

# RISK ALERT



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A Risk Management Newsletter for Hospital Authority Healthcare Professionals

## IN THIS ISSUE

### ✧ Sentinel Events (Q2 2014)

- Retained Consumables or Instruments
- Medication Error
- Wrong Side Procedure
- Patient Suicide

### ✧ Serious Untoward Events (Q2 2014)

### ✧ Global Sharing

- Inadvertent Cutting In-line (or Closed) Suction Catheter during Shortening of Endotracheal Tube

### ✧ Local Sharing

- Top Categories of AIRS Incidents

*We should not look back unless it is to derive useful lessons from the past error, and for the purpose of profiting by dearly bought experience.*

*– George Washington*

George Washington could as well be talking about clinical incident management.

Healthcare workers always value the ability to take care of patients as an honor and privilege, and attempt to uphold this responsibility in the highest regard. Yet despite the best intentions and systems in place, it is difficult, if not impossible, for hospitals to attain zero clinical incidents. This can lead to serious emotional and physical consequences for the patients, their families and healthcare workers.

It is a challenge for HA to ensure that lessons learnt from patient and other safety incidents are shared among staff in order to prevent errors from recurring. Beside staff training and publishing the "Risk Alert" newsletter, HAHO has been organizing biannual Patient Safety Forums to provide a platform for clinical and management staff to share their knowledge and experience in handling clinical incidents.

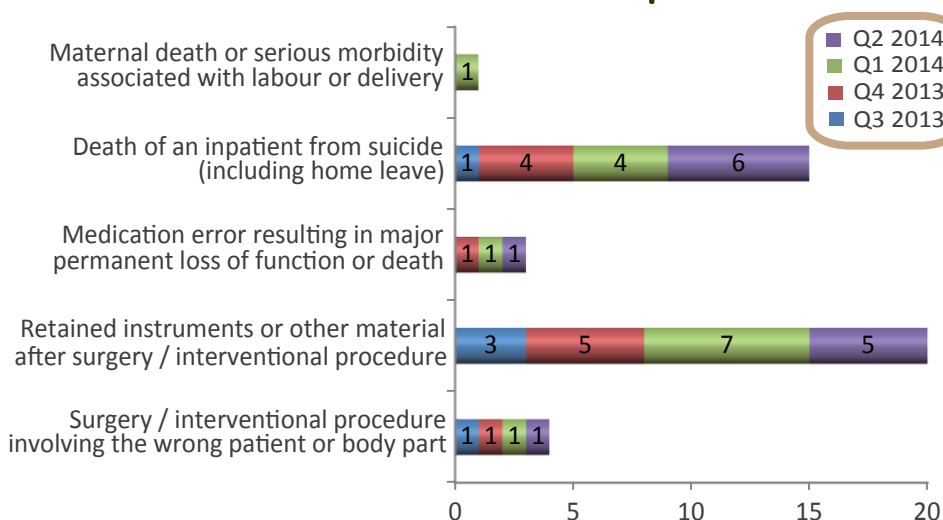
Since March 2014, the Patient Safety Forums have been expanded to hospitals with encouraging results. Close to 900 colleagues attended the Forum. With positive feedback, the number of attendees is expected to increase, reflecting that staff's commitment to patient safety is articulated at all levels of the organization. Furthermore, HA has taken the initiative to share the incidents and recommended improvement measures with relevant Coordinating Committees as a means to building a safety culture.

The lessons learnt have propelled us in the right direction in fostering a patient safety culture of openness, trust and improvement, as George Washington had wisely indicated.

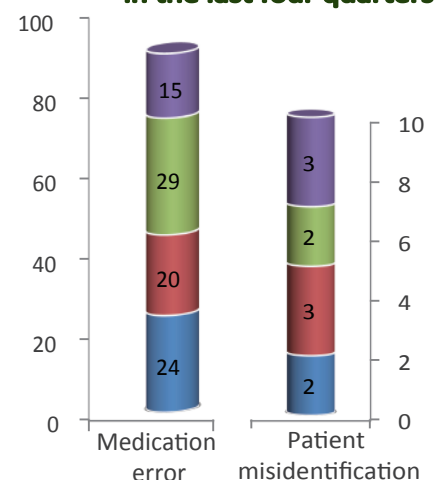
*Dr Rebecca LAM, Chief Manager, Patient Safety and Risk Management Department*

