RISK ALERT

ISSUE 31 OCT 2013

A Risk Management Newsletter for Hospital Authority Healthcare Professionals

IN THIS ISSUE

A Service Director's Perspective on Risk Management

Good members ensure good teamwork?

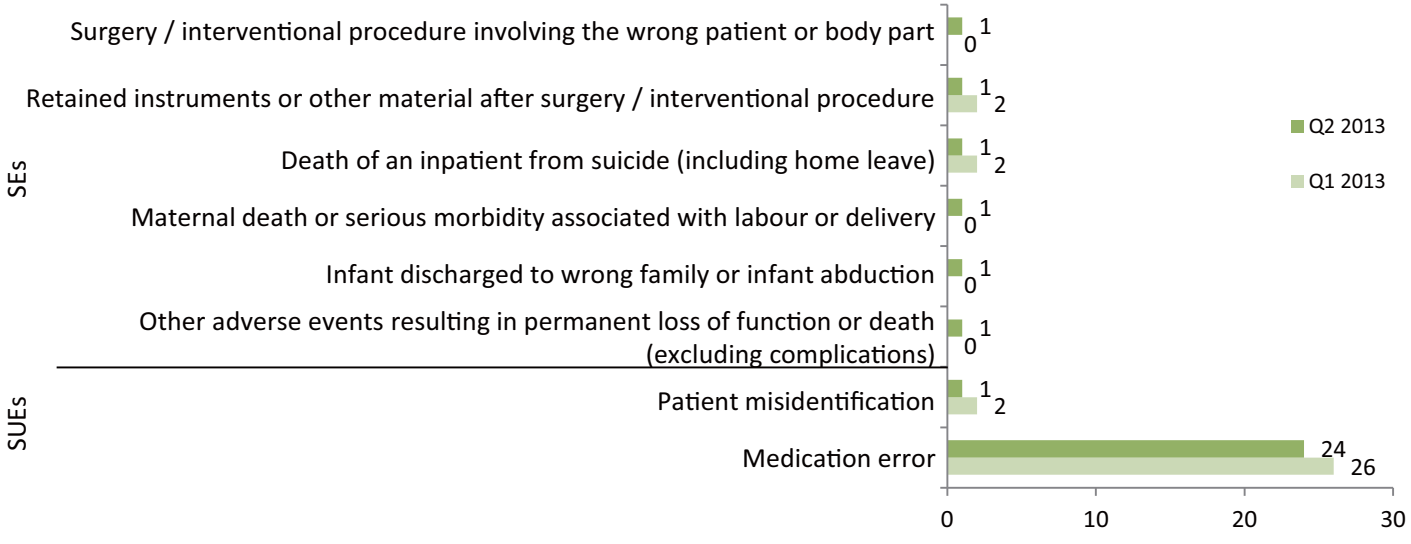
Care of hospitalized sick patients is the most complex and complicated task that one could think of as every patient is unique with differing response to treatment. Consequently, hospitals are perhaps the most complex among all types of organizations in the world. Most healthcare workers are dedicated professionals who have to continually undergo training for years to ensure they could master the art and science of clinical practice. It would be difficult to imagine any other professionals who need so much structured and vigorous training than medical doctors in various specialties.

With all the trained healthcare professionals providing care, it is baffling that errors resulting in harm to patients are still relatively common in hospitals. Our usual and traditional approach to preventing or reducing human error is more training, which seems not to be working as well as we wish. From analyses of errors occurring in highly complex and unpredictable clinical situations, it is clear that most are caused by failures of team dynamics rather than individual skills. Evidently, good teamwork is more important than just having good members in the team.

Multi-disciplinary teams are commonplace in most hospitals. However, the important attributes and dynamics to turn a group of trained individuals into a competent healthcare team are not strongly emphasized in the past. Team based training such as Crew Resource Management (CRM) training would help improve teamwork in hospitals which in turn would better safeguard our patients' safety.

