



# MEDCOM Medication Management Discussion

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**2009 MEDCOM-TJC Conference**

**Manager, Army Patient Safety Program**

**Quality Management Office**

**HQ, US Army Medical Command**

**Fort Sam Houston, TX**

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## BRIEFING OUTLINE

**PURPOSE:** To provide an update on medication management trends observed in the Army Medical Department.

- Medication Storage
- Medication Orders
- Medication Review
  - Status of the Waiver
  - Medication Review When No 24 hr Pharmacy Service
  - Automated Dispensing Cabinets - Overrides



## Medication Storage



# Medication Storage & Security

- Importance
  - Medication storage is designed to:
    - assist in maintaining medication integrity
    - promote the availability of medications when needed
    - minimize the risk of medication diversion
    - reduce potential for dispensing errors
  - Law and Regulation and manufacturers' guidelines further define the hospital's approach to medication storage

The Joint Commission, Hospital Accreditation Standards, 2009



# Medication Storage & Security

- Scenarios
  - Heparin 10,000 units/ml stored in ADC instead of 1,000 units/ml
  - If medications for 1<sup>st</sup> dose are in the ADC, pharmacy review may be by-passed (override)
  - Unsafe quantities of medications in the ADC – bulk bottle of liquid medication
  - Healthcare professionals with substance abuse issues find ways to divert medications from ADC
  - Expired medications in locked utility room

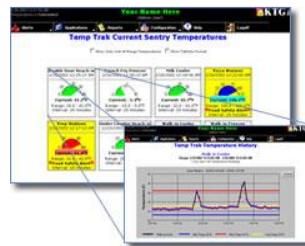


## MM.03.01.01, EP 2 Medication Storage

- Store medications according to manufacturer's recommendations
- Best Practices:
  - Temperature Monitoring
    - Centralized Monitoring System
    - Wireless Monitoring System
    - Alarm Dialing Monitors



SensaPhone™



TempTrak™



ThermaViewer™



## MM.03.01.01, EP 2 Medication Storage

- Continuous monitoring of temperature
  - Staff must understand their responsibilities:
    - Temperature monitoring
    - Resolving problems related to out-of-range temps
  - Staff training component
  - Watch out for those refrigerators in areas not staffed 7 days/week
  - Digital thermometers may be an answer



## MM.03.01.01, EP 3 Medication Storage

- Prevent drug diversion
  - Scheduled drugs are locked
  - Usage record is maintained
  - Discrepancies are resolved
  - Define resolution process
  - Define process of wasting
  - Access to automated cabinet is current
  - Staff must log out of automated cabinets
  - Electronic reporting to identify potential diversion



## MM.03.01.01, EP 7 Medication Storage

- Multi-Dose Vials (MDV)
  - USP Chapter 797 - 28 days “beyond use date”
  - Date MDV with expiration date
  - Best Practices:
    - Minimize use of MDV
    - Document: date opened and expiration date (28 days from day MDV is penetrated)
  - Pre-printed labels available

Item Code: 17638

DATE OPENED	EXP. DATE	INITIAL

Health Care Logistics, Inc

	Date Opened _____	TL-AX369
	Exp. Date _____	
	Initial _____	

Medi-Dose/ EPS, Inc

	Date Opened _____	011908
	Exp. Date _____	
	Initial _____	

Product Code: 1-369

PHARMEX/ TimeMed



## MM.03.01.01, EP 7 Medication Storage

### MULTIDOSE INJECTABLE VIALS (MDV) BAMC Memo 40-22 Medication Management

**MULTI-DOSE VIALS (MDV)** (lidocaine, insulins, injectables with preservative etc.)  
Expiration: 28 days from initial use or sooner if specified by manufacturer; also called Beyond-Use-Date; *must be labeled*

Label:

Date Opened: 21 Mar 08  
28 Day EXP: 18 Apr 08

*Examples:*



### ALL OTHER MULTI-DOSE CONTAINERS (MDC) BAMC Memo 40-22 Medication Management

**MULTI-DOSE CONTAINERS (MDC)**  
(eye drops, Tylenol, Motrin, etc)  
Expiration: **Manufacture's Expiration date**  
or discard sooner if the product has been contaminated.

*Examples:*





# MM.03.01.01, EP 7 Medication Storage

- Beyond Use Date
  - Contrast media and warmers
  - Solution bags/bottles and warmers
  - Glucometer strips



# MM.03.01.01, EP 10

## Medication Storage

- Most ready-to administer forms available from manufactures
  - Contrast media, heparin, saline flush, others
  - Insulin pens
- Unit-doses repackaged by the pharmacy or a licensed packaging company



# MM.03.01.01, EP 18 Medication Storage

- Periodic inspection of storage areas
  - Inpatient and outpatient areas
  - Appropriately train staff
  - Unannounced inspection
  - Communicate findings with leadership



## MM.03.01.03 Emergency Medications

- Issue
  - Emergency medications selection
  - Process in place to replace emergency medications & supplies when needed
- Best Practices:
  - Maximize use of unit-dose, age-specific, ready-to-administer
  - Pediatric dosing guidelines
    - Broselow™ Pediatric Emergency Tape
  - Emergency medications are secure