## Distribution of Sentinel (SEs) & Serious Untoward Events (SUEs)

**Distribution of SEs in the last four quarters**



**Distribution of SUEs in the last four quarters**

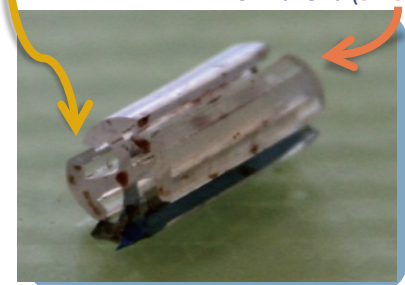


## Retained Consumables or Instruments

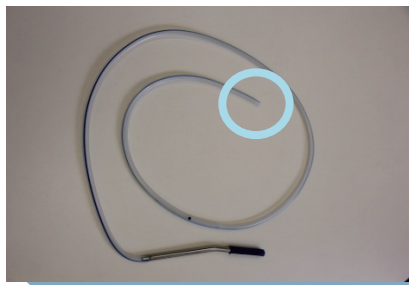
### Case 1: Broken Drain Left in Skin Wound

- A patient on regular warfarin after mitral valve replacement had right mastectomy for carcinoma of breast.
- 3 days after the operation, patient had hematoma which was treated by evacuation and insertion of 2 silicone drains.
- 2 and 6 weeks later, the two drains were removed by a nurse in the Breast Clinic separately.
- 5 months later, a nurse noted a foreign body in the patient's small non-healing wound.
- A doctor removed a 1 cm broken piece of drain from the wound.
- The patient's wound healed uneventfully afterwards.

Broken end (serrated)  
Normal end (smooth)



The broken piece of drain (1 cm)



The silicone drain used in this case

#### Key Contributing Factor:

Failure to properly enforce integrity checking of the inserted drain.

#### Recommendations:

1. Enhance the practice of integrity checking of removed drain.
2. Formulate clinical protocol on drain removal with emphasis on examination of distal end of removed drains.

### Case 2: Merocel Left in Patient's Nose

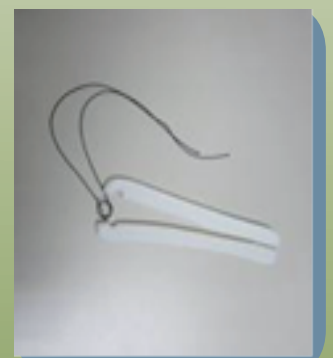
- A patient had an elective bilateral Functional Endoscopic Sinus Surgery (FESS) and Septoplasty for nasal sinus polyp and deviated nasal septum.
- Doctor A divided 2 pieces of merocel into 4 halves and packed 2 pieces into each nostril.
- Doctor B documented "nasal packing with trimmed merocels (2 pieces on each side)" in the operation record. The message was handed over by recovery room nurse to ward nurse.
- Doctor C did not read the operation record and removed one piece of merocel on each side of the patient's nasal cavity as usual.
- Doctor C then examined patient's nasal cavity with the aid of headlight and discharged the patient with normal saline nasal douching.
- Patient attended ENT clinic 1 week later. He informed Doctor B of foul smelling at the nostrils and difficulty in performing nasal douching.
- Doctor B found and removed a piece of merocel from each nostril subsequently.

#### Key Contributing Factors:

1. Lack of a clear process and documentation system for nasal gauze packing and removal.
2. Non-compliance with standard practice of confirming surgical packs count before procedure and after removal.

#### Recommendations:

1. Establish a clear process and accurate documentation of wound dressings from time of packing to removal to prevent unintentional retention of packed gauze.
2. Redesign system to enhance surgical safety and provide training to ensure compliance with correct pre-and-post surgical gauze counting.



One merocel is divided into 2 halves

### Case 3: Retained Gauze in Abdomen Wound

- A patient underwent an operation for closure of colostomy.
- During operation, “Lasso knot” with 3 loose stitches were applied owing to wound contamination, with the aim of having closure of skin later on by tightening the stitches in ward.
- The patient’s wound was packed with 1 piece of plain non-woven gauze which was then covered with plain gauzes.
- On post-operation Day 1, the case doctor performed wound dressing and documented “changed dressing and gauze removed”.
- On post-operation Day 2, another doctor closed the wound by tightening the loose stitches and ordered daily wound dressing.
- On post-operation Day 13, stitches were removed because of increasing exudate from the wound.
- During wound exploration, a piece of plain non-woven gauze was found and subsequently removed from the patient’s wound.
- The patient’s wound healed well afterwards.

