
Medication Management and the Joint Commission: A 2009 Survey Experience

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Objectives

- Review The Joint Commission (TJC) medication management standards and national patient safety goals
- Describe our organization's experience during our February 2009, unannounced TJC survey
- Identify techniques that could assist hospital pharmacies during their survey experience

Organizational Description

Exempla Lutheran Medical Center, Denver, CO



- 400-bed, non-profit, community hospital; acute care service; psychiatric facility; hospice/homecare; outpatient services
- Survey history
 - February 2006 Full JCAHO survey
 - 2006-2007 Disease-specific surveys
 - January 2009 State (CMS) full survey

Survey Expectations

- Full, unannounced TJC survey expected in first quarter 2009
- Focus on National Patient Safety Goals, Clinical Areas, Medication Management



TJC Changes



- **New Brand-TJC-The Joint Commission**
- **New Scoring Methodology**
 - Direct and indirect care items; threat to life issues
- **New Process for Reports & Action Plans**
 - Preliminary report while on site
 - Final report follows in 2-4 weeks
 - Resolution & action plans submitted in 45-60 days
- **New National Patient Safety Goal Requirements**
 - Anticoagulation
- **New Numbering for Med Management Chapter**

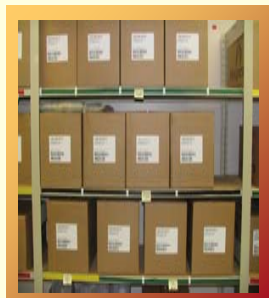
TJC Medication Management Chapter

Medication management has 6 critical processes and the TJC standards are structured around these processes

**Selection &
Procurement (2)**



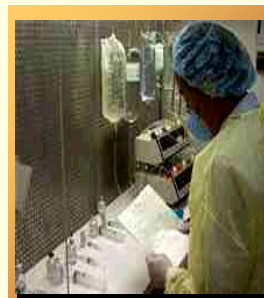
**Storage
(3)**



**Prescribing &
Transcribing (4)**



**Preparing &
Dispensing (5)**



**Administering
(6)**



**Monitoring
(7)**



- *“TJC standards are in quotes and italicized”*
- Standards that were heavily surveyed are marked with an *

Survey Experience-Team Arrival

Unannounced survey February 17-20, 2009

- 4 day survey starting on Tuesday, Feb 17
- 4-7 surveyors onsite
- Lead surveyor: Dr. Alan Rapaport



MM 01 - Defined Process

“The hospital plans its medication management process”

- ☑ Information available to caregivers
- ☑ Written policy required



MM 01 - Defined Process



“The hospital safely manages high-alert and hazardous medications”

- ✓ List of high-alert drugs in writing*
- ✓ Processes in place to minimize risk*



High Risk Medication List

- Insulin*
- Anticoagulants*
- Opiates
- Chemotherapy
- NMB
- Thrombolytics
- Electrolytes


MM 02 - Procurement

“The hospital selects and procures medications”

- ✓ P&T committee & notes
- ✓ Formulary process & availability
- ✓ Non-formulary process
- ✓ Concentrations standardized & limited
- ✓ Medication shortage & substitution procedures

MM 03 - Storage

“The hospital safely stores medications”

- ✓ Secure 
- ✓ Labeled appropriately
- ✓ Removes expired or damaged meds
- ✓ Concentrated electrolytes
- ✓ Unit-dose product
- ✓ Inspects medication storage areas
- ✓ Written policy addresses the control of medication between receipt by the healthcare provider and administration*



MM 03 – Storage continued

“The hospital safely controls medications brought into the hospital by patients, their families or licensed independent practitioners”

- ☑ Process for use of meds from home

“The hospital safely manages emergency medications”

