

JFPS 2010 >>>  

JOINT FORCES PHARMACY SEMINAR

**The Joint Commission
Medication Management
Update for 2010**

**U.S. Army Medical Command
Fort Sam Houston, TX**

 American Pharmacists Association
APHA

 **Learning Objectives**

- Describe most recent changes in The Joint Commission (TJC) Accreditation Program
- Describe updates to the Medication Management (MM) standards
- List the most problematic MM standards and provide best practice solutions
- Describe updates to the medication-related National Patient Safety Goals (NPSG)
- List the most problematic medication-related NPSG requirements and provide best practice solutions

 **Self-Assessment Questions**

- True or False: Medication-related Sentinel Events are the most commonly reported events harming patients in the US.
- What is the expiration date of vaccine multi dose vials after they are first used/penetrated?
 - a. 7 days
 - b. 14 days
 - c. 28 days
 - d. CDC & Manufacture's recommendation

 **Self-Assessment Questions**

- What the most common compliance issues regarding MM.04.01.01, Medication Orders?
 - a. Range Orders
 - b. PRN Orders
 - c. Therapeutic Duplications
 - d. All of the Above
- Since 2009, Medication Reconciliation has been:
 - a. Surveyed and scored with no changes
 - b. Eliminated for good
 - c. Surveyed, but not scored against the organization
 - d. Incorporated into standards

 **Standards Improvement Initiative (SII)**

- Revised all standards and elements of performance (EPs)
- Categorized EPs based on their impact on care provided
- Standards are clear, measurable and closely related to quality and safety
- Next SII Effort:
 - Assessing the value of standards
 - Result: Eliminate or Revise Standards

 **Standards Improvement Initiative (SII)**

- As of July 1, 2010, MM standards affected:
 - Deleted: MM.07.01.01, EP 1 & EP 2
 - Revised: PC.01.02.01, EP 1
 - Note 2: Assessment and reassessment information includes the patient's perception of the effectiveness of and any side effects related to his or her medication(s).

Question

- True or False: Medication-related Sentinel Events are the most commonly reported events harming patients in the US.

Answer: False

Medication-Related Sentinel Events

Table 2. Top 10 Sentinel Events Reviewed Since 1995

Wrong Site Surgery	898
Subsidi	785
CyPost-Op Complication	725
Delay in Treatment	587
Medication Error	535
Patient Fall	423
Unintended Retention of a Foreign Body	328
Aspiration/Choking	301
Household	298
Loss of Function	298
Medication Error	277
Medication Error	265

*Unintended retention of foreign body became a reviewable sentinel event in June 2005.

Table 1. Top 10 Sentinel Events Reviewed in 2009

Wrong Site Surgery	149
Unintended Retention of a Foreign Body	118
Delay in Treatment	115
CyPost-Op Complication	90
Subsidi	87
Patient Fall	82
Medication Error	61
Criminal	53
Event	33
Death/Injury	31
Infection	28
Retained	28

The Joint Commission Perspectives, April 2010

2010 Medication Management Standards

Rx

- Planning
 - MM.01.01.01 - Plans medication management processes
 - MM.01.01.03 - Safely manage high-alert and hazardous medications
 - MM.01.02.01 - Safe use of Look-alike/Sound-alike medications
- Selection & Procurement
 - MM.02.01.01 - Select and procure medications
- Storage
 - MM.03.01.01 - Safely store medications
 - MM.03.01.03 - Safely manage emergency medications
 - MM.03.01.05 - Safely control medications brought in by patients, their families, or LIPs
- Ordering & Transcribing
 - MM.04.01.01 - Medication orders are clear and accurate
- Preparing & Dispensing
 - MM.05.01.01 - A pharmacist reviews the appropriateness of all orders for medications to be dispensed
 - MM.05.01.07 - Safely prepare medications
 - MM.05.01.09 - Medications are labeled

