

# RISK ALERT



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A Risk Management Newsletter for Hospital Authority Healthcare Professionals

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Inpatient suicide (including patients on home leave) has accounted for a significant proportion of sentinel events in Hospital Authority (HA) since the incident reporting system was in place in 2007. While the number of inpatient suicide ranged around 1-2 per month, about 70% of the cases involved patients in non-psychiatric setting in the last 2 years.

Based on past reported incidents, it is observed that only about 20% of inpatient suicide in the psychiatric hospital/unit setting took place inside the ward (as 80 % of such suicides happened during the patient's home leave) compared with about 52% of inpatient suicides inside the ward in non-psychiatric setting. It is therefore reasonable to hypothesize that the design, features and practice of wards in the psychiatric setting could contribute to preventing suicide inside the ward premises.

Many colleagues involved in taking care of patients before their suicide felt lost and upset after the unfortunate incident. To address staff's concern over such predicament, it is imperative to acknowledge the fact that despite the best efforts by all staff, it is often difficult if not impossible to completely prevent or eliminate inpatient suicides. This is because we are trying not just to control an isolated phenomenon or a disorder but one which is mostly under the willful power of patients determined to end their own life .

After so many painstaking lessons from inpatient suicide, what have we learned and what else can we do from now on to identify patients with suicidal risks and prevent them from committing suicide? To heighten our alerts for patients with suicidal risks amidst our busy clinical duty, let's start off with profiling the next inpatient who will sadly kill himself or herself during hospitalization in a non-psychiatric setting. The patient is likely to be one who is recently diagnosed to be suffering from a disease with a potentially terminal outcome in the imminent future or one who is going into a new phase or mode of treatment for progression of a sinister disease. Our record shows that there is a 80% chance that this is a male patient and a 50% chance that he is above the age of 65. Typically, such a patient is found to be settled and calm throughout his stay in the ward. He asks for home leave by himself one day ostensibly to settle his household matter, and never makes his way back to the hospital again. An equally sad scenario is that the same patient could sneak into a toilet cubicle during night shift and hang himself. Hanging accounted for about 40-60% of the yearly inpatient suicides occurring inside non-psychiatric premises.

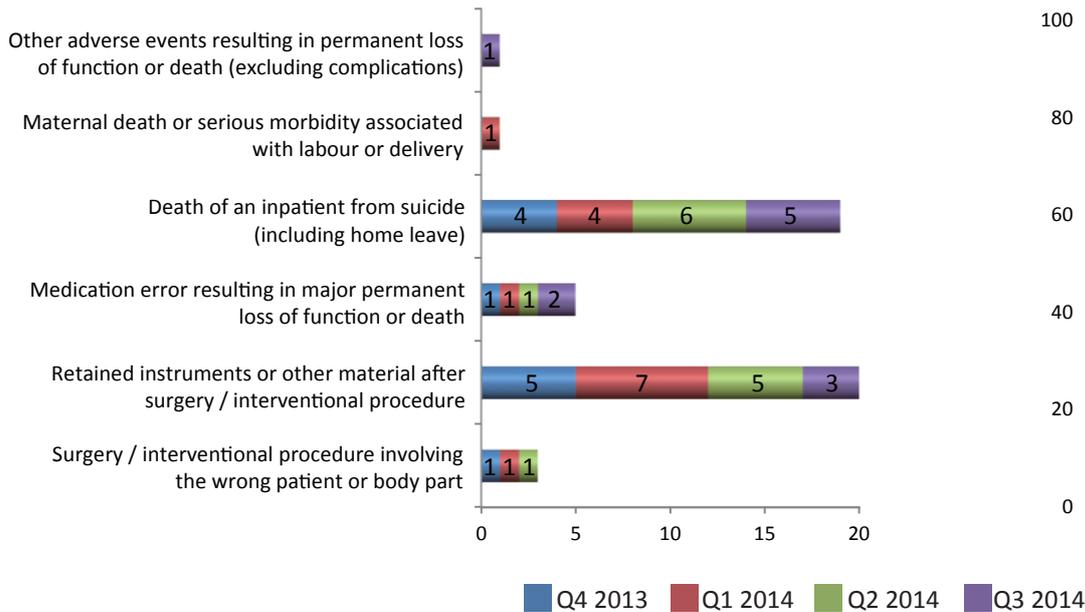
To mitigate suicidal risks, our lessons learned so far have prompted us to pay particular attention to several salient areas. The first is on granting of home leave to patients with aforementioned clinical characteristics. Proactive efforts to involve the patient's family members or carers to acknowledge suicidal risks and need for supervision at home seems a reasonable strategy. The second is on environmental safety in the ward which is another important factor to prevent such tragedy.