- ☑ Must have LIP involvement
- ☑ Unit-dose; age specific packages



Pediatric Code Carts

Example Actions and Preparation

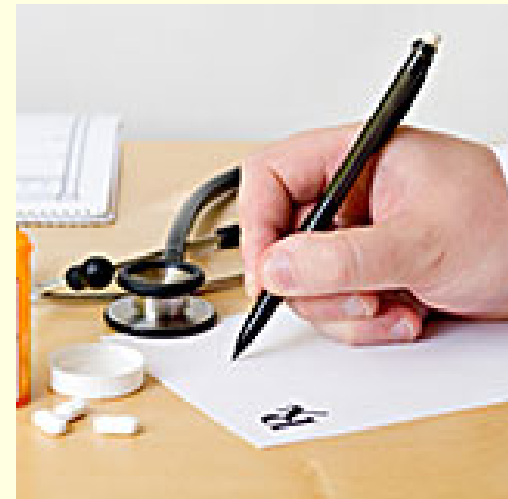
Pediatric drug trays were reviewed and the following changes have been approved by the Code Blue Committee and implemented to ensure safety:

- Dopamine 400mg/5ml concentrated vial eliminated and replaced with a ready mix bag
- Lidocaine 1% 50mg syringe was added to allow for safe measurement of small volumes for lower weight pediatrics.
- The medication tray contains “pediatric” or lower concentrations for Epinephrine, Lidocaine and Sodium Bicarbonate.
- The medication cart will contain necessary medications that are only available in a single or adult strength.
- Look Alike/Sound Alike warning stickers have been placed on Lidocaine, Epinephrine and Sodium Bicarbonate to help distinguish the different strengths
- Two pharmacists will respond to pediatric codes calls so that all medication doses can be double checked.

MM 04 - Ordering/Prescribing

“Medication orders are clear and accurate”

- 11 specific order types addressed in policy
 - ✓ Multiple PRN meds with the same indications*
 - ✓ Range orders*
 - ✓ Herbals-discontinued at our facility



MM 05 - Dispensing

“A pharmacist reviews the appropriateness of all medication orders for medications to be dispensed in the hospital”

- ✓ ADMs profiled in all but LIP-supervised areas
- ✓ Pharmacists review override lists



Radiopharmaceutical prep is overseen by a trained pharmacist or physician



MM 05 – Dispensing continued

“The hospital safely prepares medications”

- ✓ Products are compounded in pharmacy
- ✓ USP 797 compliant
- ✓ Labeling
- ✓ Safely dispensed



MM 05 - Dispensing continued

- ☑ *“The hospital follows a process to retrieve recalled or discontinued medications”*
- ☑ *“The hospital safely manages returned medications”*

MM-05 Finding

“Medication containers are labeled whenever medications are prepared, but not immediately dispensed.”

- ⊠ Finding: Contrast media had been transferred into a power syringe and the syringe was not labeled.



MM 06 - Administration

“The hospital safely administers medications”

- ✓ 5 rights; good practices

“Self administered meds are administered safely & accurately”

- ✓ Patient competence assessed; med secured

“The hospital safely manages investigational medications”

- ✓ Policy and process in place



MM 07 - Monitoring

“The hospital monitors patients to determine the effects of their medications”

- ✓ Monitoring parameters defined in policies and protocols

“The hospital responds to actual or potential adverse drug events, significant adverse drug reactions, and medication errors”

- ✓ Occurrence system
- ✓ Notification process
- ✓ Reviewed & actions taken



MM 08 - Process Improvement

“The hospital evaluates the effectiveness of its medication management system”

- ✓ Lean process improvement
- ✓ FMEA/RCA
- ✓ Smart pumps
- ✓ Carousel
- ✓ Metrics