2010 Medication Management Standards

Rx

- Preparing & Dispensing (Cont.)
 - MM.05.01.11 - Safely dispense medications
 - MM.05.01.13 - Safely obtain medications when the pharmacy is closed
 - MM.05.01.17 - Follow a process to retrieve recalled or discontinued medications
 - MM.05.01.19 - Safely manage returned medications
- Administration
 - MM.06.01.01 - Safely administer medications
 - MM.06.01.03 - Self-administered medications are administered safely and accurately
 - MM.06.01.05 - Safely manage investigational medications
- Monitoring
 - MM.07.01.01 - Monitor patients to determine the effects of their medications
 - MM.07.01.03 - Respond to actual or potential ADE, significant ADR, and medication errors
- Evaluation
 - MM.08.01.01 - Evaluate the effectiveness of its medication management system

Top MM Standards Scored Non-Compliant in 2010*

• MM.03.01.01	Medication Storage	31%
• MM.04.01.01	Medication Orders	30%
• NPSG.03.04.01	Labeling in Procedures	27%
• MM.05.01.01	Pharmacist Review	15%
• MM.05.01.09	Medication Labeling	7%
• MM.01.01.03	High Alert Medications	7%
• MM.05.01.07	Medication Preparation	6%
• MM.08.01.01	MM System Evaluation	4%

* Based on surveys Jan-Jun 2010

MM.01.01.03 High-Alert Medications

- Issues
 - Not implementing effective actions
 - Not following own policy
- Best Practices:
 - Special precautions for High Alert Drugs
 - Store, Prescribe, Prepare, Administer and Monitor
 - Computer warnings and onscreen pop-up alerts
 - Independent double check required in pharmacy and patient care area
 - Warning labels

Health Care Logistics, Inc. Medi-Dose/ EPS, Inc.



MM.01.02.01 Look-Alike/Sound-Alike (LASA)

- Issues
 - Not implementing effective actions
 - Not following own policy
 - Lack of annual review
- Best Practices:
 - Colored labels on shelves and bins
 - Physically separate in storage areas
 - Tall Man lettering (**cefTRIAxone**, **cefUROXime**)
 - List both generic & brand names on label, MARs

Hot Issues!

LOOK ALIKE
SOUND ALIKE
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New Standard in 2010



MM.02.01.01 Select and Procure Medications

- Criteria for selecting medications:
 - Indication
 - Drug Interactions
 - Adverse Drug Events
 - Other Risks
 - Effectiveness
 - Potential Error & Abuse
 - Sentinel Event Advisory
 - Cost
- Standardize and limit the number of drug concentrations available
- Annual review of medications available



MM.03.01.01 Medication Storage

- TJC Standards Booster Pack
 - MM.03.01.01 – Published in 2009
- Store medications according to manufacturer's recommendations
 - Actions taken when temperatures are out of range
- Best Practices:
 - Temperature Monitoring
 - Centralized Monitoring System
 - Alarm Dialing Monitors

Hot Issues!



MM.03.01.01 Medication Storage

- Written policy addressing the storage of medications between receipt by an individual healthcare provider and administration of medication, including:
 - Safe storage
 - Safe handling
 - Security
 - Disposition
 - Return to storage



MM.03.01.01 Medication Storage

- Excerpt of a Sample Policy
 - Any drug received from the pharmacy should be placed in an approved storage area as soon as possible, not to exceed 30 minutes from time of receipt. (*Handling, Storage*)
 - All drugs removed from a medication storage area must be removed just prior to administration and only for one patient at a time. (*Handling*)
 - Once removed, the drug must remain with the individual at all times and should not be left unattended. (*Security*)
 - The drug should not be left on or in any area exceeding 80 degrees, including in pockets. (*Storage*)
 - If not administered or used, the drug should be returned to the original storage area within 30 min. (*Disposition*)



Question

- What is the expiration date of vaccine multi dose vials after they are first used/penetrated?
 - a. 7 days
 - b. 14 days
 - c. 28 days
 - d. CDC & Manufacture's recommendation