Given their diverse causes and unique problems, preventing inpatient suicide is conceivably a challenging mission for all healthcare workers. Even if there is a panacea for inpatient suicide, we still need determined adherence to all suicidal prevention regimes as it will take much time and effort to demonstrate the effect of any workable suicidal prevention strategies. Let's redouble our efforts to prevent inpatient suicides for the sake of at-risk patients and their carers.

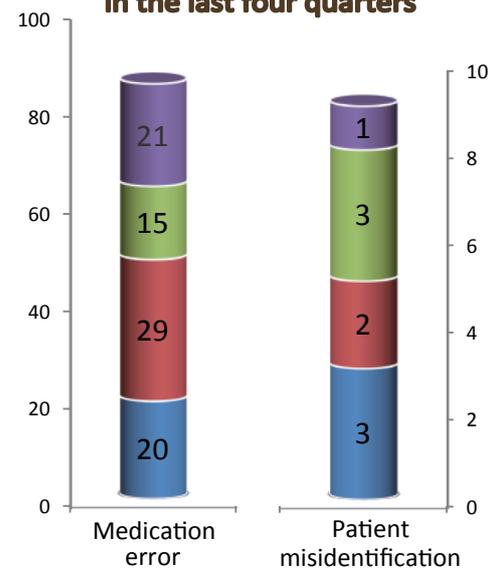
*Dr Desmond NGUYEN, Co-chairman of Subcommittee on Prevention of Inpatient Suicide*

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

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



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



## Sentinel Events Q3 2014

### Retained Consumables or Instruments

#### Case 1

#### An Angiocatheter Left in Abdominal Cavity

- A patient had a two-stage operation for carcinoma of rectum with liver metastasis.
- At the first stage operation of partial hepatectomy, angiocatheter and syringe were used for flushing and irrigation.
- At the second stage operation of laparoscopic low anterior resection of rectum, an angiocatheter was found in the abdominal cavity and was removed immediately.
- The patient was stable and was discharged on post operation day 9.



#### Key Contributing Factor:

The angiocatheter was not included in the accountable item list in this case.

#### Recommendations:

1. Improve the record system and the counting of added consumable items.
2. Consider using alternative syringe that could reduce the chance of catheter tip dislodgement.

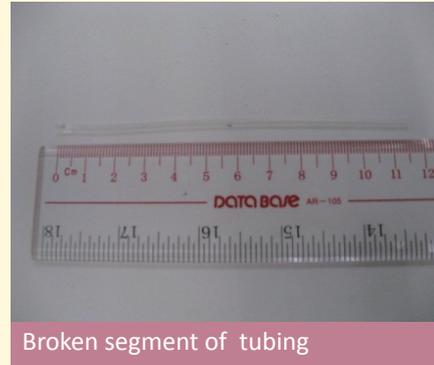
## Case 2

### Retained Segment of Subdural Drain

- A patient had an emergency burr hole operation for drainage of subdural haematoma.
- The subdural drain was removed by a doctor on post operation day 3.
- A follow up CT brain 4 days later revealed a catheter tip at the frontal area of the patient's brain.
- The tip was then removed surgically.



Silicone tubing for subdural drainage



Broken segment of tubing

#### Key Contributing Factors:

1. Failure to check the integrity of the removed drainage catheter.
2. Unaware of the trapping of the drainage catheter by a skin stitch during insertion.

