



# RISK ALERT



ISSUE 67 OCT 2022

A Risk Management Newsletter for Hospital Authority Healthcare Professionals

## IN THIS ISSUE

### Sentinel Events (SEs) (2Q 2022)

- ❖ Retained Instruments / Material
- ❖ Wrong Part
- ❖ In-Patient Suicide

### Serious Untoward Events (SUEs) (2Q 2022)

#### Local Sharing

- \* Use of Standardised Tables to Reduce Medication Error
- \* NPO Except Medication
- \* Warfarin Safety Campaign



## Opening Message

### *Strategies to Ensure Service Quality and Patient Safety*

As healthcare professionals, we strive to save lives and reduce suffering. In the continuous journey to ensure service quality and patient safety, the best intervention strategy invariably lies in system redesigns based on update best practices and technology-based solutions that help reduce human performance shortfalls, like the use of IT. If the evidence is compelling enough, there is a need to fast track the adoption of the best-practice safety systems to reduce quality variation across hospitals the soonest we can.



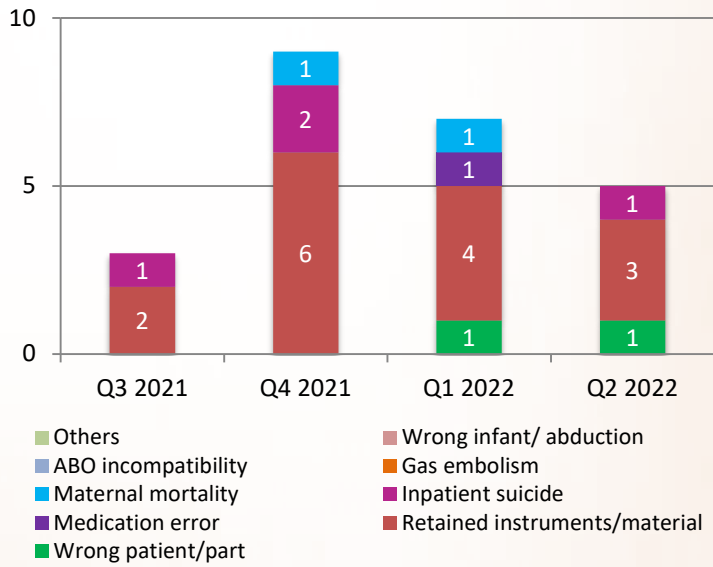
The second strategy which I find important is speak-up culture. Staff should be empowered to voice their concerns about patient safety. Though they may not always get it right, the fact is patients' lives do get saved when courageous people speak up – openly and honestly. Award programmes should be organized to acknowledge these acts to build the culture that everyone can take accountability for putting things right.

The third strategy concerns the issue of empathy. Studies have shown that when caregivers report a loss of empathy, they subsequently show an increase in their rate of major medical errors. It is worthwhile to invest in programmes which help rekindle healthcare workers' empathy, which indirectly will benefit patient safety.

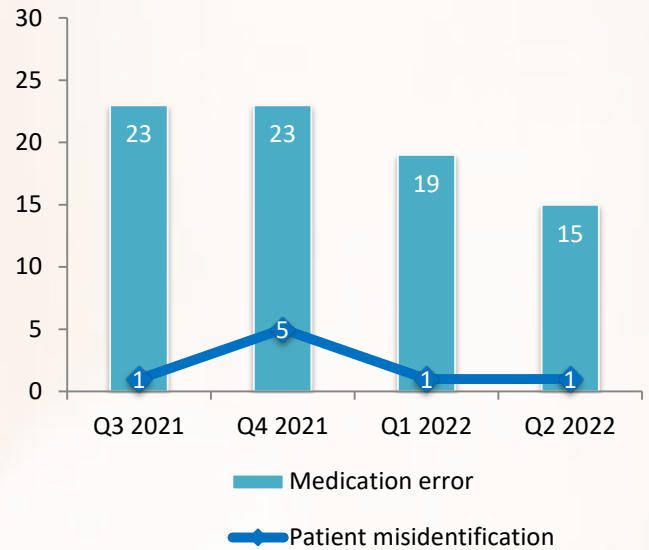
With everybody putting patients' best interest at heart in whatever we do, the state of high-quality health care should not be an unachievable endpoint.