## MM.03.01.05

### Medications Brought In

- Defines when medications brought in by patient or LIP can be administered
- Prior to use, identification and visual evaluation of integrity
- Inform prescriber/patient if medications brought in are not permitted



## Medication Orders



## MM.04.01.01 (MM 3.20) Medication Orders

- Specific Findings
  - EP 1 – 1 Observation
    - Written policy address the required elements of a complete medication order.
  - EP 6 – 3 Observations
    - The hospital specifies the required elements of the following types of orders that it deems acceptable for use:
      - “As needed” (PRN) orders
      - Standing orders
      - Hold orders
      - Automatic stop orders
      - Resume orders
      - Titrating orders
      - Taper orders
      - Range orders
      - Orders for compounded drugs or drug mixtures not commercially available
      - Orders for medication-related devices
      - Orders for investigational medications
      - Orders for herbal products
      - Orders for medications at discharge or transfer



## MM.04.01.01 (MM 3.20) Medication Orders

- Specific Findings
  - EP 13 – 5 Observations
    - Policies and procedures regarding medication orders are implemented.
- Recommendations
  - PRN Orders
    - Indication – Acetaminophen pain or fever?
    - Therapeutic duplication – which one 1<sup>st</sup>? 2<sup>nd</sup>?
  - Range Orders
    - Use only one variable (i.e. dose or dosing interval)
  - Define required elements of a complete medication orders
    - Must include route of administration
  - Pre-printed Orders
    - Check electronic and paper pre-printed orders
    - Forms Committee, P&T Committee, etc.
  - No Blanket Orders



## Medication Order Review



# MM.05.01.01 (4.10), EP1 Medication Orders Review

- TJC/DoD Protocol
  - Exempts DoD from fully complying with this standard
  - Real-time pharmacist review of all prescriptions is not possible in outpatient settings
  - Not intended for inpatient settings
  - Relies on CHCS Clinical Screening capability and quality of the DoD Pharmacy Technician Training Program
  - Not intended for civilian Pharmacy Technicians
  - Requires an annual report to TJC charting progress toward full compliance
  - DoD must be in full compliance NLT 2011



# MM.05.01.01 (4.10), EP1 Medication Orders Review

- Justify and create new pharmacist positions
- Place pharmacists in:
  - TMC Pharmacy
  - Refills Pharmacy
  - Commissary Pharmacy
  - PX Pharmacy
- Utilize Technology: Telepharmacy



# MM.05.01.01 (4.10), EP1 Emergency Room

- Medication orders written by ED providers for immediate administration
  - Current interim still in effect
  - No review required if LIP present in immediate area.
  - Retrospective review of a sample of orders by pharmacy
- Prescriptions written by ED providers
  - This issue falls under the purview of LIPs able to dispense medications.
  - The process of dispensing is regulated by state law and regulations (DoD not subject to it)
  - So it depends on policy and procedure
  - As long as the physician is involved in the process and hands medication to the nurse to give to the patient, there is no issue



# MM.05.01.01 (4.10), EP 2

## Medication Orders Review

- When an on-site licensed pharmacy is not open 24 hours a day, 7 days a week, a *health care professional determined to be qualified* by the hospital reviews the medication order in the pharmacist's absence
- What is required to conduct an appropriate review of a medication order?
- Is the identified *health care professional* competent to conduct the review?
- Is the competency documented?



# Appropriate Review of an Order

- More than the “Five Rights”
- All medication orders are reviewed for the following:
  - Patient allergies or potential sensitivities
  - Drug-drug and drug-food interactions
  - Appropriateness of the medication dose, frequency, and route of administration
  - Current or potential impact as indicated by laboratory values
  - Therapeutic duplication
  - Other contraindications
  - Variation from the hospital’s approved indications for use



# MM.05.01.01 (4.10) Medication Orders Review

- Automated Dispensing Cabinets (ADC) Overrides
- Definition - Retrieval of medications from the ADC prior to pharmacy review
- Criteria should allow emergency access when appropriate
- Implement strategies that reduce the risk of medication error:
  - Limiting the quantity and number of drug concentrations available
  - Minimizing use of multi-dose containers
  - Check the drug and dose against the patient's allergies and weight as appropriate
  - Provide medication preparation instructions (to reconstitute or dilute medications)
  - Require an independent double-check with another licensed healthcare provider
  - Requiring documentation of override rationale
  - Develop a required staff competency assessment
  - Override policy is approved by P&T Committee, or their equivalent group
  - Routinely review override reports to identify and address barriers for review



## MM.05.01.01 (4.10) Medication Orders Review

- Institute for Safe Medication Practices (ISMP) Recommendations
  - Guidance on the Interdisciplinary Safe Use of Automated Dispensing Cabinets – 2008
    - 12 core processes to influence the safe use of ADCs
  - Medication Safety Self-Assessment for Automated Dispensing Cabinets – 2009
    - PSC/Pharmacy Initiative
    - Ten MTFs are completing self assessment tool
    - Goals:
      - To assess medication safety with ADC in the MEDCOM
      - Provides tool and recommendations to improve safety with ADCs



# Questions ??