



# RISK ALERT



ISSUE 60 JAN 2021

A Risk Management Newsletter for Hospital Authority Healthcare Professionals

## IN THIS ISSUE

### ★ Sentinel Events (SEs) (Q3 2020)

- \* Retained Instruments / Material
- \* Inpatient Suicide

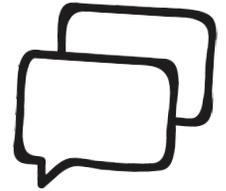
### ★ Serious Untoward Events (SUEs) (Q3 2020)

### ★ Local Sharing

- \* Sources for Checking Clinical Medication History
- \* 30-day Prescribing History vs “Drugs-on-Hand”
- \* Sharing on Commonly Used Vasopressors and Inotropes



## Opening Message



### Open Disclosure in Hospital Authority

Open disclosure is an essential part of clinical management. It is an open discussion or a series of discussions with a patient/ family/ carers about an incident which could have resulted, or did result in harm to that patient while they were receiving health care. Health care providers have the responsibility to maintain honest communication with patients/ family/ carers even when things go wrong. The elements of an open disclosure include an acknowledgement of what has been done, a factual explanation, potential consequences and follow up plan. Besides, an expression of sympathy or apology by our staff regarding the encounter/ incident should be offered where appropriate.

Previously, the practices for open disclosure for clinical incidents varied between hospitals, especially when the incidents involved more than one Cluster. As such, the Hospital Authority aligned the practices and adopted an Open Disclosure Policy in 2018. To maintain honest communication with patients/ family/ carers, open disclosure is required for all clinical incidents. Open disclosure to patients and their families is mandatory for sentinel events and serious untoward events.

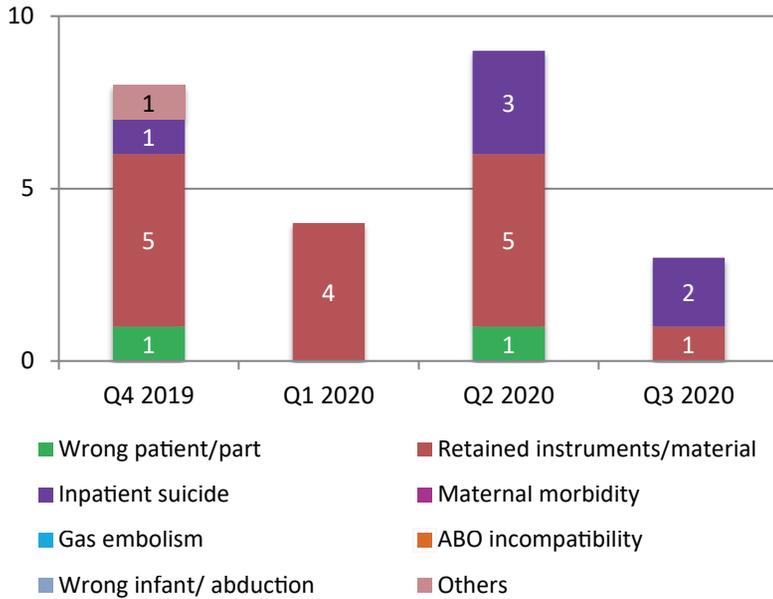
While the concept of open disclosure has been put forward decades ago, there are instances where clinicians hesitate to do so. Literature has shown this can be due to fear of litigation, lack of understanding of open disclosure, or albeit less frequently nowadays, insurance clauses that prevent disclosure.

HA adopts the position that the “apology” component in the open disclosure process does not equal an admission of liability. An apology is an expression of sympathy or regret, and should be made whenever appropriate. Although legal advice may form part of the larger clinical incident management process, fundamentally, it should never impede open disclosure.

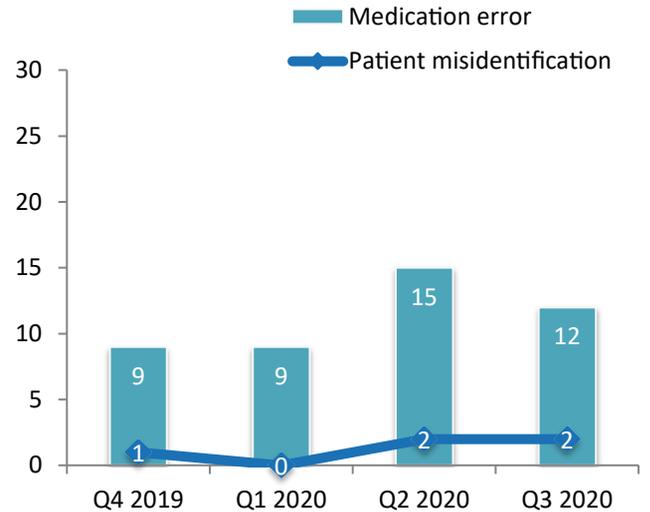
Through the enactment of the Policy and on-the-ground education and training by the Clusters, HA hopes to instill this critical concept of care into its daily practice.