#### Key Contributing Factors:

1. Small size gauze was used for packing into a relatively big wound.
2. The non-woven plain gauze was not easily identified after being soaked with blood and exudate.
3. Misinterpretation of the “dressing” gauze as the “packed” gauze.

#### Recommendations:

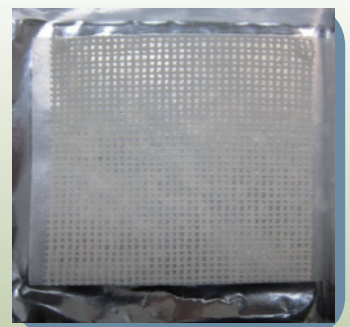
1. Consider use of appropriate type and size of dressing material and wound packing method (such as leaving a small bit of packing material outside the wound for easy removal) to prevent retention of dressing and packing material in patient’s wound.
2. Use different types of gauze material for easy differentiation between “wound-packing” gauze and “dressing” gauze in open wound.
3. Verify the number of removed “packed” gauze as indicated in patient’s medical record.



The type of non-woven gauze used

### Case 4: Retained Paraffin Gauze in Tracheostomy Wound

- A patient had an emergency tracheostomy by an ENT surgeon.
- Doctor A documented in the operation record “packed with sulfatulle (paraffin) X 2”.
- On post-operation Day 2, a nurse followed the post operative order and removed a piece of paraffin gauze covered with copious sputum.
- On post-operation Day 6, ENT team was consulted for wound discharge from the patient’s tracheostomy.
- An ENT surgeon spotted and subsequently removed 1 piece of paraffin gauze which was left inside the tracheostomy wound.
- The patient did not suffer any adverse outcome.



The type of paraffin gauze used

#### Key Contributing Factors:

1. No proper counting of paraffin gauze after removal of packing.
2. Complex patient condition (patient had a short neck, a relatively large tracheostomy wound, and firm anchoring stitches for new tracheostomy) hindered wound inspection process.

#### Recommendations:

1. Educate staff on proper counting of gauze used in surgical procedure.
2. Strengthen documentation of dressing removal, including number of pieces of dressing material removed.
3. Apply safety measure on tracheostomy packing, such as leaving gauze tail outside the wound.



## Case 5: Retained Foreign Body in Peritoneal Cavity

- A patient had medical termination of pregnancy in Oct 2013 and had repeated hospital admissions for abdominal pain since.
- In Jan 2014, ultrasound guided drainage of pelvic collection was performed with aspiration of 20ml clear fluid. Insertion of a Pigtail catheter was subsequently attempted but failed.
- CT scan of abdomen in May 2014 revealed a linear 3 cm hyperdense shadow in the pelvic region, compatible with the tip of guide wire used during the procedure in Jan 2014.
- Patient was being followed-up by the hospital for further management.

### Key Contributing Factors:

1. Role delineation of staff for surgical safety check was not clear.
2. The record on instrument used was not ready for checking at the end of procedure.

### Recommendations:

1. Assign designated staff to check instrument integrity.
2. Include surgical safety in staff orientation.
3. Conduct briefing session to staff on role of checking for surgical safety with focus on instrument integrity.

## Medication Error

### Clopidogrel (Plavix) was not Prescribed After Percutaneous Coronary Angioplasty

- A patient, with underlying diabetes, was admitted to Hospital A for Acute Coronary Syndrome (ACS).
- The patient was referred to Hospital B for Percutaneous Coronary Intervention (PCI) and drug eluting stents were implanted.
- Dual anti-platelet agents therapy (Plavix and Aspirin) for 1 year was planned.
- Upon discharge, patient was prescribed with the required medications for 3 weeks until the scheduled follow-up in Hospital A.
- During the two subsequent follow-up visits in Hospital A, the attending doctor only managed the patient's insulin regimen. The doctor assumed Hospital B would prescribe Plavix.
- 1 day after the 2nd follow-up in Hospital A, patient was admitted because of ACS and emergency investigation showed stent thrombosis.
- Patient died despite emergency PCI.

### Key Contributing Factors:

1. Communication breakdown between hospitals on post-PCI follow-up arrangement.
2. No formal departmental policy on follow-up arrangement for patients with PCI performed in another hospital.
3. Doctors unfamiliar with the post-PCI anti-platelet agent prescription were delegated to follow-up patient with PCI done in another hospital.