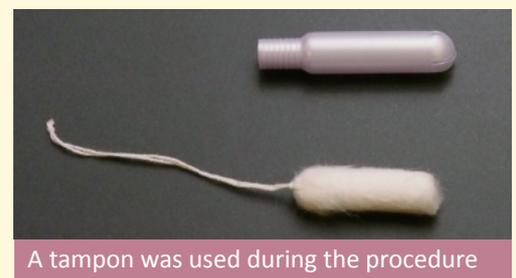
#### Recommendations:

1. Strengthen the practice of documentation and integrity checking of removed drainage catheter.
2. Encourage testing the resistance of drainage catheter when anchoring the catheter.

## Case 3

### Tampon not Removed after CT Pelvis

- A patient had CT thorax, abdomen and pelvis.
- A tampon was inserted into vagina for locating pelvic position.
- The tampon was documented on CT examination report.
- The patient noticed a string coming out from the vagina 3 days later.
- The tampon was removed uneventfully.



A tampon was used during the procedure

#### Key Contributing Factor:

Inadequate documentation and counting of consumables used in radiological procedures.

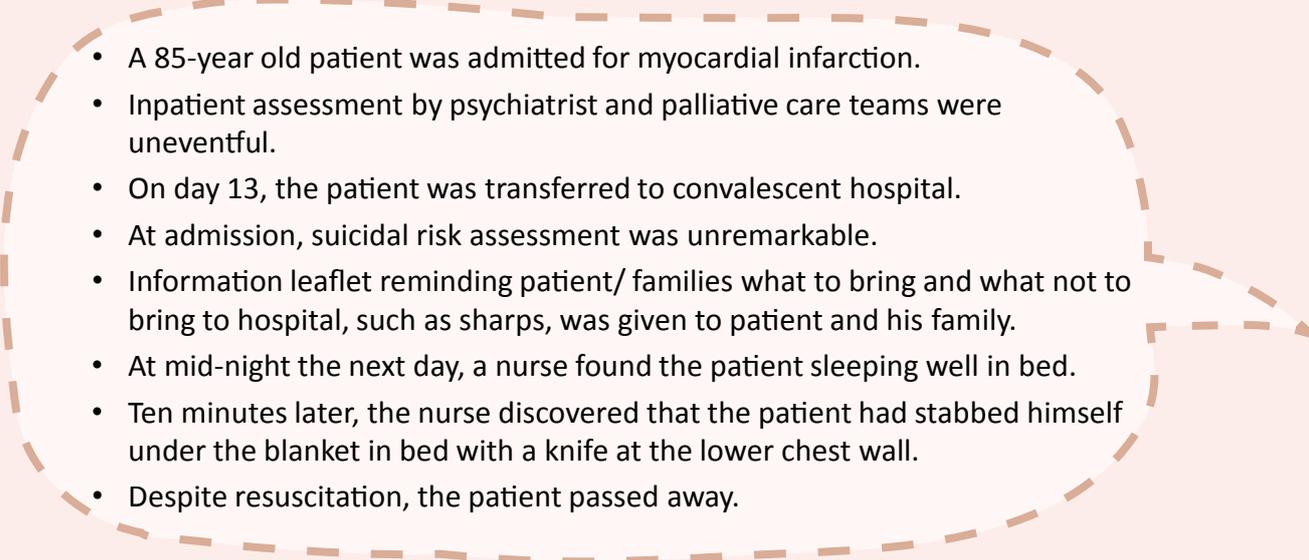
#### Recommendations:

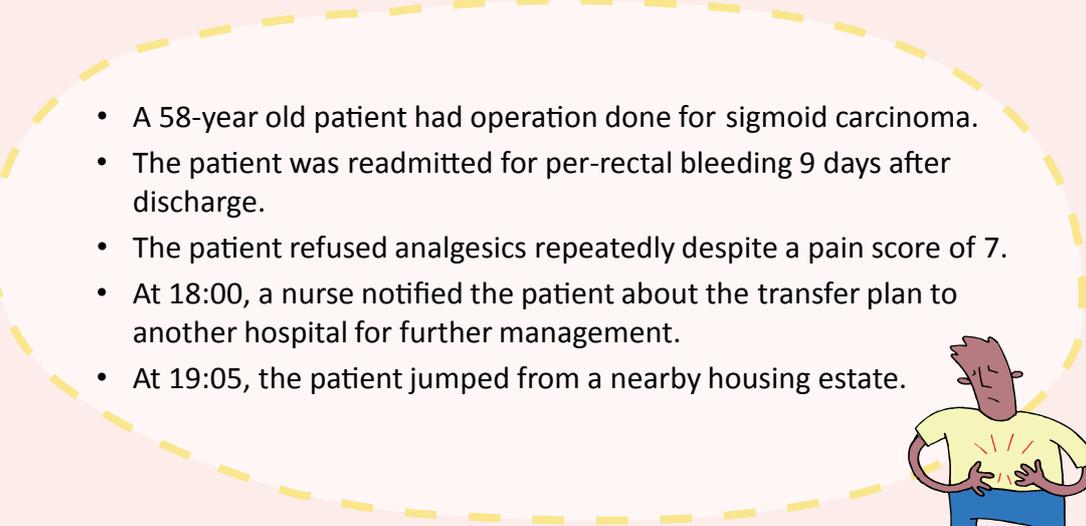
1. Redesign the counting form to facilitate counting of consumables.
2. Identify indications for tampon insertion to alert relevant staff.

# Patient Suicide

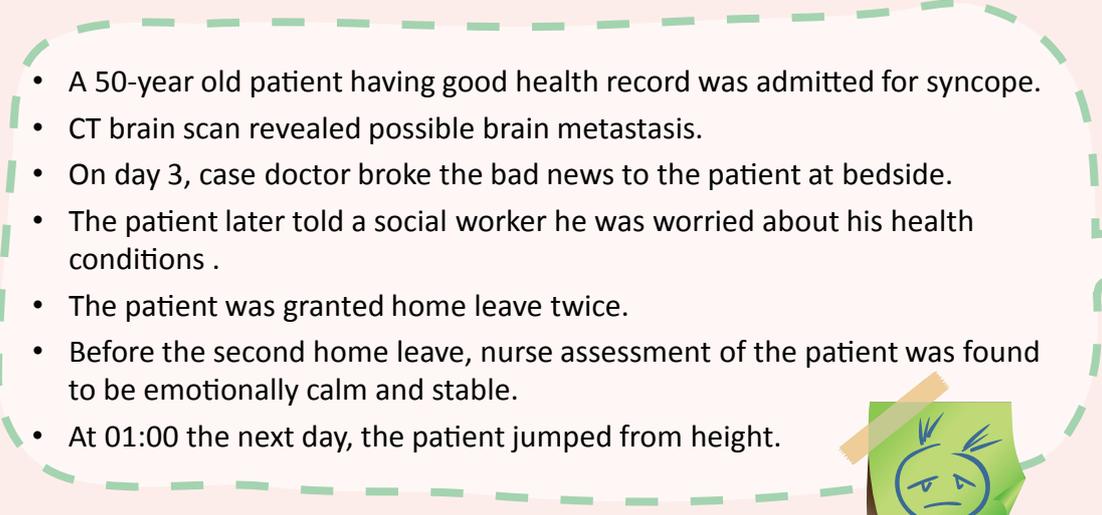
In Q3 2014, a total of 5 patients (3 male and 2 female aged between 45 and 85) had committed suicide. Two committed suicide in hospital by stabbing and jumping from a nearby housing estate respectively, and the other three by jumping from height during home leave.

Out of the 5 patients, two had psychiatric illness and one had history of suicidal attempt.