Dr Sara HO,  
Chief Manager (Patient Safety & Risk Management),  
Hospital Authority Head Office

## Distribution of SE in the last four quarters



## Distribution of SUE in the last four quarters

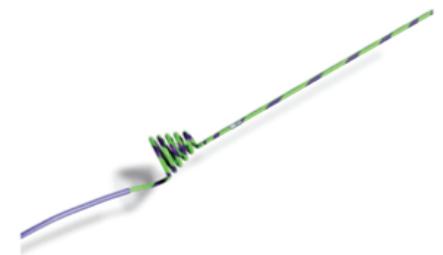


## Sentinel Events

### Retained Instruments / Material

#### Broken tip of stone retrieval device

- A patient underwent RIGHT ureteroscopy and laser lithotripsy for RIGHT upper ureteric stone.
- A Stone Cone retrieval coil device was used for preventing ureteric stone fragments migration during laser lithotripsy.
- The scrub nurse encountered resistance while withdrawing the device. The surgeon tried to straighten the device for removal.
- The device was finally withdrawn together with the ureteroscope.
- The surgeon proceeded with double-J catheter insertion and the position was confirmed by intra-operative imaging. NO significant residual stone fragment was detected.
- It was found that the end of the retrieved Stone Cone was blackened (burnt-like) with unsmooth surface during the final counting.
- The surgeon inspected and commented that the device might be damaged by the scattering of the laser beam.
- Post-operative image revealed the retention of a Stone Cone fragment at the RIGHT distal ureter.
- The retained fragment (~6cm) was retrieved completely by another operation.



Stone Cone retrieval coil



The retrieved broken part

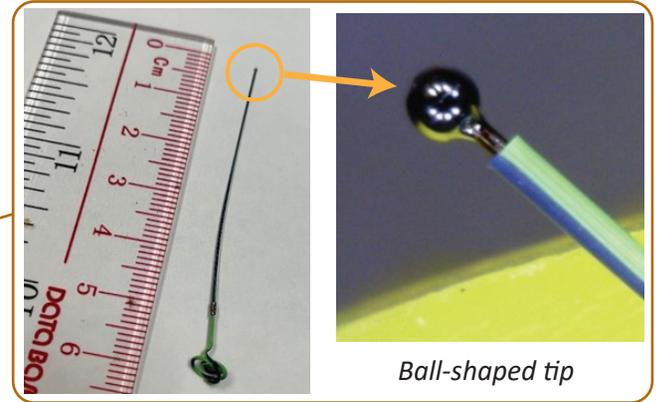


Burn mark



### Key Contributing Factors

1. Low situational awareness on the potential risk of broken and retained part of device while encountering difficulty in withdrawing the device.
2. Unaware that the device had a **ball-shaped tip**, thus did not notice that part of the device was missing intraoperatively after use and during final counting.



Ball-shaped tip

### Recommendations

1. Develop the “Tips and Tricks” of managing complex ureteric stone diseases with emphasis on encountering difficulties during operation.
2. Provide training to the operation team on the critical components of surgical consumables to facilitate the checking of the instrument integrity.

## Inpatient Suicide

In Q3 2020, two patients (1 female and 1 male patient, aged 45 and 82) had committed suicide: one by suffocation and one by jumping from height after found missing.

### Case 1

- A patient with persistent cough and haziness noted in chest X-ray was admitted for investigation. Patient was not at risk of suicide upon suicidal risk assessment on admission.
- Multiple investigations were performed. In view of persistent symptoms, differential diagnosis of atypical pneumonia was considered.
- 3 days after admission, the patient was found to be missing.
- The patient’s friend reported that the patient was certified dead on arrival to the Accident and Emergency Department (AED) of another hospital for suspected jumping from height.

### Finding

The patient was reported to be emotionally calm and cooperative throughout the hospital stay. No suicidal risk factors were documented nor reported.