**Dr Beatrice CHENG**  
**Cluster Chief Executive**  
**New Territories East Cluster**

## Distribution of SE in the last four quarters

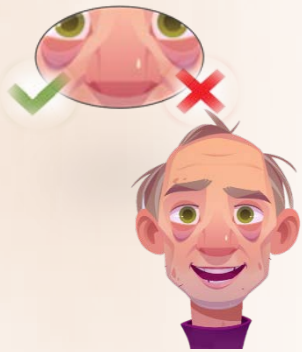


## Distribution of SUE in the last four quarters



## Sentinel Events

### Nasal Biopsy on Incorrect Side



A patient with incidental finding of RIGHT posterior inferior turbinate polypoidal lesion on computed tomography (CT), had biopsy arranged in Ear Nose Throat (ENT) clinic. Endoscopic examination showed RIGHT inferior turbinate polypoidal lesion and clear LEFT nasal cavity.

On the day of minor operation (MOT), consent for LEFT nasoendoscopy and biopsy was signed by doctor instead. Following sign-in and time out, LEFT nasoendoscopy with biopsy was performed. The incident was discovered in the follow-up clinic. RIGHT sided biopsy was arranged which revealed a benign lesion on pathology.

#### How did it happen?

1. Failed to pick up the correct laterality from clinical records
2. Consent taken on the day of procedure, not by the doctor making endoscopic diagnosis

#### How to prevent?

1. Develop and print out the "List of Procedures" for elective minor procedures – including the laterality and name of procedures
2. Write on "Procedure Booking Information Form" and the "MOT Booking List" for elective minor procedures – including the laterality and name of procedures
3. Reinforce communication among staff and with patients



## Tenckhoff Catheter Cuff/Fragment

- ❖ A patient with end stage renal failure was admitted for acute Continuous Ambulatory Peritoneal Dialysis (CAPD)-related peritonitis. Emergency operation for removal of Tenckhoff catheter was performed and patient was discharged after a course of rehabilitation.
- ❖ A year later, patient was admitted for fluid overload. X-ray abdomen and pelvis showed a 3.4cm tubular opacity in left lower abdomen. CT confirmed a short segment of Tenckhoff catheter in the subcutaneous layer of abdominal wall. Retained segment along with the external cuff were removed under local anaesthesia. Patient was discharged afterwards.



### How did it happen?

- Failed to identify missing fragment during integrity checking of the removed catheter
- Fragmented removal of Tenckhoff catheter leading to difficulty in checking integrity
- No documentation on the type of Tenckhoff catheter during insertion

### How to prevent?

1. Document the type of Tenckhoff catheter used i.e. single/double cuffed, straight/curved tip, both during insertion and after removal.
2. Avoid cutting through catheter during removal. Extend wound for adequate exposure to preserve integrity.
3. Avoid sending out part of the catheter as specimen before completion of integrity checking.

## Nasogastric Tube

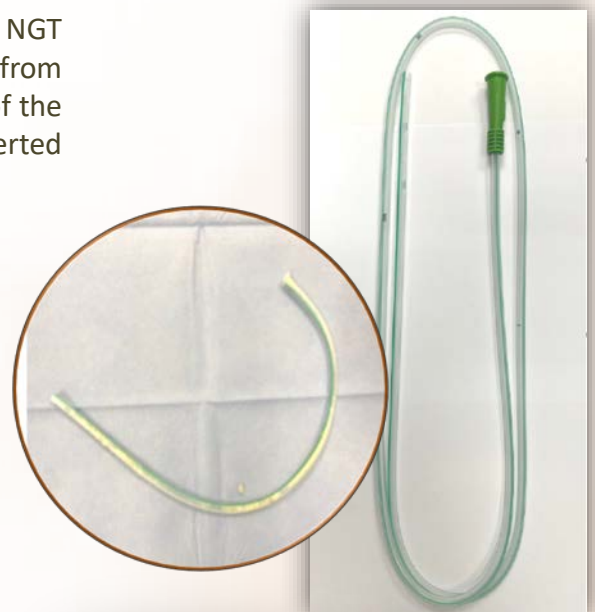
- ❖ An old aged home resident on long-term nasogastric tube (NGT) feeding was sent to Accident and Emergency Department (AED) for NGT blockage. After removal of the blocked NGT and insertion of a new NGT, chest X-ray (CXR) showed the tip of NGT above the diaphragm. The NGT was advanced, but subsequent CXR revealed kinking of the tube in esophagus. The NGT was eventually removed and patient was admitted for further management.
- ❖ During an oesophago-gastro-duodenoscopy (OGD) for NGT insertion, a 38cm long broken NGT was retrieved from patient's right side of epiglottis. The retained NGT was of the same type used in AED. An entriplex NGT was inserted afterwards. Patient was later discharged.