Answer: d. CDC & Manufacture's recommendation

MM.03.01.01 Medication Storage

- Expiration of Multi-Dose Vials (MDV)
 - Discard 28 days after first use unless the manufacture specifies otherwise
 - **Does Not apply to Vaccines**
 - Reference: TJC Perspectives Jun 2010
 - Date MDV with the expiration date
 - Best Practices:
 - Minimize use of MDV
 - Document: date opened and expiration date

Item Code: 11939

Date Opened: Exp. Date: 28 Day EXP: 18 Apr 08

Product Code: 1-349 PHARMEX/TimeMed

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MM.03.01.01 Medication Storage

MULTIDOSE INJECTABLE VIALS (MDV)

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)

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

Examples: 

Brooke Army Medical Center, Department of Pharmacy, Fort Sam Houston, Texas

MM.03.01.01 Medication Storage

- Beyond Use Date
 - Contrast media and warmers
 - Solution bags/bottles and warmers
 - Glucometer strips
- Prevent unauthorized individuals from obtaining medications in accordance with policy, law and regulation
- Remove expired, damaged and/or contaminated medications

MM.03.01.01 Medication Storage

- Concentrated Electrolytes
 - Best Practices:
 - Remove from patient care units
 - If required for emergencies (OR, ER, etc.):
 - Segregate and/or Lock up
 - Label (“**MUST BE DILUTED**” or “**HIGH RISK MEDICATION**”)
 - High-alert medication procedures
- Most ready-to-administer forms available from manufactures
- Periodic inspection of storage areas

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MM.03.01.03 Emergency Medications

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

Question

- What the most common compliance issues regarding MM.04.01.01, Medication Orders?
 - a. Range Orders
 - b. PRN Orders
 - c. Therapeutic Duplications
 - d. All of the Above

Answer: d. All of the Above



MM.04.01.01 Ordering and Transcribing

- Issues
 - Lack of implementation of existing policies
 - Lack of policy on acceptable orders
 - Interpretation of range
- Best Practices:
 - Minimize verbal or telephone orders
 - Range Orders
 - Use only one variable (i.e. dose or dosing interval)
 - PRN Orders
 - Indication – Acetaminophen pain or fever?
 - Therapeutic duplication – which one 1st? 2nd?

Not Issued



MM.04.01.01 Ordering and Transcribing

- Best Practices (cont.):
 - Define required elements of a complete medication order
 - Must include route of administration
 - Pre-printed Orders
 - Check electronic and paper pre-printed orders
 - Forms Committee, P&T Committee, etc.
 - No Blanket Orders
 - Look-Alike/Sound-Alike Medications
 - Tallman lettering in pharmacy computer



MM.05.01.01 Pharmacist Review of Orders

- Exceptions allowed:
 - Licensed Independent Practitioner (LIP) controls ordering, preparing and administration of drug
 - LIP must be physically present with the patient
 - Urgent Situations
- Emergency Department – Review Exception
 - LIP in the immediate area
 - Pharmacy retrospective review of sample of orders

Not Issued

Joint Commission Perspectives July 2007



MM.05.01.01 Pharmacist Review of Orders

- Radiology – Review Exception
 - Protocol Based Approach (Screening Tool)
 - Oral and Rectal Contrast
 - IV and Other Contrast – only if:
 - Define role of LIP before/during IV contrast administration in protocol
 - Must be approved by medical staff
 - Appropriateness is reviewed by a qualified health care professional
 - Implement quality control procedures
 - Pharmacist is available on-call, if needed
 - Retrospective chart audits of sample
 - Does not apply to non-contrast meds

Joint Commission Perspectives June 2005, August 2006, January 2007



MM.05.01.01 Pharmacist Review of Orders

- Best Practices:
 - Automated Dispensing Cabinets (ADC)
 - Maximize ADC safety features
 - Minimize and monitor “Overrides”
 - No 24hr Inpatient Pharmacy Service
 - Qualified health care professional reviews order in the pharmacist's absence
 - Measure competency
 - Retrospective review by a pharmacist
 - Consider telepharmacy and remote order entry services
 - Check with Surgery, L&D, and PACU