Dr K S TANG, Service Director (Quality & Safety), NTWC

Distribution of Sentinel (SEs) & Serious Untoward Events (SUEs) (Q2 2013)



SENTINEL EVENTS Q2 2013

Wrong Side Procedure

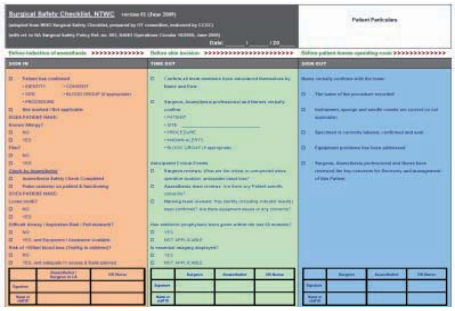
- A patient with repeated **RIGHT** shoulder dislocation was admitted for operation.
- **LEFT** regional nerve block was performed by an anaesthetist.
- The operating team conducted surgical safety check – SIGN IN and TIME OUT – before the operation.
- The anaesthetist then discovered that the nerve block was performed on the wrong side.
- The error was corrected and the operation was proceeded uneventfully on the **RIGHT** shoulder.
- No adverse effect was observed on the wrong side.

Key Contributing Factor:

Non-compliance with the surgical safety policy – "one should perform SIGN IN before anaesthesia".

Recommendations:

1. Reinforce the surgical safety policy thoroughly – SIGN IN before all interventional procedures, including anaesthesia.
    a. Involve all operating team members during SIGN IN, TIME OUT and SIGN OUT.
    b. Crew Resource Management training.
2. Develop guidelines on procedural safety.



Retained Dressing Material

- A patient with multiple chronic pressure ulcer wounds on the hip required wound care by community nurses for years and repeated hospitalization.
- The patient was admitted for excisional debridement.
- During the operation, a piece of ribbon gauze was found deep inside the wound.

Key Contributing Factor:

Lack of a good practice to ensure complete removal of wound packing materials.

Recommendations:

1. Refine the guidelines on wound packing and documentation.
    a. Reinforce accurate documentation on the use and removal of dressing materials.
    b. Mark wound site on the assessment record form.
    c. Take clinical photos to facilitate communication.
2. Develop a practice to ensure all packing materials are completely removed.

SENTINEL EVENTS Q2 2013

Maternal Death

- A pregnant woman at gestational age of 30 weeks was admitted for the management of antepartum haemorrhage and fetal distress.
- Emergency caesarean section was performed uneventfully.
- On day 1 post-delivery, shortness of breath and hypotension were noted. Urgent investigations did not show evidence of pulmonary embolism.
- The patient was transferred to ICU for further management.
- On day 3 post-delivery, whilst on inotropic support, she developed cardiac arrest; despite active resuscitation, unfortunately, the patient succumbed.
- A diagnosis of amniotic fluid embolism was subsequently confirmed.

Concluding Remarks:

1. Amniotic fluid embolism is a rare but known complication of pregnancy.
2. After reviewing the system, care process, clinical handover, staff training and the environment, the investigation panel concluded that the patient was given appropriate management.

Death of a MND Patient after Being Transported to Another Cubicle in the Same Ward

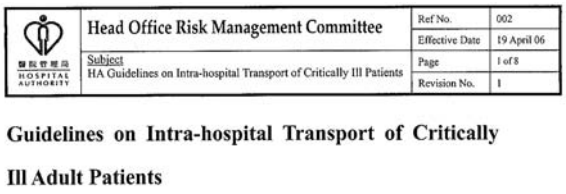
- A patient with Motor Neuron Disease (MND) required continuous oxygen therapy via Bi-level Positive Airway Pressure (BiPAP).
- The patient was moved to another cubicle in the same ward to allow cleansing and disinfection.
- Nurses assessed the patient's condition before transportation and judged that the patient could tolerate a short while without oxygen support.
- However, the patient's condition deteriorated during the transport and the patient succumbed subsequently.

Key Contributing Factors:

1. Insufficient knowledge and experience in caring for patients on BiPAP therapy.
2. Overestimation of the patient's tolerance on discontinuation of oxygen support during transportation.

Recommendations:

1. Enhance staff education and training on the use of BiPAP.
2. Reinforce promulgation of guidelines on transport of critically-ill patients.
3. Extend the corporate guidelines on the use of BiPAP.