ELMC Pharmacy Report Card

<i>Exempla Lutheran Medical Center Pharmacy</i>	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
THE GOAL: Safest Hospitals & Best Outcomes												
Reported ADEs per 1,000 Adj. Patient Days*	1.58	4.96	4.82	5.73	5.17	2.69	3.04	3.50	3.47	3.69	4.85	4.60
Overrides per 1,000 Adjusted Admissions*	1686	1653	1995	1939	2058	1760	1635	1794	1782	1643	1582	1731
Orders Sent Thru Medication Safety Review Process	134	96	100	75	83	67	49	70	71	72		
Medication Reconciliation:												
Admission	77.0%	72.0%	50.0%	80.0%	80.0%	70.0%	80.0%	50.0%	70.0%	50.0%	70.0%	75.0%
Discharge	73.0%	89.0%	95.0%	80.0%	100.0%	100.0%	95.0%	100.0%	100.0%	85.0%	90.0%	75.0%
Transfer	80.0%	83.0%	80.0%	66.0%	49.0%	97.0%	77.0%	82.0%	77.0%	80.0%	66.0%	76.0%
Medication History Completed	--	--	--	--	--	--	--	80.0%	85.0%	85.0%	90.0%	100.0%
Unreconciled Medications	10.0%	7.0%	2.0%	n/a	n/a	n/a	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%
High Risk Drug Triggers:												
Dextrose 50% Doses per 1,000 Adjusted Patient Days*	3.51	2.23	1.89	3.09	2.45	1.92	1.84	2.19	2.14	0.97	2.38	2.16
Flumazenil Doses per 1,000 Adjusted Patient Days*	0.44	0.19	0.17	0.45	0.09	0.10	0.00	0.44	0.36	0.39	0.37	0.00
Narcan Doses per 1,000 Adjusted Patient Days*	0.88	1.26	1.29	1.36	1.81	0.86	0.55	0.88	0.71	0.39	1.10	1.60
Protamine Doses per 1,000 Adjusted Patient Days*	0.18	0.29	0.09	0.09	0.18	0.00	0.18	0.00	0.09	0.00	0.18	0.09
THE GOAL: Exemplary Teams												
Turnaround Time per Page of Orders (minutes)	6.50	6.50	7.00	5.50	6.00	5.00	6.00	6.50	6.50	6.00	5.00	5.50
Total FTEs per Adjusted Admissions*	0.0172	0.0200	0.0175	0.0187	0.0191	0.0203	0.0197	0.0194	0.0207	0.0208	0.0194	0.0204
Total FTEs Actual vs. Budgete (Index Value)	0.89	0.92	0.93	0.99	1.00	1.06	1.05	1.02	1.02	1.00	0.97	1.03
THE GOAL: Financial Stewardship												
Productive Salaries per Unit of Service	\$0.44	\$0.45	\$0.45	\$0.47	\$0.47	\$0.53	\$0.49	\$0.49	\$0.49	\$0.56	\$0.50	\$0.54
Pharmacy Medical Supply Cost per Unit of Service	\$1.17	\$1.07	\$1.05	\$1.04	\$0.98	\$1.06	\$1.11	\$0.86	\$1.40	\$1.24	\$0.84	\$1.74
Overtime Hours as a Percent of Regular Hours	2.82%	2.58%	2.47%	1.77%	3.44%	4.77%	2.79%	2.50%	4.59%	2.32%	1.80%	3.13%

National Patient Safety Goals (NPSG)

- 1 Improve the accuracy of patient identification
 - 2 identifiers when giving *medications*
 - 2 Improve the effectiveness of communication among caregivers
 - Eliminate dangerous abbreviations when documenting *medications*
 - 3 **Improve the safety of using *medications***
 - Look-alike; standard concentrations; labeling; anticoagulation
 - 7 Reduce the risk of healthcare associated infections
 - Hand hygiene; *drug resistant* organisms; central line infections; SSI
 - 8 **Accurately & completely reconcile *medications* across the continuum of care**
 - Compare at transitions
 - Give to patient & next provider of care
 - 9 Reduce the risk of harm resulting from falls- evaluate *medications*
 - 13 Encourage patients own involvement in their care as a safety strategy
 - 15 The organization identifies safety risks inherent to its population
 - 16 Improve recognition and response to changes in the patient's condition
- Universal Protocol



NPSG 3: Improve the Safety of Using Medications


03.03.01 Manage look-alike/sound-alike medications

- ✓ List in place
- ✓ Policies implemented

03.04.01 Label all medication containers

- ✗ Syringes and a basin on the sterile field were empty and pre-labeled

Be Aware of **Look-Alike, Sound-Alike** Medications



YOUR Patient Might be at Risk...

Carboplatin <small>(Platinol)</small>	←	→	Cisplatin <small>(Paraplatin)</small>
Alteplase <small>(tPA)</small>	←	→	Tenecteplase <small>(TNKase)</small>
Glyburide	←	→	Glipizide
Hydromorphone	←	→	Morphine

03.05.01 - Anticoagulation

Team Charter

Education

TEAM CHARTER

Team Name: Anticoagulation Task Force

Leader: Amy Shepherd

Date: 2/22/08

What is the improvement opportunity? Reduce the likelihood of patient harm associated with the use of anticoagulation therapy.