## Case 2

- A patient with history of sigmoid colon cancer received operation in 2018 and declined adjuvant chemotherapy. The patient was later diagnosed with inoperable recurrent colon cancer and was referred for hospice care.
- The patient had abdominal pain, vomiting and no bowel opening, and was admitted via AED for intestinal obstruction.
- Upon pain team's assessment for cancer pain management, it was noted that the patient had low mood with flirting self-harm ideas but denied actual self-harm act and wished for euthanasia by sleeping pills. Pain killers were prescribed and given to the patient as scheduled. The patient was referred to the Clinical Psychologist.
- Clinical Psychologist and palliative care nurse assessed the patient. They noted that the mood of the patient was calm with adjustment reactions and the patient was not actively suicidal.
- The patient and care-givers were referred to the Medical Social Worker to provide social and psycho-spiritual support.
- On day 15 after admission, the patient tolerated congee diet and planned to be discharged on the next day. The patient complained of LEFT parotid swelling and pain at night and pain killer was given.
- In the middle of night, it was noted that the patient's head was surrounded by a vomit bag. Resuscitation was performed immediately.
- The patient was certified dead despite resuscitation.

### Conclusion

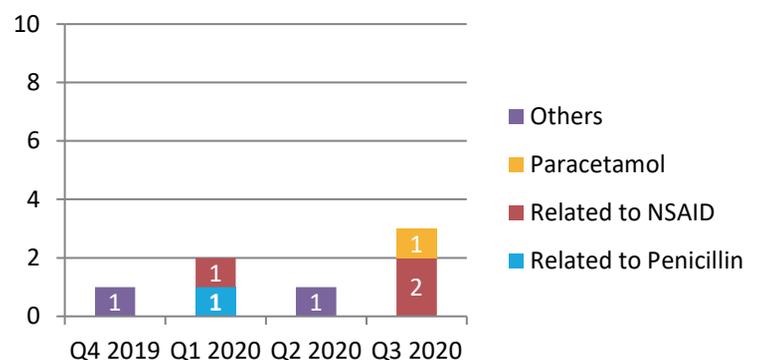
The overall assessment, treatment, management plan, including physical and psycho-social domains, provided to the patient were appropriate and were in line with the usual standards of care.



## Serious Untoward Events

Of the 14 SUE cases reported in Q3 2020, 12 cases were due to medication errors. The medication error cases involved known drug allergy (KDA) (3), anticoagulant (3), insulin (1), chemotherapeutic agent (1), oral hypoglycemic agent (1), sedative agent (1) and others (2). There were allergic reactions in two of the known drug allergy cases, which subsided after treatments were given.

Known Allergy	Allergen prescribed
Paracetamol	Paracetamol
Ibuprofen	Ketorolac
Naproxen	Diclofenac



Number of KDA cases in the last four quarters

## Known drug allergy

- A patient allergic to Brufen (Ibuprofen) attended AED for diarrhoea and vomiting.
  - Oral Holocon and rehydration salt was prescribed to the patient.
  - As the patient still complained of abdominal pain after taking the medications, intravenous fluid and tramadol injection were prescribed by the doctor.
  - In view of continuous vomiting, the prescription was changed to Ketorolac (Toradol) 30mg injection.
  - Ketorolac was given to patient as prescribed.
  - The patient developed bilateral upper eyelids swelling which subsided after medical treatment.
- A patient who had allergic reaction (angioedema) to Naprosyn (Naproxen) attended the Specialist Out-Patient Clinic for follow-up of thigh mass.
  - During consultation, the patient requested pain killer (Diclofenac) for gum pain and claimed that the involved drug was prescribed by general practitioner and was taken occasionally without allergic response.
  - The attending doctor overrode the allergy alert then prescribed Diclofenac to the patient.
  - 3 weeks later, the patient attended AED for lip swelling after taking Diclofenac. The patient was diagnosed to have angioedema and was given corresponding treatment.



Always check for cross-allergy.



Seek advice from senior colleague/ pharmacist for patients with history of potentially severe drug allergic reaction before prescribing the same group of drugs and/ or use alternative.

