When to Walk and When to Run: Prioritization of Medication Delivery

HUNTER NICHOLS, PHARMD
PGY1 PHARMACY RESIDENT
LAHEY HOSPITAL & MEDICAL CENTER

Objectives
1) Define scheduled versus non-scheduled and time-critical versus non-time critical medications
2) Classify medications into 3 categories: STAT, priority, and normal medication delivery
3) Describe the process of successful communication to ensure best possible prioritization of medication delivery

Role of the Pharmacy Technician
- Understand what medications are time-critical, non-time-critical, scheduled and non-scheduled then prioritize delivery accordingly
- Bridge the gap between pharmacy and nursing by communicating in a timely, effective manner
- Take ownership for patient care and value the responsibility to the patient

Background
- Centers for Medicare & Medicaid Services "30 minute rule"
- In September of 2010 the Institute of Safe Medication Practices (ISMP) Survey
- Acute Care Guidelines for Timely Administration of Medications
- Hospitals expected to establish policies and procedures for the timing of medication administration

CMS response to guidelines
- Removal of “30 minute rule”
- Hospitals establish the timing of medication administration
  - Time-critical medications
  - Non-time critical medications
  - Scheduled medications
  - Non-scheduled medications

Definitions of administration times
- Scheduled Administration
  - Time-critical versus non-time-critical
- Non-Scheduled Administration
  - More likely to be time critical
    - STAT versus Priority

http://www.cms.gov
Centers for Medicare & Medicaid Services
Scheduled medications

- Include all maintenance doses administered according to a standard, repeated cycle of frequency
  - TID
  - BID
  - Daily
  - Weekly

Non-scheduled medications

- Not eligible for scheduled dosing
  - STAT doses (IMMEDIATE!)
  - First time or loading doses
  - One time dose specifically timed
  - Time sequenced for doses timed for serum drug levels
  - Investigation drugs
  - As needed medications

Time-critical medications

- Scheduled
  - Medications where early or delayed administration of maintenance doses of greater than 30 minutes before or after the scheduled dose may cause harm or result in sub-optimal therapy or pharmacological effect.

Examples of time-critical scheduled medications

- Antibiotics
- Anticoagulants
- Insulin
- Anticonvulsants
- Immunosuppressants
- Pain Medications (ATC)
- Medications Prescribed more frequently than every 4 hours

Time-critical medications

- Non-Scheduled
  - STAT
    - These medications will be administered immediately or within 15 minutes (tPA, Pediatric Code Box)
    - Priority
      - Despite not being scheduled it is imperative that this medication be delivered quickly (loading doses, timed procedure)

Examples of time-critical non-scheduled medications

- STAT
  - tPA
    - Process & Delivery
      - http://www.youtube.com/watch?v=ZsFOYnSrPlw
  - Pediatric Code Box
    - Process & Delivery
  - IV Vitamin K
### Common themes for STAT medications

- Patient status can decompensate quickly
- Often patients are critically ill
- If clinical picture not rapidly improved patient may suffer complications or death
- Most agents will need to be IV for faster action
- Minutes matter

### Non-time critical medications

- Non-time-critical scheduled medications
  - Medications where early or delayed administration within a specified range of either 1 or 2 hours should not cause harm or result in substantial sub-optimal therapy or pharmacological effect.

### Prioritized delivery by unit

- **Top Tier**
  - ICU’s (MICU, SICU, CCU)
    - Go here first unless communicated otherwise
  - Emergency Room
    - May be first stop and is a likely area for STAT medications
  - Stepdown Units
- **Second Tier**
  - General Medical/Surgical floors
    - Possible to still have STAT medications

### Prioritized delivery by medication

- **Key Factors**
  - Medication identification
  - Clinical significance of medication administration
  - Communication

### Common STAT medications for ICU patients

- Fentanyl
  - Importance of pain control and sedation in the ICU
- Midazolam
  - Importance of sedation in the ICU
- Precedex
  - Importance of sedation in the ICU
- Vasopressin (Vasopressor)
  - Difference between Vasopressin and other vasopressors
- Norepinephrine, Epinephrine, Phenylephrine (Vasopressors)
  - Expiration date checking
- Heparin drips
  - Premixed versus compounded
- Insulin drips
  - New start versus drip renewal

### Common STAT medications for hospital-wide delivery

- Amiodarone
  - Bolus
  - Drip
- Diltiazem
  - New Start versus Bag Replacement
- Flolan/Remodulin
  - Check supply
  - Delivery at specific time
- IV Octreotide and IV Pantoprazole
  - What this combination means
- Cisatracurium
  - Hypothermia protocol
### Priority delivery
- Time-critical scheduled medications
- Delivery by unit
  - When medication go from priority to STAT
- Replacement IV’s for medication that were STAT
- Pain medications
  - Importance of pain control
  - Empathy

### Normal delivery
- Refilling of Pyxis
  - Capsules, tablets, bags, cups, etc
- Cathflo
  - Difference between tPA for stroke & PE and Cathflo for catheter clearance

### Keys to communication
- **Pharmacist – Technician**
  - Proactive versus reactive
  - What and when to clarify with the pharmacist
  - Extension of the pharmacist once leaving the pharmacy

### Keys to communication
- **Technician – Nurse**
  - Dropping off versus hand delivery
  - Patient first focus no matter the situation
  - Patient care more important than blame

### Keys to communication
- **Direct contact**
- **Telephone relay**
- **Note writing/handoff**
  - All of forms require the following information and level of detail
    - Patient information
      - Name, room number and/or MRN
    - Medication information
      - Medication being requested
      - New order versus sending up refill/replacement bag
      - Priority of situation
      - When does the patient need the drug

### Communication techniques
- Clear, concise and brief
- Repeat or provide information in a different form (if necessary)
- Listen to response of what has been communicated
- Positive body language
- Positive attitude
- Remember that we are a TEAM!
Example

- RN calls pharmacy at 8pm, she has recently received report on her patients as she is working 7pm-7am. RN requests a Diltiazem drip. What information would we like to have for this scenario?

Example

- Patient information
  - Name, room number and/or MRN
- Medication information
  - Diltiazem IV bag
- Priority of situation
  - Replacing a bag or new start? If replacing bag how long will current bag last?
  - Has an order been sent to pharmacy? Is the medication already in the patient profile?
  - Has the medication been made? Been delivered?

Example

- Communication
  - Communicate with the pharmacist covering patient
  - Convey pertinent information
  - Decide who will compound IV
- Delivery
  - By gathering priority of situation information medication delivery can be prioritized
    - New start = immediately/first stop
    - Replacement bag = What time frame did RN give you?
    - New start = handoff
    - Replacement bag = deliver to designated area (unless otherwise indicated)

References

1) http://www.ismp.org/newsletters/acute-care/articles/20110113.asp
2) Lahey Hospital & Medical Center Protocols
3) Centers for Medicare and Medicaid Services

QUESTIONS??

JEOPARDY!!