### Recommendations:

1. Set up a designated clinic in hospital to follow-up patients for the first time after PCI.
2. Develop a departmental workflow in hospital to ensure proper follow-up arrangement for patients with PCI done, especially for those who have procedures done in another hospital.
3. Strengthen follow-up arrangement and communication between the referring hospital and the hospital offering PCI procedure, especially regarding the dual anti-platelet therapy regimen.
4. Revamp the "Alert" system in Clinical Management System (CMS) to specify the regimen and duration of anti-platelet agents to be prescribed for post-PCI patient.

## Wrong Side Procedure

- A patient attended eye clinic for laser treatment of RIGHT eye glaucoma.
- Upon arrival, a clinic nurse confirmed the patient's details, type and side of the eye operation. A micropore tape was then applied above patient's RIGHT eyebrow as a site marker.
- In the Laser Procedure Room, Doctor A confirmed the patient's identity, operation and the side of operation but did not ask the side of operation again before starting the procedure.
- Doctor A did not see the site marker clearly, as the marker was covered by the laser machine's headband in the dimmed room.
- During the procedure, Doctor B, the supervisor, recognized the error and stopped Doctor A for further laser treatment.
- Patient received treatment to the RIGHT eye uneventfully afterwards.

### Key Contributing Factors:

1. Improper conduct of the Procedural Checklist and lack of guidelines or protocol on how the Procedural Checklist should be conducted.
2. Site marker covered by the headband of the laser machine.
3. Normal lighting being switched off before the start of the procedure.

### Recommendations:

1. Involve all staff as part of a team exercise and the patient whenever possible when conducting the Procedural Checklist to prevent wrong side surgery.
2. Develop guideline / protocol to ensure staff compliance with the 3 phases (namely, "Sign in", "Time Out" and "Sign Out") of the Procedural Checklist.
3. Provide adequate lighting at the time of procedure to ensure insertion of contact lens into the intended eye.
4. Explore alternative options to mark the side of operation to prevent wrong side surgery.

## Patient Suicide

In Q2 2014, a total of 6 patients (5 males and 1 female aged between 54 and 81) had committed suicide. While they had malignancies or chronic illness, none of these 6 patients had history of suicidal attempt nor psychiatric illness.

Of the 6 patients, three committed suicide in hospital by hanging (2) and bleeding (1), and two by jumping from height during home leave. The sixth patient, who had underlying lung cancer, left the hospital unnoticed and committed suicide by jumping from height.

### Key Contributing Factors:

1. Inadequate monitoring and following-up of facility improvement works related to environmental risk reduction for suicide prevention.
2. Inadequate communication on treatment plan (including patient's wish / expectation of treatment) among members of the clinical team(s).
3. Inadequate communication on treatment plan among patient, family and the healthcare staff.
4. Misperception on palliative care.

### Recommendations:

1. Review clinical governance to ensure proper monitoring and following-up of improvement works on environmental risk reduction for suicide prevention.
2. Enhance communication on treatment plan (including patient's wish / expectation of treatment) among members of clinical team(s).
3. Enhance communication among healthcare staff, patient and family regarding treatment plan.
4. Initiate timely referral of at-risk patients to palliative care or spiritual support service.



Bathroom curtain rail that patient used for hanging

# Serious Untoward Events Q2 2014

There were 18 SUE cases reported in this quarter, of which 15 were medication error and 3 were patient misidentification.

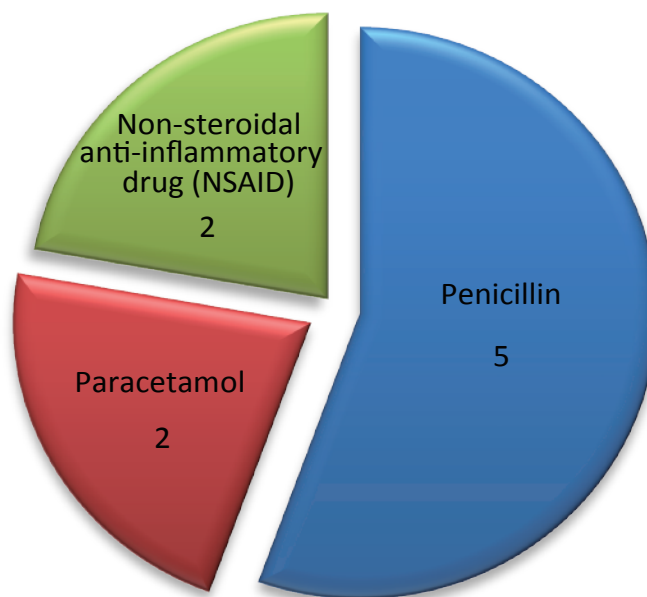
The 15 medication error incidents involved giving known drug allergens to patients (9), incorrect administration of vancomycin by bolus injection instead of slow infusion\* (2), use of insulin (2), anti-coagulants (1) and anti-platelet (1).