## Wrong dose of Actrapid was prescribed

- A patient with type 2 diabetic mellitus and fluctuating glucose level was transferred from rehabilitation hospital to acute hospital for coffee ground vomiting.
- The patient had no sign of gastrointestinal bleeding, then oral diet was resumed. The usual oral hypoglycemic agents and Actrapid were prescribed according to the handwritten medication administration record of the previous hospital.
- Subsequently, 24 units instead of 2 units of Actrapid, 3 times per day was prescribed to the patient.
- Nurse A queried about the high dose of short acting insulin. Nurse B replied that the patient's blood sugar level was high (12.6mmol/L) in the record. The high dose of Actrapid was administered to the patient twice.
- The patient developed hypoglycaemia with blood sugar level at 3.0mmol/L.
- 50% Dextrose was given to the patient intravenously.

## Key contributing factors

1. Transcription error due to illegible handwriting.
2. Assumptions and insufficient awareness of high dosage of insulin without further clarification.

## Recommendations

1. Beware of high dose of short acting insulin in the vetting process and pay special attention to concurrent use of long acting and short acting insulin.
2. Encourage speak up culture when the red flag was identified.



## Sources for Checking Clinical Medication History

### Inpatient Medication Order Entry (IPMOE) [History] function

IP Prescribing X

Previous Rx (HHH) | Previous IPMOE (HHH) | On-hand Medication

Hospital Code HI

**Previous Rx** shows the Outpatient, AED and Discharge Medication of Patient (Episode-based)

**On-hand Medication** shows the aggregated list of on-hand drug of the patient (Group by Medication)

Date	Case No.	Ref.No.	Ordered By	Status	Type
29/12/2020	TKO	3891	MED - MED	Vetted	IP Discharge
07/12/2020	HHH	1727	-	Rx Image	OP
	HHH	8354	CGTD - CGKL	Vetted	OP
02/12/2020	HHH	8167a	CGTD - CGKL	Vetted	OP
12/11/2020	TKO	5461	ORT - FRAC	Vetted	OP

Start Date	End Date	Drug	Hosp	Spec...	Type
Amlodipine Besylate tablet					
29 Dec 20	02 Jan 21	Amlodipine Besylate (NORVASC) tablet oral: 10 mg daily for 5 day(s) increase	TKO	MED	IP Discharge
Bisacodyl rectal suppository					
29 Dec 20	02 Jan 21	Bisacodyl (DULCOLAX) rectal suppository rectal: 10 mg daily PRN(100%) for 5 day(s)	TKO	MED	IP Discharge

### Electronic Patient Record (ePR)

#### Prescribing History

Electronic Patient Record (ePR) X

Prescribing History - By Order

Order Date	Hospital	Specialty	Prescription Type	Ref. No.	Prescription
22/01/2021	UCH	ASE	Discharge	UCH2229	AUGMENTIN tablet 1g oral : 1000 mg bd for 1 weeks
22/01/2021	UCH	ASE	Discharge	UCH2229	PIRITON (CHLORPHENIRAMINE MALE oral : 4 mg tds pm (100%) for 1 weeks
17/11/2020	UCH	GKBH	Out-patient	UCH9916	HYPROMELLOSE eye drops 10ml ophthalmic - 1 drop(s) tds pm for 12 wee
27/02/2020	UCH	GKBH	Out-patient	UCH1516a	HYPROMELLOSE eye drops 10ml ophthalmic - 1 drop(s) tds pm for 12 wee

**Previous IPMOE** shows the previous IPMOE history of the Patient (Different HN episodes)

Discharge Date	Hospital	Case No.	Patient Specialty
29/12/2020	TKO		MED
04/09/2020	TKO		MED
27/08/2020	TKO		MED
23/05/2020	TKO		MED
02/12/2019	TKO		EM

#### Dispensing History

Electronic Patient Record (ePR) X

Dispensing History - By Order

Dispensing Date	Hospital	Patient Type	Specialty	Drug name (Route)	Dosing Instruction
22/01/2021	UCH	IP	ASE	AUGMENTIN (OR EQUIV) TABLET 1G (ORAL)	TAKE AT THE START TWICE DAILY
22/01/2021	UCH	IP	ASE	CHLORPHENIRAMINE MALEATE TABLET 4MG (ORAL)	TAKE <1> TABLET(S) WHEN NECESSARY
17/11/2020	UCH	OP	GOP	HYPROMELLOSE EYE DROPS 10ML (OPHTHALMIC)	INSTILL TO EYES <1> DAILY WHEN NECESSARY
27/02/2020	UCH	OP	GOP	HYPROMELLOSE EYE DROPS 10ML (OPHTHALMIC)	INSTILL TO EYES <1> DAILY WHEN NECESSARY