### How did it happen?

- No thorough integrity checking on the removed NGT

### How to prevent?

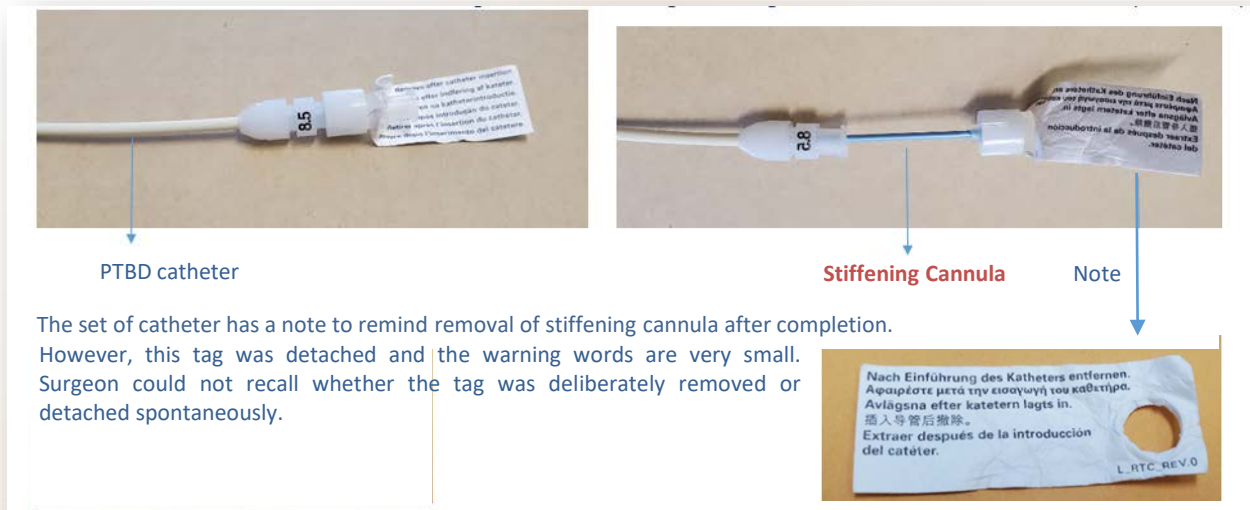
- Reiterate the importance of thorough checking of NGT completeness
- Review procedural guideline to elaborate features of an intact NGT
- Reinforce a proper nursing documentation





## Stiffening Cannula

A patient with history of hepatocellular carcinoma and recurrent cholangitis on two long-term Percutaneous Transhepatic Biliary Drainage (PTBD catheters), was repeatedly admitted for fever and blockage of PTBD catheters requiring frequent revision. In May 2022, elective cholangiography and revision of both PTBD catheters were done. The superior and inferior PTBD catheters were exchanged with Fr 8.5 PTBD catheters. However, the superior PTBD remained to have nil output while the inferior PTBD was functioning well. During subsequent revision, doctor discovered upon opening of dressing that the stiffening cannula of the superior PTBD had not been removed. The superior PTBD was eventually removed together with the cannula. Reinsertion of new PTBD was performed a few days later.



### How did it happen?

1. Low alertness for foreign body retention
2. Communication breakdown between surgeon and assisting nurses
3. Message on warning tag too small
4. PTBD exchange requires both guide wire and stiffening cannula to be removed, while many other percutaneous procedures only involve guide wire removal.