	Head Office Risk Management Committee	Ref No.	002
HOSPITAL AUTHORITY	Subject: HA Guidelines on Intra-hospital Transport of Critically Ill Patients	Effective Date	19 April 06
		Page	1 of 8
		Revision No.	1

Guidelines on Intra-hospital Transport of Critically Ill Adult Patients

Patient Suicide

A patient with paranoid schizophrenia was transferred to a psychiatric unit for rehabilitation. She committed suicide during day-time home leave.

Conclusion:

The investigation panel reviewed the treatment process, incident management and aftercare, and opined that the suicidal behaviour was impulsive. The post-incident management was adequate and person-centered.

Infant Abduction

Day of Admission

A baby was admitted for hearing test; the baby also required inpatient treatment after a fall from bed at home.

The mother was referred to the social work service for further assessment and assistance for suspected child care problem. After assessment, the social worker proposed to the mother that the baby could be taken care of temporarily by the child care program.

1 day later

One day later, the baby was found missing with a torn baby tag left on the bed. The hospital performed local and hospital wide search.

10 mins

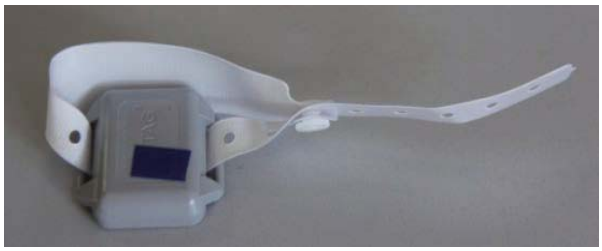
After 10 minutes, the ward nurse successfully contacted baby's mother but she refused to bring back the baby. The ward nurse reported the case to the police.

90 mins

About 1 ½ hour later, the police escorted the mother and the baby back to the hospital.

Key Contributing Factors:

1. Lack of timely communication among the social worker, the clinical team and the family.
2. Inadequate access control in ward.
3. The baby tag was not tamper-proof.



Non tamper-proof baby tag

Recommendations:

1. Enhance the effectiveness of communication among social workers and clinical health care team.
2. Explore the feasibility of improving the physical security measures to enable effective patient movement control, e.g. relocate the door release button.
3. Promulgate the existing guidelines on prevention of unauthorized removal of infants / children from ward.
4. Explore the use of tamper-proof electronic baby tags.

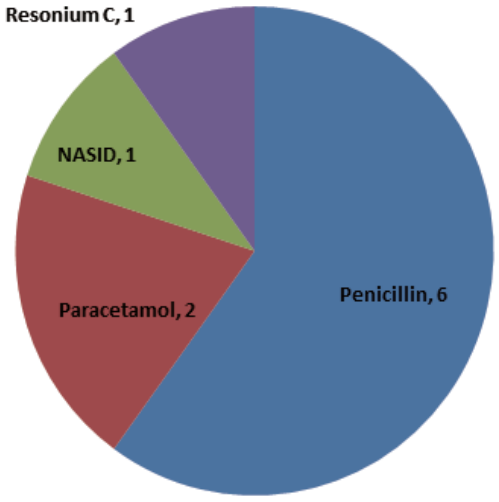
Hospital Authority Head Office
Operational Circular No. 25 / 2009

Guidelines on Prevention of and Response to Infant / Child Abductions
(Note : These guidelines should be read by CCE, HCEs, Service Directors, Heads of Clinical Departments, Department Operations Managers,

SERIOUS UNTOWARD EVENTS Q2 2013

There were 25 SUE cases reported in this quarter, of which 24 were medication errors and 1 patient misidentification. Cases related to medication errors included known drug allergy (10), use of dangerous drugs (3), anticoagulants (2), insulin (3), oral hypoglycaemic agent (1), metabolites being found in non-DM patient's urine (1), chemotherapy (1), inotropic agents (1) and others (2).

Case Highlight on Known Drug Allergy (KDA)



Medonol was prescribed and administered

- A patient with allergy history to Medonol was prescribed Paracetamol by a doctor who was not aware that Paracetamol and Dextropropoxyphene are the ingredients of Medonol.
- "No known drug allergy (NKDA)" was marked on the MAR form.
- The nurse-on-duty overlooked the allergy alert cover on the clipboard and administered the drug to the patient.
- The pharmacy noticed the problem and informed the ward.
- The patient did not develop allergic reaction.