### Corporate Drug Dispensing History

Corporate Drug Dispensing History (CDDH) Enquiry X

Disp Date	Drug Description	Duration	Disp. Qty.	Hosp.	CDDH Spec.
22/01/2021	AUGMENTIN (OR EQUIV) TABLET 1G Dosage: TAKE AT THE START OF MEAL <1> TABLET(S) TWICE DAILY	3 Days	6 TAB	UCH	AE
22/01/2021	CHLORPHENIRAMINE MALEATE TABLET 4MG Dosage: TAKE <1> TABLET(S) THREE TIMES DAILY WHEN NECESSARY	4 Days	12 TAB	UCH	AE
17/11/2020	HYPROMELLOSE EYE DROPS 10ML Dosage: INSTILL TO EYES <1> DROPS(S) THREE TIMES DAILY WHEN NECESSARY	84 Days	3 BOTT	KBC	GOPC
27/02/2020	HYPROMELLOSE EYE DROPS 10ML Dosage: INSTILL TO EYES <1> DROPS(S) THREE TIMES DAILY WHEN NECESSARY	84 Days	3 BOTT	KBC	GOPC

Drug: [ ]  
From: 27/01/2020 to 22/01/2021  
Record type: All [ ] Retrieve

## 30-day Prescribing History vs "Drugs-on-Hand"

30-day Prescribing History:

Prescription end dates

**within the past 30 days or in the future**

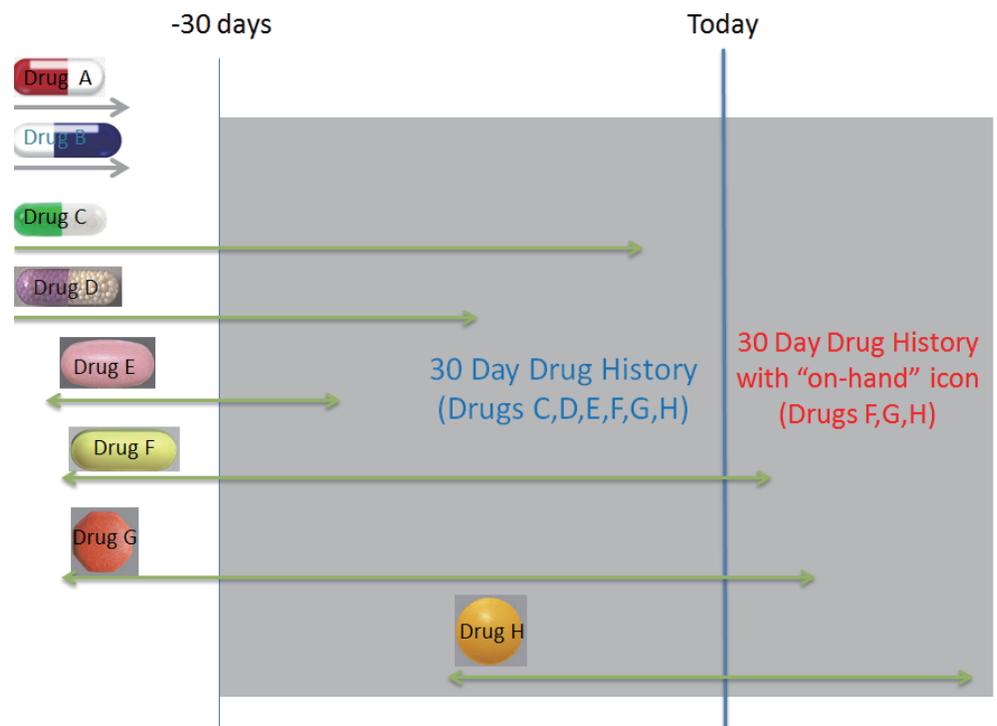
30-day Prescribing History		Zoom	Legend
Last Prescription			
End Date ▾	Drug Name (Route)		
05/05/2021 (x 2)	AMITRIPTYLINE (ORAL)		
05/05/2021 (x 2)	ASPIRIN (ORAL)		
05/05/2021 (x 2)	FERROUS SULPHATE (ORAL)		
05/05/2021 (x 2)	FRUSEMIDE (ORAL)		
05/05/2021 (x 2)	GLICLAZIDE (ORAL)		

**On hand indicator** will be shown when:

Prescription end dates from **today onwards**

### Examples

Drugs A&B were finished more than 30 days ago. They will not be shown on the 30 day drug history.