### How to prevent?

1. Doctors performing the endoscopic or percutaneous procedures must be involved in the sign out and counting process
2. Remind Integrated Endoscopy Unit nurses to specifically check for both guide wire and stiffening cannula in PTBD procedures

## Safe Handling of CVC and Guide wire



To enhance staff awareness on Central Venous Catheter (CVC) and guide wire safety, HA Patient Safety & Risk Management has launched a patient safety animation series “病人安全叮叮” via HA staff training website (e-Learning Centre). While the short animation (2.5 minutes) provides quick and easy tips to frontline colleagues on safe insertion of CVC and guide wire handling, staff could also access the full video on Safety Precautions in CVC insertion (10 minutes) for details.

# In-Patient Suicide

An elderly ambulatory male was admitted for shortness of breath, chest discomfort and bilateral lower limb edema. After admission, he underwent a CT scan and was suspected to have metastatic lung cancer. Next morning, the case doctor disclosed the CT result to patient, phoned his wife and referred the patient to medical social worker. Blood tests for tumour markers were arranged. Due to in-patient COVID-19 contact, the patient was transferred to an isolation cubicle and requested to stay in the cubicle. Disposable urinal in plastic bag was provided. Blood results of the tumour markers were available in a late afternoon. Nurse reported the findings to on-call doctor at night. The on-call doctor then disclosed the news to patient by ward telephone shortly. Two days later, patient was found unconscious in bed with his head covered in a plastic bag. Despite resuscitation, patient eventually succumbed and the case was reported to Coroner.

During bereavement interviews, patient's family recalled that the patient had expressed trouble sleeping and about pain.



## Learning Points

- Eliminate any item imposing risk of misuse for self-harm
- Enhance communication and support to the patient and family proactively after breaking bad news
- Enhance the process of breaking bad news

A SPIKES Protocol\* for effective breaking of bad news is enclosed for reference:

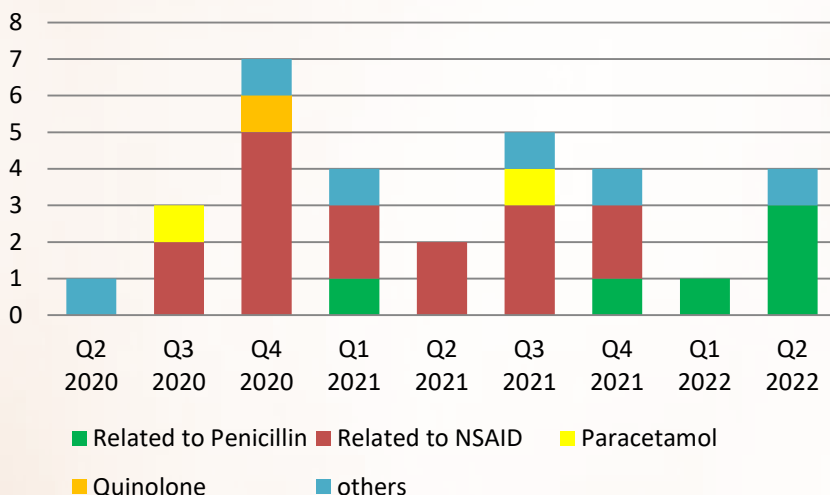


\*Baile, W. et al (2000). SPIKES – A six step protocol for delivering bad news: application to the patient with cancer. The Oncologist, 5, 302-311.

## 🧠 Serious Untoward Events

Of the 16 SUE cases reported in 2Q 2022, 15 cases were related to medication errors, including known drug allergy (KDA) (4), dangerous drugs (2), vasopressors and inotropes (1), antiplatelet (1), oral hypoglycaemic agents (1), insulin (2) and others (4).

Number of KDA cases (Q2 2020 – Q2 2022)



Known Allergy	Allergen prescribed
Penicillin	Augmentin
Penicillin	Augmentin
Ampicillin & Cloxacillin	Tazocin
ACEI	Zestril

## NPO Except Medication

To enhance staff awareness, this issue shall highlight some incidents related NPO\* except medication.

A patient with diabetes mellitus (DM) was admitted for heart failure at night. NPO Except Medication (NPOEM) was ordered by doctor before seeing the patient. Usual medications including Protaphane penfill were then resumed after assessment. The next morning, patient's

H'stix was 8.7mmol/L, and nurse administered 8 units of Protaphane to the patient. An hour later, patient's H'stix dropped to 2.7mmol/L.

1

A patient with DM and multiple medical problems was admitted for fluid overload and decreased output from Percutaneous nephrostomy (PCN).