How will the success of this team impact the Exempla Healthcare Strategies and Service Priorities?

This team is required by JC NPSG 3E. It supports our goals of safest hospitals, best teams, and best patient experience.

What is the Objective or AIM of the Team? (There should be Measures of Success for each Objective)	Method of Measurement
The organization implements a defined anticoagulant management program to individualize the care provided to each patient receiving anticoagulant therapy.	See policies & protocols in P&T packet
To reduce compounding and labeling errors, the organization uses ONLY oral unit dose products and pre-mixed infusions, when these products are available.	Done
When pharmacy services are provided by the organization, warfarin is dispensed for each patient in accordance with established monitoring procedures.	A placeholder appears on the MAR to indicate the dose, target range, indication & parameters for holding/monitoring the med. INR frequency to be determined.
The organization uses approved protocols for the initiation and maintenance of anticoagulation therapy appropriate to the medication used, to the condition being treated, and to the potential for drug interactions.	Heparin protocols, Lovenox dosing in the high risk drug policy; warfarin protocols
For patients being started on warfarin, a baseline International Normalized Ratio (INR) is available, and for all patients receiving warfarin therapy, a current INR is available and is used to monitor and adjust therapy.	Pharmacists to confirm.
When dietary services are provided by the organization, the service is notified of all patients receiving warfarin and responds according to its established food/drug interaction program.	Dietary receives a report
When heparin is administered intravenously and continuously, the organization uses programmable infusion pumps.	Done
The organization has a policy that addresses baseline and ongoing laboratory tests that are required for heparin and low molecular weight heparin therapies.	See policies & protocols in P&T packet
The organization provides education regarding anticoagulation therapy to staff, patients, and families.	Sheet that prints out for nurses to review with patient in response to placeholder.
Patient/family education includes the importance of follow-up monitoring, compliance issues, dietary restrictions, and potential for adverse drug reactions and interactions.	Sheet that prints out for nurses to review with patient in response to placeholder.
The organization evaluates anticoagulation safety practices	Quantros; Vitamin K use; Use of protocols; Adverse events from warfarin minimal

Physician Changes (beginning October 1st) and Reminders for the New Joint Commission Patient Safety Goal and to Improve Care at ELMC

Goal of Education: ELMC Staff should be able to identify ways we make anticoagulation medication therapy safe.

COUMADIN (WARFARIN):

Coumadin Education Sheet (See example 1)

- Will print out with MAR. Nursing will complete daily with the patient and give copy at discharge. Education will cover indication, hospital Coumadin dose, hospital INR, compliance, dietary and pharmacy issues, side effects/complications and discharge follow-up. Patients will be given a vendor booklet.

Nursing consulting dietary and RX

- Nurses will consult dietary/pharmacy for patients requiring reiteration of nursing key points or for patients requesting additional information.

Physician Needs: Be aware.

Coumadin (warfarin) Placeholder (See example 2)

- Will occur on patient's MARs.
- Pharmacy will document in Meditech.
- Nursing and pharmacy will call the physician for questions on the appropriate dose, target INR, indication and outpatient managing physician.

Physician Needs: Document target INR, indication and outpatient managing physician in the progress notes or orders.

No Splitting any Coumadin (warfarin) Tablets

Pharmacy will call the Physician to have the tablet strength changed.

Physician Needs: Be aware

Reversing Coumadin (warfarin) with Vitamin K (phytonadione)

- Subcutaneous route is not recommended due to unpredictable effect.
- Doses > 5mg oral or IV are excessive (unless the patient has active bleeding or requires emergent reversal).

Physician Needs: Be aware of guidelines when prescribing Vit K for warfarin reversal.

ANTICOAGULANT LABS:

RN/Pharmacy may order if needed.

Coumadin (warfarin)

- Baseline liver, baseline INR on day 1 and day 3 with follow-up labs as needed.

Physician Needs: Order baseline labs

Heparin

- Platelets (baseline), PTT (per protocol), CBC with platelets every 2 days.

Physician Needs: Labs are built in order set.

Enoxaparin (Lovenox)

- Labs needed prior to therapy: baseline renal, platelet (baseline and follow-up as needed).