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- 1
- A 85-year old patient was admitted for myocardial infarction.
  - Inpatient assessment by psychiatrist and palliative care teams were uneventful.
  - On day 13, the patient was transferred to convalescent hospital.
  - At admission, suicidal risk assessment was unremarkable.
  - Information leaflet reminding patient/ families what to bring and what not to bring to hospital, such as sharps, was given to patient and his family.
  - At mid-night the next day, a nurse found the patient sleeping well in bed.
  - Ten minutes later, the nurse discovered that the patient had stabbed himself under the blanket in bed with a knife at the lower chest wall.
  - Despite resuscitation, the patient passed away.

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- 2
- A 58-year old patient had operation done for sigmoid carcinoma.
  - The patient was readmitted for per-rectal bleeding 9 days after discharge.
  - The patient refused analgesics repeatedly despite a pain score of 7.
  - At 18:00, a nurse notified the patient about the transfer plan to another hospital for further management.
  - At 19:05, the patient jumped from a nearby housing estate.



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- 3
- A 50-year old patient having good health record was admitted for syncope.
  - CT brain scan revealed possible brain metastasis.
  - On day 3, case doctor broke the bad news to the patient at bedside.
  - The patient later told a social worker he was worried about his health conditions .
  - The patient was granted home leave twice.
  - Before the second home leave, nurse assessment of the patient was found to be emotionally calm and stable.
  - At 01:00 the next day, the patient jumped from height.



4

- A 45-year old patient was under psychiatric care for schizophrenia for about 20 years.
- He was admitted for deteriorating mental condition.
- He stayed in hospital for about one month and did not express any suicidal idea.
- About 2 hours before the patient's home leave, case doctor assessed the patient to be calm and not psychotic or suicidal. The doctor contacted the patient's mother to arrange one week home leave.
- The patient left hospital accompanied by his mother.
- A nurse talked to the patient when he arrived home.
- On the next day, the patient jumped from height at home.

- A 50-year old patient living alone was under psychiatric care for schizophrenia and had history of suicide by jumping.
- The patient was admitted for psychotic symptoms.
- About 4 months after admission, she was transferred to psychiatric rehabilitation unit for intensive rehabilitation.
- A multi-disciplinary case conference was held a few months later. It was planned to put her on conditional discharge.
- About 10 months after admission, she was granted Absence on Trial (AOT).
- On the first day of AOT before the patient left the rehabilitation unit, she was assessed by a case manager to be suitable for home leave.
- On the next day, the patient jumped from height at a shopping centre.

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### Key Contributing Factors

1. Patients had underlying medical illness and unanticipated change in their mental status leading to unpredictable suicidal impulse.
2. Patients concealed their suicidal ideas and plans.

### Conclusions

1. The overall assessment and management of the patients were considered to be appropriate and timely.
2. The telephone home caring service could be enhanced to provide better follow up care during patient's home leave.



# Medication Error

## Missed the Reduced Dosage Instruction for Metoprolol (Betaloc)

- A patient was admitted for congestive heart failure.
- The patient underwent computer tomography coronary angiogram (CTCA) after discharge.
- The recommended instruction for reduced dosage of Betaloc (12.5 – 25mg) printed on the upper right corner of the second page of the request form was obscured by the patient's labels stapled on top of it.
- Standard adult Betaloc loading dose of 50mg was prescribed and administered to obtain optimal heart rate and image quality.
- The patient was allowed to leave after removal of intravenous catheter.
- The patient collapsed at home on the same day and was admitted.
- The patient died 6 days later despite intensive care.

### Key Contributing Factor:

The procedure was performed for a high risk cardiac patient in an out-patient setting where close monitoring was difficult.

### Recommendations:

1. Stratify patients into high risk and low risk when arranging CTCA.
2. Enhance identification of high risk patients, such as reviewing data collection for CTCA booking and streamlining various forms and checking procedures for CTCA.
3. Redesign the request form for prominent display of important information.