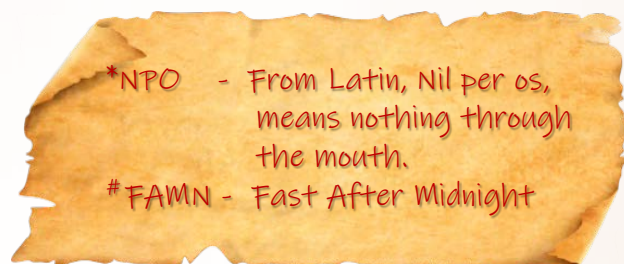
3

After clinical assessment, doctor ordered fasting after midnight (FAMN#), with vital sign monitoring and blood analysis. Usual medications (including Diamicon MR 60mg om) were prescribed. Nurse omitted Diamicon in the first morning. As PCN reinsertion was planned, patient was kept NPOEM for another day. The second morning, a nurse administered Diamicon MR 60mg to the patient. A few hours later, patient looked dull and H'stix was 1.8mmol/L.

A DM patient on insulin was admitted for haematuria. Regular Mixtard 30HM was resumed upon admission. Patient was later planned for emergency operation (EOT). "Fasting after midnight except medication (FAMNEM)" and ½ : ½ solution were ordered as pre-operative preparation. "Withhold" insulin in IPMOE

2

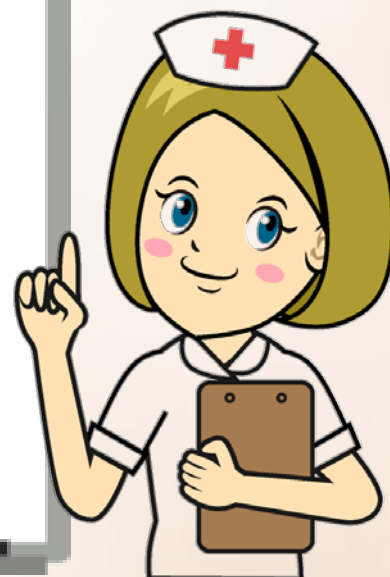
was not done. During medication round in the next morning, patient's H'stix was checked to be 8.4mmol/L. Mixtard 22 units were given. Upon return to ward after OT, patient's H'stix dropped to 1.9mmol/L.



Following clinical review and management as clinically indicated, **all patients were well.**

### Safety Tips

1. Review and correlate patient's diet prescription with drug profile. **Adjust patient's DM medication(s) accordingly**
2. **Stay alert** before giving any DM medication to patient when there is a signage "NPO except Medication"
3. **Clarify patient's medication regimen** especially involving DM medication when there is NPOEM or fast after midnight
4. **Be careful** when DM patient is on fasting without IV replacement therapy
5. For patient planning for operation/interventional procedure, please **check the anaesthetic record** or pre-procedural instruction



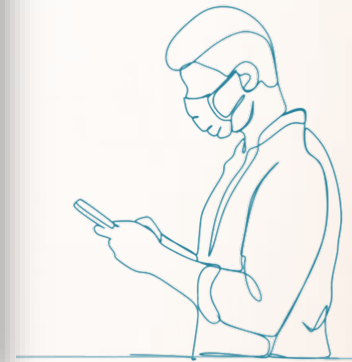
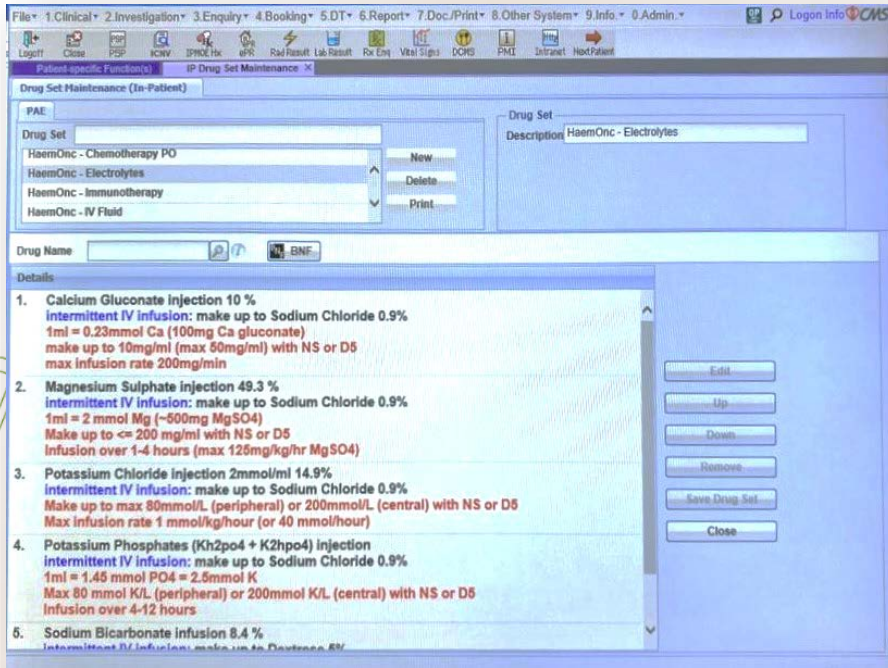