2. Legend	
Current Prescription	It shows the recent medication orders of a patient. A medication is considered as recent if the prescription end date is within 30 calendar days from the date of enquiry.
	(a) The "Hand" icon indicates medications the patient should have on hand according to the prescribing records. (b) It does not indicate latest changes (e.g. drug discontinuation / dosage reduction) and should not be regarded as the existing drug regime patient is taking.



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



## Sharing on Commonly Used Vasopressors and Inotropes

Vasopressors and inotropes are drugs that increase vasoconstriction or myocardial contractility, which are frequently used in critical care units. Vasopressors and inotropes are currently classified as high alert medications in Hospital Authority (HA); inappropriate use of these drugs could result in serious adverse events and patient harm.

Commonly used vasopressors and inotropes in HA are summarised below:

	<b>Adrenaline</b>	<b>Noradrenaline</b>	<b>DoPAMine</b>	<b>DoBUTamine</b>
<b>Mechanism of Action</b>	<b><math>\beta</math>1-, <math>\beta</math>2- and <math>\alpha</math>-adrenergic agonist</b> <ul style="list-style-type: none"> <li>Increase contractility &amp; heart rate</li> <li>Vasoconstriction</li> <li>Bronchial smooth muscle relaxation</li> </ul>	<b>Predominant <math>\alpha</math>-adrenergic agonist</b> <ul style="list-style-type: none"> <li>Vasoconstriction</li> </ul>	<b>Dopaminergic agonist (low dose)</b> <ul style="list-style-type: none"> <li>Renal vasodilation</li> </ul> <b><math>\beta</math>1-adrenergic agonist (moderate dose)</b> <ul style="list-style-type: none"> <li>Increase contractility &amp; heart rate</li> </ul> <b><math>\alpha</math>1-adrenergic agonist (moderate-high dose)</b> <ul style="list-style-type: none"> <li>Vasoconstriction</li> </ul>	<b><math>\beta</math>1- &amp; <math>\beta</math>2- adrenergic agonist</b> <ul style="list-style-type: none"> <li>Increase contractility &amp; heart rate</li> <li>Vasodilation</li> </ul>
<b>Clinical indications</b>	Cardiac arrest Cardiogenic shock	Septic shock	Heart failure Cardiogenic shock Septic shock	Heart failure Cardiogenic shock
<b>Compatible diluent(s)</b>	0.9% NaCl (NS) or 5% Dextrose (D5)	<b>D5</b> (dilution with NS alone is not recommended)	NS or D5	NS or D5
<b>Intravenous administration</b>	Preferably via central line	Preferably via central line	Infusion into large vein	Infusion into large vein
<b>Therapeutic dosage range</b>	0.01-1mcg/kg/min (Max: 2mcg/kg/min)	0.05-1mcg/kg/min (Max: 3mcg/kg/min)	2-20mcg/kg/min (Max: 50mcg/kg/min)	2.5-10mcg/kg/min (Max: 40mcg/kg/min)

### Safety tips on the use of vasopressors and inotropes:

- Use **standardised dosing/ infusion tables** to minimise calculation error
- Before administration, check on **5 “Rights”** (right patient, right time, right drug, right dose and right route), dilution and pump settings; perform independent double check if feasible
- Use **tall-man lettering** for look-alike drug names e.g. **DoBUTamine, DoPAMine**
- Store and label the drugs properly to facilitate differentiation e.g. various concentrations of adrenaline (1:1,000 and 1:10,000)
- Properly label all syringes containing drugs; discard any unidentified syringes

### References:

- UpToDate Drug Information
- FDA Professional Drug Information <https://www.drugs.com/pro/>
- Package insert of adrenaline (DBL[1:10,000], Feb2019), noradrenaline (Sintetica), dopamine (Laboratorios Basi, Dec2015) and dobutamine (Hospira, Sep2011)
- Safety Solutions on High Alert Medications, HA Medication Safety Committee

### EDITORIAL BOARD

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

**Board Members:** Dr S L LEE, Deputising SD(Q&S), HKWC; Dr W M KWAN, SD(Q&S), NTWC; Mr Brian CHING, P(CPO), HAHO; Dr Alastair MAH, SM(PS&RM), HAHO; Mr Edmond FAN, SM(PS&RM), HAHO; Ms Katherine PANG, M(PS&RM), HAHO; Mr M N CHAN, M(PS&RM), HAHO.

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