## Wrong Flow Rate of Dopamine Infusion

- A patient was put on dopamine infusion for congestive heart failure.
- The intended prescription was 200mg dopamine in 100ml saline infused at a rate of 3ml/hour.
- Before changing the dopamine infusion set and preparing the drug, two nurses checked the volume of saline and dosage of dopamine.
- After connecting the new infusion set, the nurse set the "Set Rate" instead of "Volume To Be Infused (VTBI)" to 100ml.
- The nurse noticed the incident when 100ml dopamine infusion was completed after an hour.
- The patient passed away on the next day.



### Key Contributing Factor:

Non-compliance with the guideline on use of infusion pump which requires confirmation of the correct infusion rate before starting infusion.

### Recommendations:

1. Reinforce adherence to the guideline on the safe use of infusion pump.
2. Arrange refresher training on the use of infusion pump for staff.

# Misplaced Nasogastric Feeding Tube

- A bed-ridden patient was on long-term nasogastric (NG) tube feeding.
- The NG tube slipped out.
- On re-insertion of NG tube, whoosh test was performed (whoosh test: rapidly injecting air down an NG tube while auscultating over the epigastrium. Gurgling is indicative of air entering the stomach).
- Aspirate from the NG tube was tested pH neutral.
- No bubbling at the end of the NG tube was observed when it was immersed into water.
- No immediate respiratory distress was noted.
- A Chest X-ray (CXR) was then requested to confirm the NG tube position.
- NG tube feeding was started after doctor examined the CXR.
- The patient developed respiratory failure on the start of NG tube feeding and died on the next day.

## Key Contributing Factor:

Misinterpretation of the NG tube position.

## Recommendations:

1. Promulgate and reinforce the Guidance for Verifying Correct Placement of NG tube.
2. Include interpretation of X-ray for confirmation of NG tube position in the orientation program for medical trainees.
3. Consult gastroenterologist for failure to insert a NG tube on repeated attempts.