MM.05.01.01 Pharmacist Review of Orders

- Appropriate Review of Medication Order
 - Patient allergies/potential sensitivities
 - Existing/potential food & drug interactions
 - Appropriateness of drug, dose, frequency & route of administration
 - Current/potential impact of laboratory values
 - Therapeutic duplication
 - Other contraindications
 - Variation from approved indications for use
 - Clarification with individual prescriber prior to dispensing



MM.05.01.07 Safely Prepare Medications

- Issue
 - Non-pharmacy staff preparing IV medications
- Best Practices:
 - Only Pharmacy admixes sterile IV products
 - Except in emergencies or when not feasible
 - Be aware of elastomeric pump systems
 - Remove non-emergent medications from patient care units
 - Functionally separate area on nursing unit
 - Technical competency must be documented



MM.05.01.09 Medications are Labeled

- Issue
 - Drugs not labeled when should
 - No expiration date
- Applies to labeling medications in general
 - NPSG on perioperative and procedural areas
- Best Practices:
 - Label all medication if prepared but not immediately administered
 - Educate staff on importance of requirement
 - Pre-printed labels



MM.05.01.11 Dispense Medication

- Issues
 - Dispense medication and maintain records
 - Dispense within defined time-frame to meet patient needs
- Best Practices:
 - Develop anti-diversion strategies
 - ADC reports, Pandora Data System, etc.
 - Maximize use of most ready-to-administer forms and unit doses
 - Minimize use of MDV



MM.06.01.01 Administer Medication

- Define individuals authorized to administer medications
- Before administration, individual must:
 - Verify medication matches the order
 - Visually inspect medication
 - Verify expiration date
 - Verify contraindications
 - Ensure proper time, dose and route
 - Discuss unresolved concerns
 - Educate patient/family on new medication



MM.07.01.03 Adverse Drug Events

- Process to respond to actual and potential:
 - Adverse drug events
 - Significant adverse drug reactions
 - Medication errors
- Best Practices:
 - Assess Patient Safety Culture
 - Develop a Systems Approach
 - Identify Triggers
 - For Example: Benadryl, Dex 50%, Naloxone, Vit K, INR >6
 - Proactive risk assessment



MM.08.01.01 Evaluation

- Issue
 - Lack of evaluation of risk points and internal review
- Best Practices:
 - Establish Process Improvement Program
 - Takes action and document improvements
 - Review literature/external sources
 - ASHP, APhA, ISMP, TJC, IHI, AHRQ, USP & others
 - Evaluate changes

2010 National Patient Safety Goals

- Patient identification
 - Two patient identifier
 - Transfusion errors
- Communication
 - Critical results
- Medication safety
 - Medication labeling
 - Anticoagulation
- Health care-associated infections
 - Hand hygiene
 - Multi drug resistant organism
 - CLABSI
 - Surgical site
- Medication reconciliation
- Identify patients at risk
- Universal protocol

NPSGs Deleted in 2010

- Read back verbal order
- Do not use abbreviations
- Hand-off communication
- Look-alike/Sound-alike drugs
- Sentinel event resulting from infection
- Fall prevention
- Patient & family involvement
- Early recognition/response

Moved to Standards in 2010

NPSG 1 Patient Identification

- NPSG 01.01.01: Two Patient Identifiers
 - EP1: Use at least two patient identifiers when administering medications, blood, or blood components; when collecting blood samples and other specimens for clinical testing; and when providing treatments or procedures. The patient's room number or physical location is not used as an identifier.

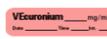
NPSG 3 Safety of Using Medications

- NPSG.03.04.01: Labeling Medications
 - In perioperative and other procedural settings both on and off the sterile field, medication or solution labels include the following:
 - Medication name
 - Strength
 - Quantity
 - Diluent and volume (if not apparent from the container)
 - Preparation date (Deleted)
 - Expiration date when not used within 24 hours
 - Expiration time when expiration occurs in less than 24 hours

Note: The date and time are not necessary for short procedures, as defined by the hospital.