Key Contributing Factors:

1. A patient's allergy history was not checked before drug prescription and administration.
2. The ingredients of an uncommonly used drug – Medonol – were not ascertained before prescribing.

Recommendations:

1. Reinforce the practice of checking drug allergy history during prescription and administration of drug.
2. Clarify with pharmacists on the active ingredients of any unfamiliar proprietary pharmaceutical products when in doubt.

Medication Incident Related to Known Adverse Drug Reaction (ADR)

- A patient was admitted for wound debridement.
- Rifampicin was prescribed for uncontrolled infection after operation.
- After receiving two doses of Rifampicin, the patient's haemoglobin level and platelet count dropped.
- Clinical reassessment revealed that the patient had a history of Rifampicin-induced thrombocytopenia.
- Rifampicin was stopped immediately.

Key Contributing Factors:

1. The prescribing doctor did not recognize the significant adverse drug reaction of Rifampicin.
2. The 'Allergy/Alert' automated print-out in the Clinical Management System (CMS) did not provide information on the nature and severity of ADR.

Alert Details

Allergy

Allergen/Allergen Group	Clinical Manifestation	Additional Information	Certainty
PLATELET	Rash		Certain
PLATELET	Rash		Certain

Adverse Drug Reaction

Drug	Adverse Drug Reaction	Additional Information	Severity
RIFAMPICIN	Thrombocytopenic Disorder		Severe

Recommendations:

1. Suggest pharmacists to confirm with a supervisory grade clinician if severe ADR alert is to be overridden by the doctor-in-charge.
2. Reinforce clinical staff's training on the importance of checking ADR information.
3. Explore inclusion of both the drug name and severity of ADR in the 'Allergy/Alert' print-out from CMS.

Anticoagulants

- A patient was prescribed **Enoxaparin** and later switched to **Innohep**.
- A nurse assumed that Innohep and Enoxaparin had similar strength and performed 2 injections of Innohep without reading the dosage strength as indicated on the glass syringe.
- The incident was discovered when the nurse requested the pharmacist for a more concentrated dose of Innohep.
- The patient had no overt bleeding and showed no adverse effect.

Key Contributing Factors:

1. Non-compliance with checking procedures before drug administration.
2. Insufficient knowledge on handling of medications.

Recommendations:

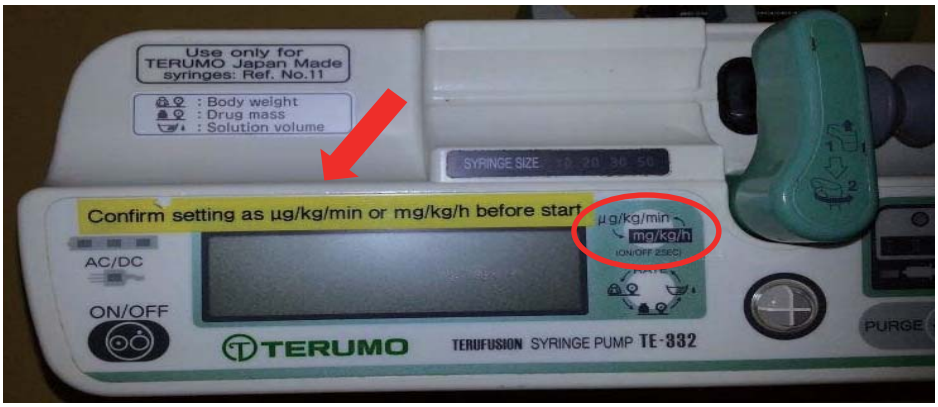
1. Reinforce compliance with the "5 rights" during medication administration and follow the HA Guidelines on Medication Management.
2. Reinforce the importance of checking the drug information insert and clarifying with pharmacists when in doubt.
3. Cross-check high risk / alert medication before administration.
4. Administer medications by the named nurse who is more familiar with the patient and drug profile.