# Use of Standardised Tables to Reduce Medication Error



Incorrect prescription, preparation and programming of infusion device can occur due to numeric errors. Different drugs such as Heparin, Midazolam, Dilantin etc. have been involved in medication incidents in the past few years. This issue hopes to highlight and encourage the use of In-Patient Medication Order Entry (IPMOE) drug sets and infusion drug tables, to reduce medication error.

**IPMOE drug sets\*** are available for many common drug regimes, with dilution and infusion rates for reference.



- \* To facilitate alignment of standard dilution while maintaining certain clinical flexibility, the following features are available in IPMOE:
1. **Standard Regimen / Hospital Drug Set** (Maintained by designated doctors/pharmacist representative of individual hospital)
  2. **Department Drug Set** (Maintained by designated doctors from the individual specialty of the hospital)

Some departments e.g. Paediatrics have also prepared **infusion drug tables** to aid calculation.

HKCH Standardized Continuous Infusion Drug Table for PICU, NICU and CARD, Updated 07-12-2021

Drug	Preparation	Dilution Concentration				Diluent	Max. Conc.	Dosing Unit	CIS Hard Stop Upper Limit	Usual Dose Range	CIS soft Stop Upper Limit (for Adult dose)
		BW <2kg	BW 2-5kg	BW >5-10kg	BW >10kg (Fluid Restricted)						
Dopamine	200mg/5ml	1mg/ml 25mg/25ml	2mg/ml 50mg/25ml	2mg/ml 100mg/50ml	200mg/50ml 4mg/ml	NS, D5	6mg/ml	mcg/kg/min	50 mcg/kg/min	N/A	
Dobutamine	250mg/20ml	1mg/ml 25mg/25ml	2mg/ml 50mg/25ml	2mg/ml 100mg/50ml	5mg/ml 250mg/50ml	NS, D5	5mg/ml	mcg/kg/min	60 mcg/kg/min	N/A	
Adrenaline	1:10000 10ml	0.02mg/ml 0.5mg/25ml	0.04mg/ml 1mg/25ml	0.04mg/ml 2mg/50ml	0.06mg/ml 3mg/50ml	NS, D5	0.064mg/ml	mcg/kg/min	20 mcg/kg/min	N/A	
Noradrenaline	4mg/4ml	0.02mg/ml 0.5mg/25ml	0.04mg/ml 1mg/25ml	0.04mg/ml 2mg/50ml	0.08mg/ml 4mg/50ml	DS, NS* (with reference to QMH E Calculator)	0.1mg/ml	mcg/kg/min	10 mcg/kg/min	N/A	
Isoprenaline	0.2mg/1ml	N/A	0.04mg/ml 2mg/50ml	0.04mg/ml 2mg/50ml	0.06mg/ml 3mg/50ml	D5	0.06mg/ml	mcg/kg/min	5 mcg/kg/min	Limited data in neonates. >5kg: 0.05-2mcg/kg/min	
Phenylephrine	10mg/1ml	N/A	0.04mg/ml 2mg/50ml	0.04mg/ml 2mg/50ml	0.1mg/ml 5mg/50ml	NS, D5	0.12mg/ml	mcg/kg/min	15 mcg/kg/min	Limited data in neonates. >5kg: 0.1-5mcg/kg/min	
Milrinone	10mg/10ml	0.4mg/ml 4mg/10ml	0.1mg/ml 1mg/10ml	0.1mg/ml 1mg/10ml	0.2mg/ml 2mg/10ml	NS, D5	0.8mg/ml	mcg/kg/min	3 mcg/kg/min	0.25-1mcg/kg/min	
Vasopressin	20unit/1ml	0.2unit/ml 2unit/10ml	0.2unit/ml 2unit/10ml	0.2unit/ml 2unit/10ml	0.4unit/ml 4unit/10ml	DS, NS* (with reference to QMH E Calculator)	1unit/ml	unit/kg/hr	0.4 unit/kg/hr	0.02-0.12unit/kg/hr	
Glycerol trinitrate	10mg/10ml	0.02mg/ml 0.2mg/10ml	0.04mg/ml 0.4mg/10ml	0.04mg/ml 0.4mg/10ml	0.08mg/ml 0.8mg/10ml	Low Conc.: 0.1mg/ml 5mg/50ml		unit/kg/min	0.0067 unit/kg/min	0.0003-0.002unit/kg/min	