Cases related to patient misidentification included mixing up with another patient's laboratory report leading to unnecessary electrolytes replacement (2); selecting wrong patient from CMS resulting in wrong prescription to patient (1).

*\* Vancomycin should NOT be given by bolus injection. In general, concentrations of no more than 5 mg/mL and rates of no more than 10 mg/min are recommended in adults. Staff are reminded to always make reference to the updated standardized administration guideline for parenteral drugs when preparing the parenteral medications. In case of any uncertainty on the information provided, staff should refer to the product inserts or clarify with the pharmacy department.*

## Medication Incidents Related to Known Drug Allergy

**Distribution of known drug allergy incidents in Q2 2014**

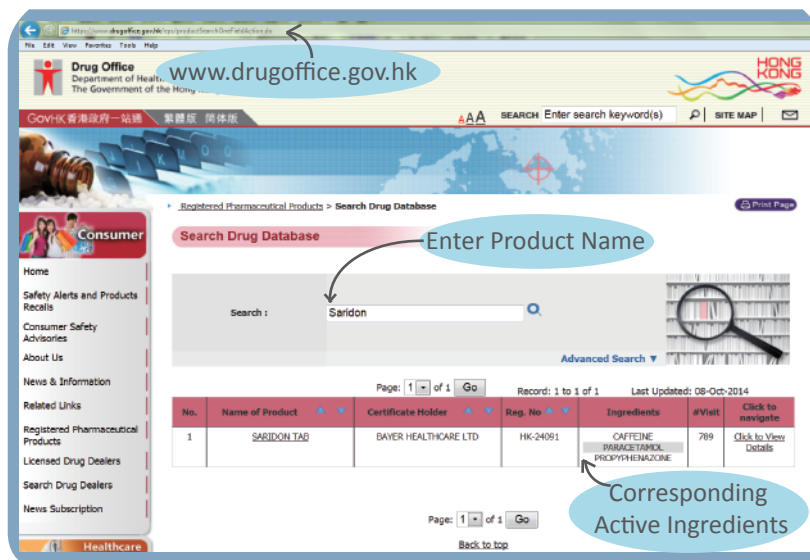


### Case Highlight: Paracetamol was Given to a Patient with Known Allergy to Saridon

- A patient attended General Out-patient Clinic for left knee pain.
- There was no past medical history in CMS as it was the patient's first attendance in Hospital Authority.
- During the consultation, patient stated that he was allergic to "Saridon".
- The attending doctor entered "Saridon" in the "Drug Allergy" alert of CMS accordingly. He then prescribed Paracetamol to the patient for pain relief.
- The patient informed the dispenser at the pharmacy that he had drug allergy history. However, he did not know if he was allergic to Paracetamol.
- After taking one tablet of Paracetamol, the patient developed eye itchiness, rash and pruritus over face and ears.
- He then attended the Accident and Emergency Department.
- The patient's condition improved after given antihistamine. He was discharged home on the same day.

(con't...)

(...con't)



Drug search website of Drug Office, Department of Health

### Key Contributing Factors:

1. Lack of knowledge on ingredients of Saridon, an over-the-counter drug, which contains “Paracetamol”, “Caffeine” and “Propyphenone”.
2. The drug allergen was entered in free text in CMS which was not subject to system checking for allergy.

### Recommendations:

1. Explore adding the link of drug search website provided by Department of Health on the drug allergen page of CMS to facilitate access of information on ingredients of a drug.
2. Enter the drug allergen in the structured data fields in CMS to enable system checking for allergy.
3. Design easy reference materials for over-the-counter drugs which contain “Paracetamol / Aspirin” to raise staff awareness.
4. Reinforce HA guideline on known drug allergy checking.

## Global Sharing

### Inadvertent cutting in-line (or closed) suction catheter during shortening of endotracheal tube (ET) - National Health Service (NHS) England

#### Background:

- The NHS has shared a recent incident about a tracheal suction catheter that was cut by mistake and retained in the endotracheal tube (ET).
- The ET was cut (with the suction catheter inside) for reducing the dead space to improve the lung ventilation.
- The incident was found several days later when the catheter tip was noticed in the patient’s right main bronchus of a chest X-Ray film.
- The retained suction catheter was subsequently removed by optic bronchoscopy.
- The NHS found 8 additional incidents which had been reported since 1 January 2012.
- The incidents involved neonates and adult patients which caused moderate harm.
- Also, there are potential risks of infection and injury when undertaking an invasive procedure to remove the retained catheter.