Dangerous Drugs

- A patient received emergency operation for compartment syndrome on the left leg.
- During anaesthesia induction, Dr A set the infusion rate for Remifentanyl at "0.10" **µg/kg/min**, but inadvertently pressed the UNIT SELECT button and reset the rate as **mg/kg/hr**.
- Dr A did not notice the change of rate setting and started infusion while the unit setting of the pump was not counter-checked by Dr B.
- Bradycardia and hypotension were noted. The incorrect dosage of the infused Remifentanyl was subsequently discovered.
- Infusion was stopped immediately. Fluid replacement and treatment were given before the operation. The patient was stable post-operatively.

Key Contributing Factors:

1. Non-compliance with the policies / guidelines on medication administration.
2. Inadequate knowledge on the settings of different models of infusion devices.



Recommendations:

1. Standardize operation procedures including drug dilutions, checking protocols and setting dosage limits and alarm of infusion devices.
2. Enhance training and orientation for device users.
3. Review the current inventory of syringe pumps at hospitals and explore the possibility of pump replacement and upgrade.

LOCAL SHARING

Misinterpretation of "Drugs-on-hand" Icon in Electronic Patient Record (ePR)

Prescription error is one of the most commonly reported medication incident categories in the Advance Incidents Reporting System (AIRS).

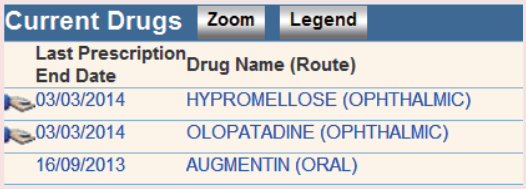
A recent review showed that a number of these prescription error cases were related to the misinterpretation of the "drugs-on-hand" icon in the electronic Patient Record (ePR), for example:

Case 1

A patient with history of diabetes, stroke and gastric ulcer due to Aspirin was prescribed Aspirin and Diamicron (which were stopped in the last admission) by referring to the old drug record. The patient had mild hypoglycaemia but no other adverse outcome.

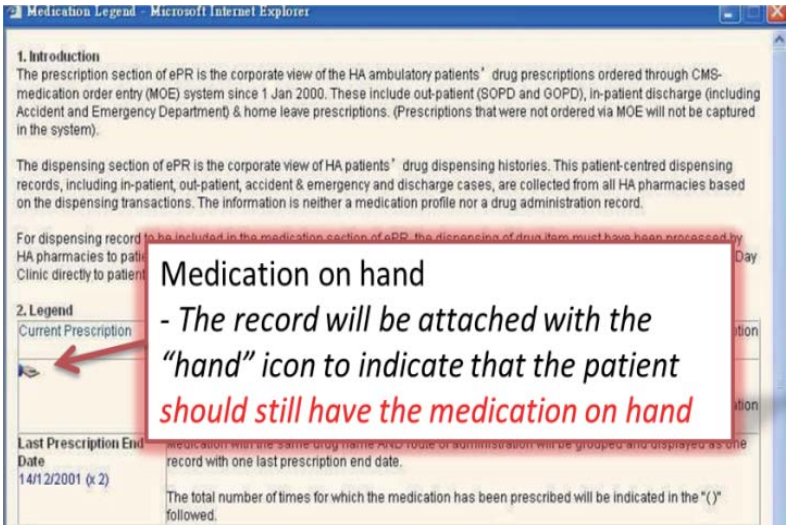
Case 2

A patient with hypertension and diabetes was prescribed the old drug regime with wrong dosage of anti hypertensives and insulin. There were no significant complications.



Common observations of the cases:

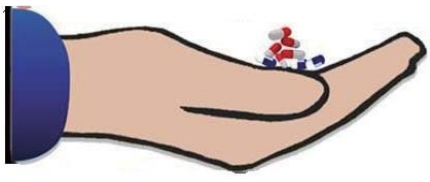
- Incomplete documentation of medication modifications
- Failure to reconcile the drug order, particularly during transition of care across hospitals or specialties
- System design limitations, e.g. no explicit indication of medication discontinuation or dosage reduction



Recommendations to reduce prescription errors :

- Verify the drugs-on-hand and the latest medications in use
- Check other concurrent information, e.g. recent discharge summaries when drugs might be changed
- Reconcile (compare and construct the drug order) before "resuming" medication
- Update the drug records with proper documentation (with reasons for modifications)
- Clarify the drug regime with the patient

A computerized medication order system is now widely adopted as a crucial technology for reducing medication prescription errors and improving the efficiency of clinical care. However, it would be dangerous if we rely solely on the technology as our safety net and forget our key role in medication reconciliation.



