic FB.
- Post-operative X-ray revealed a 1mm x 2mm FB shadow adjacent to the implant. The images were reviewed by the clinical team and decided that there was no need to remove the FB.

**Key contributing factor**

Drill bit was not used to open the lateral cortex of the bone.

**Recommendation**

Reinforce the training on the use of drill bit in performing operations with PFNA.

### Retained stylet after Port-a-Cath insertion (2 cases)


- A Port-a-Cath with special features of preloaded stiffening stylet was inserted for patient A for palliative chemotherapy. "No resistance" was detected upon flushing of the catheter.
- Chest X-ray after removal of Port-a-Cath catheter showed a linear metallic foreign body. The patient was called back and the stylet was retrieved uneventfully.
- The hospital reviewed and noted the use of similar catheter in another patient. The X-rays were reviewed and showed a retained stylet which was removed subsequently.
- In both cases, all involved surgeons were not aware of the new special features of the catheter.
- The Hospital Authority has immediately issued risk alerts to hospitals to review the patients using similar catheters.

**Key contributing factors**

1. The stiffening stylet was preloaded inside the catheter with no alert label given inside the package.
2. Surgeons were not familiar with the new model of catheter preloaded with stylet.

**Recommendations**

1. Recommend the manufacturer to enhance the alert measure of the presence of preloaded stiffening stylet.
2. Implement a mechanism to coordinate and monitor the use of new medical consumables to ensure sufficient trial of the consumables before procurement and to enforce adequate training to all relevant staff.

## Wrong infant/ abduction

### Mother took baby home without permission

- A 9-month-old baby was admitted for gastroenteritis and upper respiratory tract infection.
- The nurses provided ward orientation to the mother, including the information on the importance of informing ward staff before leaving the ward.
- The next morning, the baby was found missing. Subsequently, it was confirmed that the mother had brought the baby home, and had brought the baby back 2 hours later.
- CCTV recording revealed that, the security staff had released the door without checking the permission-to-leave card.

**Key contributing factors**

1. The mother had not informed the nursing staff before bringing her baby home.
2. Inexperienced security staff had not complied with the ward security instructions.
3. At the time of incident, the ward was undergoing renovation and was relocated to another ward without Cotag alarm system installation. As a temporary measure, permission-to-leave card was implemented in the ward.

**Recommendations**

1. Emphasise the importance and consequences of leaving ward without permission in the information given to parents and guardians of paediatric patients.
2. Enhance staff training / briefing on any system change.
3. Conduct infant abduction drill for foreseeable changes in the ward security system.

## Inpatient Suicide

In Q3 2017, a total of 3 male inpatients (aged between 58 to 70) who had malignancies or chronic illnesses had committed suicide. One patient was found missing and jumped from height at home. The other two patients committed suicide during home leave.

**Case 1**

- A patient was admitted for chest, epigastric and back pain.
- During hospitalisation, the patient had 2 uneventful home leaves. The patient was subsequently granted another home leave while accompanied by family members.
- The patient was found to have committed suicide by hanging the next morning.

**Case 2**

- A patient was admitted for palliative care for metastatic cancer.
- Psychological and spiritual assessment performed on admission was uneventful. The patient did not express any suicidal idea.
- The patient went on home leave. Due to commitment in work, family members noted difficulties in caring for the patient during home leave. The patient was referred to the Medical Social Worker for care evaluation and psychosocial support.
- As the patient's family was able to apply for leave from work to look after patient, the patient requested for home leave again which was agreed by the family members.
- However, the patient committed suicide next morning by jumping from height at home.

**Case 3**

- A drug addict on detoxification treatment was admitted for COPD exacerbation.
- The patient was found to have committed suicide by jumping from height at home.

# Sentinel Events

## Gas embolism

### Small gas locules in brain

- A patient had short gut syndrome after bowel resection for massive bowel ischaemia. Total parenteral nutrition (TPN) was given. Hickman catheter was inserted.
- The patient complained of nervousness with high blood pressure few weeks after insertion of the Hickman catheter. Symptomatic treatment was given.
- The patient's condition deteriorated a few hours later with limb weakness. Both lumens of the Hickman catheter were connected to TPN infusion via IV line connectors with no air bubble nor leakage being observed. The dressing of catheter insertion site was dry and intact.
- Emergency CT brain showed small gas locules in the RIGHT brain. The patient was escorted for hyperbaric oxygen therapy.

**RCA Panel concluding finding and recommendations:**

1. The Panel considered different potential sources of air, but the exact root cause could not be pinpointed. The presence of Hickman catheter could be the possible source of air embolism.
2. Develop a guideline on handling of central venous catheter (CVC) to ensure the checking of integrity of CVC, tight connections with CVC, and adherence to the manufacturer's recommendations.
3. Conduct regular structured induction and refresher training for staff on handling of CVC.

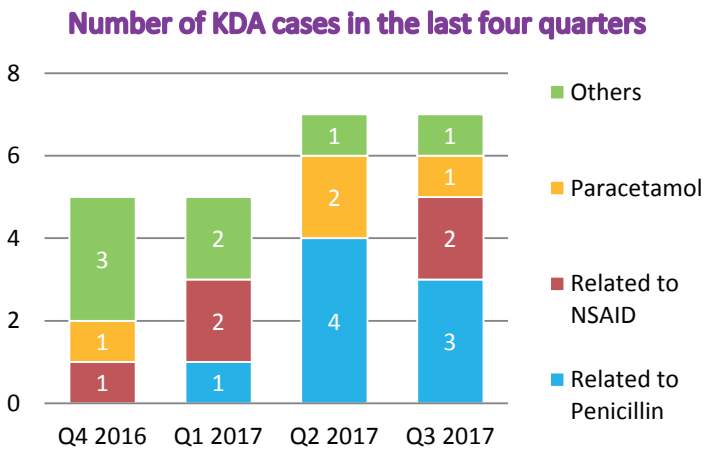
# Serious Untoward Events

Of the 21 SUE cases reported in Q3 2017, 20 were medication errors and 1 was patient misidentification.