Hot Issue!

NPSG 3 Safety of Using Medications

- NPSG.03.04.01: Labeling Medications
 - Best Practices:
 - Pre-printed labels for OR/Anesthesia
 -  **Vecuronium** _____ mg/ml
 -  **Midazolam** _____ mg/ml
 - Pre-printed labels for Procedural Areas
 -  Medi-Dose/ EPS, Inc
 - Process to label medications on & off sterile field
 - Surgical and procedural settings

NPSG 3 Safety of Using Medications

- NPSG.03.05.01: Anticoagulation Therapy
 - Applies only to patients on anticoagulants when the drug is dispensed or administered by the organization
 - Applies to outpatient retail pharmacies owned by the hospital
 - Currently applies only to:
 - Warfarin, Heparin & LMW heparin
 - Not to antiplatelets and thrombolytics
 - Does not apply to flushes and prophylactic SQ heparin and prophylactic SQ LMW heparin
 - Prophylaxis vs. Therapeutic

NPSG 3 Safety of Using Medications

- NPSG.03.05.01: Anticoagulation Therapy
 - Elements of Performance
 1. Use only oral unit-dose products, prefilled syringes, or premixed infusion bags when these types of products are available.
 2. Use written approved protocols for the initiation and maintenance of anticoagulant therapy.
 3. Before starting a patient on warfarin, assess the patient's baseline coagulation status; for all patients receiving warfarin therapy, use a current International Normalized Ratio (INR) to adjust this therapy. The baseline status and current INR are documented in the medical record.
 4. Use authoritative resources to manage potential food and drug interactions for patients receiving warfarin.
 5. When heparin is administered intravenously and continuously, use programmable pumps in order to provide consistent and accurate dosing.



NPSG 3 Safety of Using Medications

- NPSG.03.05.01: Anticoagulation Therapy
 - Elements of Performance
 6. A written policy addresses baseline and ongoing laboratory tests that are required for anticoagulants
 7. Provide education regarding anticoagulant therapy to staff, patients, and families. Patient/family education includes the following:
 - The importance of follow-up monitoring
 - Compliance
 - Drug-food interactions
 - The potential for adverse drug reactions and interactions
 8. Evaluate anticoagulation safety practices, take action to improve practices, and measure the effectiveness of those actions in a time frame determined by the organization.



NPSG 7 Health Care-Associated Infections

- NPSG.07.05.01 Surgical Site Infections
 - EP 7 – Administer antimicrobial agents for prophylaxis for a particular procedure or disease according to methods cited in scientific literature or endorsed by professional organizations.
 - The practice used by the organization must be validated by an authoritative source
 - Study published in peer-reviewed journal that clearly demonstrate efficacy of practice
 - Practice endorsed by professional organization(s) and/or a government agency (ies)



Question

- Since 2009, Medication Reconciliation has been:
 - a. Surveyed and scored with no changes
 - b. Eliminated for good
 - c. Surveyed, but not scored against the organization
 - d. Incorporated into standards

Answer: c. Surveyed, but not scored against the organization



NPSG 8 Medication Reconciliation

- As of January 1, 2009:
 - TJC to evaluate and refine the expectations
 - Not factor into the accreditation decision
- April 2010 – Field Review of proposed revision
 - NPSG.08.01.01-04 to NPSG.03.07.01
- Jul 2010 – Evaluation of Field Review
 - Implementation challenges
- New goal implementation – June 1, 2011

Hot Issues



The Joint Commission's Mission

- To continuously **improve health care for the public**, in collaboration with other stakeholders, by evaluating health care organizations and inspiring them to excel in **providing safe and effective care of the highest quality and value**

JFPS 2010 >>>

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Closing Remarks

U.S. Army Medical Command
Fort Sam Houston, TX