Drugs-on-hand ≠ Existing medication regime that the patient is taking

LOCAL SHARING

Beware of the Possible Consequences of KDA Prescription Errors

Medication incidents related to KDA are commonly associated with prescription errors, e.g. omitting the drug allergy record, copying the electronic Patient Record (ePR) of another patient and failure to identify early ADR signs, etc. However, a patient's mild allergic reactions may lower medical staff's awareness of the severity of these type of incidents.

From January 2011 to June 2013, five disciplinary inquires had been conducted by the Medical Council of Hong Kong (MCHK) regarding cases that practitioners prescribed medications to patients who had KDA:

- Two practitioners prescribed NSAIDs to patients with known allergy to aspirin.
- Two practitioners prescribed Amoxycillin to patients with known allergy to Penicillin.
- One practitioner prescribed 'Brufen' to a patient with known allergy to 'Ibuprofen'.

The doctors involved were sentenced to the following disciplinary actions:

- Removal of name from the **General Register for 3 months**
- Removal of name from the **General Register for 1 month**, with the removal order suspended for 1 year
- Possible removal of name from the Specialist Register
- Requirement to receive continuing medical education on safe use of drugs, medical therapeutics and safe prescribing

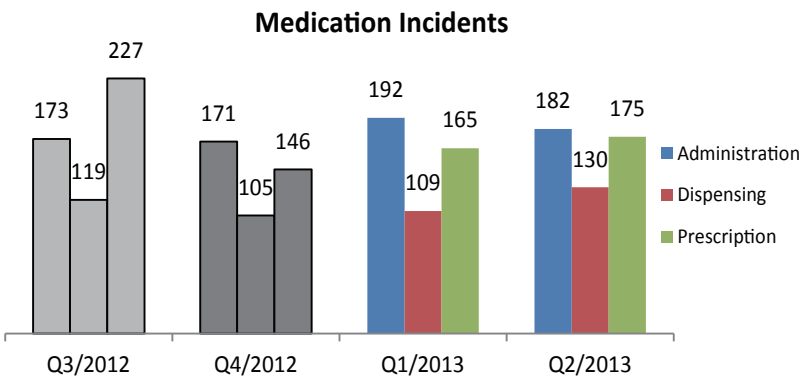

女西醫再揭失德 除名緩刑

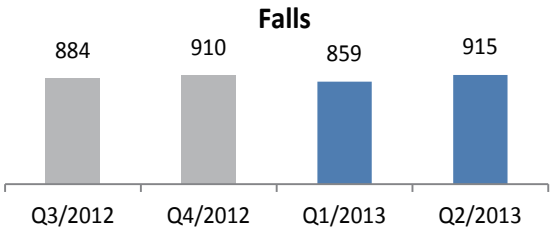
As mentioned in a recent judgment of the MCHK, "it is a **fundamental responsibility of every doctor** to consider the possibility of allergic reactions before prescribing medicines…we must send a message to the medical profession that the matter will be **dealt with seriously in sentencing in future** cases if a patient's known allergy is blatantly overlooked."

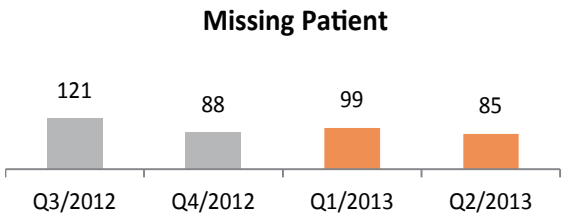
To assure medication safety and minimize medication incidents caused by KDA, the HA Guidelines on Known Drug Allergy Checking (The Guidelines) was published in August 2013. The Guidelines is available online at http://portal.home/sites/cpo/committees/msc/guidelines/default.aspx.

Acknowledgement: Q&S Division, NTWC

Top Categories of AIRS Incidents (Jan – Jun 2013)







Note:
1. Incident reporting in AIRS is voluntary.
2. Include near miss incidents without affecting patients.

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