The medication error cases involved giving known drug allergen (KDA) to patients (7), dangerous drug (3), insulin (2), anticoagulant (1), electrolytes (1), OHA metabolites (2) and others (4). Of the 7 known drug allergen cases, 1 developed mild symptoms which subsided after treatment. The others had no allergic reaction.

The one patient misidentification case was related to drug administration.

| Known Allergy | Allergen prescribed |
|---|---|
| Penicillin | Tazocin |
| Penicillin / Ampicillin | Augmentin (2) |
| Mefenamic Acid / Aspirin | Ketorolac (2) |
| Paracetamol | Paracetamol |
| Mydrin-P eye drops | Mydrin-P eye drops |



# Serious Untoward Events

## Medication Error

### Known Drug Allergy – Low alertness of allergy history

- A patient was registered with pseudo-ID. The nurse found the patient's allergic history to Penicillin through clinical management system (CMS) "Check ID" function, and documented the allergy history in paper record in Accident and Emergency Department.
- The doctor also noted the patient had drug allergic history via "Check ID" function after admission, but entered "No Known Drug Allergy" into the pseudo-ID CMS record and prescribed Augmentin via In-patient Medication Order Entry (IPMOE) System. The nurse referred to the patient's pseudo-ID CMS record during the admission.
- The patient did not have any allergic reaction after receiving the dispensed medication.

**Risk of Pseudo-ID**

1. Patients who could not present any valid identity document but claimed to be a HKID card holder upon registration, will be registered under a Pseudo-ID.
2. In CMS, an orange button "Check ID" will be turned on under both Pseudo-ID and claimed-HKID to alert staff.


Generated sample screen

3. Staff could access the linked records via this button but the clinical information, including the allergic history, will not be automatically transferred, until the records are merged after verification of the patients' identity.

### Omission in prescription of antiviral drug for Hepatitis B carrier after chemotherapy

- A chronic Hepatitis B carrier was diagnosed with lymphoma. The patient was given chemotherapy. This patient should have entecavir prescription in the out-patient clinic after completing chemotherapy. However, it was noted that entecavir was not prescribed in 3 of the out-patient follow-ups.
- The patient had deranged liver function and the condition improved after resuming entecavir.

**Key contributing factor**

Unfamiliarities with drug regimen after completing chemotherapy for hepatitis B carriers.

**Recommendations**

1. Enter antiviral drug regimen and treatment plan into 'Reminder' function in the CMS to alert all physicians.
2. Explore feasibility of enhancement of Medication Order Entry (MOE) system.

### Phenytoin 750mg infusion was given at a faster rate than prescription

- A patient with history of surgery for ventriculoperitoneal shunt (VP shunt) insertion, moderate mitral regurgitation and atrial fibrillation (AF) was admitted for tonic convulsion and fast AF.
- Phenytoin loading dose of 750mg by intermittent intravenous infusion over 30 minutes was prescribed in IPMOE.
- During administration, intravenous infusion of the drug was given over 10-15 minutes.
- The patient developed cardiac arrest afterwards and was successfully resuscitated. The cardiac arrest could be due to underlying diseases with critical clinical condition or the faster infusion rate than the prescribed rate. The patient was transferred for ICU care and was subsequently discharged 19 days later.

**Key contributing factor**

Limited knowledge and experience of loading phenytoin.

**Recommendation**

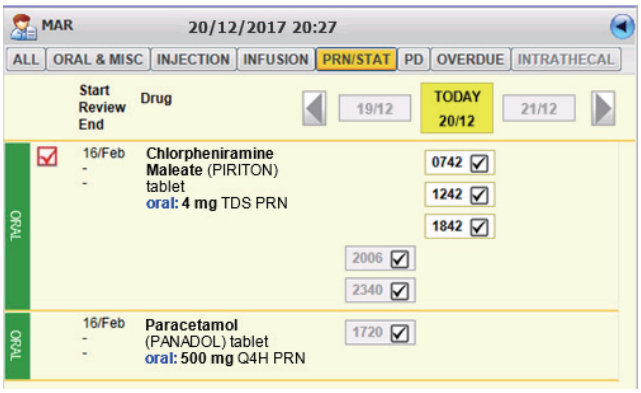
Suggest expanding the usage of existing drug information resources in the administration module as in the prescription module in IPMOE.

# Local Sharing

## Attention Areas of Using In-Patient Medication Order Entry (IPMOE) System for Drug Administration

### Pro re nata (PRN) Medication

Check on the time interval between the last dose and the current dose





### Drug Reconstitution

INJECTION

28/Dec
-
-

**Vancomycin HCl** injection
**intermittent IV infusion: 1000 mg** in **250 mL**
**Sodium Chloride 0.9%**
over 120 Minute(s) Q12H

Ensure the correct drug preparation and instruction

### Conditional Dosing

INJECTION

27/Dec
-
-

**Insulin Neutral Human** (ACTRAPID HM) injection
100u/ml
**SC bolus: 4 unit(s)** before breakfast and
**SC bolus: 4 unit(s)** before lunch and
**SC bolus: 4 unit(s)** before dinner
Omit if H'stix < 12

Beware of the conditions on the prescription