### pH determination



pH ≤ 5.5

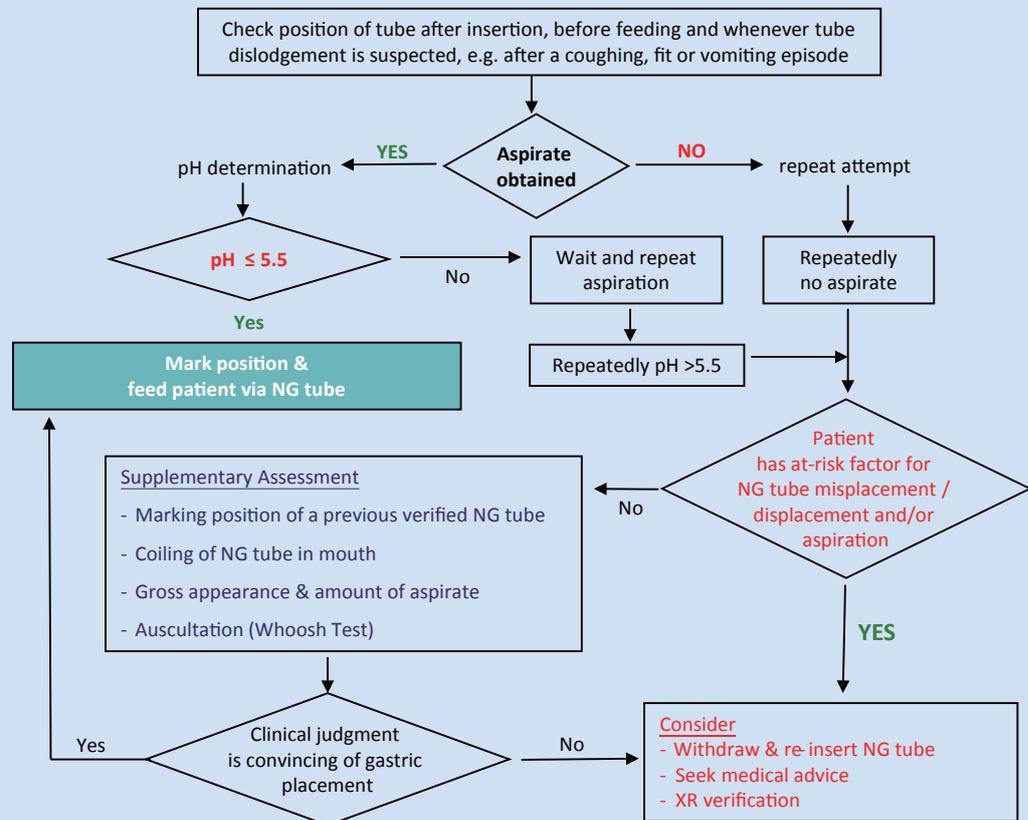
### NG tube



XR verification

## For Reference: A Risk Management Strategy for Verifying NG Tube Placement

Source: *Guidance for Verifying Gastric Placement of Nasogastric (NG) Tubes for Feeding* [http://ha.home/ho/coc\\_qands/ngtube.pdf](http://ha.home/ho/coc_qands/ngtube.pdf)



In order to have the appropriate CXR examination for confirmation of NG tube position, it is a good practice to specify the clinical indication on CXR request.

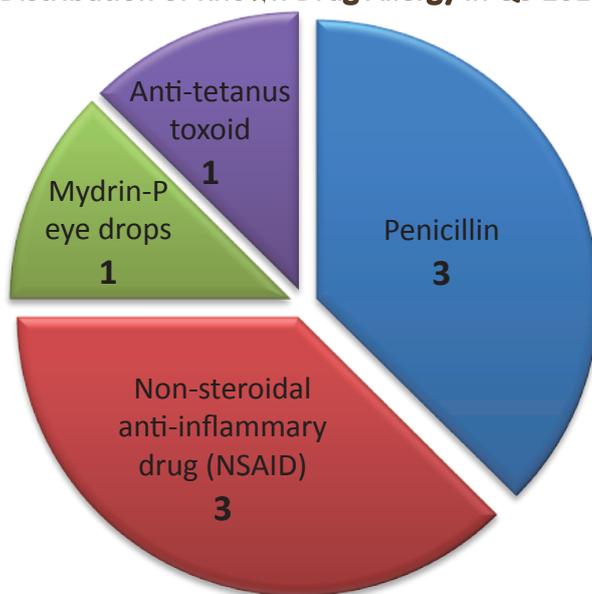
# Serious Untoward Events Q3 2014

There were 22 SUE cases reported in this quarter, of which 21 were medication error and 1 was patient misidentification.

The 21 medication error incidents involved giving known drug allergens to patients (8), use of anti-coagulants (5), insulin (4), dangerous drug (2), giving incorrect dose of Chloral Hydrate (1) and incorrect infusion rate of Amiodarone (1).

The patient misidentification incident involved incorrect administration of medication to a patient instead of the intended one.

**Distribution of Known Drug Allergy in Q3 2014**



## Local Sharing

### Medication Incident Statistics (Jan - Jun 2014)

No. of Incidents by Severity	
Severity Index	Frequency
0	416
1	525
2	113
3	11
4	6
5	0
6	2

Rank	Top 3 Most Common Error Types					
	PRESCRIBING		DISPENSING		ADMINISTRATION	
	Inpatient	Out-patient	Inpatient	Out-patient	Inpatient	Out-patient
1 <sup>st</sup>	Wrong Strength / Dosage (40%)	Wrong Patient (31%)	Wrong Drug (30%)	Wrong Strength / Dosage (27%)	Dose Omission (36%)	Dose Omission (11%)
2 <sup>nd</sup>	Wrong Drug (14%)	Wrong Strength / Dosage (21%)	Others (7%)	Wrong Drug (26%)	Wrong Drug (25%)	Extra Dose and Wrong Drug (9%)
3 <sup>rd</sup>	Known Drug Allergy (9%)	Wrong Drug (9%)	Wrong Label Info and Wrong Strength / Dosage (5%)	Wrong Label Info (20%)	Wrong Dose (15%)	Wrong Dose (7%)

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