Physician Needs: Order baseline labs

HEPARIN, ARGATROBAN, LEPIRUDIN

Argatroban:

Concurrent warfarin and argatroban will falsely elevate INR. Order sheet modified to assist Physicians and ELMC staff.

Physician Needs: Be aware.

This form includes fields for patient name, room, and date. It contains sections for 'Nursing Consulting Dietary and RX' and 'Physician Needs: Be aware.' It also features a 'Coumadin (warfarin) Placeholder' section with checkboxes for various clinical scenarios.

Example 1

This form is titled 'ANTICOAGULANT LABS' and lists various lab tests such as INR, PT, PTT, Platelets, and Renal. It includes checkboxes for 'Order' and 'Baseline' for each test, along with a section for 'Physician Needs'.

Example 2

Thank you for your help!

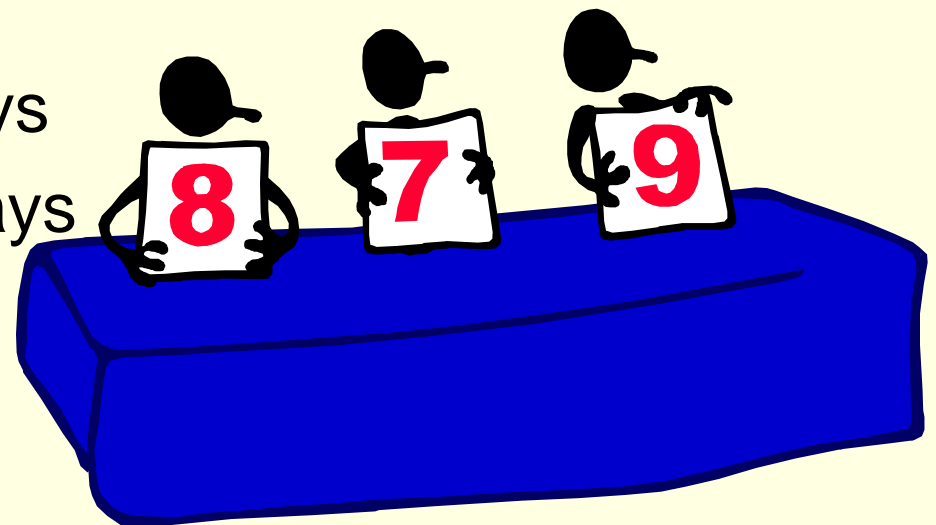
Medication Management Tracer

- Final meeting of survey
- Time to discuss any findings
- Reviewed survey findings:
 - High risk medication management
 - Range orders & prn indications
 - Medication reconciliation-outpatient
 - Anticoagulation
 - ADE/error management process
 - P&T process & oversight
 - LASA lettering
 - USP 797



Survey Scoring

- Preliminary report: 34 findings
- Final report (4 weeks)
 - 24 hospital program findings
 - 6 home care program findings
- Clarifications submitted within 10 days
- Corrective timelines
 - Direct impact: 45 days
 - Indirect impact: 60 days



Findings



- Environment of Care (5)
- Life Safety (3) – *egress, fire prevention*
- Infection Control (1) – *sterilization logs*
- Information Management (1) – *info on white boards*
- Leadership (1) – *staff are held accountable for responsibilities*
- Medication Management (2) – *handling policy; labeling*
- Medical Staff (1) – *privileging*
- Record of Care (3) – *verbal order authentication; others*
- Transplant Safety (1) – *Alloderm prep documentation*
- Patient Care (1) – *sedation assessment*

NPSG Findings

- Critical tests – *timeliness of reporting not assessed*
- Medication safety- *pre-labeling*
- Suicide Risk –*admission nursing assessment did not include current risk for suicide*
- Time out - *some components not documented*
- Hand hygiene – *observations inconsistent*

