## **GROUP NO...3**

## HIGH RISK MEDICATION MANAGEMENT

Reviewed by

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# TARGET AUDIENCE AND FREQUENCY OF TRAINING

- ▶ DOCTORS QUATERLY
- NURSES MONTHLY
- ► TECHNICIAN MONTHLY
- PHARMACY PERSONNEL QUATERLY

## SUGGESTION ON THE MODULE

► Definition of High Risk Medication:

High risk medicines (HRMs) are medicines that have an increased risk of causing significant patient harm or death if they are misused or used in error.

► These drugs include generally have low therapeutic index

### Preparation of HRM list as per ISMP List of High Risk Medication

#### **Specific Medications**

EPINEPHrine, IM, subcutaneous

epoprostenol (e.g., Flolan), IV

insulin U-500 (special emphasis\*) (\*All forms of insulin, subcutaneous and IV, are considered a class of high-alert medications. Insulin U-500 has been singled out for special emphasis to bring attention to the need for distinct strategies to prevent the types of errors that occur with this concentrated form of insulin.)

magnesium sulfate injection

methotrexate, oral, nononcologic use

nitroprusside sodium for injection

opium tincture

oxytocin, IV

potassium chloride for injection concentrate

potassium phosphates injection

promethazine injection

vasopressin, IV and intraosseous

#### Classes/Categories of Medications (Abbreviation definitions: IV-intravenous, IM-intramuscular)

adrenergic agonists, IV (e.g., **EPINEPH**rine, phenylephrine, norepinephrine)

adrenergic antagonists, IV (e.g., propranolol, metoprolol, labetalol)

anesthetic agents, general, inhaled and IV (e.g., propofol, ketamine)

antiarrhythmics, IV (e.g., lidocaine, amiodarone)

antithrombotic agents, including:

- anticoagulants (e.g., warfarin, low molecular weight heparin, unfractionated heparin)
- direct oral anticoagulants and factor Xa inhibitors (e.g., dabigatran, rivaroxaban, apixaban, edoxaban, betrixaban, fondaparinux)
- direct thrombin inhibitors (e.g., argatroban, bivalirudin, dabigatran)
- glycoprotein IIb/IIIa inhibitors (e.g.,eptifibatide)
- thrombolytics (e.g., alteplase, reteplase, tenecteplase)

cardioplegic solutions

chemotherapeutic agents, parenteral and oral

dextrose, hypertonic, 20% or greater

dialysis solutions, peritoneal and hemodialysis

epidural and intrathecal medications

inotropic medications, IV (e.g., digoxin, milrinone)

insulin, subcutaneous and IV

liposomal forms of drugs (e.g., liposomal amphotericin B) and conventional counterparts (e.g., amphotericin B desoxycholate)

moderate sedation agents, IV (e.g., dexmedetomidine, midazolam, LORazepam)

moderate and minimal sedation agents, oral, for children (e.g., chloral hydrate, midazolam, ketamine [using the parenteral form])

opioids, including:

- IV
- oral (including liquid concentrates, immediate- and sustained-released formulations)
- transdermal

neuromuscular blocking agents (e.g., succinylcholine, rocuronium, vecuronium)

parenteral nutrition preparations

sodium chloride for injection, hypertonic, greater than 0.9% concentration

sterile water for injection, inhalation and irrigation (excluding pour bottles) in containers of 100 mL or

# Training of list to target audience.

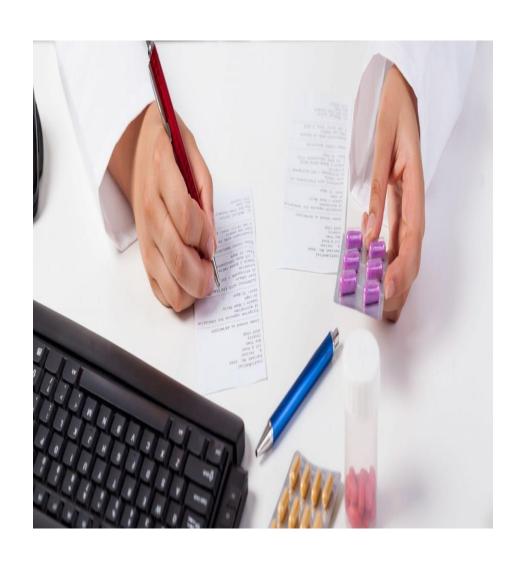
Display of high risk medication list in Pharmacy & Ward



Storage of high risk medication- separate storage with color coding (safety and security)



## Prescription and Dispensing





Verification of prescription and administration-In case of high risk medication(s), the verification shall be done by at least two staff (nurse-nurse or nurse-doctor) independently and documented. The nurses are knowledgeable regarding high risk medications and are empowered to highlight prescription errors noted while verifying the orders.



## Thank you