#### Findings:

- The suction catheter is not easily visible if left inside the ET in closed systems for neonates (similar colors and sizes).
- Staff did not always document by whom and when the ET was cut.
- Staff could damage the in-line catheter with sutures through the ET for securing.
- Staff failed to fully withdraw the catheter after performing tracheal suction.

(con't...)



(...con't)

### Lessons Learnt:

- Leaving a suction catheter inside ET is a poor clinical practice and may restrict ventilation. It poses a particular **RISK** if the ET is to be cut for any reason.
- Following suction, the catheter must be **WITHDRAWN** according to the manufacturer's instructions and the procedure be reflected in guidelines and training material.

Source: <http://www.england.nhs.uk/wp-content/uploads/2014/07/psa-cut-inline-suct-cathtrs.pdf>



Closed suction catheter

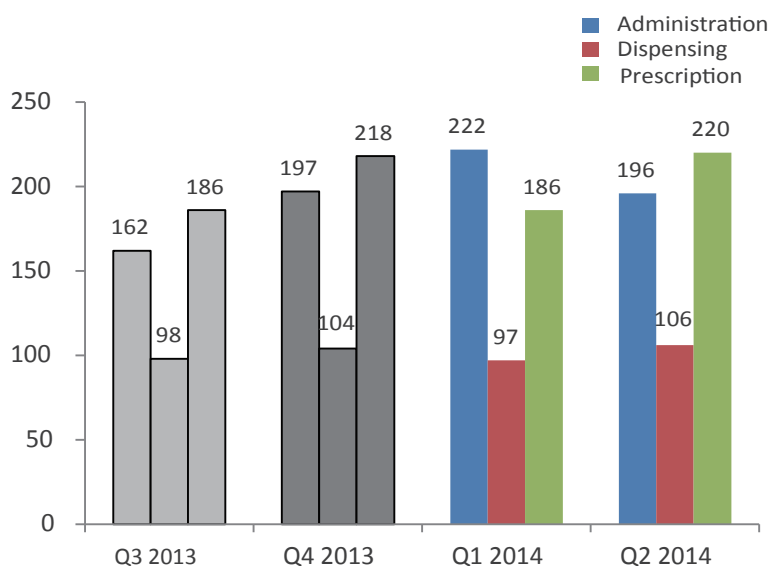


Ensure catheter is fully withdrawn from the ET after suctioning and before cutting the ET

## Local Sharing

### Top Categories of AIRS Incidents

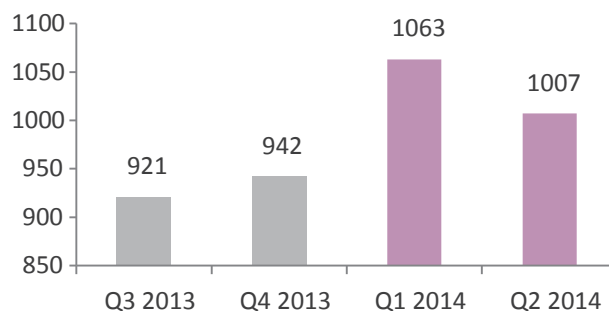
#### Medication Incidents in the last four quarters



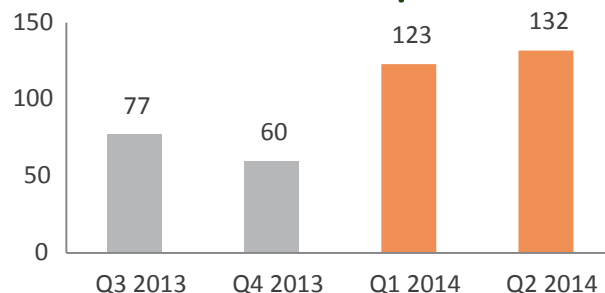
#### Notes:

1. Incident reporting in AIRS is voluntary.
2. Near miss incidents without affecting patients are included.

#### Number of falls in the last four quarters



#### Number of missing patients in the last four quarters



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Suggestions or feedback are most welcome. Please email us through HA intranet at address: HO Patient Safety & Risk Management