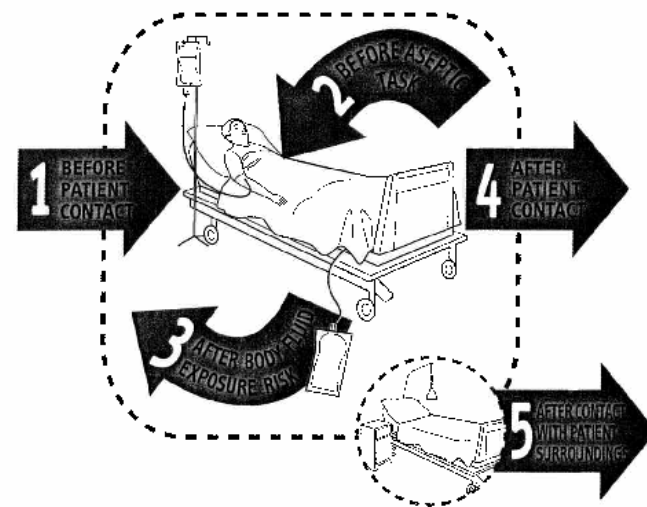


NPSG 07.01.01 Infection Control

- WHO or CDC guidelines
- Training process
- Environmental evaluation
- Disciplinary process



Your 5 moments for HAND HYGIENE



1 BEFORE PATIENT CONTACT	WHEN? Clean your hands before touching a patient when approaching their care. WHY? To protect the patient against harmful germs carried on your hands.
2 BEFORE AN ASEPTIC TASK	WHEN? Clean your hands immediately before any aseptic task. WHY? To protect the patient against harmful germs, including the patient's own germs, such as those on their body.
3 AFTER BODY FLUID EXPOSURE RISK	WHEN? Clean your hands immediately after an exposure risk to body fluids. WHY? To protect yourself and the health care environment from harmful patient germs.
4 AFTER PATIENT CONTACT	WHEN? Clean your hands after touching a patient and their immediate surroundings when caring for them. WHY? To protect yourself and the health care environment from harmful patient germs.
5 AFTER CONTACT WITH PATIENT SURROUNDINGS	WHEN? Clean your hands after touching any object or surface in the patient's immediate surroundings, such as bedrails, call bells, or bedside tables. WHY? To protect yourself and the health care environment from harmful patient germs.

Appendix B



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World Health Organization

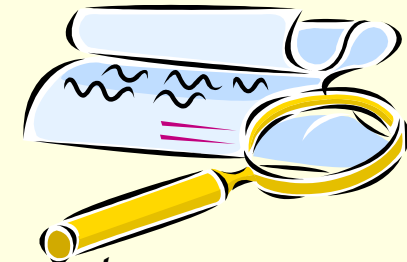
Survey Summary

- Our survey experience went largely as expected
- The story is not over when surveyors depart!!!!
- Continuous improvement and preparation can help ensure a smooth survey
 - *Clearly demonstrate, document, and articulate improvement work*
 - *Embrace findings that will assist in improving your organization's medication process*



Suggested Preparation

- Understand the standards and survey process
- Establish organizational and departmental accountability for continuous readiness
 - *Tracers organization-wide*
 - *Daily departmental checklists*
 - *Monthly departmental and organization audits*
 - *Ongoing readiness meetings to review issues*
- Medications
 - *High Risk Drugs and NPSG*
 - *Use organizational and national data*
 - *Document, measure, and communicate improvements*



Sample Daily Checklist

Personnel:

Name badges visible

Only covered drinks at nurses station (no food)

Confidential information/Medical records stored properly

Cleanliness:

Unit is visibly clean

Boxes with patient care items stored off the floor

Clean and dirty utility rooms secured/locked

Red biohazard bins in dirty utility rooms are covered tightly, no overflowing

Infection Control:

Hand hygiene supplies in place and working (dispensers are full)

Medication Safety:

All medications and syringes locked

All open multi-use vials dated

Medication administration areas clean, organized and used only for medication

Medication refrigerator log complete; alarm on batteries functioning

Fluid warmer temperature log complete

Drug references/guides 2008 or 2009

Blanket warmers contain ONLY blankets (no fluids)

All entries are signed, dated and timed

Completed med rec form on admission, transfer or discharge

Suggested Day of Survey Actions

- Utilize a checklist to assist staff in preparing their area for inspection
- Organize data and documents:
 - ADE data
 - Quality Improvement/FMEA/RCA data
 - Medication Reconciliation; Anticoagulation
 - Policies updated
 - P&T notes ready for review
 - Past action plans
- Support staff with daily updates and coaching