Drug	Preparation	BW <2kg	BW 2-5kg
Dopamine	200mg/5ml	1mg/ml 25mg/25ml	2mg/ml 50mg/25ml
Dobutamine	250mg/20ml	1mg/ml 25mg/25ml	2mg/ml 50mg/25ml
Adrenaline	1:10000 10ml	0.02mg/ml 0.5mg/25ml	0.04mg/ml 1mg/25ml
Noradrenaline	4mg/4ml	0.02mg/ml 0.5mg/25ml	0.04mg/ml 1mg/25ml
Isoprenaline	0.2mg/1ml	N/A	0.04mg/ml 2mg/50ml

Diluent	Max. Conc.	Dosing Unit
NS, D5	6mg/ml	mcg/kg/min
NS, D5	5mg/ml	mcg/kg/min
NS, D5	0.064mg/ml	mcg/kg/min
DS, NS* (with reference to QMH E Calculator)	0.1mg/ml	mcg/kg/min

Usual Dose Range
2-20mcg/kg/min
2-20mcg/kg/min
0.05-2mcg/kg/min
0.05-2mcg/kg/min
Limited data in neonates. >5kg: 0.05-2mcg/kg/min





# Local Sharing

# Warfarin Safety Campaign 2022



Following the Instagram votes on "My Favorite Warfarin Idea", a [lunchtime Webinar\\*](#) was held on 19 August 2022. Our 6 finalists from 189 submission presented their bright ideas on warfarin safety.   
 \* (Available via HA intranet)



Our Champion proposes to utilize the **electronic dashboard** for INR results alerts; and educate patients and carers to utilize **HA-GO App** to check latest drug regime.



Tony K H LAU,  
QMH Clin Pharm

Our 1st runner-up team focuses on **Warfarin Regime Standardization**. Doctors are encouraged to prescribe by standardized dosage pattern instead of complicated regime. This can help to reduce prescription/transcription error and facilitate patients' understanding and compliance to warfarin.

Intended average dosage per day	Standardized Dosage Pattern
1mg	1mg Daily
1.25mg	1mg Odd Day & 1.5mg Even Day
1.5mg	1.5mg Daily
1.75mg	2mg Odd Day & 1.5mg Even Day
2mg	2mg Daily

Average daily dose can also be provided for easier reference.



TKOH Pharmacy  
Amity CHIU  
Andy CHUI  
Jack YANG

Our 2nd runner-up proposes to have **"Medication Genie"** prompted during drug administration to provide the latest laboratory results as reference to the prescription order.



Dr Joyce Ka Yin  
CHAN, HOIT&HI  
SHI(C)

ORAL & MISC	INJECTION	INFUSION	PRN/STAT	PD	OVERDUE
Start					
Review	Drug				
End					
Latest result from ePR within 7 days					
ORAL	05/May	Metformin HCl sustained release	oral: 500 mg BD		
ORAL	05/May	Warfarin Sodium tablet	oral: 2 mg once per day		
			Omit if INR >= 4		
				Test	Result
				Glucose, Capillary Blood, POCT	7.5 mmol/L
				Glucose, Whole Blood, POCT	---
				Potassium	4.1 mmol/L
				INR	1.2
				Platelet	119 L x10 <sup>9</sup> /L
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